

# HOW CAN TALENT ABROAD INDUCE DEVELOPMENT AT HOME?

TOWARDS A PRAGMATIC DIASPORA AGENDA

EDITOR: YEVGENY KUZNETSOV





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**Towards a Pragmatic  
Diaspora Agenda**

Editor: Yevgeny Kuznetsov  
Migration Policy Institute

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# Foreword

Demetrios G. Papademetriou and Kathleen Newland  
Migration Policy Institute

This is a book about the “how to” of one of the most important aspects of diaspora engagement — leveraging countries’ talent abroad to support development at home. The understanding that the diaspora (emigrants and their descendants who retain ties to their countries of origin or ancestry) can be a critical partner for development has emerged fairly recently, due in large part to the experience of two new global powers — China and India — whose rise to prominence owes much to the contributions of their talent abroad. In the amazingly short span of about 15 years, the importance of the diaspora to development has evolved from a novel and somewhat heretical hypothesis to conventional wisdom. Now it is commonly acknowledged that diasporas can be important, but the path of developing policies and programs to help realize the promise of diasporas has been fraught with frustration and disappointment. Diaspora contributions seem to come spontaneously rather than as a result of policy interventions; they are, as the editor of the book puts it, a matter of serendipity. By focusing on policy interventions that effectively promote diaspora contributions, the book fills an important gap in the literature.

The volume is novel in at least two ways. First, it develops an innovative and pragmatic approach to diaspora engagement that starts from creative individuals, a creative state, and the private sector in the country of origin. This approach focuses on the strength and flexibility of domestic institutions, which may seem paradoxical when diaspora engagement is by its very nature a transnational undertaking. The book scans the heterogeneity of domestic and international institutions to identify dynamic segments of the institutional fabric that could be effective partners to those among the diaspora who have the talent and the will to contribute to the development of their countries of origin.

Second, the main audience and most of the authors of the chapters in this volume are practitioners — individuals who make things happen alongside scholars who write about them. This is consistent with the Migration Policy Institute’s focus on the real-world implementation and impacts of policy, and gives the book particular credibility. The volume highlights the insights of people with relevant practical experience who also have a knack and a zest for self-reflection and drawing of lessons. As the editor and main author of the book, Yevgeny Kuznetsov, puts it, they are “thinking doers.” Having spent 17 years as a World Bank economist responsible for innovation, science, and technology operations all over the world, he himself is one such “thinking doer.”

This book can be guaranteed to stimulate thinking, with its many paradoxes and unorthodox concepts. One of our favorites is “guided serendipity” — an oxymoron on the face of it. But this idea conveys the character of the diaspora programs the book offers as models that strive to combine the drive, initiative, and enthusiasm of diaspora members with organizational support that is effective but not stifling.

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Demetrios G. Papademetriou  
President  
Migration Policy Institute

Kathleen Newland  
Director  
MPI’s Migrants, Migration, and  
Development Program

# PART ONE

TALENT ABROAD AND  
INSTITUTIONAL DYNAMICS  
AT HOME: CONCEPTUAL  
ISSUES



# CHAPTER I

## INTRODUCTION AND OVERVIEW

Yevgeny Kuznetsov

World Bank and Migration Policy Institute

### Main Conceptual, Empirical, and Policy Issues

#### A. *Diasporas as Part of the Country*

“**W**hat is diaspora?” a senior official of the biotechnology department of India’s Ministry of Science and Technology asked me as she was describing how the department engages with India’s technical and managerial talent abroad. Overseas Indians’ relevant expertise is drawn upon for peer review of proposals and mentoring of their subsequent implementation. Diaspora members are relied upon as “sounding boards” and “antennas” when decisions are made on allocation of funds for research and technology development. Engagement with the diaspora has become a routine part of the department’s organizational practices. In Moliere’s play *Le Bourgeois gentilhomme*, a character is shocked to discover that he has been speaking prose his whole life without knowing it. In contrast, in this example, the official was engaging in good practice vis-à-vis diaspora engagement without having a slightest idea of it — she was “speaking in verse” without being aware of it. Diaspora talent has become a part of her daily management practice, and a part of the country.

Diaspora being part of the country — or, to be more precise, being what the country is capable of becoming — is a paradoxical statement that in my judgment is a good summary of this book. Competent individuals who know the country well and care about its future, yet have no stake in local vested interests, can function as proverbial Archimedean levers to trigger and sustain change. The search for such individuals often leads to the country’s talent abroad — its skilled diaspora. In my area of expertise — innovation and competitiveness enhancement — many projects in a number of countries relied on the technological diaspora

to search for, design, and implement projects.

“Diaspora as part of the country” means that diaspora members engage in the everyday activities of the home country without necessarily relocating to it or even belonging to a particular diaspora organization. Compare this with a notion of the African diaspora as the “sixth region of Africa” (the African Union divides Africa into five regions, with the diaspora being an additional one<sup>1</sup>) or the diaspora as the “ninth region of Mali.”<sup>2</sup> The idea of diaspora as a province of a country conveys a notion of a well-organized and relatively homogeneous whole.

In contrast, in this book we define diaspora broadly as constituting the “non-resident population who shares a national, civic or ethnic identity with its homeland through being born in the homeland and migrating or being the descendants of emigrants”<sup>3</sup> and stress the heterogeneity of diasporas. For example, those who were born in the home country and migrated — the first-generation diaspora members — would have more ties with home country than second-generation diaspora members. This book focuses on skilled diasporas (individuals with at least tertiary education), and particularly on one small, dynamic, and entrepreneurial segment of diasporas — individuals who have achieved extraordinary professional success and are close to the pinnacle of their professional careers, whom we call “high achievers.”

## **B. First Movers from Diasporas and their Search Networks**

In 1997, Ramón L. García, a Chilean applied geneticist and biotechnology entrepreneur, contacted Fundación Chile, a private-public entity charged with technology transfer in the area of renewable resources. After jointly reviewing their portfolios of initiatives, Fundación Chile and García’s company Interlink founded a new co-owned company to undertake long-term research and development (R&D) projects. These projects were needed to transfer technologies to Chile that were key to the continuing competitiveness of the country’s rapidly growing agribusiness sector. Without García’s combination of deep knowledge of Chile, advanced US education, exposure to US managerial practice, and experience as an entrepreneur, the new company would have been inconceivable.

The extension of projects of diaspora entrepreneurs from co-founding joint firms in home countries to co-creating institutional infrastruc-

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1 World Bank, “Mobilizing the African Diaspora for Development” (concept note, Africa Regional Office, World Bank, September 2007), <http://siteresources.worldbank.org/INTDI-ASPORA/General/21686696/conceptnote.pdf>.

2 Dovelyn Rannveig Agunias, ed., *Closing the Distance: How Governments Strengthen Ties with Their Diasporas* (Washington, DC: Migration Policy Institute, 2009).

3 Kathleen Newland, ed., *Diasporas: New Partners in Global Development Policy* (Washington, DC: Migration Policy Institute, 2010).

ture so that these firms can flourish is natural, a byproduct of the original venture. The initial objectives of Ramon García and other diaspora “first movers” were both modest and specific: to advance their professional and business interests by setting up technology firms in their home countries. Yet as the constraints of their home country’s institutional environments became apparent to them, they constructed so-called search networks — networks to identify constraints and then people or institutions that could help mitigate their effects. Successful growth of knowledge-based firms and creation of an appropriate institutional environment became two sides of the same collaborative process. Innovation entrepreneurship has blossomed into institutional and policy entrepreneurship. Significant in this transition is that only a small number of diaspora members with knowledge, motivation, and institutional resources tend to be actively involved in the dialogue with local authorities to change the rules of the game. If these members have sufficient status and motivation, there is no need of larger numbers to get traction. In such a collaborative, long-term process, diaspora members bring their status and resources to their undertaking in home countries; they leverage their status for common good rather than seeking their status from their home countries.

Members of expatriate communities, particularly high achievers, have three characteristics that position them to make a unique contribution to the development of their home country: a strong motivation to “make their mark” despite and against many odds; knowledge and expertise of both global opportunities and local particulars; and (not always, but frequently) resources to act on new opportunities. When these resources are combined, usually as a result of serendipity, the impact on home country development can be substantial. Yet these resources can also combine in a negative way: high achievers from diasporas can become ferocious rent seekers allying themselves with reactionary and backward-looking vested interests in their home country.

Our hypothesis is that the ability of expatriate talent to effect change in their home country stems from a combination of three features:

- substantial professional success and reputation gained abroad, which allows them to create search networks capable of facilitating reforms and investment in home countries;
- intrinsic motivation — in this case a desire to be a part of a larger “national” project, to get involved with the home country and change it for the better; and
- strong motivation to advance professionally and economically (traditional neoclassical utility maximization familiar to economists).

Synergy between these three features allows diaspora members to become what we call first movers — change agents with an unusually long planning horizon. Their intrinsic motivation lengthens their planning horizon, making them patient in waiting to see the results of their efforts, while the search networks they create enable effective problem solving.

### **C. Diversity of Expatriate Talent and its Motivation**

The defining characteristic of a network of expatriate professionals is that it deals with talent — technical, managerial, or creative. Talent is an elusive category, yet a powerful one. This book's working definition of talent is individuals of high impact. That impact can be in science and technology, business, culture, or politics. Talent is about creativity and new ways of doing things. Hence innovation is at the root of talent.

As already noted, innovation — technological and institutional — is at the root of successful development. Expatriate talent could be a key resource for home country development precisely because of its inherent creativity and inventiveness. But there is another key factor: motivation. Talented people tend to be characterized not just by high motivation, but more importantly by intrinsic motivation. The ability to achieve results despite many obstacles and against many odds is due to intrinsic motivation. An intrinsically motivated activity is an activity carried out for its own sake. The activity is an end in itself, not a means to some other end. When asked why she abandoned the comfort and security of her home to come to a newly formed Israel, Golda Meir responded, paradoxically, that it was “pure selfishness.” The task was so challenging and huge that “I must be a part of it. Just pure selfishness, I suppose.”<sup>4</sup> This is a classic example of intrinsic motivation.

The rest of Part I (Chapter 2) of this book takes a closer look at the motivation of diaspora first movers. The main conclusion we draw is that while at first glance their actions may seem irrational, they are in fact highly rational. Three examples of diaspora first movers are considered in detail, each involved in entrepreneurship in different fields: philanthropy, business, and politics.

But intrinsic motivation is not the only factor, or even in many cases a central factor, in spurring diaspora members to get involved with their home country. The more traditional “external” motivation of professional advancement is also crucial. High-profile members of the Indian diaspora took the risk of convincing their US bosses to establish research operations in India not so much because of their concerns about India's economic prospects, but largely because doing so was a smart career move for them. In general, in the early stage of personal

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4 See Albert Hirschman, *Shifting Involvements: Private Interest and Public Action* (Princeton, NJ: Princeton University Press, 1982).

development of expatriate talent, the motivation of individual professional advancement predominates. Migrants are usually concerned with getting ahead individually and are not concerned with collective diaspora identity, and those personal ambitions drive the nature of the projects they sponsor at home (if and when they decide to get engaged with the home country at all), which is often limited to unpublicized, sporadic, and individual efforts. This embryonic stage of diaspora involvement is apparent in many post-socialist countries, such as the Russian Federation (discussed in Chapter 8), and in Africa (Chapter 4). Also, diaspora members' motivation to get engaged does not necessarily coincide with the interests or development goals of their homeland. The diaspora's role is not necessarily providential and can be harmful. We do not assign any value judgment here. Talent and skills are often related to education level (usually measured by years of schooling, with tertiary education being a standard skill threshold) but should not be equated to it. Cultural talent or medical skills are obvious counterexamples. Examining a case of construction workers who moved from Mexico to the United States, Chapter 5 focuses on tacit mid-level skill — skill that is learned through hands-on experience rather than through formal training or classroom instruction. The chapter bridges the conventional gap in the literature on high-skilled workers and the literature on low-skilled workers and introduces the notion of mid-level migrants. These are typically migrants with relatively lower levels of formal education who have acquired significant and complex skill through on-the-job learning. The main conclusion is that migrants transfer and transform significant construction skill, but that such skill transformation remains extremely sensitive to local institutions and localized work practices. Yet very little is known about how to facilitate the contributions of such middle-skilled diasporas to the development of either the home country or the country of destination. The chapter attempts to articulate a policy agenda for such mid-skilled diasporas.

#### ***D. Diaspora First Movers and Institutional Change at Home***

When the Taiwanese government decided to promote the venture capital (VC) industry in the early 1980s, it had neither the capabilities nor a blueprint to do so. Many were opposed to the idea because they considered the concept of VC foreign to traditional Taiwanese investment practices, in which family members closely controlled all of a business' financial affairs. Through a process of intense interactions with the Taiwanese diaspora in Silicon Valley, a seed fund was established to provide matching capital contributions to private VC funds. Two VC funds were also created in the mid-80s. To run these funds, educated Chinese who lived overseas received invitations to relocate to Taiwan. These were the examples of micro reforms — changes in the institutional environment at a micro level. Once the first venture funds proved successful, domestic IT firms started to create their own VC funds.

Drawing on AnnaLee Saxenian's 2006 book *The New Argonauts: Regional Advantage in a Global Economy*, Chapter 6 illustrates how the development of globally competitive innovation clusters in Taiwan involved several micro-level reforms. Such reforms are gradual and incremental, and there is no guarantee that they will continue long enough to become irreversible. But as the Taiwanese example illustrates, when they do, they have the potential to redefine the institutional fabric of the economy. Since micro reforms may be disrupted and may not necessarily be scaled up, they often escape the notice of policymakers and vested interests. Part II (Chapters 3 to 6) sheds light on the diversity of micro reforms triggered in the home country by diasporas and returning migrants.

Chapter 3 presents cases of social entrepreneurs from the Indian diaspora and returnees to India promoting micro-level changes in the delivery of social services. The chapter calls these individuals "bottom-up change agents" who recognize that an intervention can only be meaningful if it can be scaled up, which requires partnerships with both the market players and the government. While recognizing the weakness of the Indian state's ability to provide those services, they are also cognizant of the heterogeneity among state institutions and the fact that the state is often not a veto player and sometimes can be a helpful partner for those willing to make that commitment. Because of this keen interest in collaboration, demonstrated by the reform sponsors, the micro reforms described in the chapter have the potential to be scaled up. While IT progress in India occupies the limelight, this chapter is novel in that it links international migration to innovation in the delivery of public and social services.

Chapter 4 focuses on experiences from Africa's diasporas and presents a picture that is somewhat similar in terms of the diversity of cases of social entrepreneurs and the micro reforms they initiate, particularly in higher education. Yet while examples of top-down reforms are striking (World Bank officials from Liberia and Nigeria coming back to occupy top government positions in their home countries, for example), the scaling up of the efforts undertaken by bottom-up change agents encounters many problems. But even in the case of a difficult institutional environment, the jury is still out: the author concludes that micro-level reforms are a very recent phenomenon in Africa and may need time to mature.

Chapter 5 on mid-level skills presents an altogether different perspective: it is about micro reforms in a destination country (the United States) that could have happened yet failed to occur. The micro-level innovations advocated in the chapter include the creation of transnational certification programs that would allow workers to demonstrate their skill easily even as they move across national labor markets, and immigrant visa programs for workers with mid-level skills, evaluated through their performance in actual business practice and vouched for by employers.

Chapter 6 juxtaposes two cases of diaspora-induced micro reforms that did in fact experience a significant scale up: the creation of a VC industry in Taiwan and water provision in Morocco. These are unlikely cases for comparison, and the similarities between them are illuminating. The chapter also attempts to sketch a theory of institutional change facilitated by diaspora members.

Empirical evidence in Part II of the book suggests that diaspora networks have several core competitive advantages over good international consultants, development organizations, and international NGOs. These advantages are manifestly not about better education or access to international knowledge networks, but are about: a) motivation, b) longer time horizons, and c) better understanding of local constraints and thus capability for local coalition building.

### **E. Is It a Numbers Game?**

The fact that skilled expatriates can create enormous benefits for their countries of origin has come to attention in recent years through the conspicuous contributions that the large, highly skilled, manifestly prosperous, and relatively well-organized Chinese and Indian diasporas have made to their home countries. But our earlier example of Chile's Ramón García indicated that diasporas may not need to be large to produce an impact: ten cases of Ramón Garcías could transform entire sectors of the economy in relatively small countries like Chile. Moreover, García's experience suggests that even sparsely populated, informal diaspora networks, linking small home countries with their talent abroad, have some institutional resources and may prove capable of developing more.

A wide variety of countries and their diaspora experiences are touched upon or discussed in the book. The 2006 Organization for Economic Cooperation and Development (OECD) database of tertiary educated migrants residing in OECD countries is the most recent source of data available with quantitative estimates of skilled diasporas worldwide. Table 1 divides skilled diasporas into three broad, yet necessarily arbitrary groups:

- Super-large diasporas (more than 1 million skilled individuals located in OECD countries). This is predictably a mixed group consisting of: India, with its long tradition of overseas education and its role in the formation of the Indian elite (see Chapter 3 for more details); Great Britain, which is a reflection of the global dominance of the English language, Anglo-Saxon institutions (eloquently discussed in Niall Ferguson's 2003 *The Rise and Demise of the British World Order and the Lessons for Global Power*), and particularly of good higher education; the Philippines, which is the only large country in the world in which higher education is explicitly oriented towards skills

exports;<sup>5</sup> and China.

- Large diasporas (between 200,000 and 1,000,000). Mexico, Russia, and Taiwan are in this category.
- Relatively small skilled diasporas (less than 200,000). Ireland (touched upon in Chapter 11), South Korea (Chapter 9), and Argentina (Chapter 7) are in this category.

This back-of-the-envelope taxonomy of the country cases is intriguing because it contradicts the impression some have formed about certain diasporas. Ireland, a paragon of both a successful and entrepreneurial diaspora and an efficacious diaspora (touched upon in Chapter 11), is categorized as a small diaspora, while the Philippines — no match to Ireland in terms of its diaspora's impact — are in the superstar category in terms of numbers. The point, of course, is that counting heads provides too broad a picture from which to discern crucial details about a diaspora's strength and engagement with the home country. The importance of high achievers — typical for the Irish diaspora, but still an exception for the Philippines — is one dimension of diaspora heterogeneity that we have touched upon. The crucial importance of home country institutions is another dimension we discuss below.

To conclude the discussion of data, let me point out that the international migration of skills affects both developed and developing countries. Due to the increasing return on skills, talent seeks the environment of similarly talented peers. For instance, few centers of excellence, such as Silicon Valley, are global magnets of skills for both developed and developing countries. The following facts are worth noting:

### **1. On the Diaspora Side: The Professional Advancement of Diaspora Members Is Time Consuming**

Talent needs time to mature and advance in professional hierarchies. Junior foreign professionals might prefer to conceal and even to forget their foreign roots for fear of discrimination, and to focus exclusively on professional advancement. As high achievers emerge and become more numerous and diverse, senior members of the diaspora start to mentor junior members. As many diaspora high achievers reach the top of their professional hierarchies, a collective credibility emerges. The specific trajectory of how each diaspora member made it to the top is invariably unique, and so the experiences and capabilities of diasporas from Israel (note that the Jewish diaspora is a different phenomenon than the Israeli diaspora), India, China, and Armenia, which are examples of collective credibility and influence, are unique. As time goes by, the relatively young, skilled diasporas of Latin America, Africa, and Eastern Europe are maturing and advancing, suggesting a higher incidence of high achievers. This is one reason why the size of skilled

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<sup>5</sup> Agunias, *Closing the Distance: How Governments Strengthen Ties with Their Diasporas*.

diasporas is far from a perfect predictor of the number of high achievers. At minimum one has to consider the “age” of a diaspora to develop realistic expectations of it.

**2. On the Home Country Side: Diverse Pockets of Dynamism in Domestic Economies**

Durable macroeconomic, political, and social stability, which are now a fact of life in most of the developing world, stimulate the development of regional and sectorial clusters. This signals dynamism and growth, even if the national economy is slow-growing or stagnating. Such increasingly diverse pockets of dynamism are sources of demand for highly-skilled expatriates and brain circulation networks.

**Table I. Number of Tertiary Educated Expatriates (All Labor Force Status) in OECD Countries, 2005**

Rank	Country of Birth	Number of Expatriates
1	India	1,660,952
2	Great Britain	1,199,823
3	Philippines	1,179,475
4	China	1,002,269
5	Mexico	774,991
6	Russia	684,337
13	USA	323,493
14	Taiwan	301,822
27	Ireland	186,460
41	Argentina	117,027
43	South Korea	105,592

Source: Organization for Economic Cooperation and Development (OECD), “Database on Immigrants in OECD Countries,” 2005-06 Reference Years, [www.oecd.org/els/mig/dioc.htm](http://www.oecd.org/els/mig/dioc.htm).

**F. Innovation-Based Development and Expatriate Talent**

Actors in developing economies must have the capacity to acquire new knowledge — to learn new ways of doing things — if the developing economy is to compete in the world economy. Learning, in turn, supposes and contributes to the ability to search out and usefully recombine scattered information about production methods, markets, and resources. Because development depends on learning and learning depends on searching, development almost invariably depends on linking the domestic economy to the world beyond, for even the strongest economies quickly rediscover (if they have ever forgotten) that they cannot continue to generate world-beating ideas in isolation.

As countries, including developing economies, embark on a policy agenda of innovation-based growth, they face an acute shortage of competent individuals who know the country well but who are not part of the domestic status quo and therefore have no vested interests other than the best possible country outcome. Paradoxically, the search for these individuals often leads to the country's talent abroad — its skilled diaspora. The best and brightest, who are crucial for innovation, have often left the country in search of better opportunities. The usual policy focus — encouraging the return of talent to the home country — is often neither realistic nor necessary: members of skilled diasporas can just as effectively engage in joint continuous projects with the home country without permanently relocating to it. This phenomenon is called “brain circulation.” Part III of the book focuses on the contributions and modes of engagement of science and technology diasporas and documents the pattern of brain circulation in four countries: Argentina, Mexico, Russia, and South Korea. South Korea is already a paragon of an open innovation-based economy, while Argentina, Mexico, and Russia — all higher-middle-income economies with significant stocks of accumulated skills both at home and abroad — have ambitious agendas to transform themselves into high-income, innovation-based economies. All of them view their skilled diasporas as a critical asset in this transformation.

On the basis of surveys and structured interviews, Chapters 7 through 9 describe patterns of interaction between science and technology talent abroad and the economies of those four countries. Chapter 8, focused on Russia, concludes that in terms of business linkages and entrepreneurship, Russian emigrants are less engaged in their home country's development than their Argentinean and Mexican counterparts, who are described in Chapter 7. But this gap is not as large as it seems, given the much stronger engagement with the home country of the foreign organizations at which Russian emigrants work, and the high intensity of business visits to their home country in spite of distance and costs. The chapters show remarkable similarities in the behavior and perceptions of Russian and Mexican emigrants, and reveals that Argentineans almost always respond differently. Membership in international networks and the receptiveness of local businesses to change and cooperation seem to drive linkages in Russia and Mexico more than other factors. Individual risk-taking is strongly associated with linkages to the home country in all countries. Somewhat counterintuitively, Russia displays the widest variety of diaspora success stories, more so than the more advanced and successful South Korean economy.

Chapter 8 introduces five types of diaspora successes in Russia:

- Russian-based multinationals such as IPG Photonics, which is a global leader in fiber lasers with more than US \$500 million in capitalization. Twenty-five percent of its personnel are based in Russia.

- Senior managers of multinational corporations that succeeded in lobbying for the establishment of R&D centers in Russia (e.g. Boeing, Intel, EMC).
- Traditional start-ups, which for various reasons move a substantial part of their business development to Russia.
- Outsourcing of operations to Russia (i.e. IT, pharmaceuticals).
- Opening of parallel or “mirror” labs in applied sciences by successful Russian scientists in Russia.

Chapter 9 presents the counterintuitive finding that the South Korean science and technology diaspora contributes relatively little to the creation of technology start-ups and the transformation of the innovation system in South Korea. South Korea is regarded as a paragon of an effective development state, so the finding is surprising. The chapter shows how the legacies of the success of the developmental state model, which are reflected in the strong entrenchment of stakeholders of the *chaebol* system, have strongly limited the opportunities for diaspora participation and contribution to economic transformation in South Korea. It identifies both strategic opportunities and challenges for South Korean diaspora members’ contributions to home country institutions. The chapter argues that new opportunities for diaspora networks are emerging now. Search networks, such as the BayArea K Group, could fill the existing niche for providing receptive firms, clusters, and institutions in South Korea with access to best practices in technology, business, or policy from the United States. Such changes will necessarily be incremental. However, over time, the accumulation of incremental changes can contribute to larger-scale transformations that ultimately overwhelm the legacies of the developmental state.

Table 2 summarizes the main results of Part III. Drawing on the heterogeneity perspective, the table introduces the notion of local “islands” of excellence in the public sector and higher education — dynamic and relatively efficient, yet isolated small segments within otherwise dysfunctional innovation systems.

**Table 2. Impact of Diaspora Members on the Domestic Innovation System: A Comparison of Four Countries Discussed in Part III**

	Mexico	Argentina	Russia	South Korea
<b>Characteristics of S&amp;T Diaspora</b>	Relatively large and well organized	Relatively small and poorly organized	Relatively large and poorly organized	Relatively small and well organized
<b>Dynamics of Technology Start-ups</b>	Relatively weak: the “big neighbor curse”	Visible but fragile diversity of regional dynamics	Diversity of regional innovation proto-clusters	Relatively weak: the “big <i>chaebols</i> curse”
<b>Public Sector Pockets of Efficiency (“Islands”)</b>	Strong in every ministry but suffers from “coordination curse”: a ministry’s attention span is short	Pockets of efficiency at sub-national level	Pockets of efficiency at sub-national level	Public sector is relatively uniform and effective
<b>Science and Higher Education “Islands”</b>	Weak, despite significant investment	Binding constraint: elite/pragmatic sector is weak	Elite segment remains strong but its skill base appears to be eroding	Elite segment is strong)
<b>Impact of Diasporas in Transforming National Innovation Systems</b>	Too early to expect impact: actors are establishing meaningful conversations that may yield results in the future	Some policy impact through informal interactions with first movers from the government and diaspora	Limited impact: diverse but isolated success stories that fail to turn into role models	Limited impact: capable government and private sector do not feel much need for diaspora engagement

Source: Author’s compilation.

### **G. Paradoxes of Diaspora Engagement**

Discussions of diaspora contributions to home country development tend to start with exhortations about appropriate home country conditions, implying that for diasporas to contribute, the investment climate and governance in the home country must improve. But as Albert Hirschman noticed more than half a century ago, if developing countries had such conditions, they would not have needed external change agents to begin with. This book starts from a different premise, asking how the institutional environment of the home country can improve, gradually and incrementally, through the participation of diaspora members. The evidence presented in Parts I through III of the book can be summarized as the following series of paradoxes.

First, all the strength and brilliance of the diaspora notwithstanding, it is domestic institutions that appear to determine the success of

diaspora projects, particularly of complex and long-term projects (see, in particular, Part III). Second, first mover diaspora projects are about entrepreneurship and risk taking in expectation of higher-than-usual returns (which can be defined in non-monetary terms such as recognition, self-esteem, and intrinsic motivation). Hence risk taking cannot be mandated, administered, or directed but can be nourished and supported. This is the paradox of “guided serendipity” — it highlights the need to create a framework in which unplanned occurrences can take place on a regular basis.

To articulate projects with high development impact diaspora members need to search for people and institutions to engage with. This is the paradox of the Archimedean lever: diaspora members help to identify dynamic domestic institutions and individuals (the levers) to unblock binding constraints on local development.

As examples of high-impact projects and institutions with diaspora participation from Chile, Taiwan, and other countries attest to, the promise of diaspora engagement is very high, but so are frustration and disappointment. For every success story from China, India, and Chile, there are many more stories — from Argentina or Armenia or sub-Saharan Africa — of diaspora members who have tried but failed to make a contribution to their home country’s development agenda. Yet repeated failure is not for lack of trying on either the receiving or contributing end. Governments are often proactive in establishing a bewildering number of programs and other institutions (repatriation schemes, diaspora ministries, etc.) to tap into diaspora resources. In part, a variety of programs reflect the sheer diversity of forms of diaspora engagement and contributions. But it is precisely this diversity and the paramount importance of the local circumstances (diaspora members are only effective within a localized context) of engagement that makes most centralized interventions too crude to be successful. They tend to stifle rather than promote innovation, and consolidate entrenched interests rather than coordinate the behavior of these special interests. Yet it is not possible to rely on the bottom-up creativity of diaspora members and their networks alone. To have an impact, informal networks need to be scaled up and institutionalized. Here, then, is the central policy dilemma: how can governments provide a coherent, centralized framework to assure diverse, bottom-up diaspora initiatives that fit specific local circumstances?

Analytical and empirical investigation of this question is possible due to the recent literature on economic growth, which demonstrates that growth is not hard to start: it almost starts itself, somewhere, sometimes. But keeping it going is not easy: doing so requires attention to the context of growth-binding constraints and situation-specific ways to resolve them. The same goes for institutions. It is almost always possible to find some institutions that are working, so the issue is using the ones that work to improve those that don’t. This hypothesis

assumes that there are nearly always opportunities for development in a given economy, and that some actors, private and public, begin to take advantage of them. But while development in this view is not hard to start, neither is it self-perpetuating. From this perspective, diaspora members act at once as “antennas” to detect better-performing and more dynamic segments of domestic institutions, and institutional vehicles (as members of search networks) to expand, institutionalize, and scale up these better-performing segments. This is the objective of the indirect, or pragmatic, approach to diaspora engagement summarized in Part IV of the book.

## ***H. Public Novelty of the Book: An Indirect or Pragmatic Approach to Diaspora Engagement***

Part IV of the book (Chapters 10 and 11) introduces the indirect approach to diaspora mobilization that favors “high-resolution” diaspora policies — to cultivate the relationships and commitments of movers and shakers (both in the diaspora and in homeland institutions) that could potentially make a significant difference and are counted in tens and hundreds, not thousands or tens of thousands.

In terms of practical advice for policymakers, this approach can be summarized as follows:

- Focus on high achievers
- Build a diaspora leadership group
- Facilitate the formation of partnerships between diaspora groups and local reform-minded agencies
- Support diaspora initiatives with clearly defined projects and identifiable outcomes
- Emphasize quality over quantity of diaspora projects
- Maintain the balance between the volume of resources channeled to support diaspora projects and the strength and depth of diaspora leadership groups.

More generally, the indirect approach is novel in three ways. First, its objective is to solve specific problems by relying on international connections and networks, including diaspora networks, rather than to engage the diaspora for the sake of engaging it. Thus GlobalScot — a paragon network we discuss in Chapter 10 — includes “friends of Scotland” (people with a special affinity for Scotland) in addition to the Scottish diaspora. Similarly, specialized international networks run by Enterprise Ireland (discussed in detail in the final chapter) include many individuals of Irish origin as the key and most active members,

but are not exclusively diaspora networks either. Commitments and contributions are targeted indirectly as a second step in the search for solutions (the first step is an initial roster of global expertise; the second is a sub-set of that called diaspora expertise).

Second, this is an indirect approach in terms of motivation. The ambition is to arrive at intrinsic motivation (the passion to engage, an entrepreneurial drive to overcome obstacles) and make it blossom. But by definition intrinsic motivation comes from within. It cannot be mandated or managed. Rather, diaspora networks can develop room for such motivation to flourish through the development of first mover projects with the home country (see David Ellerman's *Helping People Help Themselves* for a more general discussion of how indirect approaches can help to facilitate intrinsic motivation<sup>6</sup>). Yet intrinsically motivated individuals are not irrational. This is a key message from the sample of first movers discussed in Part II and in Chapter 2.

Third, this is an indirect approach in terms of the organizational support for diaspora networks. A "light-touch" and flexible organizational support is emphasized to promote rather than stifle individual creativity, commitments, and the initiative of diaspora members. The bet is on serendipitous encounters between individuals, yet the organizational objective is to facilitate this serendipity. Hence "guided serendipity," which in this approach is not an oxymoron but a generative metaphor. This is in contrast to a focus (some would say an obsession) on counting numbers in the direct approach. In fact, our hypothesis is that many diaspora initiatives fail because they require a lot of participation (conferences, databases, responding to surveys) but yield few practical results. For a time, the networks can be sustained by the initial enthusiasm of diaspora members, but if all they participate in are events and surveys, their interest is inevitably replaced by skepticism. This is why diaspora initiatives that emphasize counting diaspora members and extracting information from them can have a negative value added. An indirect approach rarely starts from them; rather, such activities are performed on a limited scale to support the design and implementation of tangible projects.

Finally, Chapter 11 puts the indirect approach into the broader context of strategies for diaspora engagement and integration with the home country. In my view, from a policy perspective this is the most valuable chapter of the book because it provides an outside perspective on the hypotheses and evidence of the book. The chapter at once advances the indirect approach (by contrasting the experiences of Ireland and Scotland), shows its limitations (as it deals mainly with economy and building economic institutions), and articulates its place in a broader discussion of socio-political diaspora strategies.

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6 David P. Ellerman, *Helping People Help Themselves: From the World Bank to an Alternative Philosophy of Development Assistance* (Ann Arbor, MI: University of Michigan Press, 2005).

## ***1. Diaspora as Part of the Country: A Summary for the Policymaker***

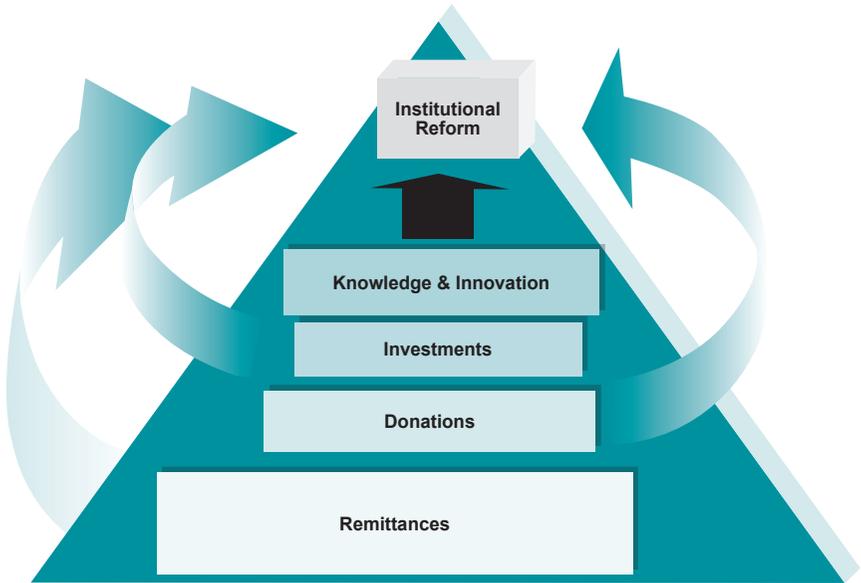
The book distinguishes between direct and indirect diaspora impacts. The direct economic impacts of diasporas relate to remittances, donations, investments, and the knowledge of diaspora members. These four impacts are well known and well documented, particularly the size and dynamics of migrants' remittances.<sup>7</sup> Our claim is that the increased salience of diaspora networks to home economies goes beyond their direct economic impacts. Diasporas of the highly skilled can contribute to institution-building through multiple incremental changes that lead to the transformation of private- and public-sector institutions (the indirect impact).

Direct economic impact is about the breadth of diaspora engagement, whereas the institution-building impact is about its depth (see Figure 1). While remittances and donations — currently in the limelight of debates about migration — are important for poverty reduction, the key issue is how to turn migrants and diasporas into agents of change in the area of institutional development in their home countries. Figure 1 thus conveys two messages. First, it shows that all forms of direct impact (remittances, donations, investment, and knowledge) can be vehicles for development (by which we mean institutional transformation in home countries). Second, it establishes a hierarchy of direct impacts; it suggests that the subtler the contribution, the more likely it is to become a vehicle for transformation. In that sense, the knowledge and skills of diaspora members are more valuable than remittances.

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7 Dilip Ratha, Sanket Mohapatra, and Ani Silwal, "Outlook for Remittance Flows 2010-11" (Migration and Development Brief 12, World Bank, Washington, DC, 2010), <http://sit-eresources.worldbank.org/INTPROSPECTS/Resources/334934-1110315015165/MigrationAndDevelopmentBrief12.pdf>.

**Figure 1. Hierarchy of Diaspora Impact**



Source: Author's rendering.

### **J. Issues for Further Research**

Novel concepts of institutional heterogeneity and migration-related search networks to advance institutional transformation both in the home country and the country of destination can be advanced in many directions, of which we will dwell on two.

As already noted, analysis and the policies that inform the international migration field have divided migrants into two camps. In the first group are those with formal education equal or superior to the median level of workers in the receiving labor market, and in the second group are low-skilled migrants who often do not have any formal education and are often of unauthorized status in the destination country. The first group contains those that the receiving country wants, the second spans those that it does not want politically, and mid-skilled migrants (discussed in Chapter 5) are those that a receiving country often needs (as their tacit craft skills tend to be in short supply). But can migrants move from the first group to the second and from mid-level to skilled? What is the dynamic of accumulation of labor competence within diasporas? To explore this dynamic, the notion of heterogeneous diaspora (i.e. characterized by internal diversity even within migrant groups with identical educational levels) can be complemented by the

notion of open migration chains.<sup>8</sup> These are sequences of educational or job opportunities that allow a migrant to move to progressively more complex educational and job tasks necessary to work in the global environment. An empirical project to identify and describe open migration chains in occupational streams important for developing economies such as construction, hotel, and restaurant management, is one direction for further research.

The second direction stems from Chapter 2 on motivation and Part IV on policies and would seek to advance an indirect approach to diaspora engagement. Having spent a significant part of my career at the World Bank, I can see how the current preoccupation with harnessing, leveraging, and even exploiting diaspora populations to accelerate economic growth and development in the home country is recasting diaspora-homeland relationships as a utilitarian motive. As an illustration, note the language used: the diaspora as the sixth region of Africa, for instance. It is as if a diaspora is a similar asset to natural resources under the soil, the only difference being, perhaps, that it is disperse and thus more difficult to exploit. But an implicit objective still appears to be economistic: “let’s exploit our shared heritage for my gain,” or “I see you as someone who can broker my interests.” This narrows the relationship between the diaspora and the homeland and threatens to undermine the long-term diaspora-home country development agenda. Development of the indirect alternative approach can be the subject of a future policy research project. 

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8 Yevgeny Kuznetsov and Charles Sabel, “Global Mobility of Talent from a Perspective of New Industrial Policy: Open Migration Chains and Diaspora Networks,” in *The International Mobility of Talent: Types, Causes and Development Impact*, ed. Andres Solimano (Oxford: Oxford University Press, 2008).

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# CHAPTER 2

## PASSIONS FUELING INTERESTS: UNRAVELING MOTIVATION OF FIRST MOVERS FROM DIASPORAS

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### Introduction

**F**irst movers, by definition, are rare. Beyond the introducers of new projects or services, this chapter concerns a particular subset of first movers: diasporans, and specifically those individuals who, against all odds, initiate and persist in their efforts to introduce innovation in their country of origin. Why do they do it? This chapter begins to tease out what may motivate these individuals, particularly since at first glance their actions may seem irrational. In effect, I disaggregate some of what has heretofore fallen under the category of “luck,” identifying the particular rationality and comparative advantages of diaspora first movers. Specifically, I aim to unravel the synergy between intrinsic motivation and more conventional extrinsic incentives. I draw upon literature on the entrepreneurial personality, classical motivation theories, and happiness. I then combine these inputs to investigate how they relate to the distinction of interests and passions as suggested by Albert Hirschman<sup>1</sup> and later elaborated by Ruth Grant.<sup>2</sup>

The chapter proceeds as follows. Section II reviews the relevant literature. First, I discuss the entrepreneurial personality and what the literature on entrepreneurship suggests about first-mover motivation. Then I review early intrinsic motivation theories and more general behavioral models. Recent research on happiness contributes additional ideas for possible factors that motivate and sustain entrepre-

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1 Albert O. Hirschman, *The Passions and the Interests: Political Arguments for Capitalism Before Its Triumph* (University Park, PA: Pennsylvania State University Press, 1977).

2 Ruth Grant, “Passions and Interests Revisited: The Psychological of Economics and Politics,” *Public Choice* no. 137 (2008): 451-61.

neurial behavior. I then describe Grant's passions. Finally, I highlight the particular characteristics and potential comparative advantages of diaspora first movers, and confirm diaspora first-mover behavior as rational action. Section III brings these streams together into a model that can be used to explain diaspora first-mover motivation and persistence. The model is exploratory and should be viewed as a series of hypotheses rather than a road map. Subsequent empirical research — some of which appears in this volume — can be used to verify and refine the model.

I will begin by illustrating whose behavior we seek to explain and why it poses such a quandary.

### **Three Vignettes**

In an effort to isolate motivation from application, I will describe three examples, each targeted to a different context of entrepreneurship: philanthropy, business, and politics.

#### **1. Nermien Riad, Founder and Executive Director, Coptic Orphans<sup>3</sup>**

Coptic Orphans (CO), incorporated in 1992, is a \$3 million nongovernmental organization (NGO) operating in Egypt whose mission is “to unlock the God-given potential of children in Egypt, and so equip them to break the cycle of poverty and become change-makers in their communities.” Under Riad's leadership, the organization evolved from a predominately welfare strategy to one that seeks sustainable solutions through development initiatives. The strategy encompasses a range of actors whose institutional development has become a priority.

Child assistance remains CO's primary effort, but Riad was not content influencing individual children and families alone. By founding the Valuable Girl Project she at once expanded CO's emphasis on education as a more sustainable solution to poverty alleviation and established the possibility of working with children of all faiths. The project brings Copts and Muslims together in the same mentoring program, at the risk of accusations of apostasy, which is punishable by death. She also established Serve to Learn, which enables CO to sustain diaspora youths' connection to Egypt beyond tourism, instilling a personal, emotional connection that is rooted in faith.

In recognition of the interconnectedness of the challenges that prevent sustainable solutions to poverty and poor health among Egyptian children, CO began partnering with a range of Egyptian NGOs, seeking complementarity to maximize impact. Riad aims to build the institu-

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3 This profile, and the quotations in later sections, draws on the author's interviews with Nermien Riad (January 21, 2004; May 11, 2007), as well as secondary sources and personal observation; see Jennifer M. Brinkerhoff, *Digital Diasporas: Identity and Transnational Engagement* (New York, NY: Cambridge University Press, 2009).

tional capacity of the nonprofit sector working in Coptic communities in Egypt. Through partnerships, she provides mentoring and incentives for professionalization. She has similarly sought to build the institutional capacity of the Coptic philanthropic sector in North America, organizing six Coptic Charity conferences that assembled representatives from organizations based in the United States and Canada who focus on charity work within Coptic communities in Egypt. She pursues this sector development work despite the possibility of its creating competition for resources to support her own organization.

Recently, Riad turned her attention to the Coptic Church in Egypt. She endeavors to influence the leadership of the Coptic Church in two ways. First, she wants to convince them to move more fully beyond traditional charity and welfare approaches to engage more directly in service outreach, with a view to improving the quality of life of their flock. Second, she wants them to initiate and build stronger relationships with the Coptic diaspora in order to sustain the faith and traditional worship practice in the diaspora, as well as to tap its financial and human-capital resources in order to support service and development work in Egypt.

Why did Riad move beyond the impressive impact and growth of her philanthropic work among orphan children to push the boundaries even further? Why would she risk her successes and the continued operation of her organization in order to reach out to children of Muslim faith? Why would she support competitors for the resources she may need for her own organization? Finally, it seems highly improbable that a woman could become the lynchpin in modernizing, however minimally, the Coptic Church — one of the most traditional institutions in Egypt. What makes her believe she can and should pursue this change?

## **2. Bal Joshi, Founder and Managing Director, Thamel.com<sup>4</sup>**

Bal Joshi is from a prominent Nepali family. After getting a degree in the United States in business administration, he felt obliged to return to Nepal and give back in some way. He began with a pushcart on the streets of Katmandu and then thought to create a national lottery system in Nepal similar to the one he had seen in the United States. With support from His Majesty's Government (HMG) of Nepal and private investors, including a major contribution from an American businessman, Joshi launched Nepal's first national lottery. The lottery, with a 2 million rupee prize per week (approximately US\$40,000-

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4 This profile, and the quotations in later sections, draws from the author's interview with Bal Joshi (December 17, 2004; December 6, 2007) as well as secondary sources; see Jennifer M. Brinkerhoff, "The Diasporan as Political Entrepreneur: The Diaspora Advantage and Theoretical Implications" (working paper prepared for the research workshop on "Explaining Diaspora Politics," Economic and Social Research Council, University of London, October 30-31, 2009).

\$45,000), was organized on a rudimentary IT platform. It employed teen-aged “runners” who took orders manually and then input them into one of over 100 cable modem terminals set up for that purpose.<sup>5</sup>

The objective was to fund the South Asian Federation Games (for which HMG had pledged US\$6 million), and at the same time generate employment throughout the country. The lottery eventually employed approximately 1,500 people, some direct employees working as runners, and — an unforeseen development — others working on commission, who represented the business establishments that hosted terminals. At one point, the lottery was estimated to be generating over \$1 million per month. Joshi proposed to HMG that after the first year the lottery be used to fund social development and infrastructure. Unfortunately, the lottery’s success attracted the attention of a new government administration, and individuals’ demands for kickbacks led Joshi and his investors to close up shop.

At the urging of several of his former employees, Joshi agreed to start anew with an information portal on Nepalese businesses. The original idea was to market a guide to local businesses to entice tourists to come to Nepal and spend money at those businesses. They named the company after the Kathmandu street that hosts the business core: Thamel. Thamel.com’s primary source of business quickly became the Nepali diaspora, not, as they had anticipated, the tourists. With a network of over 500 local businesses, as an experiment, Joshi and his associates decided to post a few items for sale online and explore whether or not diasporans would want to purchase gifts for their families in the home country. They linked this gift giving to important cultural events and festivals in Nepal. The business took off and is now thriving year-round.

Thamel.com employs cell phone-carrying gift deliverers in Nepal who know the local area (maps, street names, and house numbers are rare) and deliver the gift (or in some cases a coupon) directly to the family; the deliverer then takes a digital photograph of the recipients with their gift, which is emailed to the diaspora customer. Gift delivery evolved into a rite of its own, with the delivery person welcomed into the celebration, despite caste differences. The digital photograph establishes accountability and trust between Thamel.com and its customers at the same time as it takes on emotional value and engenders connection. The latter is most notable in the case of Father’s Day, when the photograph delivery is timed so the customer can “Look upon Father’s face” — the Nepalese translation for Father’s Day — at the start of the day. For some, this can be the first they have seen of their families since departing Nepal.

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5 Tari Henke, “Stewardship from Afar: An Entrepreneur from Nepal Promotes Community and Creates Jobs — From Half a World Away,” *Global Envision*, February 2003, [www.globalenvision.org/library/24/242](http://www.globalenvision.org/library/24/242). See also Bal K. Joshi, “Thamel.com – Serving Diaspora Communities Through ICT,” *ICT Connections: Local Ideas, Global Applications*, Center to Bridge the Digital Divide, Washington State University, October 2004.

The gift-giving business necessitated the development of a large network of reliable, high-quality producers. This, in turn, led Thamel.com to establish small business development services. It also began to provide consulting for e-commerce. While its online remittance services proved popular owing to the trust it established with its customer base, Thamel.com wanted to be more than a transfer agency. Thus it developed remittance services that include purpose-targeted remittances that enable remitters to control the application of their financial resources. Diasporans, in partnership with Thamel.com and local banks, can now remit to support private education, large animals, and home loans. Just four years after it was founded, Thamel.com became a \$1.3 million business, employing over 50 Nepalis (with additional temporary employment for festivals), and supporting a network of over 500 local businesses. The World Summit on the Information Society recognized Thamel.com as one of three businesses in the world that are “most contributing to poverty alleviation.”<sup>6</sup>

By 2005, Thamel.com had inspired at least ten e-commerce ventures in Nepal.<sup>7</sup> Member businesses credited Thamel.com-supported e-commerce for 5 to 10 percent of their sales on average.<sup>8</sup> Through Thamel.com Joshi demonstrated the utility of a supportive IT platform and regulatory environment. Joshi enjoys high-level access to government officials and has secured expedited IT and telephone upgrades from the state as needed. He advises the government on its IT framework.

Joshi was not content to stop at Thamel.com’s success or with the impact in Nepal alone. Partnering with other associates with experience in international business, Joshi co-founded Thamel International as a means to promote the lessons learned from Thamel.com’s experience. Thamel International codified a flexible model, based on the Nepalese experience, that can inform other homeland governments, donors, entrepreneurs, and diasporas as they seek effective ways of capturing the productive potential of remittances and building the small-business sector in the home country.

After such a disappointing start, and the realization of endemic corruption and the many forces that could work against him in his efforts to do business as well as good in Nepal, why did Joshi try again? Once successful, why didn’t he stop with the diaspora gift giving, especially since it satisfied his initial objectives for employment and a small profit? Why does he focus so much of his attention on business development services beyond what is needed for Thamel.com, particularly when such services create potential competitors for his business? Why was he not content to rely on an easy money-transfer business, choosing instead to engage in complicated partnerships with banks

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6 Ted Katauskas, “He’ll Get Your Goat,” *Portland Monthly*, September 2004.

7 John Paul, “Interview with Thamel.com,” Next Billion (blog), December 14, 2005, [www.nextbillion.net/blogpost.aspx?blogid=162](http://www.nextbillion.net/blogpost.aspx?blogid=162).

8 Ibid.

and educational institutions to ensure remitters had control over their funds? And what prompted him to seek to export his model to other countries through Thamel International?

### 3. Djimé Adoum, Activist for Peace and Good Governance in Chad<sup>9</sup>

Djimé Adoum followed his wife, a member of the American Peace Corps, to the United States, where he pursued his PhD in agricultural economics and worked for the US Department of Agriculture as a social science analyst (an evaluation specialist). Throughout his studies and professional career, Adoum never lost interest in his homeland. In 2004 he founded tchadnews.info, an online news service about Chad, which became the most popular news source among Chadian diasporans worldwide. Adoum had already co-founded the Mid-Atlantic Chadian Association and served as its president. The cultural organization assembled Chadian diasporans residing in the US mid-Atlantic area for national and cultural celebrations aimed, in part, at sustaining the Chadian identity and culture across the generations of the diaspora. When a subset of the membership became increasingly concerned with the politics of Chad, they decided to spin off a new organization, GRANIT (Groupe de Reflexions et d'Analyses d'Interets Tchadiens/ Group for Reflections and Analysis of Chadian Interests).

GRANIT was intended to be a think tank focused on establishing a transitional government while promoting free and fair elections in Chad. The group sought to organize a large roundtable to promote and generate political will for these objectives among US and international actors. They faced resource constraints and organizational difficulties while events in Chad, including several coup attempts, continued. In the wake of these challenges, GRANIT disbanded, yet Adoum remained committed to pursuing his vision by other means.

With the 2007 August 13<sup>th</sup> Agreement, some of these objectives were initiated. The agreement is an internal political accord that aims to reinforce the democratic process in Chad. Approximately 95 political parties signed the accord, which calls for a free and fair electoral process (including an electoral census, registration improvements, and an independent electoral commission), as well as a “suitable climate” for elections (e.g., depoliticization and demilitarization of administration, freedom of speech, and an independent judiciary).<sup>10</sup> Because civil society and rebel groups were not included, Adoum fears it will not be effective as a sustainable solution for peace and good governance.

Building on his credibility as a blogger, Adoum regularly meets with a

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9 This profile, and the quotations in later sections, draws from the author’s interview with Djimé Adoum (September 6, 2009) and his meeting with Nathalie Losson from Caring for Kaela on August 29, 2009; see Brinkerhoff, “The Diasporan as Political Entrepreneur: The Diaspora Advantage and Theoretical Implications.”

10 Chrysantus Ayangafac, *Resolving the Chadian Political Epilepsy: An Assessment of Intervention Efforts* (Pretoria: Institute for Security Studies, 2009).

range of stakeholders in Chad, including government officials, among diasporas in North America and Europe, and with Chadian Embassy staff in Washington. As a part of his work with GRANIT, Adoum began partnering with Caring for Kaela, an international NGO working to improve quality of life for the Chadian people. Adoum participated in Caring for Kaela's numerous international-level policy and advocacy efforts, including the crafting of policy recommendations for the European Union, the Obama administration, and the United Nations. In each of these efforts he emphasized the need for inclusive dialogue.

Following the demise of GRANIT, under the auspices of Caring for Kaela, Adoum co-organized an inter-Chadian diaspora meeting in France in March 2008. The objective was to address and explore the concept of an inclusive dialogue about Chad's politics. Participants unanimously selected Adoum as the moderator of the meeting and, later, as coordinator of the newly established Independent Commission for an Inclusive Dialogue (CIDI).

Next, Caring for Kaela partnered with the International Peace Institute and the United States Institute of Peace to convene a multi-stakeholder consultation on Chad, on October 8, 2008 in New York. Participants included European Commission and UN representatives, as well as representatives of NGOs, academia, and several country missions to the UN (including France, Libya, and Senegal). The Chadian Secretary of State for Foreign Affairs also attended. The discussion was off the record. At the end of the day, Adoum expressed his intention that the diaspora drive the process. He wanted to impress upon these policymakers the need to move beyond talk to action. He urged the participants to "come along. We would appreciate you coming along, helping us to navigate. And when we come to you, you be receptive to what we said here."<sup>11</sup>

Less than a month later, Adoum met privately with Chadian President Idriss Déby during a diplomatic visit to Canada, where he laid the groundwork for the formal acceptance of an independent Technical Assessment Team (TAT) in March 2009. The TAT would meet with Chadian rebel groups based in Darfur and eastern Chad. The objective was to end the Chadian and Sudanese governments' support for each other's rebel groups. The TAT was also mandated to meet with other armed forces, political opposition groups, and international actors. It was not authorized to speak on behalf of the Chadian government. The assessment was to be done in partnership between CIDI and Caring for Kaela, and funded by President Déby. In keeping with Adoum's transparency values, a press release was immediately issued. Not surprisingly, this made big news across Africa and among the diaspora. It was featured prominently, for example, on Radio France, and particularly in Chad.

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11 Djimé Adoum, in an interview with the author, September 9, 2009.

However, when the time came for the TAT to begin its work, Adoum received a last-minute phone call from the Chadian Embassy indicating that the timing was not good and he should postpone. Adoum surmises that President Déby was pressured to renege and wonders if his own emphasis on transparency was a mistake. Other international parties were taken by surprise by the TAT approval, and the enthusiastic publicity became very disconcerting, especially since these stakeholders had their own negotiators, track records, and agreements. One reason given for the change of heart was the identification of CIDI members with militant ties in Chad. Adoum was aware of at least one such member, but in the spirit of inclusiveness, had not imposed restrictions on membership in CIDI. Given Adoum's personal reputation among the various stakeholders — including President Déby — he initially intended to pursue the idea of an independent TAT, without the participation of CIDI.<sup>12</sup>

Adoum has a happy family life with two US-born children and a successful career in his area of interest and expertise. Why does he still worry over Chad? Why assert himself politically in such a context? And, with the strong social network he has developed in the Mid-Atlantic region, why would he risk alienating his friends and dividing the community by spinning off GRANIT? After GRANIT's demise, why would he trouble himself to continue this work, even to the point of working with President Déby, whom his compatriots had wanted to see removed from office? And, perhaps most importantly, why does this one individual whose only consistent support is a tiny NGO and a few Chadian friends, believe he can help end almost 40 years of civil war and unrest in Chad, a conflict that has extended into neighboring Sudan?

## I. The Entrepreneurial Personality, Motivation, Passions, and Diasporas

This part proceeds as follows. First, I review what we know about the entrepreneurial personality. Second, I summarize relevant factors from motivation literature as they relate to first movers. The Appendix discusses in greater detail early intrinsic motivation theories, four models of behavior based on Jeffrey Pfeffer,<sup>13</sup> and the recent literature on happiness. Third, I draw on Grant to distinguish interests from passions as potential motivators.<sup>14</sup> Fourth, I apply these identified motivation factors to the

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12 On March 12, 2010, Adoum was named Technical Advisor in Charge of Rural Development to President Déby. He is focused on deepening stabilization and reconstruction in Chad in order to prevent the outbreak of new violence within Chad's borders; see Caring for Kaela, "CFK Advisor Named Technical Advisor to Chadian President Idriss Déby Itno," (press release, March 17, 2010).

13 Jeffrey Pfeffer, *New Directions for Organization Theory: Problems and Prospects* (New York, NY: Oxford University Press, 1997).

14 Grant, "Passions and Interests Revisited."

specific case of diaspora first movers. Finally, I discuss why, contrary to appearances, diaspora first-mover behavior is rational action.

## A. The Entrepreneurial Personality

Entrepreneurs, as the word implies, provide an in-between function to produce innovation, or the making of new combinations.<sup>15</sup> Entrepreneurs are defined according to traits, behavior, and, increasingly, context. The historically emphasized trait theories centered on, for example, need for achievement,<sup>16</sup> a strong sense of self-efficacy or internal locus of control,<sup>17</sup> and tolerance for ambiguity and risk bearing.<sup>18</sup>

Entrepreneurism is a process wherein an actor seeks to change circumstances to reach a desired goal. Thus, both context and personal preference influence entrepreneurial behavior.<sup>19</sup> Entrepreneurial behavior typically encompasses a high risk of failure and possibly personal risks to the entrepreneur in terms of finances, reputation, psychic well-being,<sup>20</sup> and perhaps even safety. Specific behavioral characteristics of the entrepreneur include pursuing opportunity regardless of the resources available,<sup>21</sup> creating opportunity, and envisioning a desired future.<sup>22</sup> The entrepreneur is both an agent who influences structure and one who is influenced by it. This approach acknowledges that structure can both enable and constrain entrepreneurial action.<sup>23</sup> That is, the agent drives the entrepreneurial process, including the envisioning of a particular future, but is embedded in and somewhat constrained by the context.<sup>24</sup> Strategy evolves through learning by doing.<sup>25</sup>

Social relations have a profound impact on entrepreneurial behavior. Entrepreneurs learn a personal role, including through the individual's

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15 Joseph Schumpeter, *The Theory of Economic Development* (Cambridge, MA: Harvard University Press, 1934).

16 David C. McClelland, *The Achieving Society* (New York, NY: Free Press, 1961).

17 Julian B. Rotter, "Internal versus External Control of Reinforcement: A Case History of a Variable," *American Psychologist* 45, no. 4 (1990): 489-93.

18 John Stuart Mill, *Principles of Political Economy with Some of Their Applications to Social Philosophy* (London: John W. Parker, 1848).

19 Elizabeth Chell, "Towards Researching The 'Opportunistic Entrepreneur': A Social Constructionist Approach and Research Agenda," *European Journal of Work and Organizational Psychology* 9, no. 1 (2000): 63-80.

20 Patrick R. Liles, "Who are the Entrepreneurs?" *MSU Business Topics* 22, no. 1 (1974): 5-14.

21 Myra M. Hart, Howard H. Stevenson, and Jay Dial. "Entrepreneurship: A Definition Revisited," in *Frontiers of Entrepreneurship Research*, eds. William D. Bygrave et al. (Babson Park, FL: Babson College, 1995).

22 Chell, "Towards Researching The 'Opportunistic Entrepreneur.'"

23 Anthony Giddens, *The Constitution of Society* (Oxford: Blackwell, 1986).

24 See, for example, Christos Kalantaridis, *Understanding the Entrepreneur: An Institutional Perspective* (Aldershot: Ashgate Publishing Ltd., 2004).

25 Sidney M. Greenfield and Arnold Strickon, "A New Paradigm for the Study of Entrepreneurship and Social Change," *Economic Development and Cultural Change* 29, no. 3 (1981): 467-99.

perception of others' expectations, and from role models.<sup>26</sup> Models and experiences from childhood can be particularly influential. Several scholars have focused specifically on the role of social networks in entrepreneurial behavior. Ronald Burt's application of structural holes to the entrepreneur is particularly insightful. Structural holes refer to nonredundant contacts within social networks. Individual actors can occupy these structural holes and act as bridges between diffuse sources of information. Thus entrepreneurs become the "tertius," or "individual who profits from the disunion of others."<sup>27</sup> Accordingly, the greater the number and depth of structural holes within a social network, the greater the potential for entrepreneurial activity. The existence of deep structural holes that an entrepreneur believes he or she can occupy inspires confidence that the entrepreneur can succeed. A clear role may suggest itself solely by virtue of the hole's existence and the individual's placement between these unconnected network nodes. Once an entrepreneur recognizes his or her placement in a structural hole, the entrepreneurial process can begin.

To summarize, entrepreneurs are characterized by a need for achievement, strong internal locus of control, and high tolerance for ambiguity and risk bearing. Entrepreneurs pursue identified opportunities, sometimes at great risk and regardless of the resources at hand; they create new opportunities and envision a desired future. They both influence and are influenced by their context and social relations. They occupy structural holes between various stakeholders and mediate among them.

## **B. First Mover Motivation<sup>28</sup>**

Early intrinsic motivation theories suggest several relevant factors regarding first movers. First movers may share the following dispositional and behavioral characteristics: positive affect; internal locus of control; relatively high percentile scoring on the Big Five personality dimensions (extraversion, agreeableness, conscientiousness, emotional stability, openness to new experience); satisfied lower order needs (physiological, safety, love/belonging, and self-esteem) such that the primary motivation is self-actualization; a high need for achievement that supersedes felt needs for power and affiliation; and strong internal commitment to the chosen course of action.

Pfeffer's general models of behavior shed further light on first-mover motivation. First movers may not conform to the economically-focused

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26 Leland H. Jenks, "Role Structure of Entrepreneurial Personality," in *Change in the Entrepreneur*, edited by the Harvard University Research Center in Entrepreneurial History, 1949: 108-52; see Kalantaridis, *Understanding the Entrepreneur*.

27 Ronald Burt, "The Network Entrepreneur," in *Entrepreneurism: The Social Science View*, ed. Richard Swedberg (Oxford: Oxford University Press, 2000): 281-307.

28 See Appendix for an explanation and further discussion of the theories and models reviewed.

actors assumed in the economic model. This is not to say that they do not respond to extrinsic rewards at all, but these may not be the primary drivers of their behavior. For example, other relevant extrinsic rewards include power resources (e.g., economic, social, political, moral, and informational<sup>29</sup>). These resources may be direct motivators or be sought because they enhance first movers' ability to influence their context to support their vision for reform. The moral and social models may inform first movers' cognitive rationality. That is, they may be driven by particular values, social norms, and obligations that compel them to set particular goals that may be other-regarding. The cognitive model helps explain the seemingly irrational drive of first movers: their behavior is rational in that it conforms to first-mover self-perception and preferences, including their need for achievement and the reliance on their own creativity, especially in the face of adversity; their positive affect and related optimism; and their expectation of success. The model may also explain why first movers are driven to excel under difficult circumstances — they perceive enjoyment and a greater sense of achievement from challenges, especially in the absence of extrinsic rewards — and why they persist in the face of adversity. Most importantly, the cognitive model helps explain first movers' depth of psychological empowerment, or their "belief that they have the resources, energy, and competence to accomplish important goals."<sup>30</sup>

Happiness appears to reinforce many of the dispositions associated with first movers, including resilience in the face of adversity and ambiguity. Happiness encompasses a sense of meaning and purpose, which can be reinforced by the first mover's vision for change. Happiness can be proactively reinforced through expressed appreciation, positive thinking, and altruistic behavior.<sup>31</sup>

### **C. Passions Fueling Interests**

Are first movers driven by passions or interests? The interest or economic model fundamentally concerns self-preservation and is thus insufficient to explain the full range of individuals' behavior, notably other-regarding behavior that forms the foundation for community, faith, and family. Furthermore, interests do not explain why individuals seek more than what they need, and sometimes in ways that may ultimately be damaging to self-preservation. Here, we may better understand behavior by referring to passions. Grant highlights the following passions: status, justice, community or solidarity, and security,

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29 Norman Uphoff, "Analytical Issues in Measuring Empowerment at the Community and Local Levels," in *Measuring Empowerment: Cross-Disciplinary Perspectives*, ed. Deepa Narayan (Washington, DC: World Bank, 2005): 219-46.

30 Ed Diener and Robert Biswas-Diener, "Psychological Empowerment and Subjective Well-Being," in *Measuring Empowerment: Cross-Disciplinary Perspectives*, ed. Deepa Narayan (Washington, DC: World Bank, 2005): 125.

31 Sonja Lyubomirsky, Kennon M. Sheldon, and David Schkade, "Pursuing Happiness: The Architecture of Sustainable Change," *Review of General Psychology* 9 (2005): 111-31.

some of which may be mediated by a sense of duty or responsibility.<sup>32</sup> In this section I will describe each of these passions in more detail.

The status passions include a competitive component, aimed at ambitions that seek honor and status over others, and implicating envy and jealousy, as well as an egalitarian component that targets self-esteem and self-respect among, but not over and above, others. Despite its noncompetitive orientation, this latter component may still give rise to undesirable behavior, as violations of status can invoke rage. The status passions both inspire individuals to join associations, and activate an interest in status among various peer and aspirational groups.

Passions may emerge from concern for justice; namely, injustice (undeserved suffering) may provoke behavior stemming from anger and/or pity. Psychological theories tell us that if individuals can rationalize injustice — for example, argue that it is unavoidable or unintentional — then anger may subside. However, righteous indignation can occur, even on behalf of people who are unrelated to and/or far away from these individuals, if they view suffering as unnecessary, intentional, or unjustifiable. Pity may be more intense if the individuals identify or empathize with those who suffer. If individuals identify with the suffering group too much, they may also experience and be motivated by fear.

Another passion is precisely this sense of solidarity or community. Specifically, events that happen to a group with which an individual identifies “can trigger immediate and passionate responses in that person even when he or she is not directly affected and is unlikely *ever* to be directly affected by similar events.” Through solidarity individuals come to “share others’ pleasures and pains.”<sup>33</sup> This aspect of solidarity can be understood as love. The opposite passion is hatred, wherein an individual demonizes others, and takes pleasure in others’ suffering, viewing the world as divided between “us” and “them.” The latter may be motivated or reinforced by the passion of fear, which drives people to seek security. This side of solidarity passion may manifest in a narrow definition of intended beneficiaries for one’s efforts.

Moving from these passions to action may be mediated by a sense of duty or responsibility. These are distinct from solidarity as they do not necessarily require a sense of identification with the others on whose behalf an individual might choose to act. Duty and obligation are socially constructed. Those who grow up in a family that emphasizes service and charity are more likely to partake in similar behaviors as

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32 Grant, “Passions and Interests Revisited.”

33 *Ibid.*, 455.

adults.<sup>34</sup> Such an orientation may be reinforced by an individual's faith; service work motivated by religious values may serve to deepen faith.<sup>35</sup>

Passions implicate many of the first-movers theories and behaviors noted in the previous section. The status passion may derive from an individual's self-perceived identity as a community leader (cognitive model) who aspires to conform to community expectations as such (moral and social models). If the aim is to have status over others, as opposed to an equitable interpretation, then the economic model may be at play. Status may be an expected reward from first-mover successes and/or an operational base for initiated behavior (e.g., sense of duty). In short, the status passion reinforces the first mover's need for achievement and search for all five of Norman Uphoff's power resources. Passion for justice is a reflection of the moral model, though it is also socially influenced and motivated, again, by an individual's cognitive interpretation of right and wrong, and of us and them. That is, the justice passion reinforces selected social expectations and, most importantly, may inform the first mover's vision. The solidarity/community passion maps most closely onto the moral and social models and demonstrates a need for affiliation. It, too, reinforces social expectations and informs the first mover's vision. This passion also motivates the search for social and moral power resources. Finally, the mediation of duty reflects the moral and social models, as well as an individual's self-perception of what it means to be a responsible human being.

#### **D. The Particular Case of Diaspora Entrepreneurs<sup>36</sup>**

Taken together, the above findings describe first-mover behavior on a general level. Are diaspora first movers any different from the above-described entrepreneurs? Do they merit special attention when seeking to promote innovation in their countries of origin? Within these frames of reference, diasporans do, indeed, have particular motivations and advantages worth considering. Specifically, due to their disposition, the migration experience, and the development of hybrid identities, many of the characteristics of first movers generally may be over-represented in diaspora populations. Those who elect to migrate may do so precisely because they already possess several of the characteristics typical of first movers, including internal locus of control, high tolerance for and even enjoyment of risk and ambiguity, openness to experience, and curiosity. As they encounter a range of social groups and possibilities that are new to them, diasporans may be particularly motivated by passions of status, community/solidarity, and injustice. Each of these

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34 Paul G. Schervish and John J. Havens, "Social Participation and Charitable Giving: A Multivariate Analysis," *Voluntas* 8, no. 3 (1997): 235-60.

35 Jeff Haynes, "Religion, Secularisation, and Politics: A Postmodern Conspectus," *Third World Quarterly* 18, no. 4 (1997): 709-28.

36 The hypothesized diaspora comparative advantages are based on elective migration; they may be less applicable to those whose migration is forced.

may be mediated by a sense of duty or obligation, which is further reinforced both in the diaspora community and in the place of origin (i.e., family, community, culture, and faith).

Among the features of the migration experience that are conducive to entrepreneurship<sup>37</sup> are: withdrawal of status,<sup>38</sup> which results in the emergence of “individualism and self-reliance as key personality attributes, which in turn favor creativity and entrepreneurial activity”;<sup>39</sup> incentives to create new social ties (e.g., beyond the immigrant community);<sup>40</sup> and an emergent ability to “activate a cultural repertoire, brought from the home country, which allows them to construct an autonomous portrayal of their situation that goes beyond a mere adversarial reaction.”<sup>41</sup> Alejandro Portes et al. found that transnational entrepreneurs represent the elite of their immigrant communities in terms of professional education, associated income, and legal status.<sup>42</sup> These findings challenge the assumption that diasporan transnational political activists are motivated by status loss vis-à-vis their previous quality of life in the homeland. Rather, their status may have been augmented and they may be motivated to engage precisely to demonstrate this enhanced status.<sup>43</sup>

Table 1 summarizes factors informing entrepreneurial behavior generally, and identifies diaspora-specific implications.

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37 Brinkerhoff, “The Diasporan as Political Entrepreneur.”

38 Everett Einar Hagen, *On the Theory of Social Change: How Economic Growth Begins* (Homewood, IL: Dorsey Press, 1962).

39 Kalantaridis, *Understanding the Entrepreneur*, 55.

40 Howard E. Aldrich and Catherine Zimmer, “Entrepreneurship Through Social Network” in *The Art and Science of Entrepreneurship*, eds. Donald L. Sexton and Raymond W. Smilor (Cambridge, MA: Ballinger, 1986): 3-24.

41 Alejandro Portes and Julia Sensenbrenner, “Embeddedness and Immigration: Notes on the Social Determinants of Economic Action,” *American Journal of Sociology* 98, no. 6 (1993): 1320-50.

42 Alejandro Portes, William J. Haller, and Luis Eduardo Guarnizo, “Transnational Entrepreneurs: An Alternative Form of Immigrant Economic Adaptation,” *American Sociological Review* 67, no. 2 (2002): 278-98.

43 Brinkerhoff, “The Diasporan as Political Entrepreneur.”

**Table I. Entrepreneurial Factors and Diaspora Applications**

Factors Informing Entrepreneurial Behavior		Diaspora-Specific Applications
<i>Individual Traits</i>		
Entrepreneurship Literature		
<b>Internal locus of control</b>		May be over-represented among diaspora populations
<b>Need for achievement</b>		Some electively migrate precisely to attain higher achievements (educational, economic, etc.). They may feel a duty to succeed
	Other-directed	Can be reinforced by social obligations and expectations in both the diaspora and place-of-origin communities
	Enjoy high-risk situations	May be over-represented among diaspora populations
	High perceived probability of success, especially in circumstances of uncertainty	May be over-represented among diaspora populations
	Belief that personal effort is critical to success	May be reinforced through the migration experience
	Motivated by feedback and ability to trace impact	
<b>High tolerance for risk and ambiguity</b>		May be over-represented among diaspora populations
<i>General Internal Factors</i>		
<b>Big Five</b>	Extraversion	
	Agreeableness	
	Conscientiousness	
	Emotional stability	Necessary for successful migration and adjustment
	Openness to experience	May be over-represented among diaspora populations
<b>Motivated by self-actualization</b>	Acceptance of human nature	
	Focus on the greater good (as opposed to idiosyncratic concerns)	Could be problematic for some diasporans as they face the challenge of integrating into a new society, though successful integration may trigger a reinforcement of duty, obligation, and sense of "giving back"
	Curiosity	May be over-represented among diaspora populations
<i>Models of Behavior</i>		
<b>Economic model</b>	Economic rewards not primary, but signal achievement and status	Economic reward in the country of origin may be less important than the demonstrated resources a diaspora first mover can bring to the table
<b>Moral model</b>	Access to social, political, moral, and informational power resources may also motivate	Difficult to disentangle personal reward from motivation due to the facilitative benefits for the first-mover vision
	Some work is beyond transactions (can't put a price on it)	

Factors Informing Entrepreneurial Behavior	Diaspora-Specific Applications	
<b>Cognitive model</b>	Personal values motivate, including culture and faith	
	Remains true to self-perception	May incorporate a sense of obligation to the place of origin
<b>Happiness</b>	Rationalizes unrewarded behavior and risk	
	Sense of purpose	
	Able to sustain efforts and endure difficulties	Migration experience may reinforce sense of self-efficacy
	Acknowledging blessings	These may be more readily identified through comparison with those who remain in the place of origin
	Optimism/positive affect	Can be reinforced by successful migration experience
	Practicing acts of altruism	
<i>Social Influences</i>		
<b>Entrepreneurship literature</b>	Perception of others' expectations	May be particularly salient if family supported migrant as a vehicle for collective achievement
	Models and experiences from childhood	Family members in place of origin may have supported economic advancement and even emigration, demonstrating sacrifice and perseverance
<b>Moral model</b>	Acting as a role model for others	
	Obligation and duty to others	Reinforced if family supported emigration
	Compliance with perceived authorities	Includes family and place of origin community leaders
<b>Social model</b>	Social norms and obligations	Diasporans can rely on alternative identity references (place of origin/place of residence) to rationalize responsiveness or lack thereof to various sources of social norms and obligations. The process can be both liberating and compelling, depending on personal choices
	Expected behavior	
	Earning respect and feeling included	
<i>Process</i>		
<b>Entrepreneurship literature</b>	Learning by doing	Reinforced by migration experience
	Actions reflect opportunities and constraints from the context as well as personal preferences	Diasporan can navigate opportunities and constraints through unique combinations from various contexts (country of origin, country of residence, international practices)
	Behavior encompasses high risk of failure and personal risks (finances, reputation, psychic well-being)	Risks may be rooted in country of residence, diaspora community, and/or country of origin. There may be a possibility of hedging these risk sources
	Pursuit of objective regardless of resources available	Diasporans can access multiple sources of intangible resources through tertius roles
	Creating opportunity	
	Envisioning a desired future	The vision may encompass combinations of values and experience from both the country of origin and the country of residence

Factors Informing Entrepreneurial Behavior	Diaspora-Specific Applications	
<b>Internal commitment</b>	Task fulfills own needs and sense of responsibility	
	Consistency with personal values	
	Ability to change course as needed	Due to hybrid identity, diasporan may face fewer social sanctions for creativity that deviates from expected behavior
<i>Context</i>		
<b>Entrepreneurship literature</b>	Social networks and ability to be the tertius	Diasporans are particularly poised to be a tertius between country of residence and place of origin actors, and between place of origin and higher authorities within the country of origin
	Availability and number of structural holes	Varied and intensive depending on skills, knowledge, related networks, and scope of action
<i>Passions</i>		
<b>Status</b>	Status passion may represent an expectation of referent others	Diasporans may experience a glass ceiling in the country of residence and perceive a greater ability to achieve status and recognition in the country of origin
<b>Justice</b>	Reinforces moral motivations, sense of obligation/duty	May simply derive from comparative perceptions of well-being between self (in country of residence) and those in place of origin. Could be further reinforced by discrepancies in institutions experienced in diaspora and those operating in the country of origin
<b>Community/solidarity</b>		Diaspora identity and sense of difference with society of residence may compel greater efforts for acceptance of and service to diaspora community and place of origin communities
<b>Security</b>	May lead to narrow definitions of beneficiaries	Diasporans may be motivated vis-à-vis the country of origin in part to ensure a safe, secure, and prosperous place to retreat to later in life. Perceived threats to their particular identity group(s) may lead them to narrow the scope of beneficiaries even within the country of origin

Source: Author.

Not all diasporans will become first movers. First movers, even within the diaspora context, remain rare. In fact, there are some features of the diaspora experience that may work against the emergence of first movers, such as a passion for security that inspires a greater emphasis on survival and idiosyncratic concerns than on a greater good, and a narrowly defined community and set of obligations that limits the diasporan's potential to identify structural holes and act as a tertius.<sup>44</sup>

### ***E. Diaspora First-Mover Behavior as Rational Action***

First movers can be perceived as irrational actors. These perceptions may derive from a lack of appreciation or the obscurity of the first mover's particular advantages and risk management strategies, the

44 See Portes and Sensenbrenner, "Embeddedness and Immigration."

rarity of the first-mover phenomenon, and the fact that first movers are more tolerant of risk and ambiguity than their critics. Despite the fact that first movers are particularly driven by achievement at high risk, the motivation and means by which they pursue their visions are still quite rational.

Even as they appear to be irrational cranks and misfits, first movers create a narrative that can recast these perceptions, establishing them as visionaries.<sup>45</sup> As mentioned above, diaspora first movers in particular may face fewer constraints in terms of social sanctions for deviating from social norms. Furthermore, entrepreneurs generally may engage in a rational calculus to assess the potential relative costs and benefits of their particular visions, as suggested by expectancy theory.<sup>46</sup> The possible rewards of the vision, especially their potential to be valued by others, may far outweigh the personal risks for the first mover. Entrepreneurism is a result of both individual agency and context reflected in a strategy of learning by doing;<sup>47</sup> first movers rationally adjust tactics to reflect lessons learned and changes in context. They adjust their expectations for success based on the evolving certainty of the contexts in which they work.<sup>48</sup>

First movers are motivated by a range of things, many of which they pursue rationally. They may engage in entrepreneurial behavior to acquire power resources and material gains (the economic model of behavior); express and comply with values and social norms and expectations (the moral and social models of behavior); respond to respected others and social rewards (the social model of behavior); and/or consistently enact their identity, their personal vision for themselves, and the vision to which they have committed (the cognitive model of behavior). In other words, the rationality of first-mover motivation extends beyond economic and material rewards and encompasses moral, social, and cognitive rationality as well as the pursuit of passions.

Still, what makes them believe they can succeed against all odds? According to David McClelland, individuals with high need for achievement (nAch) tend not to perceive their actions as particularly risky.<sup>49</sup> As the above review of diaspora characteristics suggests, diaspora first movers may indeed possess particular comparative advantages that may be unrecognized by others, who consequently attribute their behavior

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45 Stephen Downing, "The Social Construction of Entrepreneurship: Narrative and Dramatic Processes in the Coproduction of Organizations and Identities," *Entrepreneurship Theory and Practice* 29, no. 2 (2005): 185-218.

46 John P. Campbell, Marvin D. Dunnette, Edward E. Lawler III, and Karl E. Weick, Jr., "Expectancy Theory," in *Managerial Behavior, Performance, and Effectiveness*, eds. John P. Campbell, Marvin D. Dunnette, Edward E. Lawler III, and Karl E. Weick, Jr. (New York, NY: McGraw-Hill, Inc., 1970): 343-48; see also Victor Vroom, *Work and Motivation* (New York, NY: Wiley, 1964).

47 Greenfield and Strickon, "A New Paradigm."

48 McClelland, *The Achieving Society*.

49 Ibid.

to irrationality, and their success to luck. In fact, these attributes may reduce the de facto risks of failure or even personal risk to the diaspora first mover. For example, knowledge and networks from both the country of residence and country of origin enable the diasporan to access a far greater range and depth of resources, some of which can be hedged against identified risks. Deep structural holes in networks between the country of residence and the country of origin inspire confidence that the entrepreneur can succeed.<sup>50</sup> This is not to negate the personal risks and more general risk of failure that diaspora first movers confront. By definition, first movers have a higher tolerance for such high risks, and overcoming them results in a greater sense of achievement, which is an important foundation of their motivation.

In sum, diaspora first movers rationally respond to: social expectations, including family/community obligations based on their relative advantages and experience; opportunities posed by networks, including their effort to strategically place themselves within and capitalize on them; their risk assessment, which differs from other actors in response to perceived comparative advantages and understanding of the context; and self-interest, with respect to seeking power resources (economic, informational, social, moral, political, and coercive) and complying with their self-perception (the cognitive model). Their passions inform these interests. Status passions fuel their need for achievement and the search for power resources. Passion for justice reinforces social expectations and may shape their vision for change. And solidarity passion similarly reinforces their perceived self-interest in complying with social expectations, and their search for social and moral power resources.

## II. Towards a Motivation Model for Diaspora First Movers

By definition, first movers possess particular traits without which they are not likely to behave in entrepreneurial ways. But traits alone will not assure that these individuals will so engage. Contrary to the intentions of many policy interventions, the additional required ingredients are not necessarily aspects of an “enabling environment.” Since first movers initiate action seemingly against the odds and without regard to the resources available, they do not necessarily wait for facilitating conditions; they can create them. In addition, since some first-mover activities are high risk (threatening, for example, the first mover’s livelihood and reputation), we cannot say that they are motivated exclusively by self-interested behavior. What, then, are the additional necessary ingredients? I believe the answer lies in passions sustained by happiness. In the case of diaspora first movers, diaspora identity and

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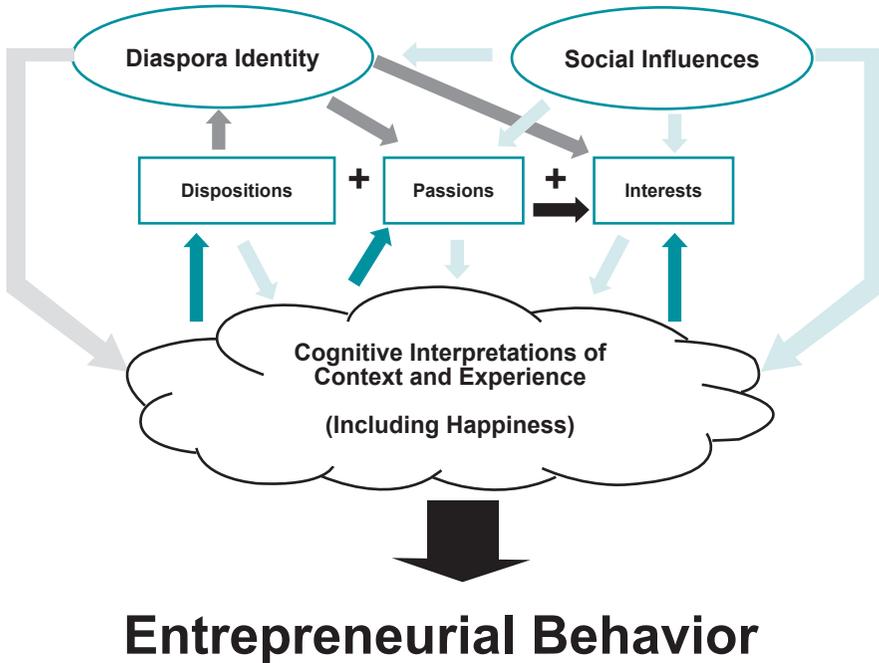
50 Burt, “The Network Entrepreneur.”

experience may reinforce passions. The following is a proposed model depicting diaspora first-mover behavior. The model is then illustrated through the examples introduced above.

### A. A Model of Diaspora First-Mover Behavior

Figure 1 depicts the model.

**Figure 1. A Model of Diaspora First-Mover Motivation**



Source: Author's rendering.

First movers have particular dispositions, including positive affect, internal locus of control, high percentile scoring on the Big Five personality dimensions (extraversion, agreeableness, conscientiousness, emotional stability, openness to new experience), high tolerance for risk, drive for self-actualization (which could also be considered an interest), high need for achievement, and internal commitment to the chosen course of action. Passions of status, justice, and solidarity are informed and reinforced through personal values (including faith), social norms and obligations, and experience (including the diaspora experience); they, in turn, inform interests such as the search for power resources (e.g., status, profit, and political power). The diasporan's dispositions may contribute to the decision to migrate, and thus inform diaspora identity, including the makeup of the diasporan's hybridity

(the unique combination of culture and values from the place of origin and the country of residence<sup>51</sup>). Diaspora identity and the migration experience significantly influence the specific passions and interests that may motivate the diaspora first mover. The identified internal motivators (simply referred to here as dispositions) combined with passions and interests, which are partially socially influenced, inform diaspora first movers' interpretation of their context and experience (including their happiness affect), as does the diaspora identity, which simultaneously motivates their entrepreneurial behavior and reflects back on their dispositions and perceived passions and interests. Continuous cognitive interpretations influence entrepreneurial behavior initiation and persistence.

## **B. The Model Illustrated**

In order better to illustrate how the model works, I have applied it to each of the first mover vignettes detailed above.

### **1. First Mover Nermien Riad**

Nermien Riad is fundamentally motivated by her faith, though faith alone cannot explain her vision, risk-taking, and effectiveness. While her faith could inspire a fatalistic attitude — indeed, she refers often to “God’s will” — she embodies a joy rooted in “God’s blessings,” which also inspires a sense of duty to others who are less fortunate. As Riad puts it,

*God was the one that brought us here. We can never say “Oh, I worked hard. I made a lot of money.” I did nothing. And so, having gotten that opportunity, shame on me if I were to forget these people that are worse off.<sup>52</sup>*

Perhaps reinforced by the advantages she perceives to have come from American socialization and professional training, Riad has a strong sense of an internal locus of control, and through these acts as a tertius. She elaborates:

*I’ve never worked in Egypt. I don’t know what it’s like there. So I’m modeling after what I’ve seen here.... Had I been raised there, number one I wouldn’t have been exposed to that idea to begin with. Number two, I wouldn’t have asked for justification of why or why not. There, it’s a given, “We don’t do that.” So, thank God we don’t understand, we don’t have the same thinking ways so that we can begin to question why do we do it this way?<sup>53</sup>*

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51 Brinkerhoff, *Digital Diasporas*.

52 Riad interview with the author, December 17, 2004.

53 Ibid.

She believes that once she asks the “why” there will be something she can do about it. Like McClelland’s high nAch individuals, Riad likely does not perceive her actions as particularly risky. Rather, she adjusts her behavior according to the cues she receives from her environment and through learning by doing. Hence, in order to support the needs of children of both faiths in Egypt, she saw the simple solution of identifying a neutral convening place through local institutional partners.

Her faith and engineering background buttress, respectively, her agreeableness and emotional stability, and her conscientiousness. Perhaps it was her openness to new experience and her curiosity that led her to so readily to embrace a spontaneous proposal from a graduate student staff member to pilot a girls’ education effort that led to the Valuable Girl Project. In Riad’s own words:

*When the idea of the girl’s education project came about, we jumped on it. We said, “Yes, this is perfect. We want to do this.” Of course it took us into a totally different realm. This is something outside of our expertise. We’ve never done anything like this before. We’ve never had to partner with an organization before. And it was all uncharted territory. But, you know, why not? Let’s try it. And the whole idea also was, once we get it started somewhere that we want to replicate it in other places, and that we want to expand it, because we want to get as much coverage.<sup>54</sup>*

It is difficult to disentangle the influences of her faith and disposition in explaining her general happiness. Riad has a clear sense of purpose, regularly counts and thanks God for her blessings, and is almost continuously focused on altruistic behavior.

Riad embodies the moral model of behavior. The nature of her work — “God’s work” — negates any notion that her motivation derives from material self-interest. One cannot put a definitive price tag on her efforts, even though they are encompassed in a professional nonprofit organization from which she draws a salary. Riad began Coptic Orphans in the basement of her home and at her own expense. She views her work as compliant with the Coptic Church’s mandate of charity and service, and as a duty or moral obligation to those who suffer.

Among the passions that drive her, perhaps the most pertinent is injustice, and her response is fueled by her socialization in the United States: “The American thinking is, ‘I see an injustice, therefore I’m going to do something about it.’ Whereas in Egypt, the Egyptian thinking is more, ‘I see an injustice. That’s the way life is.’”<sup>55</sup> She also appears strongly motivated by a passion for solidarity/community. This is perhaps the driver for her efforts to connect and unite a dispersed Coptic community of faith, leading her to link the Coptic diaspora to the Church in Egypt; build bridges within the Coptic diaspora, inclusive of CO offices

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<sup>54</sup> Riad interview with the author, December 6, 2007.

<sup>55</sup> Riad interview, 2004.

in Canada and Australia; and convene several Coptic charity networking and capacity-building events. These efforts have contributed to making Riad a leader in the Coptic diaspora and a recognized resource for the Coptic Church.

And how do these factors combine into a process that encompasses cognitive interpretation and response? Her successes and recognition by Church leaders may have led Riad to a deeper sense of self-efficacy, and to identify as a change maker. And while status is not a primary driver — Riad uses the word “we” in describing CO’s evolution and contributions — it is possible that this recognition also contributes to a status passion, as she experiences recognition from both the Church and the development/nonprofit professional community in the United States. This contributes to her ability to fundraise and open doors to new opportunities. It also influences the way in which she thinks about her work; she now has, for example, broader notions of the importance and operationalization of sustainable development, and a larger sense of “community” to which she directs her contributions.

## **2. First Mover Bal Joshi**

The first impression Bal Joshi gives is one of exuberant joy. He speaks of family influences and the importance of giving back. He explains, “I’m the eldest son in the family and the family has businesses, and as the eldest son my duty is to bring home the things that I learned in the States, and hopefully create new economies or bring ideas to Nepal.”<sup>56</sup>

Like other entrepreneurs, his story illustrates his internal locus of control and his high tolerance for risk and ambiguity. His curiosity led him to experiment with marketing to the diaspora; his risk tolerance and internal locus of control pushed him forward despite the absence of what any other business investor would consider the necessary infrastructure for delivery of goods and services. His perceived probability of success was informed by his understanding of his role as a bridge between knowledge and resources in the United States and Nepal. After all, it was a conversation with his eventual American investor that led to his initial efforts in the lottery, he explains: “He and I had talked about how do you create jobs? How can we launch a new business that would help Nepali youth understand that there are new ideas that can be implemented?”<sup>57</sup> Curiosity and openness to experience led him to take on a variety of business opportunities, despite his lack of particular expertise in, for example, information technology.

Despite the fact that Thamel.com is a profit-making business, Joshi’s need for achievement is also channeled into other-directed endeavors. Due to his sense of obligation as a member of a privileged class and the expectations of his family that he fulfill certain roles, his primary aim

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56 Bal K. Joshi interview with the author, September 17, 2004.

57 Ibid.

at the outset was to employ technically trained youth so as to prevent their felt need to migrate, particularly to the Gulf, where he believed they would endure a much poorer quality of life. Despite the disappointing outcome of his lottery experience, Joshi responded to requests from his former staff to try again: "My guys who had worked for me, who were extremely bright, did not have interest to go abroad and not [use] their skills, so they approached me and said 'We want to do something in Nepal.'"<sup>58</sup> He understood that they saw him as a leader and that it was his obligation to fulfill that role. Joshi at once explains his motivation and illustrates his openness to experience and tolerance for ambiguity in the following statement:

*For me, my biggest objective was how can I help these guys do whatever they do best and see if they can come up with something of use? It was more of a research and experimentation for me than basically anything else. I had not expected that this would turn out to be the venture that it would. I knew that I had some really bright kids, but I had no expectations in terms of what they were going to come out with.*<sup>59</sup>

It is this sense of duty that also compels him to meet the needs of the diaspora beyond making profits, such as offering remittance services that enable people to control the application of their hard-won resources, and supporting business development in Nepal well beyond his own business. It is clear, then, that he too fits squarely in the moral model of behavior. He aims to be a role model for others; his actions reflect duty to others; and he complies with legitimate authorities, in this case his family and Nepalese society. He has a strong sense of purpose, and despite setbacks has sustained his efforts, even if in a different direction, as well as retained his joy in his ventures.

Joshi is also driven by a passion for justice. Ironically, this is what led him to forgo his initial efforts with the national lottery. It may also be what inspires his efforts to serve the diaspora through remittance services. He speaks with passion about returning diasporans who find that the money they have contributed over years has funded the purchase of alcohol, supported a new spouse, or was not applied to the education of a treasured child. As he explained,

*There have been a lot of cases... we have seen in Nepal where these guys would be away from home for 18 to 20 years and they would get to go back home once in three years. In a lot of cases, these people were sending money to Nepal either through Hundi or whatever, by the time they retire, when they come back, the wife would be gone, the home would be gone. Whatever he saved, all the money would be gone.*<sup>60</sup>

Joshi appears proud of his decision to back away from the national

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58 Ibid.

59 Ibid.

60 Ibid.

lottery due to corruption, and similarly of the services that he offers to fellow diasporans and the successes he has achieved therein.

He also seems gratified by the recognition he has received from international prizes, and especially from the feedback he has received from HMG. He describes the response to his televised receipt of an international prize thus:

*I had the honor of accepting the award dressed up in my Nepalese dress and that became big news in Nepal — a Nepali guy was able to accept a respected award in Nepalese dress. Because of that I received a letter from the Prime Minister's office saying, "Good luck kids and continue to do whatever you have done." Because of that any help from the government has been there.<sup>61</sup>*

Joshi sees his enhanced status as contributing to his continuing success by opening new opportunities to cooperate with HMG. For example, he now sits on an advisory board for information technology policy.

These experiences reinforced his identity as a leader both in innovation and redressing seemingly intractable challenges related to justice. This deepened identity inspired broader applications of his thinking and model to support the business sector in Nepal, as well as the quality of life of diasporans beyond just those of Nepali origin, through Thamel International.

### **3. First Mover Djimé Adoum**

While Joshi exudes joy, a smile always on his face, Adoum is full of laughter. Like the other two first movers discussed here, Adoum is strongly influenced by a perceived sense of duty that derives from family influences and his faith. Adoum describes his father as a community leader and clearly views him as a role model who influenced his own learning and experience:

*Nowadays, if I walk around some of these villages... the old people might recognize me and say, "This is Adoum's son".... So, you know, can you fill in your dad's shoes? I don't know.... And then as you grow and you travel and you learn, you look at the world, you read about those people who grew up in misery and had nothing, but yet they made such an impact. So we learn from those great experiences.<sup>62</sup>*

Adoum credits his faith both for creative ideas and resilience:

*I have faith in God. I sit here at night, I look up at the moon and it's quiet, and I pray hard. And I say, "Please help me stick to what is generally acceptable. And figure out a way of coming out with creative ideas. Creative ideas that should or must do good".... Growing up with the religion,*

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61 Ibid.

62 Adoum interview with the author, 2009.

*growing up in a very poor environment... you develop a very deep sense and root yourself in the goodness of the religion, and it basically says, "You do your part, God does his part."*<sup>63</sup>

Adoum is clearly adventuresome and open to new experiences. He was the son designated to receive a Western education. When a school opened nearby, his father, at his uncle's urging, despite knowing nothing about this kind of education, sent Adoum to attend. Adoum recounts the conversation thus:

*"Look. You did enough Koranic education. This brother and so on, they're going to continue with their Koranic education. You? This thing? Take it all the way and see what is in it for you." I said, "Okay." And it stuck with me, even when I thought, "Oh, I'm getting tired of this. I don't want to do it anymore." I didn't finish high school, when I came to the States I got my GED. And each time I wanted to stay away from it, the old man, bless his heart, said, "Have you taken it all the way?"*<sup>64</sup>

More than the other first movers profiled here, Adoum's is a risky business. He is actively seeking to communicate with people who carry guns, and was barred from returning to Chad to pursue his vision for a technical assessment of the conflict. Yet, like other entrepreneurs, he does not necessarily perceive what he is doing to be significantly risky. Like others with a high need for achievement, he appears either to underestimate the risk and/or to make appropriate adjustments to his behavior based on environmental cues. As he puts it, "when you get into these kind of things, the risk, you know, you could be walking on the street and be hit by a car. I think the risks are minimal." When pressed more directly about his intention to talk to the armed opposition and going to areas where there is fighting, he responds,

*Well, let me put it this way. Let's say, hopefully, when we go to these people they're not going to be fighting.... Ceasefires are made for that. So you can't go right into the line of fire. No one's a hero. Only Mandela and a few others, Dr. King, Gandhi — these are the big guys. The rest of us are just, you know, just little guys.*<sup>65</sup>

Like the others, Adoum enjoys the feedback and recognition he receives thanks to his work. It is with great enthusiasm that he recounts how during a family vacation to Scotland his presence was discovered by local Chadians who were so excited to meet him in person that they asked him to stay on to meet with others, some of whom had traveled from London for that very purpose. Adoum describes it thus:

*Ten or 15 people came up and they said, "Oh my God, here's an opportunity to greet you in person, to see you. That's wonderful" .... And it's very*

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63 Ibid.

64 Ibid.

65 Ibid.

*rewarding to say, "Oh my goodness. Here I am sitting in the gazebo writing them [blogs] and there are people reading them." It's fantastic.*<sup>66</sup>

In terms of his process and evolution as a first mover, Adoum's vision evolved from and was supported by his experiences and feedback from first his success as a development consultant and later as a blogger. As a consultant, he says he thought the following:

*If I got paid to go to different places... maybe I have something to offer. However limited that is, maybe I can put it to service. I mean this is a fortunate country, you come in and you get educated and so on. At some point we can also take that and go back to these unfortunate places.... from a distance at least I can contribute somewhat.*<sup>67</sup>

Feedback on his blogging led Adoum to realize he had to do more:

*If we just try to educate the Chadians and we don't go beyond that, it probably defeats the purpose. The purpose of beginning something that small and trying to move it forward is that once you get, okay, the blogosphere to read it, and just for intellectual purpose, you've got to move it beyond curiosity. Okay, what impact would that have on policymakers in Chad?*<sup>68</sup>

Adoum clearly values how others perceive him and, like others with a high need for achievement, earnestly wants to see that his personal efforts will make a difference. As he puts it:

*My objective is to bring peace; and then after you bring peace, to tackle the problem of governance, democracy, prosperity, and so on and so forth. [My motivation is] just that I will be seen as someone who contributes to a small extent, but significantly enough. Someone who did not just sit under the gazebo like this, but actively fought and fought, and finally there is some result that can be shown for all of this.*<sup>69</sup>

Adoum is very explicit about the importance of happiness and how it influences his interpretation of experience:

*You do like a duck. A duck goes into the water, it gets out and shakes, and it just rolls off. Nothing fazes you.... You need to be able to be like a sorcerer: constantly looking for the good, the bad, the ugly, and jumble that all together, all the time. And you've got to sort it out, because if you carry all that baggage with you, you're not going to succeed. And be happy. I mean really, be happy. It's unbelievable. "Be happy" and "what you see is what you get" goes a long way.*<sup>70</sup>

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66 Ibid.

67 Ibid.

68 Ibid.

69 Ibid.

70 Ibid.

### III. Implications and Conclusions

First movers have certain intrinsic dispositions that increase the likelihood of their entrepreneurial behavior. However, the evolution of this behavior into its own entrepreneurial paths is not a linear process. Rather, it is characterized by setbacks, challenges, adaptation, and new directions. For example, Djimé Adoum moved away from the idea of a think tank (GRANIT) that might promote a change of regime, to a technical assessment that would support lasting peace, regardless of President Déby's stay in office. First movers take from and build upon previous experience, but not necessarily in incremental ways; Bal Joshi moved from a national lottery to what would become Thamel.com. By implication, potential supporters of first-movers should be cautious in interpreting what they perceive to be a first-mover's early failure. These should not cause them to avoid investing (including support beyond money, such as coordination and cooperation) or not to take a first mover seriously. The first-mover experience reinforces Hirschman's Principle of Conservation and Mutation of Social Energy, which holds that the learning accumulated through experience and the resulting social energy remain in storage until they are reactivated in new forms or for new functions. By implication, such initial efforts should not be considered failures.

Furthermore, external factors may not influence first movers' determination and motivation. As they may view challenges and risks differently from others, not only do first movers not wait for "enabling circumstances," they may even take pleasure in successfully navigating these challenges. For example, Nermien Riad did not wait for a change in Egyptian law that would make outreach to Muslim girls safer for her organization and staff; rather, she identified an alternative to Coptic Orphan's traditional practice of meeting in children's homes and found neutral meeting places. In fact, those seeking to facilitate first-mover initiatives should take care that external interventions do not undermine first-mover internal commitment. First movers are motivated by remaining in the driver's seat, living by their values and moral obligation (or duty) while they pursue their passions and interests.

Diaspora first movers are potentially significant both because they hold particular comparative advantages over first-movers generally, and because they are poised to inform institutional reform in their countries of origin, many of which are stymied in their social, economic, and political development by institutions that are outdated and unresponsive to changing needs and circumstances. The migration experience and the diaspora identity that evolves from it can enable diasporans better to identify and exploit information and resource gaps (structural holes) between the country of residence, the country of origin, and international practices. Especially when the diaspora first mover's vision is other-regarding rather than exclusively materially motivated, he or she may be a particularly important partner in development processes in the country of origin.

The phenomenon of first movers is an enigma. A close examination of their motivations and process reveals why this is so. By nature (disposition), first movers appear irrational. Passions inform their interests, and passions are potentially or essentially illogical. Passion is defined as “emotions as distinguished from reason” and an “intense, driving or overmastering feeling or conviction.”<sup>71</sup> First movers are significantly influenced by social forces that may have deep psychological roots. These forces may derive from a distant past (including early memory), a deep and abiding religious faith, or commitment to a set of secular values. These are not readily observable, so the calculus of first movers’ progress from intention to motivation to behavior remains obscured. While cognitive interpretative processes are invisible in all human beings — indeed, they are often unconscious even to the individuals themselves — in first movers, these may appear even more mysterious. First-mover behavior corresponds to the individual’s own cognitive rationality, as we see in the experiences of Riad, Joshi, and Adoum, but it does not necessarily or often coincide with observers’ cognitive rationality.

This is the essence of innovation. To see the world and respond differently is to be creative. Possessing a disposition and rationality that allows one to interpret a world full of risk and ambiguity as a challenge and even a pleasure; to have enthusiastic, maybe even joyful, confidence in one’s eventual success; and to view these as fodder for a strong sense of purpose and the essence of one’s identity — these are the characteristics of first movers, which determine why they are both rare and essential to progress. 

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71 Merriam-Webster online dictionary, [www.merriam-webster.com/dictionary/passion](http://www.merriam-webster.com/dictionary/passion).

# Appendix. Review of Relevant Motivation Literature

All behavior is complex, drawing from influences including but not limited to: disposition (genetics, cognitive capacity, and orientation), social influences (family, peer groups, culture, and society), and lived experience. With the latter two, we confirm the influence of both nature *and* nurture. Accordingly, there is a plethora of motivation theories, many of them built upon, or evolutions of, historical experiments and resulting theories. Theories address intrinsic and extrinsic motivation and combinations thereof. Early influential theories include Abraham Maslow's hierarchy of needs;<sup>72</sup> McClelland's needs for affiliation, achievement, and power (respectively, nAff, nAch, and nPow);<sup>73</sup> expectancy theory,<sup>74</sup> and cognitive models such as dissonance and later retrospective rationality.<sup>75</sup> Pfeffer organizes these and others into behavioral models. The following is a review of literature relevant to first-mover motivation.<sup>76</sup> First, I discuss early intrinsic motivation theories. Next, I present Pfeffer's behavioral models. In the final section, I briefly present findings from happiness literature.

## A. Early Intrinsic Motivation Theories

Especially in leadership studies much attention has been placed on dispositions, or characteristics particular to the individual, some of which may be genetic in origin. The most studied and relevant for the purpose of this study are affect, locus of control, the so-called Big Five factors, and those deriving from need-based theories, such as need for achievement, need for affiliation, and need for power.<sup>77</sup> These are somewhat overlapping. Positive and negative affect refer to the propensity to be happy or unhappy across time and circumstances.<sup>78</sup> This type of disposition relates to levels of job satisfaction and is especially pertinent to the findings of happiness studies discussed below. Locus of control refers to an individual's tendency to believe he or she has some degree of influence over his or her surroundings, as opposed to being subject

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72 Abraham Maslow, "A Theory of Human Motivation," *Psychological Review* 50, no. 4 (1943): 370-96.

73 McClelland, *The Achieving Society*.

74 Vroom, *Work and Motivation*.

75 Leon Festinger, "The Motivating Effect of Cognitive Dissonance," in *Assessment of Human Motives*, ed. Gardner Lindzey (New York, NY: Holt, Rinehart & Winston, 1958): 69-85; Barry M. Staw, "Rationality and Justification in Organizational Life," in *Research in Organizational Behavior*, 2, eds. Barry M. Staw and Larry L. Cummings (Greenwich, CT: JAI Press, 1980): 45-80.

76 Pfeffer, *New Directions for Organization Theory*.

77 McClelland, *The Achieving Society*.

78 David Watson, Lee A. Clark, and Auke Tellegen, "Development and Validation of Brief Measures of Positive and Negative Affect: The PANAS Scales," *Journal of Personality and Social Psychology* 54, no. 6 (1988): 1063-70.

to them.<sup>79</sup> For example, those with a fatalistic outlook are considered to have an external locus of control — they are objects subjected to the influence of the world around them, rather than subjects with agency who act upon and change their circumstances.

The Big Five refers to core dimensions of the personality. They are: extraversion (e.g., sociable, assertive, and emotionally expressive), agreeableness (compassionate, cooperative, altruistic, kind, affectionate, and tendency for other prosocial behavior), conscientiousness (thoughtful, self-disciplined, goal directed, dutiful, and achievement-oriented), emotional stability (secure, confident, and not easily stressed or quick to anger), and openness to experience (imaginative, curious, inventive, and insightful).<sup>80</sup> Big Five assessments map onto a range of personality disorders.<sup>81</sup> More positively, the factors have predicted job performance<sup>82</sup> and are variously linked with other positive outcomes. For example, Daniel Ozer and Verónica Benet-Martínez find associations between high scores on each factor with happiness, health, and identity strength at the individual level; high-quality and stable relationships with peers, family, and significant others at the interpersonal level; and positive job choice, satisfaction, high performance, and community involvement at the institutional level.<sup>83</sup>

Individuals are also motivated by needs, some of which can be considered dispositional, some socially determined, and others resulting from experience. Maslow's hierarchy of needs posits that individuals will be motivated by unsatisfied needs evolving in a particular order: physiological needs, safety needs, love or belonging needs, self-esteem, and self-actualization. Maslow derived this model from investigating what he called "exemplary people" such as Jane Addams and Albert Einstein, so his frame is particularly relevant to the study at hand. His model indicates that only once the lower level needs are met will an individual turn his or her attention to the higher order needs. Self-actualization, then, is not something that may be pursued by all, but rather by those who have previously met to some level of satisfaction the lower level needs, and thus have the freedom to explore their full potential. A self-actualized person demonstrates acceptance of his or her human nature, inclusive of shortcomings, without feeling distressed; focuses on some greater good, as opposed to idiosyncratic problems; and demonstrates

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79 Rotter, "Internal versus External Control."

80 See, for example, Murray R. Barrick and Michael K. Mount, "Autonomy as a Moderator of the Relationship Between the Big Five Personality Dimensions and Job Performance," *Journal of Applied Psychology* 78, no. 1 (1993): 111-18.

81 See Douglas B. Samuel and Thomas A. Widiger, "A Meta-Analytic Review of the Relationships Between the Five-Factor Model and DSM-IV-TR Personality Disorders: A Facet Level Analysis," *Clinical Psychology Review* 28, no. 8 (2008): 1326-42.

82 See Murray R. Barrick and Michael K. Mount, "The Big Five Personality Dimensions and Job Performance: A Meta-Analysis," *Personnel Psychology* 44, no. 1 (1991): 1-26.

83 Daniel J. Ozer and Verónica Benet-Martínez, "Personality and the Prediction of Consequential Outcomes," *Annual Review of Psychology* 57 (2006): 401-21.

a keen curiosity about the world.<sup>84</sup>

McClelland articulated three particular needs that motivate people: affiliation, power, and achievement. The need for affiliation (nAff) corresponds well to Maslow's love or belonging needs; however, in McClelland's model, individuals may have a natural propensity to be motivated by a particular need regardless of how satisfied other needs are. The need for power (nPow) is defined as an urge to control others and a desire for the status and prestige that may come from that control. The need for power is often viewed as contradicting or displacing a need for affiliation. In other words, an actor may put control ahead of relationships in the process of pursuing objectives, perhaps corresponding to Robert Blake and Jane Mouton's dictatorial leadership style.<sup>85</sup>

McClelland is most famous for his examination of the need for achievement (nAch), which he applies to whole societies, not just individuals. Whether or not sought-after achievements are other-directed depends upon socialization. Individuals with a high nAch tend either to enjoy or even prefer high risk environments or simply perform better under such circumstances. In fact, McClelland reports that the link between nAch and performance was only confirmed and positive for tasks that required imagination, creativity, and some personal initiative, as opposed to routine tasks. Interestingly, as much as they might prefer some risk in their work, high nAch individuals tend not to perceive their actions as particularly risky, and may be characterized by irrational levels of self-confidence or belief that they will succeed (perceived probability of success). That said, with accumulated experience, these individuals adjust their expectations. In other words, the more uncertain a situation, the more confident such an individual is in his or her probability of success. And the more they believe their personal efforts are necessary to success, the harder they will work. Finally, it should be noted that such individuals do not necessarily require public recognition to feel satisfied as much as they need a measure of how well they are doing, and to feel that they can be the decision maker. As McClelland put it, "the achievement satisfaction arises from having initiated the action that is successful, rather than from public recognition for an individual accomplishment [sic]".<sup>86</sup> In controlled experiments, high nAch individuals performed better when they received "positive and definite" feedback on their performance.<sup>87</sup>

These types of internal drivers — dispositions and needs — contrast with external enticements such as material rewards and incentives (extrinsic motivation). More to the point, they implicate what Chris

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84 Abraham Maslow, *Motivation and Personality* (New York, NY: Harper and Row, 1954).

85 Robert R. Blake and Jane S. Mouton, *The Managerial Grid: Key Orientations for Achieving Production Through People* (Houston, TX: Gulf Publishing Company, 1964).

86 McClelland, *The Achieving Society*, 230.

87 *Ibid.*, 232.

Argyris calls internal commitment. Internal commitment refers to an action choice that is internalized by the individual “because it fulfills his own needs and sense of responsibility, as well as those of the system.”<sup>88</sup> In other words, the behavior is not induced by others, and results in a greater sense of ownership and personal responsibility. Individuals commit to a particular path because they *believe* it is the appropriate course of action. Part of that belief derives from the action’s and objectives’ correspondence with the individual’s personal values. The individual makes an informed decision to commit to a behavior or set of actions and can, through freedom of choice, adjust that commitment and/or its direction according to new information and experience. Internal commitment is greatly enhanced when the individual participates in crafting the chosen objectives and means for a particular action. Why is internal commitment so important? Because it results in a deeper dedication to the action and sustained motivation despite possible reductions in external rewards, or increasing risk and/or stress.

## **B. Four Behavioral Models**

These early intrinsic theories evolved as they were tested and refined. Additional ways of explaining human behavior were also developed and similarly evolved. Pfeffer organizes these into a limited number of behavioral models.<sup>89</sup> I adapt his framing and, partially building from and revising his descriptions, I discuss four of these models: economic, moral, social, and cognitive.

The economic model suggests that individuals are self-interested rational actors who seek to maximize their utility, primarily in economic or material terms. They are motivated by extrinsic rewards and may require supervision to ensure compliance. As such, the economic model does not explain other-regarding behavior that may contradict economic rational self-interest. In other words, the economic model does not allow much room for self-motivation. Scholars have also questioned the extent to which the underlying assumptions reflect human nature or become self-fulfilling prophecies as individuals adapt behavior according to situational cues.<sup>90</sup>

Other extrinsic rewards include power resources. Uphoff outlines six types that may enable an individual to achieve his or her desired ends: economic, social (social status based on social roles or on complying with socially valued criteria), political (ability to influence the exercise of authority), moral (perceived legitimacy of actions), and information-

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88 Chris Argyris, *Intervention Theory and Method: A Behavioral Science View* (Reading, MA: Addison-Wesley Publishing Company, 1970, 20).

89 Here, I modify Pfeffer’s model and briefly discuss four, collapsing the cognitive and retrospective rationality models.

90 See, for example, Chris Argyris, “The Individual and the Organization: Some Problems of Mutual Adjustment,” *Administrative Science Quarterly* 2, no. 1 (1957): 1-24.

al.<sup>91</sup> These resources both enhance one's ability to influence context and can become motivators, especially if one takes a broader view of "utility" beyond material gain.

Similarly, the moral model allows for the rational pursuit of moral ends. The individual is still a rational actor; however, he or she is motivated not only (and maybe only minimally) by self-interested extrinsic rewards, but also by the pursuit of his or her values and beliefs. He or she chooses both ends and means accordingly. This model is limited in its transactional applications, as some items are not considered legitimate material for exchange. The moral model of behavior explains why individuals engage in altruism and suggests that some of their behavior is intended not only to harmonize with their own values but also to set examples for others to follow, i.e., to be role models. What motivate, then, are individual values, social norms, and obligations and duty to others.<sup>92</sup> This normative order introduces a prescriptive dimension to individuals' behavior and suggests they are motivated to comply with the rules and expectations of those they consider to be legitimate authorities. The latter may include actors from their religious faith, government, and community.

The moral model begins to anticipate the social model of behavior, though the latter moves well beyond the individual as a rational actor. The social model encompasses a broad range of theories grounded in group dynamics as well as cognitive psychology. It asserts that individuals' behavior is influenced by social norms, expectations, and aspirations, and that these may even influence individuals' cognitive interpretations of needs, preferences, context, and appropriate responses. Interactions with others change individuals' very perceptions of the world, helping to frame what they notice about their environment and how they assign value to objects and experiences.

The cognitive model of behavior explains not only these social influences on individuals' interpretation of the world, but also the impact of their cognitive processing based on disposition and experience. Together, these factors—disposition, socialization, and experience—create an evolving cognitive map through which individuals understand and interpret their world. What motivates, then, is behaving in ways that are consistent with that cognitive map, avoiding any appearance of irrationality. Put another way, individuals are motivated to resolve cognitive dissonance, or to explain behavior in ways that retain or

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91 See Jennifer M. Brinkerhoff, "Creating an Enabling Environment for Diasporas' Participation in Homeland Development," *International Migration*, 50, no. 1 (2012): 75-95. While Uphoff ("Analytical Issues in Measuring Empowerment at the Community and Local Levels") includes physical power (i.e., coercion or violence, depending on perceived legitimacy of applied physical force), this study focuses on diaspora first movers who work within the bounds of existing sovereignty and legal frameworks.

92 See, for example, Amitai Etzioni, *The Moral Dimension: Toward a New Economics* (New York, NY: Free Press, 1988).

restore rationality or consistency with their specific cognitive map.<sup>93</sup> This explains why individuals tend to make retrospective sense of their behavior.<sup>94</sup> Interestingly, this sense-making process may lead individuals to deepen their commitment to failing endeavors, in order to rationalize “sunk costs,” and may enhance perceptions of the meaning and pleasure from work that is otherwise under-rewarded, in order to rationalize the individuals’ efforts.<sup>95</sup> The latter implies that when individuals who are intrinsically motivated are offered material rewards, their commitment and effort may actually diminish, as they interpret the work to have been demeaned in some way that makes it less important. Pfeffer highlights an important implication: “once individuals are committed to some organization or activity, additional incentives probably will not increase their motivation or positive affects and can, in fact, undermine their positive attitudes and actions.”<sup>96</sup> The cognitive model also explains why commitment may escalate in the face of adversity.

Expectancy theories and equity theory incorporate both a social and a cognitive dimension. The premise of expectancy theory is that individuals have certain cognitive expectancies concerning their behavior (effort) and the likelihood of outcomes and associated rewards.<sup>97</sup> An individual’s preference for a particular outcome is referred to as its “valence,” which is partially socially determined.<sup>98</sup> For example, individuals may value something more when others possess it or ascribe to its value in some way. Therefore, motivation is a function both of perceived probability of success and the valence for the outcomes of that success. Equity theory can be viewed somewhat as an extension of expectancy theory in that individuals will be motivated to adjust their efforts according to perceptions of fairness, compared with others, in terms of the effort-reward relationship.<sup>99</sup>

### **C. What’s Happiness Got to Do with It?**

Psychological empowerment is closely related to subjective well-being, or “people’s positive evaluations of their lives, including pleasant emotions, fulfillment, and life satisfaction.”<sup>100</sup> One important component of

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93 Festinger, “The Motivating Effect.”

94 See Staw, “Rationality and Justification.”

95 See, for example, Karl Weick, “The Reduction of Cognitive Dissonance Through Task Enhancement and Effort Expenditure,” *Journal of Abnormal Social Psychology* 68, no. 5 (1964): 533-39.

96 Pfeffer, *New Directions for Organization Theory*, 68.

97 See Campbell et. al, “Expectancy Theory.”

98 Vroom, *Work and Motivation*.

99 See Richard T. Mowday, “Equity Theory Predictions of Behavior in Organizations,” in *Motivation and Work Behavior*, eds. Richard M. Steers and Lymon W. Porter (New York: McGraw-Hill, 1983): 91-112.

100 Ed Diener and Robert Biswas-Diener, “Psychological Empowerment.” See also Ed Diener, “Subjective Well-Being,” *Psychological Bulletin* 95, No. 3 (1984): 542-75.

subjective well-being is a sense of meaning and purpose.<sup>101</sup> Subjective well-being, or happiness, enables individuals to endure difficulties and sustain efforts. According to Sonja Lyubomirsky and Kari Tucker, relatively happy people tend to view and respond to difficulties more positively and adaptively.<sup>102</sup> Happiness is a function of disposition (positive affect, as above), social influences, sense of meaning or purpose, and experience (reinforcement). Specifically, Lyubomirsky et al.'s sustainable happiness model posits that disposition or set point (the level of happiness to which one returns after circumstances influence happiness levels) determines approximately 50 percent of our happiness; circumstances account for 10 percent; and intentional activities correspond to roughly 40 percent. Happiness requires a proactive mindset, both in terms of behaviors and the interpretation of behaviors. Reinforcing behaviors include explicit acknowledgement of blessings; reflecting, writing, and talking that emphasizes positive thinking and goals; and practicing acts of altruism. Positive emotions have been shown to contribute to feelings of sociability, self-confidence, energy, engaged activity, altruism, and creativity.<sup>103</sup>

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101 See, for example, Sonja Lyubomirsky, Chris Tkach, and M. Robin Dematteo, "What Are the Differences Between Happiness and Self-Esteem?" *Social Indicators Research* 78 (2006): 363-408.

102 Sonja Lyubomirsky and Kari L. Tucker, "Implications of Individual Differences in Subjective Happiness for Perceiving, Interpreting, and Thinking About Life Events," *Motivation and Emotion* 22, no. 2 (1998): 155-86.

103 Diener and Biswas-Diener, "Psychological Empowerment."

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# PART TWO

GLOBAL SEARCH FOR  
LOCAL SOLUTIONS:  
ROLE OF DIASPORAS



## CHAPTER 3

# INTERNATIONAL MIGRATION AND REFORMS IN INDIA: FROM POLITICAL AND BUREAUCRATIC LEADERSHIP TO SOCIAL ENTREPRENEURS

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### Introduction<sup>1</sup>

In January 2003 the Indian government organized the first *Pravasi Bharatiya Divas* — a celebration of overseas Indians that mixed emotion and sentimentality with business and economic opportunity. In his inaugural address Indian Prime Minister Atal Bihari Vajpayee asked for help from the distinguished “alumni” of his country in building India. But the request, interestingly, was not for money: “We do not want your investments, we want your ideas. We do not want your riches; we want the richness of your experience.”<sup>2</sup>

As Planning Commission Deputy Chairman Montek Singh Ahluwalia recently stated, “We are reaching out (to Non-Resident Indians or NRIs) because we value the long, socio-cultural footprint that we all share. So, honestly I would tell you, if you don’t feel ready to invest in India, don’t be apologetic. It’s our job to get investors...Indian or foreigner doesn’t

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1 The first part of this chapter draws on Chapter 5 of Devesh Kapur, *Diaspora, Democracy and Development: The Impact of International Migration from India on India* (Princeton, NJ: Princeton University Press, 2010.)

2 Atal Bihari Vajpayee, Prime Minister of India, *Pravasi Bharatiya Divas* (Overseas Indians Day), New Delhi, January 9, 2003.

matter.”<sup>3</sup> Indeed, of the cumulative US\$179.45 billion foreign direct investment (FDI) in India after the 1991 reforms (through 2010), the NRI share was just 1.3 percent.

While NRIs may not have invested much directly through FDI, they have indirectly “invested” heavily through remittances. Cumulative remittances into India from 1992 to 2010 total \$382.7 billion, half of which (\$191 billion) occurred over the last four years (2007-10); one reason why the buzz around international migration and development has focused on the financial benefits to the country of origin. Nonetheless, the Indian prime minister’s request focused on something less tangible and less visible: the expertise, ideas, and experiences of the country’s migrants. Might these, rather than money, have greater influence on the country of origin?

In this chapter we examine the impact of these “social remittances” on reforms in India.<sup>4</sup> Following Yegveny Kuznetsov,<sup>5</sup> this chapter looks at the effects at two levels:

- Top-down elite driven reforms at the national level
- “Inside-outside,” bottom-up reforms at local levels which leverage the heterogeneity of institutions in India’s federal system, across both states and sectors, to ally with forward-looking segments of the polity and provide prototypes for others to mimic and replicate.

The circulation of skills and ideas through international migration, especially studying and working abroad, has influenced migration policy in sending countries historically and recently. Early 19<sup>th</sup> century Britain endeavoured to thwart French and Russian efforts to recruit its skilled workers by sharply limiting these workers’ mobility abroad; emigrant workers were required to return home within six months of being warned to do so, on threat of losing their property and citizenship. And if before the end of the Cold War Western countries aided the immigration (defection) of Soviet scientists, in the aftermath of the Soviet Union’s collapse, they were concerned with ensuring that these scientists did not leave.

The ideational effects of international migration on decision-making behaviour are manifest at multiple levels of society. The migration and education abroad of Latin American elites, for instance, has been seen as an important factor facilitating the sharp shift in macroeconomic

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3 *The Hindu* special correspondent, “India Not After NRI Money: Montek,” *The Hindu*, January 10, 2011, [www.hindu.com/2011/01/10/stories/2011011051321300.htm](http://www.hindu.com/2011/01/10/stories/2011011051321300.htm).

4 The term “social remittances” was first used by Peggy Levitt, albeit in a somewhat different sense.

5 Yevgeny Kuznetsov, “Talent Abroad Promoting Growth and Institutional Development at Home: Skilled Diaspora as Part of the Country,” (World Bank Economic Premise No. 44, December 2010), <http://siteresources.worldbank.org/EXTPREMNET/Resources/EP44.pdf>.

policies in that region.<sup>6</sup> A country's "ownership" of International Monetary Fund (IMF) programs is greater when its economic decision makers have studied in similar graduate schools as their Fund counterparts or have worked in that institution.<sup>7</sup> Even at the micro level, controlling for household characteristics, Mexican households with family members in the United States have more neoliberal economic views than those who do not; accordingly, the former are the households that increasingly form the electoral support for neoliberal economic policies.<sup>8</sup> The causal chain we posit here runs from how migrants get exposed to new ideas that shape their policy preferences to their actions as "change agents," whether through their political or bureaucratic roles or as social entrepreneurs.

In the first part of the chapter we demonstrate how the education of India's political and bureaucratic elites in the past half-century have translated into institutional and policy choices at two critical junctures in India's history: at the time of independence and during economic liberalization in 1991. This analysis reveals three broad trends. First, in the decades following Indian independence, the number of India's decision-making elites being educated abroad declined steadily, as new political elites representing hitherto marginalized social groups came to the fore through democratic processes. Thus as India's political elites became more socially representative vis-à-vis India, they also became more parochial relative to the earlier elite profile. Second, since the 1990s this trend has reversed. At a time when India became more "open" to international trade and finance, the international exposure of its elites has also been growing. Third, the source of ideas to which Indian policy elites were exposed has shifted markedly from the United Kingdom to the United States.

The second part of the chapter examines the role of returning migrants as change agents in fomenting bottom-up changes, focusing on social entrepreneurship. There are reasons for the shift in their insertion points from the public to the private and nonprofit sectors. The changing nature and weakness of the Indian state and the abounding need for creative solutions to address social challenges in India, together with the market's dominance as a place for developing and testing innovative ideas, have all resulted in returning talent using the market and social sector as platforms to address these challenges. The private sector has supplanted public institutions as a main pathway for gener-

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6 Sarah Babb, *Managing Mexico: Economists from Nationalism to Neoliberalism* (Princeton, NJ: Princeton University Press, 2001); Jorge I. Domínguez, *Technopols: Freeing Politics And Markets In Latin America In The 1990s* (University Park, PA: Penn State Press, 1997); Judith A. Teichman, *The Politics of Freeing Markets in Latin America: Chile, Argentina, and Mexico* (Chapel Hill, NC, and London: University of North Carolina Press, 2001).

7 Devesh Kapur and Moises Naim, "The IMF and Democracy," *Journal of Democracy* 16, no. 1 (January 2005): 89-102.

8 Devesh Kapur and John McHale, *The Global War for Talent: Implications and Policy Responses for Developing Countries* (Washington, DC: Center for Global Development, 2005).

ating and institutionalizing new ideas. A major facet of this trend has been the rise of social entrepreneurship, led through the private sector as well as through civil society.

## I. The Education of India's Political and Bureaucratic Elites

### A. Ideas and Elites

In recent years, literature has emphasized how norms and ideas shape political outcomes.<sup>9</sup> What actors believe in may be just as important as what they want, insofar as these beliefs influence interests, priorities, and preferences. Ideas give content to interests, and new ideas can profoundly change an agent's interests. Understanding the exchange of ideas can help us to understand how interests are formulated. However, the extent to which ideas exert long-term effects depends on whether or not they are institutionalized in administrative procedures, programs, and bureaucracies. Once they become programmatic and paradigmatic, ideas are reified and can generate constituencies to later defend those ideas. The concept of institutionalized ideas helps us understand the path-dependent nature of public policy.

Where and how individuals spend their formative years helps to determine how their ideas and worldviews are shaped. The type of education, the country of education, or specific experiences in the workplace and broader environment may matter. Of course the transformative effects of overseas experiences are not the result of higher education alone. Rather, the very dislocation from one's own social imaginary may force a deeper introspection, one informed by varied experiences.

Whether the ideas one returns with are due to the selection effect (pre-existing skills and values of the individual), the transformative effects of their experience, or some combination is exceedingly hard to distinguish. Also, the choice to enter these environments may be exogenously directed by financial or other parameters. The ideational effects of migration on the home country will depend on the migrant population's size, socio-economic characteristics, country of location, and access points in the power structure of the country of origin. Recent studies suggest an intriguing reason why overseas exposure might be transformative: it appears to enhance creativity. Time spent living abroad

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9 Peter Hall, *The Political Power of Economic Idea: Keynesianism Across Nations* (Princeton, NJ: Princeton University Press, 1989); Kathleen R. McNamara, *The Currency of Ideas* (Ithaca, NY: Cornell University Press, 1998).

appears to have a positive relationship with creativity.<sup>10</sup>

## **B. Indian Political and Bureaucratic Elites**

This chapter uses Lasswell's classic definition of elites as "people at the top." He writes, "The study of politics is the study of influence and the influential . . . the influential are those that get the most of what there is to get . . . Those who get the most are elite; the rest are mass."<sup>11</sup> For the purposes of this study we have focused on national elites who may have an impact on the political economy of India in some direct way. Consequently, the analysis focuses on political, business, bureaucratic, and scientific elites while excluding cultural elites (such as experts in the performing arts and literature).

While the database of Indian elites covers four critical decision-making groups — politicians, bureaucrats, scientists and industrialists — in this chapter we focus on the first two. Education was measured on two dimensions: the level to which the individual studied and the place from where the degree was obtained. The time period covered was 1950-2000. The data set captures three points in time — 1950, 1980, and 2000 — to reflect changes in the aggregate population of elites throughout its gradual turnover during the period examined here. (For the groups comprising politicians and scientists, the data cover all three points in time, while for bureaucrats the data cover only 1980 and 2000.)<sup>12</sup>

### **I. Political Elites**

In a parliamentary system, members of parliament constitute a self-selected national political elite. The database includes all members of both houses of the Parliament: the Lok Sabha (the lower house of parliament) and Rajya Sabha (the upper house). While this criterion supports consistency, it fails to capture all of India's political elites. Regional power brokers who have never been members of parliament often hold critical influence in India's diffuse political system. While this was less of an issue in earlier years, regional parties have grown in importance since the 1990s, and thus limit the robustness of the 2000 snapshot.

The data are presented in Table 1. While after independence one of 10 parliamentarians had an overseas education, by 1980 this figure had

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10 Angela Ka-yee Leung; William W Maddux; Adam D Galinsky; Chi-yue Chiu, "Multicultural Experience Enhances Creativity: The When and How," *American Psychologist*, 63 (2008): 169-181; William W Maddux; Adam D Galinsky, "Cultural Borders and Mental Barriers: The Relationship between Living Abroad and Creativity," *Journal of Personality and Social Psychology* 96, no. 5 (2009): 1047-61.

11 Harold Lasswell, *Politics: Who Gets What, When, How* (New York, NY: McGraw-Hill, 1936), 13.

12 For more details of the methodology, in particular problems of consistency over time, and sources for the database see Kapur (2010).

declined to 6.2 percent. Two decades later the figure dropped further: one out of 25 received an overseas education. In 1950 India's political elites who were educated abroad predominantly studied in the United Kingdom. Half century later the United States had emerged as the principal destination.

**Table I. Educational Attainment for Political Elites in India, 1950, 1980, and 2000**

Year	1950	1980	2000
<b>Percent Studied Abroad of which</b>	<b>10.4</b>	<b>6.2</b>	<b>4.0</b>
In United Kingdom	74.6	61.4	42.9
In United States	12.7	24.6	45.7
Elsewhere	14.3	15.8	11.4
<b>Education Level</b>			
High School or Less	21.2	21.4	14.9
Bachelor's Degrees	21.7	24.9	28.6
Professional Degrees	39.5	31.0	28.3
Other Master's and PhDs	16.2	15.8	22.2
More than One Degree	0.0	1.0	4.7
Diplomas in Arts, etc.	1.7	1.4	1.4
Sample Size (N)	605	915	879

*Note:* The percentages do not precisely add up to 100 because in some cases a person has studied in more than one country and several others have more than one type of degree.

*Source:* Devesh Kapur, *Diaspora, Democracy and Development: The Impact of International Migration from India on India* (Princeton, NJ: Princeton University Press, 2010.)

A significant selection effect with regard to who was able to study abroad and who was elected helps to explain the decline in overseas education of India's political elites. A student's family had either enough wealth to send him abroad, or the connections to secure overseas scholarships. In both scenarios, these families were usually members of India's upper-caste social echelons. Yet the success of India's democracy after independence shifted the demographic of India's political elites to include hitherto marginalized social groups and non-Anglicized elites. The ideas of the Indian political elite thus became more parochial, less cosmopolitan and "open." This shift was inevitable: nationalist movements were invariably led by Western-educated elites, whose education empowered them both within their societies as well as against the colonizing power. However, universal franchise in such a socially heterogeneous society meant that sooner or later, voters would select representatives that better reflected their own social identities.

## 2. Bureaucratic Elites

In examining bureaucratic elites we took two approaches. First, we extracted names from the 1980 and 2000 *India Who's Who*, a storehouse of basic information about India's leading personalities compiled by the India News and Feature Alliance (INFA), the country's leading news and feature agency founded in 1959 (hence data for 1950 were not available).<sup>13</sup> As we see from Table 2, in a trend similar to that of political elites, there is a decline in overseas education as well as in the importance of the United Kingdom as a source for education over time. However, in contrast to political elites, the share of US-educated returnees does not grow; instead, other countries (notably Australia and several Asian countries) become more important.

**Table 2. Educational Attainment for Bureaucratic Elites in India, 1980 and 2000**

Year	1980	2000
<b>Percent Studied Abroad of which</b>	<b>17.7</b>	<b>13.7</b>
In United Kingdom	55.0	45.0
In United States	45.0	40.0
Elsewhere	0.0	15.0
<b>Education Level</b>		
High School or Less	0.0	0.0
Bachelor's Degrees	18.6	8.2
Professional Degrees	15.0	16.4
Other Master's and PhDs	49.6	49.3
More than One Degree	15.9	25.3
Diplomas in Arts, etc.	0.9	0.0
Sample Size (N)	113	146

*Note:* The percentages do not precisely add up to 100 because in some cases a person has studied in more than one country and several others have more than one type of degree.

*Source:* Kapur, *Diaspora, Democracy and Development*.

Second, a database was compiled from the list of all current (as of mid-2004) serving officers of the Indian Administrative Service (IAS), based on records of the Ministry of Personnel, Government of India. These records help track different cohorts of India's bureaucratic elite over the past 35 years. The oldest cohort was formed in 1965 and the youngest in 2003. Given the source of the database, the accuracy and consistency of this data are very high.

13 India News and Feature Alliance. available at [www.infa.in/index.php?option=com\\_frontpage&Itemid=1](http://www.infa.in/index.php?option=com_frontpage&Itemid=1).

The total number in the database is 4,791. Of these, 542, or 11.3 percent, had overseas exposure through education, foreign training, or foreign posting. More precisely, 438 have had foreign training, 195 a foreign posting, and 26 foreign education. A substantial number of officers are of too recent vintage to have had foreign training or a foreign posting. In general, 12 to 15 years of service are required before being eligible for selection for overseas training and posting. The average percentage of officers who went abroad in the 1970 to 1974, 1975 to 1979, and 1980 to 1984 cadres, respectively, rises over time. This suggests that just as India's economy opened up, its bureaucracy also began to put a greater emphasis on "openness," at least in the sense of being more open to foreign exposure. That older cohorts of the IAS (who joined the service in the 1970s) participated in overseas courses just recently, while younger cohorts (who joined in the 1980s) take positions overseas earlier in their careers, is also reflective of this trend.

The bulk of the training courses took place after 1995. Nearly half of all training programs are in the United Kingdom. While the United Kingdom still holds a dominant position, its share has been declining since 1999. This decline has been offset by the emergence of Australia and other Asian countries as destination sites, while the relative share of the United States and Canada has not changed (though their respective absolute numbers have increased). However, in the last few years the Indian government has increasingly sent members of its civil service for study and training in the United States.

### **C. The Institutionalization of Elite Ideas I: The Institutions of Independent India**

The hallmarks of India's pre-independence elites were international migration, education, and *return*. Returning skilled migrants were more likely than other Indians to possess an important nonobservable trait: intense nationalism. Most Indian nationalist elites had considerable overseas exposure through either work or education. Indeed, what stands out is just how disproportionately India's elites at the time the country became independent — in politics in particular, but also in science, business, and the bureaucracy — were educated or had lived abroad. Their social status in combination with these experiences gave them the opportunity and will to shape India's new government. In politics, for example, the giants of India's freedom movement equipped themselves with knowledge of British legal mores and constitutional processes both to confront the colonizing power and to design India's own constitutional norms and structures. Gandhi, Nehru, Patel, and Ambedkar all studied abroad.<sup>14</sup>

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14 One might add the brilliant but mercurial Subhas Chandra Bose. However, his premature death in 1945 meant that he did not leave any institutional legacy.

Perhaps the most significant institutional impact of the overseas education of India's elite was on the character and content of the Indian constitution, which proved to be the new nation's "cornerstone."<sup>15</sup> Given Ambedkar's seminal role in its drafting, his own overseas influences (at Columbia University and the London School of Economics) assume particular importance. According to Eleanor Zelliot, Ambedkar used his "knowledge of American culture to analyse his own country's social situation." Thus the value of Ambedkar's experience in America "seems to be chiefly in developing his commitment to a pragmatic, flexible democratic system."<sup>16</sup>

Two other institutions that shaped independent India and which in turn were shaped by overseas experiences were the Finance Commission and the Planning Commission. The antecedents of the Finance Commission lay in a visit by two key civil servants to Australia in 1946 to frame policies that would strengthen provincial autonomy and improve provincial finances. Their tract, "Report of the Australian System of Federal Finance and its Applicability to Indian Conditions," became the basis of India's Finance Commission — a statutory body that developed into the cornerstone of India's fiscal federalism. Similarly, India's Planning Commission was set up by PC Mahalanobis, a distinguished professor of physics at Cambridge who returned to India at Jawaharlal Nehru's urging. His impact on India has arguably been greater than that of almost any other economist, whether through the hatching of the 2<sup>nd</sup> Five Year Plan, the establishment of the Indian Statistical Institute, or the leadership of the Planning Commission itself.

India's independence was clearly a key historical moment, and returning migrants played a critical role in shaping the fundamental institutions of independent India. A half-century later a very different group of return migrants, "technocrats," would also play an important role in another critical juncture: India's historic economic reforms of 1991.

#### **D. The Institutionalization of Elite Ideas II: The 1991 Reforms**

The reasons for India's economic liberalization in 1991 are varied and complex: economic crisis, manifest inimical effects of existing policies, broader political and ideational changes in the outside world, and external pressure from international financial institutions. We argue that the Indian leadership of this process indicates that ideational effects of migration played an important role. India's institutional setup — a strong bureaucracy and a parliamentary system — means that a returning technocrat has to spend time in an advisory capacity before he can undertake a decision-making position. This fosters trust

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15 Granville Austin, *The Indian Constitution: Cornerstone of a Nation* (New Delhi: Oxford University Press, 1966).

16 Eleanor Zelliot. *From Untouchable to Dalit* (New Delhi: Manohar, 1988).

and also offers the returning technocrat a chance to understand critical political nuances. The fact that one has to pay one's dues to the system ensures that a technocrat becomes a stakeholder. This is an important reason why individual Indians living abroad, no matter how prominent they may be, wield less influence than those who return and work from within the system.

How ideas held by the diaspora or return migrants influence policy depends on three factors. First, the institutional configurations of the "home" country and its relative receptivity to accepting both new ideas and returning human capital; second, the willingness of individuals to return; and third, the reputation and credibility of the destination to which an individual has gone abroad. Economic policy-making in India has been singularly affected by returning economists who have studied and worked abroad. As might be expected, they have most often assumed positions in the economic ministries — the Finance Ministry and the Commerce Ministry — but also the central bank (Reserve Bank of India [RBI]) and the Prime Minister's Office. While this has been especially marked in the last few decades, fluctuations in this trend have had notable consequences throughout the latter half of the twentieth century.

Unlike their predecessors, many of the country's brightest young minds went abroad to study in the mid-1960s and did not return.<sup>17</sup> Liberal economists, in particular, left, and key Indian universities became self-reinforcing havens for skeptics of markets and free trade. Unsurprisingly, their students who joined the bureaucracy harboured similar views during this period. The Planning Commission, which had been an intellectually stimulating and politically powerful institution, lost both attributes after Nehru's death. India's economic (and increasingly political) travails during the 1970s also made return less attractive; indeed, many who had returned left again.

In the 1970s, many Indian economists joined the IMF and World Bank, especially the latter, which at this time emerged as one of the most intellectually vibrant places for research in economic development. Starting in the early 1980s, although only a few returned, there was enough strength in numbers for them to matter in key roles in the principal economic ministries: finance, commerce, and industry.<sup>18</sup> Three prominent governors of the RBI during the crucial decade of the 1990s and the 2000s, S. Venkitaramanan, C. Rangarajan, and Bimal Jalan, completed their doctoral work in the United States and engaged with the Bretton Woods institutions in various forms. But the most prominent returnee, who after having studied at Cambridge and Oxford occupied

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17 Khatkhate (2003) sheds light on some of the principal actors, their academic and institutional backgrounds, and their contributions to Indian policy making. Deena Khatkhate, "Looking Back in Anger," *Economic and Political Weekly* 38 (2003): 51-52.

18 These included Montek Singh Ahluwalia, Rakesh Mohan, Suman Bery, Arvind Virmani, Shankar Acharya, and Vijay Kelkar.

a political role, was of course Manmohan Singh, who went on to play a preeminent role as the architect of India's economic liberalization in 1991 and became India's prime minister in May 2004. And M. A. Chidambaram served as finance minister in the United Front government (1996-98) and again in the Congress-led UPA government of 2004. His MBA experience at Harvard Business School "exposed [him] to another model, which appeared to be more successful, which appeared to have brought jobs and incomes and prosperity to a much larger proportion of people."<sup>19</sup>

Virtually all of the aforementioned individuals worked in or with international financial institutions. Khatkhate argues that in the case of the aforementioned individuals, having worked on diverse countries at the World Bank "enriched" their insights and, more importantly, that "the lack of insularity in their thinking enabled them to see India's problems in a broader perspective and real world context and counter some of the ingrained habits of many Indian economists, both in academia and the government, brought up in the interventionist environment."<sup>20</sup>

Diaspora members with such experience have also, to a limited extent, been able to influence India's corridors of power. Finance Minister Chidambaram explained, "First, the phenomenal success achieved by Indians abroad by practicing free enterprise meant that if Indians were allowed to function in an open market, they could replicate some of that success here. Secondly, by 1991 sons and daughters of political leaders and senior civil servants were all going abroad... I think they played a great part in influencing the thinking of their parents."<sup>21</sup> A wealthy, educated diaspora, embedded in networks with access to policy-relevant institutions in India, and connected by easy and relatively inexpensive communication technology, has amplified the policy influence of international migration.

### **E. Bottom-Up Change Agents**

If the state and its different organs were the principal loci of reforms and change until the 1990s, in recent years the private sector, nonprofits, and civil society have been playing greater roles as change agents in the Indian economy and society. This is in part because the reforms of the 1990s unleashed a previously shackled private sector. But perhaps the more important reason is the poor condition of the Indian state, resulting in the government's limited ability to address India's numerous challenges. At the same time, India's democracy allows civil society and "change agents" to function without being smothered by the state

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19 Public Broadcasting Service (PBS) interview with Palaniappan Chidambaram, "Commanding Heights: The Battle for the World Economy," PBS, 2002, [www.pbs.org/wgbh/commandingheights/shared/pdf/int\\_palaniappanchidambaram.pdf](http://www.pbs.org/wgbh/commandingheights/shared/pdf/int_palaniappanchidambaram.pdf).

20 Ibid.

21 Ibid.

(as they are in, for example, China). In a country like China where the state is very strong, returnees might have the greatest impact by joining state organs. In India this was the case in earlier decades. In recent years the private sector and civil society have become stronger, supplanting weakening public institutions as primary routes for the diaspora and returnees to influence reform processes. And in contrast to activists who self-consciously view themselves as having a contentious relationship with the state, social entrepreneurs committed to providing services and acting as “change agents” are more likely to work *with* the state rather than *in* or *against* the state. Thus while in principle the role that returning and circulating migrants can play in fomenting “inside-out” or “bottom-up” reform appears quite intuitive, the mechanisms through which this may occur are contingent on the institutional structures of the country.<sup>22</sup>

India’s massive challenges and huge market, coupled with an ineffective state and an open society, have created both needs and opportunities for creative and innovative solutions. Indeed, innovative market-based provision of social services has become an important supplement to the often-strapped public sector in aiding India’s poor. Capitalizing on the severely limited incomes of this “bottom-of-the-pyramid” market, private enterprises are providing affordable goods and services — from health care to off-grid refrigerators — to India’s low-income population. With a similar entrepreneurial spirit, effective NGOs and collectives have empowered otherwise marginalized groups through education, advocacy, and access to markets and capital.

While these organizations are numerous and varied in their impact and scale, the following section demonstrates the importance of social enterprise as a venue for returnees to provide “bottom-up” solutions. We argue that their particularly transformative ideas, implemented through entrepreneurship, have reverberated in follow-on enterprises, public-private partnerships, and other mechanisms. Whether they can be scaled-up and catalyze systemic reform in India remains an open question.

## **F. Social Entrepreneurship**

India’s social entrepreneurs have sought to improve social welfare directly by applying innovation and a grassroots approach to address India’s many challenges, in particular India’s 400-odd million living in poverty. From power and water to health care and education, India’s huge low-income populations struggle to access basic necessities to break the cycle of limited economic opportunity, poor health, and indigence. While public-sector capacity is limited in addressing this

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22 For instance, see the discussion on talent flows and the diaspora in Vinod K. Goel, Carl Dahlman, and Mark A. Dutz, “Diffusing and Absorbing Knowledge,” In Mark Dutz, ed., *Unleashing India’s Innovation* (Washington, DC: The World Bank, 2007): 91-92.

overwhelming burden, misallocation and massive leakage of resources intended for India's poor further strain existing government programs. Also, while involvement through politics often requires a career-long commitment and has high barriers to entry for someone coming from the outside, volunteerism and social enterprise offer avenues for those with other primary careers to engage in service and leverage their talents for the social good. In this section, we aim to describe trends in social enterprise in India, and to characterize the roles played by returnees. For our purposes, we broadly define "social entrepreneurship" to include the founding and leadership of any NGO, nonprofit, or for-profit organization focused on improving the welfare of India's poor in some way. India's growing corps of social entrepreneurs has devised organizations to address needs across a range of sectors. These organizations provide affordability and access to products and services; develop and market technologies to improve lives at the bottom of the pyramid; and use innovative business schemes from tiered pricing to marketing cooperatives to empower the underserved. However, only a handful of these groups are able to measure and make available data on their performance and outcomes. Consequently it is not possible to evaluate the impact of social enterprise on poverty alleviation and to disentangle this causal relationship from the many other economic changes occurring in India.

Notwithstanding this limitation we hope to demonstrate that social enterprises are emerging as an important force within India's development landscape, and a crucial window for returnees to contribute to development efforts in India. This argument is supported by trends drawn from a database of social enterprise activity in India. Second, both trends in returnee involvement and illustrative case studies demonstrate the crucial role of returnees as change agents who collectively are reshaping India's ideas, practices, and institutions in the development field.

### **G. Trends in India-Based Social Enterprises and NGOs**

An official study commissioned by the Indian government estimated that India may house the largest number of nonprofit organizations in the world: 3.3 million (in 2008), or one for every 400 of its residents.<sup>23</sup> While only 0.144 million organizations were registered prior to 1970, this number grew to 1.122 million by the end of the 1990s. Three activities — social services (37 percent), education and research (24 percent), and culture and recreation (15 percent) — accounted for three-fourths of

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23 Central Statistical Organization, "A Survey on Non-Profit Institutions in India — Some Findings" (paper prepared for the Special IARIW-SAIM Conference on "Measuring the Informal Economy in Developing Countries," Kathmandu, Nepal, September 23-26, 2009), [www.iariw.org/papers/2009/9apercent20CSO.pdf](http://www.iariw.org/papers/2009/9apercent20CSO.pdf).

these organizations.<sup>24</sup> Nearly 80 percent of them were formed after 1990, and just 3 percent before 1970. While the total workforce of 18.2 million workers exceeded the entire public sector workforce, only 2.7 million were paid workers (the rest were volunteers).

With regard to finances, 54 percent of the funding of these organizations came from grants, 16 percent from donations and offerings, and another 16 percent from income from operations. The Indian government has been a substantial donor, having set aside Rs. 18,000 crore (about \$4 billion) in the XI Plan, followed by foreign contributors, who donated around Rs. 9,700 (\$2.2 billion) in 2007 to 2008. Individual donors are becoming increasingly important sources for funds, and private-sector companies, long a minor player, are playing an increasing role. According to a recent estimate, annual private giving in India has increased almost threefold to between \$5 billion to \$6 billion in 2010, from \$2 billion in 2006. Corporations in India gave an estimated \$1.5 billion in 2010, five times the amount donated in 2006.<sup>25</sup> Nearly half the funds are deployed for education, followed by social services (20 percent) and health (11 percent).

However, almost all the information about these organizations is on the input side. There simply is no systematic data about outcomes. Capturing the true scale and scope of the activities of nonprofit organizations throughout the country is a major challenge. There has been little effort to track the activities and efficacy of such organizations even as their numbers have exploded. Moreover, innovators are influencing change from the “outside” through increasingly diverse channels. As discussed earlier, social enterprise often comes in the form of for-profit business models. Entrepreneurs create products, services, and financing schemes designed for the bottom of the pyramid and its ability to pay, engaging those historically marginalized from the market in economic activity. The double-bottom line of profit and social welfare guides these groups, which aim to transform charity from an act of giving to one of empowering. Whether legally structured as for- or nonprofit, socially innovative organizations like these are especially important to broader reform because their goals include sustainability and scale.

Systematic efforts to understand these types of organizations are just beginning. However, projects like the Ayllu Initiative have undertaken the task of increasing organizational transparency and creating a hub for NGO information to facilitate investors and entrepreneurs alike in the creation of market-based solutions to poverty. Ayllu aims to collect,

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24 Ministry of Statistics and Program Implementation, *Final Report on Non Profit Institutions in India: A Profile and Satellite Accounts in the Framework of System of National Accounts* (New Delhi: Government of India, Ministry of Statistics and Program Implementation, 2012), [http://mospi.nic.in/Mospi\\_New/upload/Final\\_Report\\_Non-Profit\\_Institutions\\_30may12.pdf](http://mospi.nic.in/Mospi_New/upload/Final_Report_Non-Profit_Institutions_30may12.pdf).

25 Arpan Sheth and Madhur Singhal, *India Philanthropy Report 2011* (Mumbai: Bain & Company, Inc., 2011), [www.bain.com/bainweb/images/LocalOffices/Bain\\_Philanthropy\\_Report\\_2011.pdf](http://www.bain.com/bainweb/images/LocalOffices/Bain_Philanthropy_Report_2011.pdf).

analyze, and disseminate information on social enterprise around the world. Its latest project, begun in early 2010, is iuMAP, created in partnership with NextBillion.Net. iuMAP is a searchable directory of social enterprises catalogued by information such as name, geography, area of focus, and sector. While still in beta form and expanding, the database purports to be the largest publicly available directory of social enterprises focused on alleviating poverty.<sup>26</sup> iuMAP's current listings include 235 active organizations working in India. Its current method for identifying organizations includes scanning listings of award and fellowship recipients, investors' portfolios, organization reports and media coverage available on the internet, and following up through web searches to classify and create a brief profile for each organization.<sup>27</sup>

Given the selection effects of such a web-based methodology where the most notable, creative, and innovative groups are self-selected, there are obvious limitations. A universe consisting only of organizations with a web presence perhaps skews towards those with resources, capacity, and skill for public relations, which may not relate to the organization's effectiveness. Awards programs and investors have widely varying criteria; some offer start-up funds based on business plans alone, while others focus on specific social issues over others. Initiatives with a narrow focus or non-technological thrust may neither need nor have capacity to create a web presence, and may not involve themselves in internationally recognized awards programs. Further, the recognitions and web presence of organizations catalogued by Ayllu do not offer any understanding of these organizations' scale and impact. Nonetheless the iuMAP database offers us a place to begin understanding basic trends in social entrepreneurship focused within India, including their objectives, activities, history, and drivers.

To investigate the role of India's returnees in social innovation and entrepreneurship, we used this database as a jumping-off point. Starting with information on each group's name, sector of operation, founder's name, founding year, brief mission/objectives, countries and/or regions of activity, and for- or nonprofit status, we conducted further background research to develop a profile of each founder. In some cases, we also used personal communication to fill information gaps or verify data. We thus were able to catalogue the gender and status as returnee, local, or non-Indian of nearly all the founders of the 235 organizations. We also broadly classified the type of innovation each organization undertook as "service," "technology," or a combination of the two. We defined service innovation as the offering of a novel product, such as agricultural training; process, such as marketing or financing strategy; or organizational innovation, such as a collective or grassroots advocacy group. Organizations classified as technological innovators are those founded around

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26 Melissa Richer and Shital Shah, "Introducing iuMAP, a Resource to Track Social Enterprise Globally," Next Billion, July 6, 2010, [www.nextbillion.net/blog/introducing-iu-map-a-resource-to-track-social-enterprise-globally](http://www.nextbillion.net/blog/introducing-iu-map-a-resource-to-track-social-enterprise-globally).

27 Personal communication with Nate Heller, February 21, 2011.

the development and/or marketing of a product or process involving a technological breakthrough or improvement, from biomass-based rural energy systems to novel health-care devices.

This information enables us to extrapolate broader trends in involvement and interest in social entrepreneurship in India. However, it falls short of offering us a way to understand the causal impact of such efforts on poverty alleviation, such as geographic scale, number of people affected, or the intensity of the impact. While social welfare indicators have improved as these organizations have proliferated over the past few decades, it is difficult to parse the effect of social enterprise from the multitude of foreign aid or government-led programs or the broader economic changes underway. Also, while many social enterprises have existed for many years, the vast majority are less than a decade old; their effects have only begun to show (see Table 3).

**Table 3. Social Enterprise Trends over Time\***

	Before 1990	1990-94	1995-99	2000-04	2005-10
<b>Total Number of Organizations</b>	25	13	22	50	136
<b>Founders/Co-Founders Residence/Location Status</b>					
Local	16	11	10	29	64
Returnee	6	2	11	17	42
Non-Indian	3	0	1	5	30
<b>Organizations Founded, by Sector</b>					
Agriculture	1	2	1	4	8
Education	6	4	6	5	9
Energy	2	1	5	10	22
Fair Trade Crafts	1	1	0	5	6
Health	6	1	2	9	15
Housing	0	0	0	0	2
Information Technology	0	0	1	6	29
Labor/Other	4	2	0	5	18
Transportation	0	1	0	0	6
Waste	3	1	0	0	5
Water	1	0	0	5	4
<b>Gender of Founders or Co-Founders</b>					
Number of organizations with female founders or co-founders	8 (32%)	4 (31%)	5 (23%)	12 (24%)	29 (21%)
<b>Type of Innovation</b>					
Percent of organizations with tech component	25	8	55	40	38

\*Sample size of organizations with known founding year is 226.

Source: Ayllu and authors' database.

The organizations in the database overwhelmingly were founded over the past decade; however, their founding years range from 1946 to 2010. Their sectors of focus span agriculture, education, energy, fair trade crafts, health, housing, information technology, labor/other (including other types of advocacy and rights), sanitation, transportation, water, and waste (see Table 4).

**Table 4. Social Enterprise Trends by Sector (%)\*\***

Sector	Founders or Co-Founders of Organizations Who Are: (%)		
	Local	Returnee	Non-Indian
Agriculture	50	44	6
Education	67	23	10
Energy	30	50	20
Fair Trade crafts	54	31	15
Health	52	39	9
Housing	50	50	0
Information technology	56	36	8
Labor/other	63	20	17
Transportation	86	14	0
Waste	83	17	0
Water	64	29	7

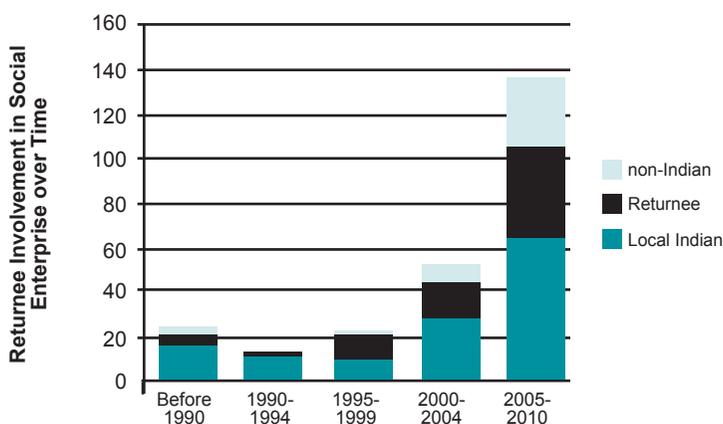
\*\*For founder location, sample size is 230. For founder gender, sample size is 228.

Source: Ayllu and authors' database.

Overall, energy has been the focus of the greatest number of organizations (40) and also is the sector including the highest proportion of both returnees (50 percent) and expatriates (20 percent). While locals have consistently dominated social enterprise across time periods and sectors, the diaspora and foreigners have increasingly contributed to such efforts. Of the 229 organizations for which the founders' biographical data are known, 78 include returnee founders or co-founders.

The founding of 25 organizations prior to 1990 — dating back to 1946 — is reflective of India's historically robust civil-society space. As Figure 1 illustrates, returnees have long played a role in leading social welfare initiatives, and increasingly so since the 1990s. Interestingly, as returnee leadership increased, so has that of expatriates. By the 2005-10 period, of 125 organizations, 42 were founded or co-founded by returnees.

**Figure 1. Returnee Involvement in Social Enterprise over Time**



Source: Ayllu and authors' database.

Over time, the focus of these organizations has shifted. While agriculture and education have long held the interest of social entrepreneurs in India, the number and proportion of technology-related innovations — particularly in the fields of energy and information technology (IT) — have climbed with increased involvement from expatriates and returnees (see Table 5).

**Table 5. Social Enterprise Type of Innovation, by Sector**

Sector	Service	Tech	Tech + service	Total
Agriculture	14	2		16
Education	28	1	1	30
Energy	5	27	8	40
Fair Trade Crafts	13			13
Health	24	2	7	33
Housing	2			2
Information Technology	11	7	18	36
Other	24		6	30
Sanitation	1		1	2
Transportation	7			7
Waste	9		3	12
Water	2	6	6	14

Source: Ayllu and authors' database.

The tech-heavy energy and information technology sectors have ballooned, particularly from 2005 to 2010. Twenty-one percent of organizations founded between 2005 and 2010 are in the information

technology sector. While leadership in energy has been dominated by returnees (50 percent) and a significant number of expatriates (20 percent), information technology organizations have been founded mostly by locals (56 percent). While many of the energy sector technology breakthroughs involve an innovation that harnesses an alternative energy source (solar, biomass, etc.), information technology enterprises more often involve the use of existing platforms for new and specific purposes, such as mobile phone-based banking and web-based access to knowledge and markets. These more incremental innovations are focused on fulfilling specific needs. In contrast, energy-focused innovations are more disruptive, hinging on entirely new forms of technology to generate power for the underserved. This perhaps helps to identify the divergence in demographics of the innovators in these two sectors.

The proportion of female founders or co-founders of social enterprises has not increased markedly over time — in fact, it has dropped in recent years. Overall, just 41 organizations (18 percent of the 228 in the sample) were founded solely by women, and another 17 included a female co-founder (in total, 25 percent of organizations were founded or co-founded by women). Most women involved in innovation/entrepreneurship are locals, perhaps due to the return of more men than women to India, and lead organizations focused on providing services, as opposed to new technology (see Tables 6 and 7).

**Table 6. Gender and Residence/Location Status of Social Enterprise Organization Founders and Co-Founders**

Gender	Returnee	Returnee + Local	Returnee + Local + Non-Indian	Returnee + Non-Indian	Local	Local + Non-Indian	Non-Indian	Total
Female	9			1	28		3	41
Female + Male	3	1		2	8	1	2	17
Male	55	4	1	2	79	7	22	170

Source: Ayllu and authors' database.

**Table 7. Type of Innovation, by Gender of Founders and Co-Founders**

Innovation	Female	Female + Male	Male	Total
Service	35	9	93	137
Tech	3	4	36	43
Tech/service	3	4	41	48

Source: Ayllu and authors' database.

Education has drawn more women than any other sector; 10 of the 30 education enterprises were founded or co-founded by local women.

Education is also the only sector in which women independently founded enterprises across all time periods in the database. Overall, eight out of the 13 founders of fair trade crafts organizations (62 percent) are women. Housing (50 percent), education (41 percent), transportation (40 percent), and waste (36 percent) all also include a significant proportion of female leaders. These sectors are also dominated by service-oriented organizations, and lie within the traditional domains of women's interests in the household — more than, say, energy or sanitation. While one would think that by this logic water too should attract a significant number of female entrepreneurs, not one of the 13 initiatives in this sector were not founded or co-founded by a woman. This is perhaps because all but one — a foundation focused on supporting water-security innovations — include a technological component or are purely technology-based. The data (see Table 7) support the notion that women focus more on entrepreneurship that results in direct service provision, while a greater proportion of men are attracted to working on systemic change through upstream innovation, such as the development of new technology.

These data are emblematic of the rapid growth of nonprofits and social enterprise in India, with returnees playing an important role in the more significant organizations. While the impact of this sector's growth in terms of goal achievement is not well understood, the spread and stickiness of *ideas* is an important impact indicator, especially in signifying how individual efforts relate to broader reforms. We posit that returnees contribute particularly transformative ideas because of their overseas experiences, and while their ventures are in early phases, the broader impact of these ventures is visible in how these ideas are catalyzing new initiatives and institutions.

## II. Case Studies in Returnee Social Enterprise

The six examples we have chosen to examine here are illustrative of returnees' role as change agents through social enterprises. Through both background research and personal communications with the founders of each enterprise, we draw linkages between each entrepreneur's experience abroad and the mission and design of his or her organization. Furthermore, we trace how these organizations have launched new trends, approaches, and institutions in India. Together, these cases show how social enterprise in India thrives from the country's limited public sector capacity and broad demand for innovation, and how returnees have catapulted it into a tool to create "bottom-up" reforms.

## A. *Indicorps: Fostering Self-Discovery through Civic Engagement*

Highly competitive and well-structured volunteer programs targeting the diaspora, like those offered by Indicorps, have given young people of Indian origin a transformative experience and bolstered the notion that direct service is an important component to discovering one's Indian identity. The affirmation of this narrative has, over time, contributed to the spike in returnee-led social enterprises, and the growth of a global Indian service network.

Indicorps is perhaps the most widely recognized success in this field. It is a nonprofit organization based in Ahmedabad, India that places youth from the Indian diaspora with grassroots community organizations across India for summer, one-year, or multi-year service fellowships. Founded in 2002 by Gujarat-born and US-raised siblings Anand, Sonal, and Roopal Shah, the program aims to have a long-term impact on development by offering the chance to create ties to India for its volunteers. Indicorps also works to legitimize service as a career for the high-performing. It has maintained a small and highly competitive program, with most volunteers being recent college graduates from some of the best universities in the United States and around the world.<sup>28</sup> Fellows usually work on specific projects with a potential for substantial local impact, although some assignments involve development of solutions to large-scale problems. Indicorps provides its volunteers with a modest and immersive living experience through a small monthly stipend, housing with NGOs or families, and rigorous initial training, plus workshops throughout the internship and periodic phone check-ins.

In the 1990s, as the Shah siblings began to formulate the Indicorps concept, they realized that their goal of creating “young leaders with impeccable values: refined by the deep history of Indian service movements, weathered by the hard reality of grassroots efforts for change, and permanently motivated by the power of an individual action” would require a significant paradigm shift away from financial donations and remittances to a focus on making “the idea of serving in India noble and prestigious.”<sup>29</sup> In recent years, such structured volunteer programs have proliferated at the hands of NGOs and elite US universities alike. Examples include the American India Foundation (AIF), the Deshpande Foundation's Sandbox Fellowship, and the Asian Foundation for Philanthropy's Paropkaar Volunteers program, which have helped expose the leaders of tomorrow to the benefits of direct service. Yet while Indicorps maintains its focus on young Indians, these other

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28 Aaron Terrazas, *Connected Through Service: Diaspora Volunteers and Global Development* (Washington, DC: Migration Policy Institute, 2010), [www.migrationpolicy.org/pubs/diasporas-volunteers.pdf](http://www.migrationpolicy.org/pubs/diasporas-volunteers.pdf).

29 Roopal Shah and Anand Shah, “A New Rite of Passage,” in *Journeys in Service* (Ahmedabad: Patel Printing Press Pvt. Ltd., 2011).

programs offer opportunities to non-resident Indians as well as non-Indians, proliferating awareness and interest in India beyond those of Indian origin.

The ability to empathize with young Indian-Americans in combination with their knowledge of social welfare service in India allowed Sonal, Roopal, and Anand to craft a highly successful program. The three were raised in Houston, Texas and after their college years, each spent time travelling and volunteering abroad and found that many other Indian-Americans were searching for ways to spend structured time volunteering in India. They also observed that the Indian development space was largely driven by fundraising interests rather than the idea of service and a desire to have an impact. Drawing from the models of Teach for America and Peace Corps, they decide to mount an initiative that could act as an interface between Indian diaspora youth and India's NGO sector. Leveraging strong ties on both ends—travelling to India, conducting first-hand research to find high-functioning NGOs with worthy projects for volunteers while drawing on ties in the American development sector to raise funds—the three launched their first round of internships in 2002.<sup>30</sup>

While Indicorps itself expanded modestly over the past decade, it has provided a model and inspiration to those interested in service in India. Perhaps even more importantly it has actively assisted in the launch of other programs to facilitate involvement from Indians abroad, including Connect India, Piramal Fellowship, Teach for India, Inspire Now, the Gandhi Fellowship, MedicIndia, Sama Source, Super Flux, and Learning Journey. Numerous Indicorps partner organizations, having benefited from the inputs of dedicated individuals, have also created structured volunteer programs of their own. Former Indicorps fellows have played a role in establishing many of these programs, in addition to other awareness and service-oriented projects such as Global Rickshaw, LaborVoices, and ThinkChange India.<sup>31</sup> Indicorps has even begun accepting applications from urban youth living in India who wish to participate in rural development projects. This surge in service leadership, the follow-on of NGOs to the Indicorps experience, and the rise in interest from young resident Indians reflects a shift in attitudes and an interest in direct service within India, in which Indicorps, AIF, and similar programs driven by non-resident Indians have played an important role.

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30 Arun Venugopal, "Humanity that Works," *India Abroad*, December 18, 2003, [www.rediff.com/news/2003/dec/18spec.htm](http://www.rediff.com/news/2003/dec/18spec.htm).

31 Gaurav Madan, *Journeys in Service* (Ahmedabad: Patel Printing Press Pvt. Ltd., 2011).

## **B. Dasra: Mobilizing Resources for Strategic Philanthropy**

Dasra was established in 1999 by Deval Sanghavi and Neera Nundy, who had both been working at Morgan Stanley in New York. They were inspired to adapt for the nonprofit sector Morgan Stanley's focus on scaling and increasing profitability through management. Sanghavi was born in the United States and Nundy was born in Canada. Their experiences working with venture capital and strategic investments led them to return to India after two years on Wall Street. Through their transnational connections, Sanghavi and Nundy began Dasra with support mostly from wealthy Indians in the United States.<sup>32</sup>

Dasra aims to provide financial and direct management support to promising social enterprises and nonprofits in India, particularly those addressing the challenges of marginalized communities. Capitalizing on their unique position with respect to philanthropic funders abroad who were eager to enter India but lacked their own teams on the ground, Dasra quickly expanded to act as the operating arm of many international funders, such as Zurich-based LGT Philanthropy, in addition to working with Indian funders. It has drawn in philanthropists and high-net worth individuals, has worked with more than 200 social sector organizations, and directed funding into the nonprofit sector since its inception. Its strategy is hands-on investing, combining hand holding and strategic planning support with funds to help organizations scale and succeed. This approach, showcased to philanthropists through donor study tours, has helped draw more funds to organizational development, and created ripple effects whereby philanthropists seek to implement similar hands-on models throughout their portfolios.

While Dasra began by focusing on early-stage organizations, since 2002 it has taken a greater interest in mid-growth initiatives that have potential to flourish with improved management support.<sup>33</sup> It has also developed a nine-month executive training program called Dasra-Social Impact, which helps 30 to 40 social entrepreneurs on a quarterly basis to create three- to five- year business plans and readies a selection of them to receive grants.<sup>34</sup>

There are two distinctive strands in Dasra's active philanthropy approach. It has focused on improving management and helping organizations scale, as well as on building a new culture of Indian philanthropy. Launched in March 2010, Dasra's Indian Philanthropy Forum aims to build a network of influential individuals committed to

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32 Clare Mulvany, "Dasra-Fortifier of Deeds," *Exceptional Lives* blog, September 23, 2006, [http://exceptional-lives.blogspot.com/2006\\_09\\_01\\_archive.html](http://exceptional-lives.blogspot.com/2006_09_01_archive.html).

33 Deval Sanghavi and Neera Nundy, "Interview: Deval Sanghavi and Neera Nundy," *Alliance Magazine*, October 2009, [www.alliancemagazine.org/node/2850](http://www.alliancemagazine.org/node/2850).

34 Dasra, "Dasra-Social Impact," <http://dasra.org/n/forwebsite/factsheet/Dasra-Social-Impact.pdf>.

strategic philanthropy in India. With a membership of over 150 philanthropists, the Forum is taking important steps to further transform India's funding landscape. Forum members receive reports on India's social sector, participate in informative events or field visits to learn about the application of philanthropy, and are invited to pool funds with other donors through Dasra Giving Circles to provide organizations with Rs. 3 crore (close to US\$700,000) coupled with 250 days of hands-on support.<sup>35</sup> The Indian Philanthropy Forum also helps reduce barriers between the public and private sectors and facilitate government involvement by inviting corporations to bring their clients as well as NGOs and government officials. Having found that most organizations that have scaled significantly have done so through government partnership, Dasra endeavors to build such partnerships for the organizations with which it works.

Seeds of change have become visible beyond Dasra's direct activities. In 2010, the Indian government proposed a law stipulating that firms with a turnover of Rs 1,000 crore (about \$232 million) or net profit of Rs 5 crore (about \$1.2 million) or more earmark 2 percent of their net profit for the preceding three years for corporate philanthropy.<sup>36</sup> Early 2011 saw Warren Buffett and Bill and Melinda Gates visiting India to encourage philanthropy in the country.<sup>37</sup> Globally, organizations like New Philanthropy Capital, Robin Hood Foundation, Global Social Benefit Incubator, and Global Philanthropist Circle have taken on aspects similar to the Dasra model. GiveIndia has launched the First Givers Summit, which gathers first givers and forms giving circles, engaging retail donors and mobilizing individuals to get involved in philanthropy. While Dasra's model, based on the larger sums its giving circles accrue, and its work with organizations both pre- and post-grant disbursement, is noteworthy by itself, even more influential is its leadership in strategic giving, which has undeniably opened new doors for philanthropy in India.

### **C. SEARCH: Research and Action to Improve Health Systems**

Abhay and Rani Bang, both born in India, attended medical school together at Nagpur University. After completing their studies, they founded Chetna Vikas, a local health care delivery NGO providing services in the villages of Wardha. In pursuit of a strong desire to

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35 Dasra, "Indian Philanthropy Forum," <http://dasra.org/n/forwebsite/factsheet/Indian-Philanthropy-Forum.pdf>.

36 Jennifer George, "Philanthropy in India: Being the Change You Want to See in the World," *Businessweek*, April 2011, <http://bx.businessweek.com/philanthropy/philanthropy-in-india-being-the-change-you-want-to-see-in-the-world/5333703403287759594-957d73079348184ce2829f20fb83f71a/>.

37 "Buffet, Gates to Promote Philanthropy in India," *The Hindu*, January 31, 2011, [www.hindu.com/2011/01/31/stories/2011013158452000.htm](http://www.hindu.com/2011/01/31/stories/2011013158452000.htm).

address India's health care challenges at a larger scale, Abhay and Rani both completed masters' degrees in public health at Johns Hopkins University in the United States. Upon returning to India, they identified key health issues in Gadchiroli, Maharashtra, and in 1985 launched the research and service-based projects which comprise SEARCH (Society for Education, Action and Research in Community Health).<sup>38</sup> Disagreeing with the priorities of the official Indian medical establishment, which included population control and family planning as a primary public health objective, they adopted the communal consensus method favoured by Gandhi, listening to people to determine public health priorities. They started out by surveying two villages, and discovered that contrary to the current understanding of women's health needs in the area, contraception was not the biggest issue — 92 percent of women had gynecological diseases. With this approach — atypical of public health trends in India at the time—they developed SEARCH's key program areas, one including gynecological health, on which Rani and Abhay Bang have published multiple landmark papers.<sup>39</sup>

The overall mission of SEARCH includes community health care, research, and training.<sup>40</sup> It operates public health programs in 39 villages in Maharashtra.<sup>41</sup> With SEARCH's work in the region, neonatal mortality in the area declined by 70 percent over seven years. The program also helped cut the rate of illness in half for mothers during and immediately after childbirth.<sup>42</sup> Moreover, it has parlayed its deep understanding of effective community health into policies and programs at the state and national levels, especially a community health training program designed to reduce infant mortality. The latter program is now being adopted across India, and in Nepal, Bangladesh, Pakistan, and parts of Africa.<sup>43</sup>

#### **D. Husk Power Systems: Scaling Renewable Energy**

India's rural population (also its poorest) continues to rely on traditional fuels like firewood, kerosene, and dung, which are inefficient and unreliable, pose health risks, and contribute to environmental degradation.<sup>44</sup> The market for clean energy products among India's rural poor exceeds \$2 billion annually. Some of this can be sourced from biomass kilns or small-scale hydro-electricity plants and others from new tech-

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38 Ashoka, "Ashoka: Rani Bang," [www.ashoka.org/fellow/2600](http://www.ashoka.org/fellow/2600).

39 Alex Perry, "The Listeners," *Time Magazine*, October 31, 2005, [www.time.com/time/magazine/article/0,9171,1124299,00.html](http://www.time.com/time/magazine/article/0,9171,1124299,00.html).

40 "SEARCH," [www.searchgadchiroli.org/](http://www.searchgadchiroli.org/).

41 MacArthur Foundation. "Society for Education, Action and Research in Community Health." [www.macfound.org/grantees/732/](http://www.macfound.org/grantees/732/).

42 Ibid.

43 Ibid.

44 World Resources Institute, "The Clean Energy Market Expands to India's Rural Poor," (news release, September 27, 2010), [www.wri.org/press/2010/09/news-release-clean-energy-market-expands-indias-rural-poor](http://www.wri.org/press/2010/09/news-release-clean-energy-market-expands-indias-rural-poor).

nologies, including solar-based home electricity systems and lanterns, energy efficient stoves, and decentralized electricity services generated from micro hydro and biomass gasifiers. Though efforts to improve energy efficiency have been run aground by politicization, evidence points to a high ability and willingness to pay amongst rural consumers. Yet credit constraints, lack of technical capacity, lack of awareness, and under-developed market distribution all continue to challenge the deployment of renewable sources for rural electricity.<sup>45</sup> Indian returnees have entered the market to overcome such challenges.

A notable example is a rice husk-based off-grid village-level generation system. Gyanesh Pandey and Manoj Sinha, the founders of Husk Power Systems (HPS), grew up in Bihar (one of India's largest and poorest states), and after spending time during their careers in the United States decided to devote their efforts to tackling Bihar's energy insecurity, one of the most severe in India.

HPS implements the concept of "decentralized renewable energy" using biomass-based power plants which run on rice husk, a common agricultural waste product in many of the northern Indian states that comprise India's rice belt.<sup>46</sup> Currently HPS has 60 power plants up and running, serving 60 villages and 150,000 people.<sup>47</sup> On average, each power plant serves about 400 households and replaces approximately 42 KL of kerosene and 18 KL of diesel per year.<sup>48</sup> HPS energy saves customers a third of what they would have spent on kerosene, allows shops to stay open later, and provides business and employment through its use of a local waste product.

Pandey returned to India in 2002 after spending nine years in the United States working for a semiconductor manufacturer in Los Angeles, where he was responsible for getting the best performance from integrated circuits at the lowest possible cost — skills that would prove useful for HPS.<sup>49</sup> Similarly, Sinha had earned an engineering degree in India and had gone on to earn a PhD and an MBA in the United States. He led a successful career in banking and corporate development in the United States before becoming the driver of the Husk Power

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45 James Cust, Anoop Singh, and Karsten Neuhoﬀ, "Rural Electrification in India: Economic and Institutional Aspects of Renewables," (EPRG 0730 & CWPE 0763, December 2007), [www.eprg.group.cam.ac.uk/wp-content/uploads/2008/11/eprg0730.pdf](http://www.eprg.group.cam.ac.uk/wp-content/uploads/2008/11/eprg0730.pdf).

46 Sreyamsa Bairiganjan, Ray Cheung, Ella Aglipay Delio, David Fuente, Saurabh Lall, and Santosh Singh, *Power to the People: Investing in Clean Energy for the Base of the Pyramid in India* (Chennai: Centre for Development Finance, 2010), [http://pdf.wri.org/power\\_to\\_the\\_people.pdf](http://pdf.wri.org/power_to_the_people.pdf).

47 Jenara Nerenberg, "Husk Power Systems wants to Lead 'A Revolution in Electricity,'" Fast Company, January 5, 2011, [www.fastcompany.com/1714395/husk-power-systems-from-power-to-empowered](http://www.fastcompany.com/1714395/husk-power-systems-from-power-to-empowered).

48 Husk Power Systems, "Home," [www.huskpowersystems.com/index.php](http://www.huskpowersystems.com/index.php).

49 David Bornstein, "A Light in India," *The New York Times*, January 10, 2011, <http://opinionator.blogs.nytimes.com/2011/01/10/a-light-in-india/?scp=1&sq=huskpercent20powerpercent20systems&st=cse>.

Systems business model, along with his MBA classmate Charles Rensler.

HPS has developed a number of innovations complementary to its technology. For example, it set up a side business turning the char from used rice husk into incense, providing supplemental income to 500 women. The company also developed a pre-payment smart-card reader for home installation to help curb electricity theft and inadvertent use.<sup>50</sup> Wider diffusion of its technology is being undertaken through franchising and a training institution that will enlist, train, and support partners who wish to open their own HPS franchise. In this way, HPS hopes to replicate its model in countries around the world, serving 10 to 20 million people in the next 10 to 15 years.<sup>51</sup> To meet the demands of the \$2 billion clean electricity market among India's rural poor is HPS's next benchmark; the organization is currently seeking further international investment to support its expansion.<sup>52</sup>

### **E. Aakash Ganga: Scaling Water Security through Public-Private-Community Partnership**

Addressing water security challenges in India's resource-poor communities and elsewhere requires the combination of appropriate technology and local capacity. Government supplies are not adequate in quantity or quality — fluoride and dissolved salt levels exceed public health norms, and during the dry season, households in areas like Rajasthan have to buy water often priced as high as two dollars for a day's supply.<sup>53</sup> Numerous systems have been developed to facilitate safe water access, from its procurement through rainwater collection to its purification for drinking to its protection through sanitary latrines and hand-washing. By applying expertise gained in the private sector, returnees have played a catalytic role in bringing such innovations to scale.

After earning a PhD in the United States in engineering science and working in research and development (R&D) in companies such as Alcatel, Verizon, General Dynamics, and Hughes Network Systems, as well as founding two start-ups, Bhagwati P. Agrawal founded Aakash Ganga ("river from the sky") and the associated network Sustainable

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50 Ibid.

51 Nerenberg, Husk Power Systems wants to Lead 'A Revolution in Electricity.'"

52 Tracy Elsen, "Environmental Entrepreneurs: India's Husk Power Systems Converts Rice Husks into Energy," World Resources Institute, March 2011, [www.wri.org/stories/2011/03/environmental-entrepreneurs-indias-husk-power-systems-converts-rice-husks-energy](http://www.wri.org/stories/2011/03/environmental-entrepreneurs-indias-husk-power-systems-converts-rice-husks-energy).

53 *The Wall Street Journal*, "Aakash Ganga: Saving Water for a Rainy Day," *Wall Street Journal*, July 7, 2009, <http://online.wsj.com/article/SB124697560759705907.html>.

Innovations in his home state of Rajasthan.<sup>54</sup> Agrawal drew from these experiences, along with his upbringing in rural Rajasthan and an engineering degree from that state, to approach Rajasthan's water security challenge. Over seven years, he and his team worked to develop a program that would be holistically sustainable in the socioeconomic, institutional, and cultural context of rural India.

Aakash Ganga (AG) has developed a rainwater harvesting system for Rajasthan's rural areas (56 million people, 40,000 rural villages) that channels rooftop rainwater from every house in a village into a network of underground reservoirs. Agrawal drew upon his technical expertise as well as his knowledge of traditional water procurement practices in Rajasthan's rural communities to design this water collection network. He incorporated the levy system and communal water supplies, both part of a long history in Rajasthan, into the AG model. Additionally, satellite images are used to set up geographic information systems (GIS) to guide optimal reservoir placement. An IT network manages utilization and monitors water quality.<sup>55</sup>

With demonstrated results, Agrawal created a public-private-community partnership in Rajasthan that acquires rights from homeowners to harvest their rooftop rainwater for a fee or subsidy. The harvested rainwater is supplied to the village according to a socially equitable distribution policy. Households with thatched roofs fill their cisterns from the shared community reservoir, while for participating households, half the rainwater flows to a private reservoir and the other half to the community's shared reservoir. AG has the capacity to collect and store several hundred cubic feet of rainwater, enough to last for an entire year of average rainfall. The shared water is used for revenue generation and cost recovery.<sup>56</sup> Funding has been provided by the government, social investors, and communities. While its development and scale is capital-intensive, AG relies on public and community partnerships to garner the necessary resources for its expansion.

Piloted successfully in Raila village, as of July 2009 the program has been implemented in six villages.<sup>57</sup> With financial support from the state government, AG is on schedule to expand to 15 to 20 villages by the 2013, and to 100 villages by 2015, serving 50,000 and 250,000 people, respectively. Early successes have drawn increasing support from AG's support network to allow these rapid jumps in scale. The available evidence suggests that in the villages where it has been imple-

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54 The World Health Care Congress, "BP Agrawal, Sustainable Innovations, Keep Drinking Water Flowing in India," WHCC Innovations, June 22, 2010, <http://blog.whcchealthinnovations.org/2010/06/22/bp-agrawal-sustainable-innovations-keep-drinking-water-flowing-in-india/>.

55 *Wall Street Journal*, "Aakash Ganga: Saving Water for a Rainy Day."

56 Ibid.

57 Asian Development Bank, Water Financing Partnership Facility, "RETA 6498 Knowledge and Innovation Support for ADB's Water Financing Program," December 2008.

mented, women have become more economically productive and girls' school attendance has increased. Almost all households with rainwater tanks have established kitchen gardens, which in turn improve household nutrition and health conditions.<sup>58</sup> Also, by strategically placing reservoirs and maintaining the communal supply (as opposed to a solely household-based system), people of different castes all participate in the rainwater harvesting scheme and the pooling of water resources.<sup>59</sup> The system is being considered for large-scale implementation by the Government of India.<sup>60</sup>

## **F. Educate Girls: Scaling through Up-front Government Partnership**

Educate Girls Globally (EGG) is rare amongst the numerous NGOs working to improve gender equality in its efforts to introduce education reform through the existing government school system. With a comprehensive, multi-intervention model, EGG empowers local community stakeholders to take ownership of their government-owned schools. Begun in 1999 by economist A. Lawrence Chickering in Sausalito, California, EGG initially struck a partnership with a local NGO in Uttarakhand, with little impact. A second partnership in 2005 with the Rajasthan government saw success at 47 out of 50 schools. To scale this to 2,342 schools in 1,067 villages, EGG established an independent Indian affiliate, the Foundation to Educate Girls Globally (FEGG), more recently re-titled Educate Girls (EG), under the leadership of Safeena Husain.<sup>61</sup>

Husain came to lead EGG's flagship initiative in India after study at the LSE and 15 years of experience on community health projects in Ecuador, Mexico, Bolivia, and South Africa with US-based NGOs. Working with different communities and local country partners, the experiences served her well in crafting a basket of interventions to achieve EG's main goal — an effectively scaled model with high impact and low cost.

EGG has combined an innovative approach of getting young girls in school to act as peer “brand ambassadors,” persuading households with young girls not attending school to send them, with the use of innovative techniques in teacher training. EGG achieves long-term sustainability by fostering community ownership of improved schools. EGG schools develop Action Committees, charged to create plans for their schools. These committees engage in community outreach to identify and tackle key issues. EGG gradually removes itself from the Action

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58 *Wall Street Journal*, “Aakash Ganga: Saving Water for a Rainy Day.”

59 *Ibid.*

60 Lemelson-MIT Program, “BP Agrawal: 2010 Lemelson-MIT Award for Sustainability,” <http://web.mit.edu/invent/a-winners/a-agrawal.html>.

61 Educate Girls Globally, “Home,” [www.educategirls.org/index.html](http://www.educategirls.org/index.html).

Committee's functionings, leaving fully capable Action Committees to lead on their own. EG also provides training to government school-teachers, and fosters leadership skills through student parliament and other self-esteem building activities.<sup>62</sup>

Its approach has combined scale with impact, growing from 50 to 500 to 2,342 schools. A recent evaluation of 29,000 children from 910 primary schools in grades three, four, and five shows that students in the Educate Girls program schools are almost 13 percent more likely to score in the upper achievement levels in Hindi and 14 percent more likely to score in the upper achievement levels in Math than students in non-program schools. Improvement occurs among both boys and girls in the program schools.

EG estimates a cost of about Rs. 100 — just above \$2 — per child per year, as compared with the \$90-per-student annual cost associated with building a new school. Partnerships keep costs down, as EG's success lies in the synergy of the resources it marshals. Educate Girls uses materials developed by leading education and community mobilization NGOs; its government partnership ensures that it builds on government investments in existing schools, and also supports its own financial stability — the state's contribution to the program has increased from zero to 46 percent.

There is undoubtedly a positive sample bias in these case studies, but they are a window into the growing corps of returnees working to shape India's future. Several elements define this new generation of returnees. First, unlike their predecessors, who embarked on careers as diplomats, technocrats, or public servants, these individuals are professionals not policy experts per se. They are doctors, engineers, lawyers, and financiers who turned into social entrepreneurs. Their impact is in part the result of a transfer of skills and knowledge from these overseas experiences and in part the result of their access to different networks that allows for initial seed funding to build prototypes and "proof of concept" models for potentially scalable (and transformative) solutions.

Second, they are either relatively young or have already achieved their career goals overseas. For such people, India offers innumerable opportunities in the social sectors, and the fact that the country now has many of the amenities once found only abroad also makes the shift more conducive.

Third, they recognize that any intervention can only be meaningful if it can be scaled up, and this requires partnerships with both the market and the government. While recognizing the weakness of the Indian state's ability to provide those services, they are also cognizant of

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62 Charlotte Mills Seligman, "Educate Girls Globally," *ICOSA Magazine*, June 22, 2011, [www.icosaco.com/2011/06/educate-girls-globally/](http://www.icosaco.com/2011/06/educate-girls-globally/).

the heterogeneity among state institutions and the fact that the state is often not a veto player and sometimes can be a partner for those willing to make that commitment.

### III. Conclusion

During the first half of the 20<sup>th</sup> century most migrants who left India to augment their human capital returned. More often than not their re-entry point was the state, especially at the federal level, whether in politics or the bureaucracy or the many new state institutions in higher education and research. Through these vantage points, returnees helped shape key institutions, exemplified by the democratic bedrock of India's constitution. In subsequent decades, most of those who left did not return and the few who did in the 1980s joined the Indian government in economic policy-making ministries and institutions, helping to shape another pivotal moment in Indian history: the economic reforms that began in the 1990s.

In the last decade, the travails of the Indian state, together with an economic boom in India, have led to an increase in returnees, but this time the locus of their activities has shifted from the state to the private sector and social entrepreneurship, reflecting the weakness of the Indian state as well as its inability to leverage such a reservoir of talent. While India's development and growth story is primarily a domestic story, its international migrants have played — and are playing — important roles, especially as “change agents” in driving bottom-up initiatives. Given India's chaotic democracy and weak institutions are coupled with an open society, there are numerous opportunities for returning talent to foment change. Whether that can compensate for the state's weaknesses remains to be seen. 

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# CHAPTER 4

## DIASPORA HIGH ACHIEVERS SUPPORTING INSTITUTIONAL DEVELOPMENT IN SUB- SAHARAN AFRICA

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African Development Bank and BP p.l.c.

### Introduction

This chapter focuses on the role of African diaspora high achievers in contributing to institutional development in their home countries over time.<sup>1</sup> This is a narrower focus than the more common question of the links between migration and development, or indeed the role of diaspora in development. The discourse on African diasporas often focuses either on how diaspora members' talent is lacking back home or how much their remittances and charities could fill the development finance gap. Yet this chapter examines how the African diaspora has helped to shape institutions in their home countries. The involvement of diaspora high achievers in shaping both public and private institutions is nothing new, and has taken place over three phases since the waves of African countries' independence. However, most recently the process has been characterized by more efficient communication and increased business opportunities in Africa, allowing the highly skilled to strengthen their impact, especially with respect to building economic institutions.

Over 70,000 skilled professionals are thought to leave Africa each year. According to recent estimates, more than 30 million Africans were

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1 This chapter includes a series of initial interviews held between February – May 2008 in Washington, DC. Subsequent interviews were held between February 2010 and December 2010 in several African countries. A list of interviewees can be made available upon request.

living outside their countries of origin in 2010, accounting for about 3 percent of the continent's population. While the vast majority of these migrants remain in Africa, about 7.2 million of these are thought to live in Organization for Economic Cooperation and Development (OECD) countries, of which 6 million are in Europe and North America. The top emigration countries are Egypt and Morocco, which together account for over 22 percent of the African diaspora. Sub-Saharan countries with a high stock of emigrants include Nigeria, Burkina Faso, Zimbabwe, Mozambique, and Cote d'Ivoire. A different picture emerges, however, when the number of emigrants as a percentage of a country's population is considered. Cape Verde has by far the highest ratio: over 37 percent of its population is in the diaspora. It is followed by Sao Tome and Principe, Lesotho, and Eritrea with 22.0, 20.5, and 18.0 percent respectively.<sup>2</sup>

## I. Why Can Diaspora Achievers Induce Institutional Change?

Skilled expatriates can create enormous benefits for their countries of origin. There is a growing consensus that the African diaspora can have a significant impact in the development of members' home countries. Governments as well as donors implemented a plethora of schemes to design effective channels through which the diaspora can be better integrated in the process of national development. Overall, governments have mostly focused on the objective of filling the financing gap, while donors have mainly sought to fill the capacity gap.

Diaspora members are traditionally viewed as a source of resource transfer, a view that neglects the potential of a country's talent abroad to facilitate incremental institutional development in the home country. Diasporas can not only finance, teach, and build, but can also — in the medium and longer term — have an influence on institutional development at home. Moreover, diaspora funding — without its participation in institutional development — could undermine local demand for reforms, entrench the status quo, and lead to worsening conditions. What countries need from the diaspora is not so much money as ideas, participation in the public debate, and involvement in the implementation of these ideas.

### A. *Diasporans: Inside-Outsider*

Many diasporans are influential outsiders who are well positioned to trigger national reform dialogue and push it through. Individuals who

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2 African Development Bank, *2010 Annual Report* (Tunis: African Development Bank, 2010), [www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Annual%20Report%202010%20EN.pdf](http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Annual%20Report%202010%20EN.pdf).

can challenge a society's formal and informal rules are more likely to come from outside the national bureaucratic or political system. At the same time, the change process usually begins with a perceived need for reform among those powerful enough to enact new policies and change institutions.<sup>3</sup> These two factors point to the high potential of diaspora engagement.

Ideas and learning are powerful forces in overcoming the beliefs and norms that inhibit institutional reform. Studies have found a positive relationship between the length of living abroad, deep adoption of foreign culture, and individual creativity.<sup>4</sup> There is also evidence that individuals who have lived abroad or who identify themselves with multiple national cultures are more likely to become entrepreneurs or come up with new product ideas at work. It is not surprising, then, that many diasporans around the world are considered to be highly entrepreneurial and successful businessmen and woman.

Yet proponents of new ideas are more effective at changing paradigms if they understand constraints and opportunities. Shared assumptions and the inherited institutional framework create constraints to changing existing paradigms. Shared beliefs and institutional frameworks are vastly different in different societies, giving players with good local knowledge a strong advantage in promoting sustainable change in paradigms. Local experts must also have channels to communicate their alternative vision to decision makers and the public. Outside experts, such as aid agency staff and other foreign advisors, often have access to communication but limited local knowledge, while local experts often have the knowledge without the access.<sup>5</sup>

It should not be forgotten, however, that diaspora members' motivation does not necessarily coincide with long-term development goals. Often, diaspora members' incentives are interlinked with the search for personal recognition and have a limited planning horizon. Their role is not providential. Still, it is usually possible to align a diaspora's interests with pro-reform consensus building and establishing a platform for the steady implementation of reform plans.

## **B. Institutions' Incremental and Path-Dependent Development**

Institutions are actively modified through social and political processes. Institutional change is not a matter of simply declaring new rules

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3 Mary M. Shirley and Jessica Soto, "When Do Local Economists Have an Effect on Institutional Change?" (paper prepared for the International Society for New Institutional Economics conference, Reykjavik, Iceland, June 2007), [www.isnie.org/programme2007.html#](http://www.isnie.org/programme2007.html#).

4 Ajay Agrawal, Devesh Kapur, John McHale, and Alexander Oettl, "Brain Drain or Brain Bank? The impact of skilled emigration on poor-country innovation," *Journal of Urban Economics* 69 (2011): 43-55.

5 Shirley and Soto, "When Do Local Economists Have an Effect on Institutional Change?"

and establishing new organizational forms, but rather a process of changing norms and beliefs inherited from the past.<sup>6</sup> Active interaction between various players with competing interests and the prevailing rules shapes and changes institutions. The policies the players enact, the assumptions they overturn, and the institutional modifications they advocate start a process of incremental change that can go beyond their expectations or initial desires.<sup>7</sup>

Institutional change occurs primarily through marginal adjustments of the existing institutional regime. Path dependency is a critical part of institutional evolution that tends to reinforce the ongoing direction of development. This underlines the importance of long-term engagement and a long-term planning horizon for institutional reform.

## II. Three Phases of Shaping Home Institutions by the African Diaspora

The prevailing African discourse only recently has started to consider the circulatory role of the diaspora. Literature so far has paid little attention to the impact that diaspora members are having on institutional development in Africa. Research has tended to focus on remittances and the human capital loss for African countries. Good institutions are considered a precondition for diasporans to return, a view that neglects the fact that diasporas themselves have influenced institutional development back home since the home countries' independence. For instance, Leroi Henry and Giles Mohan suggest that improved governance will encourage migrants to support their home countries, but do not discuss how diaspora members themselves have been already involved in ongoing institutional changes.<sup>8</sup>

Members of diasporas have impacted institutional development in Africa since independence, yet the channels through which they contributed have varied in the last 50 years. Most of the African leaders that led their countries to independence were educated abroad. When countries became independent, it was only natural that they would look up to the brightest and smartest, those that had experienced functioning states abroad. The next generation of diaspora returnees, however, made its impact through taking high political positions. Visionary line ministers and government members returned to their countries for political office and influenced modifications top-down. A third

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6 Avner Greif, *Institutions and the Path to the Modern Economy: Lessons from Medieval Trade* (Cambridge, MA: Cambridge University Press, 2006); Douglass C. North, *Institutions, Institutional Change and Economic Performance* (Cambridge, MA: Cambridge University Press, 1990).

7 Shirley and Soto, "When Do Local Economists Have an Effect."

8 Leroi Henry and Giles Mohan, "Making Homes: the Ghanaian Diaspora, Institutions and Development," *Journal of International Development* 15 (2003): 611-22.

generation of diaspora activists is composed of private-sector-minded entrepreneurs, both business and social, who embrace regionalization and globalization and gravitate toward opportunities that arise on the continent.

The transition from one generation of diaporans to another is highly fluid — there are no rigid division lines. Instead, generations have overlapped and even coexisted, defined by opportunities on the continent and a zeitgeist that has marked each generation. While the historical generation was marked by single big leaders, such as Kwame Nkrumah, the civil servants generation was less visible at first sight. In recent years, pan-African diasporas have shaped economic institutions and created new economic agents.

### **A. *The Historical Generation: Independence***

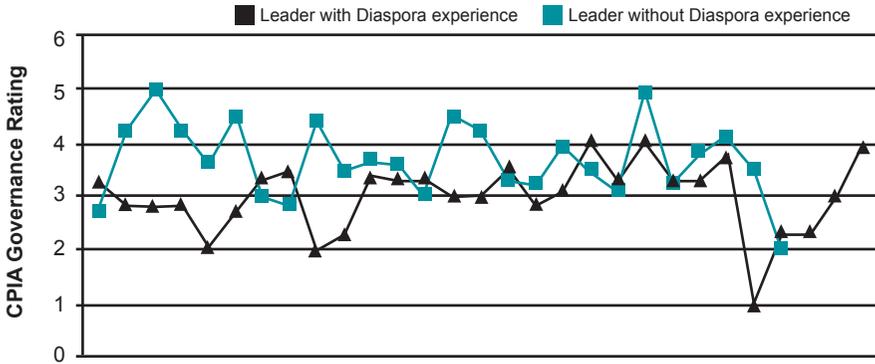
Africans educated abroad in democracies were instrumental in the initial setup of post-independence institutions. With few exceptions, the African leaders that guided their countries to independence and led the establishment of new national institutions spent significant time abroad. Highly influential leaders such as Julius Nyerere and Kwame Nkrumah spent their formative years abroad. When the countries became independent and the blueprints for an independent future were being drawn up, these leaders relied heavily on the blueprints from the countries they knew well, in effect importing some institutional solutions.

African countries whose independence leaders had spent significant time in democratic reference countries score even better in international governance ratings than those whose independence leaders had a military or no stay abroad. Personal accounts and anecdotes of the leaders of Africa’s “governance stars,” such as Tanzania and Ghana, indicate that the early postcolonial shaping of national institutions has benefitted from the leaders’ education in a democratic reference country. In addition, juxtaposing today’s international governance ratings of countries whose founding fathers were educated in a democratic environment indicates a positive correlation between independence leaders’ experience in a democratic setting and governance ratings, which holds true today (see Figure 1). This alludes to Douglass North’s concept of institutional path-dependency, indicating that these leaders may have brought with them blueprints that foster governance and institutional development.<sup>9</sup>

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9 Values and ideas, however, seem to work both ways: while shaping institutions toward better governance, higher efficiency, and transparency is one side of the coin, it is also remarkable that there could be evidence even for a destructive influence of early leaders that had been heavily exposed to military systems. African countries that were shaped by military rulers in their state-building phase still score lower in both policy and governance ratings.

**Figure 1. Governance Performance and Diaspora Experience of African Leaders in the Independence Movements**



Notes: Teal line diagonals: Leader without diaspora experience. Black line: Leaders with diaspora experience. The horizontal (X) axis measures the Country Policy and Institutional Assessment (CPIA) governance rating. CPIA governance is one measure to assess governance performance. Six is the highest rating, indicating best possible governance performance. Each point (triangular or quadrant) represents an African country's CPIA rating. The teal line combines countries whose independence leader did not have a formative experience in a democracy ("Reference Model"). The black line indicates African countries.

Source: African Development Bank (AfDB) CPIA rating and author's own elaboration.

## **B. The Civil Servants' Phase: African Diaspora Fine-Tuning and Revamping Public Institutions**

After the initial euphoria of independence had vanished and the first crises and coups indicated the reality of inefficient post-colonial institutional frameworks, a new generation of diaspora members started to shape national institutions as political technocrats, contributing to their efficiency and transparency. Foreign-trained and highly motivated diaspora high achievers became advisors, high-level bureaucrats, mentors, and opinion leaders with the local knowledge to design and implement sustainable reforms. Their activities aimed to bridge the gap between external advice about global best practices and the demands posed by local circumstances and interest groups.

### **Making Public-Private Partnerships Work: The National Water and Sewage Company**

In Uganda, a visionary foreign-educated managing director transformed a moribund state-owned enterprise into one of Africa's most successful publicly owned institutions. There was no grand design behind his efforts, just a sustained commitment to improving the company's performance.

In 1998, when Dr. William Muhairwe assumed duty, the National Water and Sewage Company (NWSC) was losing money. Muhairwe had hardly been in office for two days when court bailiffs, who were acting on behalf of the company's creditors, locked him out.

Driven by a strong will and vision, Muhairwe announced that he would turn the company around in 100 days or resign. The innovative measures the company adopted in the ambitious 100-Day program and in subsequent reform agendas included institutionalized attendance sheets, amnesty to illegal water users providing they signed up for a new water connection, and prioritizing the customer as the core of the service. Between 1998 and 2008, these measures led the company from an operating loss of 2 billion UGX a year to an operating profit of 3.8 billion UGX. In addition, its service coverage increased from 47 percent to 72 percent of households, leading to significant improvements for the affected populations. The total number of water connections increased fourfold, whereas the number of staff decreased by about 30 percent, indicating drastically improved efficiency.<sup>10</sup>

NWSC is a prime example of how a high achiever with significant experience abroad can apply innovative change management programs to turn around a local organization. Muhairwe ultimately built a company that is now considered to be a performance benchmark for water administration in Africa. Radical improvements in the performance of NWSC proved that it was possible to make money out of water in a poor developing country.

Yet more than just the efficiency gains and improved performance are noteworthy. Muhairwe also paved the way for the first parastatal with autonomous status in Uganda, indicating a new model for public-service delivery. Before Muhairwe took office, donors and politicians alike were convinced that only privatization could secure sufficient efficiency gains and financial self-sustainability. The success of NWSC, however, presented a "performance-contract" alternative, which combines a private-sector management approach with a state-owned social-service provision. Similar experiences led by successful returnees occurred at the subnational government level in Nigeria and Tunisia.

### **C. The Regionalized and Privatized Generation: A Pan-African Diaspora Shaping Economic Institutions and Creating New Economic Agents**

African diasporas still induce new ideas that change the rules of the game in a society, yet the character and focus of their engagement has shifted recently from the public to the private sector and from

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10 William T. Muhairwe, *Making Public Enterprises Work: From Despair to Promise: A Turn Around Account* (Kampala: Fountain Publishers, 2009): 227.

the national to the regional level. At the same time, the forms of their engagement have expanded. New forms of engagement are marked by increased business opportunities and the growing role of the formalized private sector, which is keen to support various institutional innovations. For instance, professional networks and private ventures introduce new ways of delivering public services such as education, health, and water. New innovative businesses increasingly adopt higher worker-protection standards. Private financing supports new schemes for the private sector's participation in Africa's infrastructure projects. These private-sector-led innovations greatly expanded opportunities for productive and innovative diaspora engagement. Diaspora members have also been proactive in promoting dialogue aimed to solidify national peace movements between different interest groups in their home regions.

Regional hubs, such as Lagos, Johannesburg, and Nairobi, offer a platform for competitive multinational companies and opportunities for doing business. Recent economic growth in Africa, which has remained positive even in times of global crisis, attracts a critical mass of "change agents" who share ideas and, similarly to processes elsewhere, help particular locations to establish themselves as attractive places for investment and employment.

Diaspora achievers exert their influence over the business expansion plans of international companies at times when many multinationals are prepared to consider Africa as the business location. African diaspora members use their influence to increase awareness of business opportunities for their companies. For example, the first Bain & Co. office on the continent was staffed with African associates and partners, the same ones who initially were instrumental in convincing management of the rationality of African expansion. A Nigerian-American senior manager of MTV was the driving force behind the company's expansion into Africa, convincing management of the local purchase power and the ultimate cultural richness of its contemporary music, which would translate into additional revenues for MTV.

The latest generation of diaspora members is shaped by a business mentality and identity. At the same time, these individuals are fully aware that cultural ties matter in business, as they lower transaction costs. Tribal loyalty fosters trust. Cultural affinity supercharges communication. In an interview in 2003, 52 organizers of the African Diaspora Summit noted that the formation of AfroNeth and other similar diaspora organizations was strongly influenced by the creation of the New Partnership for African Development (NEPAD) and its focus on African self-reliance. At a Public Private Partnership Congress in Tunis in 2011, the audience was 90 percent African, yet only half of the listed residence addresses were on the continent.

## ***D. Modes and Instruments for Institutional Innovation: Examples of Diaspora Members Promoting New Types of Economic and Political Agents***

### **1. Creating Professional Networks to Advance Modernization of Public Health Services Delivery in Ethiopia**

The Ethiopian North American Health Professionals Association (ENAHPA) is a professional organization of the Ethiopian diaspora that is very active in promoting knowledge transfer and medical state-of-the-art technology to Ethiopia. ENAPHA's mission and vision are to assist in improving health care standards, quality, access, and delivery to the citizens of Ethiopia. ENHAPA was founded in November 1999. The founder, Ingida Asfaw, a well-known Detroit-based surgeon, won the VOLVO FOR LIFE award — a high-level award for social entrepreneurship — for his engagement with ENHAPA. Along with other philanthropic engagements that help to improve medical services, ENAHPA is involved in creating centers of excellence in medicine in Ethiopia.

ENAHPA has successfully created alliances with national actors, such as the Ethiopian Medical Association (EMA) and the Ethiopian Federal Ministry of Health, and international actors such as the Christian Children's Fund of Canada. In collaboration with the latter two they founded an innovative approach to HIV/AIDS treatment. The HIV/AIDS community-centered care network grew strongly, and as of 2009 was treating 5,000 patients. This approach is innovative in Ethiopia for its focus on holistic care and on the treatment of HIV/AIDS. The All Leprosy Education Research Training (ALERT) campus, also part of the cooperation with ENHAPA, was designated by the Ethiopian Federal Ministry of Health as a center of excellence for training healthcare professionals in the specialty of HIV/AIDS medicine.

In addition, in 2008 ENAHPA broke ground on and laid the cornerstone for the first Maternal and Child Health Center in Awassa, Ethiopia, which serves as a pilot program for the nine similar centers in different regions of the country. Furthermore, ENAHPA has entered into distance-learning partnerships with top medical schools in the United States, including Johns Hopkins and the Mayo Clinic, with over 50 Ethiopian medical professionals participating. Senior physicians, pharmacy personnel, and various practitioners in Addis Ababa have received advanced HIV/AIDS, malaria, and tuberculosis training since 2005.

### **2. Raising Quality in Tertiary Education: Ashesi University in Ghana**

After living in the United States for nearly 20 years, Patrick Awuah moved back to his native Ghana to start a new university in hopes of educating Africa's next generation of leaders. Awuah left Ghana in the mid-1980s, when the country was under military rule. He graduated from Swarthmore College with an engineering degree in 1990. Soon

after, he joined Microsoft, moved to Seattle, and became a millionaire before he was 30. After achieving economic well-being and establishing his reputation and family life, he decided to relocate to Ghana. When asked about his motivation for returning, he mentions the birth of his son: "Having a son caused me to reevaluate all my priorities," he says. "This was something that was eating at me. What kind of world is it that my son is going to grow up in? And how is Africa represented in that world?" His goal was to establish an Ivy League-quality university in his home country and train the next generation of African leaders, with a focus on ethical entrepreneurship and integrity. Awuah used his American contacts and his professional knowledge to assess and develop his business plan. He found a team of management consultants and MBA students from the University of California, Berkeley to conduct a feasibility study for the university. The Awuahs invested more than US\$500,000 of private money in the project, and he raised another \$4 million through his own US-based networks.

Ashesi is a private university in a leafy residential suburb of Ghana's capital city, Accra. Its campus and facilities stand in stark contrast to Ghana's five public universities. At the government colleges, enrollment has soared to 65,000 since 1990, and overcrowded lecture halls, sub-standard student residences, rising tuition fees, and poor staff salaries have led to angry protests and frequent strikes. Tuition at public universities is still much cheaper than the \$4,500 in fees that Ashesi charges. However, Ashesi offers small classes, well-trained and paid staff, and international partnerships with top-tier universities such as New York University. About 80 percent of the university's students are from Ghana. The rest are from other nations in Africa. About half of the students receive financial aid.

In 2005 Ashesi issued its first diplomas to a graduating class of 20 students. Ashesi offers two four-year degrees, in computer science and business administration, both of which also emphasize a broad foundation in liberal arts.

Awuah managed to become a first mover in tertiary education in Africa: in 2005, Elizabeth Ohene, at that time Ghana's minister in charge of universities, attended the graduation ceremony. She praised Awuah for making a critical contribution to higher education in the country. "One is very grateful for people like Patrick Awuah who have taken up this challenge, and for what he is doing here," she said. "The old way of the state providing tertiary education for everybody who wants to go is obviously not sustainable."

### **3. Innovative Export-Oriented Business in Rwanda**

Diaspora high achievers have established many promising innovative small and medium enterprises (SMEs). These businesses strategically use their founders' search networks to advance and capitalize

on their business ideas. For instance, several small-scale African coffee plantations founded by diaspora members promoting fair-trade principles have managed to win contracts with TESCO, a large British supermarket chain. None of these initiatives, however, is yet at a social break-even point, meaning that it is not yet possible to assess if they are isolated examples of diaspora investments or constitute an incremental change in what Douglass North defines as the “rules of the game” in a society. Those incremental changes can have a broader follow-up and the potential to reshape the behavior of economic agents.

After a 20-year career working at international development organizations, Beatrice Gakuba returned to her native Rwanda in 2003. Unable to find the roses she wanted for her father’s funeral, she purchased, in early 2004, Rwanda Flora, a small private company, as it was being liquidated. Gakuba came from a prominent Rwandan family of entrepreneurs. Using her knowledge of international markets and marketing, she transformed Rwanda Flora, which at the time was little more than a small farm, into a socially responsible, six-hectare operation that sells five tons of flowers at auction in Europe each week and employs almost 200 rural women. Her experience and networking capabilities from her time abroad were essential for making the business profitable and well known.

Gakuba focused on a very narrow market of socially sustainable products and marketed her products strategically within her international networks. However, her networks at home, such as support from a brother who was involved in local banking, also helped to make her venture a success. Rwanda Flora earned recognition abroad and has been hailed by international leaders as an example of how entrepreneurial success can revitalize economies in Africa.

Gakuba did not rest with her flower-growing business. She is also a partner in Maersk Africa International, a joint venture in Rwanda, to expand the transport and logistics opportunities in the landlocked country

#### **4. Filling the Infrastructure Gap with Private Funding: Setting Up the Nigeria-Based Africa Finance Corporation**

The Africa Finance Corporation (AFC) was established in May 2007, with headquarters in Lagos, Nigeria, as an African-led financial institution that aimed to improve African economies by proactively acquiring, financing, and managing infrastructure and industrial and financial assets. Its mission is to address Africa’s infrastructure development needs by attracting private funding, while seeking a competitive return on capital for its shareholders. Its governance structure is unique in its public-private/local-international setup. The majority of the company is owned by private-sector investors, while its membership is made up

of African states,<sup>11</sup> corporate entities such as major commercial banks and financial institutions, other private commercial entities, and a few private individuals. It has raised over US\$1 billion in paid-in capital, established itself by treaty as an international organization, and completed about \$200 million in transactions. Industrial and corporate shareholders provide it with expertise and access to relevant business networks, while various African financial institutions are expected to promote synergy with local banks as well as ensure proximity to projects and transaction flows.

AFC is committed to acting as catalyst for African and international private capital flows that would help bridge investment deficits in Africa. AFC provides financing on a limited-recourse basis, as well as corporate loans to existing firms seeking expansion capital. AFC originates and executes transactions in infrastructure, including energy, roads, rail, aviation, ports, and ancillary logistics; heavy industry, as well as fertilizer, cement, manufacturing, and refining; oil and gas; and telecommunications. The AFC has already been instrumental in demonstrating the significant value that the African private sector can add to resolving Africa's power supply crisis. Among its flagship projects is an investment in Seven Energy Limited, an upstream gas producer operating in Nigeria. The project aims to expand the supply of gas to the domestic market in Nigeria, thereby helping to address the deficit of gas for power generation. Another project that is of critical importance to the West African power sector is a 300-megawatt independent power plant under development in Ghana. AFC is partnering with local and international financiers to bring this project to financial close.

AFC's operating procedures and processes are comparable to those of the best international financial institutions in the world. The corporation actively continues to seek means of expanding the impact of its balance sheet by accessing local and international financial markets, as well as by partnering with various groups of lenders and investors across Africa and around the world.

AFC's staff consists primarily of Western-educated Africans who had significant international professional experience before returning to the African continent. In 2009, the AFC appointed Adebayo Ogunlesi as non-executive chairman. Ogunlesi brought to AFC his Western education and professional expertise, ideas, and connections and combined them with his knowledge of African markets and institutions. Born and raised in Nigeria, he studied at Oxford and Harvard universities, practiced law in the United States, and is now — in parallel to his commitment in the AFC — a chairman of a major US-based global infrastructure fund. Ogunlesi is a high achiever in his professional field, and his status adds credibility to the AFC. His experience also gives him the background to ensure proper corporate governance of the AFC.

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11 Current member states are Nigeria, Guinea-Bissau, Sierra Leone, The Gambia, Liberia, and Guinea. Other countries have expressed interest, and membership is expected to expand.

## 5. Diaspora Support for Peacemaking Processes

In the past, diasporas have acted both as helpers and spoilers in African peace processes.<sup>12</sup> Yet in recent years, diasporas have been much less likely to engage in regional conflicts as spoilers, perpetuating conflicts by holding and supporting hard-line political positions.

Diaspora members in Africa have been a crucial source of political support to peace processes by providing informed advice and recommendations and placing pressure on all sides to productively engage in peace negotiations and throughout the implementation of peace agreements. For instance, between 1998 and 1999, a dialogue within the Burundian diaspora in Belgium examined the protracted conflict in Burundi in an effort to determine how best to promote peace. Four recommendations emerged from this initial outreach: the creation of systems for communication, consultation, and negotiation; structures to enhance peace; promotion of a political climate capable of integrating the viewpoints of all parties to conflict; and provision of security. The diaspora members agreed to conduct frequent meetings to develop “concrete proposals for solving specific issues,” including power sharing, addressing the past impunity of leaders, a new economic system, and regional relations.<sup>13</sup>

In Sudan, the Darfur Leaders Network (DLN) reached out to the international community offering to prepare documents useful to the Darfur peace process. This included urging the United Nations Security Council not to impede the work of the International Criminal Court (ICC) in taking action against Sudanese President Omar Al-Bashir with regard to the conflict in Darfur, and issuing statements on the humani-

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12 Eritrea’s case illustrates that influence of the diaspora on a conflict in Africa can be both pacifying and inflaming. The legacy of war-time mobilization was a unique model of political and economic integration. Eritrean citizenship was extended to members of the diaspora wherever they lived and regardless of their legal status in the host country. Almost all of them voted for independence in the 1993 referendum, and many participated in the drafting of the new constitution and its ratification in 1997. The constitution guarantees the rights of overseas citizens to vote — although multiparty elections have not yet been held. The flip side of representation is taxation, and since independence, adult Eritreans overseas have been asked to pay a voluntary contribution equivalent to 2 percent of their annual income. Khalid Koser’s research discovered near-universal compliance and minimal resentment. He reports, however, that the government’s efforts to increase contributions substantially to fund the 1998-2000 border war with Ethiopia stirred considerable resentment among the diaspora — in part because they felt overburdened financially and in part because they questioned the necessity of this war. Koser reports a growing disillusionment in the diaspora with the demands and the direction of the Eritrean state, and questions how long the intense, supportive engagement can be sustained. There is no question that diaspora contributions were a major factor in Eritrea’s development efforts in the early-to-mid 1990s. But the relationship after 1998 has been more complex. The period of reconstruction after the war again draws on the diaspora. Their support, although no longer unqualified, remains central; See Public International Law and Policy Group (PILPG), *Engaging Diaspora Communities in Peace Processes: Assessment Report and Program Strategy* (Washington, DC: PILPG, 2009), [www.diaspora-centre.org/DOCS/PILPG\\_Engaging\\_Dia.pdf](http://www.diaspora-centre.org/DOCS/PILPG_Engaging_Dia.pdf).

13 Ibid.

tarian situation within Darfur. The 2008 Dakar NGO Declaration on the Humanitarian Situation in Darfur, to which the DLN was a party, called for a ceasefire in Darfur, a cessation of all attacks, and support for regional mediation of the peace process. By maintaining a dialogue and working toward conveying a consistent message, the DLN has played a key role in voicing the concerns and needs of the Darfuri people and in pressuring the Sudanese government and the international community to work toward sustainable peace in Darfur.

Following the end of the conflict in Liberia, several members of the Liberian diaspora formed the New Liberia Institute (NLI), a Liberia-based think tank founded to assist Liberia's democratic transition. NLI used its networks to receive support from the Public Interest Law Group (PILG) on the organization of participatory constitution drafting procedures, land reform, harmonization of the judicial system, reform of the executive and legislative branches, and devolution of political powers. The ideas generated from consulting with the Liberian diaspora infused substantive knowledge and recommendations into the development of the Liberian constitution and the implementation of the Liberian peace process.

The Burundian diaspora was also instrumental in the post-conflict environment. Unified Diaspora's Recommendations have assisted the Burundian government in overcoming domestic political difficulties in implementing the peace process. Burundi's 2005 elections resulted in a government dominated primarily by a single party. Concerned with the lack of inclusiveness of the post-conflict reconstruction process, the Burundian government reached out to the diaspora. In March 2007, ten members of the Burundian parliament met with 180 representatives of the Burundian diaspora, primarily civil society and political party members, in Belgium, and engaged in discussions about how to improve the inclusiveness of Burundi's government. At the conclusion of the meeting, the members of the conference agreed to work with the Burundian ambassador to Belgium to continue political debates and form recommendations on Burundi's post-conflict reconstruction. In May 2008, a second conference for the Burundian diaspora was held, focused on easing the political deadlock in Burundi as well as the role the diaspora could play in the post-conflict reconstruction process. The consistent engagement of the Burundian diaspora in the implementation of the peace process has greatly encouraged the Burundian government to continue working toward a stable, post-conflict state.<sup>14</sup>

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14 Alejandro Portes, Luis E. Guarnizo, and Patricia Landolt, "The Study of Transnationalism: Pitfalls and Promise of an Emergent Research Field," *Ethnic and Racial Studies* 22, no. 2: 217-37.

### III. Lessons of Diaspora-Induced Institutional Change

Although much further research is needed to refine and test our premises, evidence indicates that, independent of donor activities, African achievers with experience abroad have contributed to shaping institutions on the continent through three phases marked by channels unique to each generation. However, three common characteristics, which we describe in detail below, were present throughout. Diaspora achievers made a critical contribution to institution building, motivated by a combination of intrinsic and conventional motivation and a degree of persistence and vision.

Africans educated abroad were instrumental in the initial design and formation of institutions. During the first (independence) phase, institutional blueprints were drawn up based on personal experiences of living abroad. Highly influential leaders such as Nyerere and Nkrumah are illustrative examples. The institutional frameworks these leaders shaped still perform significantly better than institutional frameworks shaped by leaders who were heavily influenced by non-democratic experiences.

In a second phase, Africans returning to public office in their home countries influenced the rules of the game in a top-up manner: visionary ministers of finance decreased distorting subsidies and ambitious CEOs of public enterprises transformed Africans' access to public utilities.

Today, diaspora high achievers in Africa still continue to “[change] norms and beliefs inherited from the past,” yet the channels for changing the rules of the game have changed are different. They now act more often as economic agents, in contrast to political agents of the past. Unique to this new generation is the ability to maintain regular contact with their home country through the use of new technologies. As Alejandro Portes et al. note, the intensity and regularity of exchanges are novel among contemporary diasporas.<sup>15</sup> The contemporary phase is marked by a strong orientation toward operations of the private sector and private enterprise.

#### A. *Characteristics that Apply Throughout the Three Generations*

Across all three generations, three characteristics seem to be inherently connected to the circular model of diaspora's impact on institutional development. In a nutshell, a highly successful person who has lived abroad for a significant period of time draws his or her motivation from both conventional and intrinsic sources. The following box reflecting on the developments in Liberia illustrates these three characteristics.

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15 Portes, Guarnizo and Landolt, “The Study of Transnationalism.”

## **Box I. Ellen Johnson Sirleaf, Liberian President from the Diaspora**

Ellen Johnson Sirleaf won the 2005 presidential election in Liberia and was re-elected to the post in 2011. She is the first elected female head of state in Africa. After obtaining her university degree in the United States, Sirleaf returned to Liberia and served as Minister of Finance under President William Tolbert from 1979 until the 1980 coup d'état, after which she left Liberia and held senior positions at various global financial institutions (including Citibank, Equator Bank, a subsidiary of HSBC) and international organizations (the World Bank and the United Nations Development Program). Overall, she spent more than 20 years in the diaspora.

Sirleaf was awarded the 2011 Nobel Peace Prize, along with Leymah Gbowee of Liberia and Tawakel Karman of Yemen. The women were recognized for their nonviolent struggle for the safety of women and for women's rights to full participation in peace-building work.

Sirleaf has been quite successful in applying the skills and experiences she accumulated in the diaspora in transforming Liberia's social and economic development. The country's first poverty reduction strategy was built around four pillars — peace and security, economic reconstruction, governance, and infrastructure and debtor services. Implementation of the strategy has been quite successful during Liberia's post-conflict reconstruction: economic growth averaged 6.5 percent a year during Sirleaf's first six years in office. Sirleaf has also succeeded in changing Liberia's brutal international image and made considerable progress in attracting foreign funding, from both private investors and international donors.

From our perspective, two particular characteristics of Sirleaf's strategy are particularly worth mentioning: her emphasis on institutional reforms and her systemic outreach toward the Liberian diaspora to build a long-term development partnership with them. These two agendas overlapped significantly in the successful work of the Liberian Truth and Reconciliation Commission (LTRC), which Sirleaf established in 2006 with a mandate to promote national peace, security, unity and reconciliation by investigating more than 20 years of civil conflict in the country. The LTRC's success has been a critical precondition for implementing the government's reconstruction plans.<sup>16</sup>

The LTRC was the first of its kind to include a diaspora population in all aspects of the reconciliation process. The LTRC partnered with a US-based

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16 Laura A. Young and Rosalyn Park, "Engaging Diasporas in Truth Commissions: Lessons from the Liberia Truth and Reconciliation Commission Diaspora Project," *International Journal of Transitional Justice* 3, no. 3 (2009): 341-61.

human-rights organization, Advocates for Human Rights, to facilitate diaspora involvement in outreach, statement taking, report writing, and the first official public hearings of a truth commission ever held in a diaspora. The project gave Liberians in the diaspora a role in promoting justice, as they participated in LTRC hearings about the human-rights violations of the civil war. This public dialogue also provides diasporans with the opportunity to monitor implementation of the LTRC's recommendations. In the medium term, the dialogue will reduce risks to the peace process and build prevention mechanisms against future human-rights abuses.

It is estimated that between 250,000 and 500,000 Liberians live in the United States, which is a significant number for a nation of 3.5 million people. The Liberian diaspora in the United States has established several organizations through which it influences economic and social development back at home. One example is the Liberian Professional Network (LPN), a social initiative to connect Liberians and those of Liberian heritage in the United States, Africa, and around the globe, to harness their collective talents to help restore Liberia.

The US-based Liberian diaspora is highly capable of promoting the ideas of peace and reconciliation at home due to its considerable soft power, which comes from its collective reputation in the eyes of home-based Liberians. This reputational advantage is associated with the diaspora's economic success, the morality of its policies, and the general attractiveness of US culture and values.<sup>17</sup>

The Liberian government, under the leadership of Sirleaf, made a systematic effort to institutionalize its relationship with the diaspora and create an enabling environment for diaspora return, institutional engagement, and investments in both the private sector and social infrastructure. To this aim, the government set up a Diaspora Unit within the Ministry of State to handle matters related to diaspora engagement and policy formulation, and to serve as an institutional link between the government and the diaspora at large. The Liberian embassy in Washington, DC established a Diaspora Advisory Board to assist the diaspora in its cooperation and to mobilize its development potential.

Other important institutional initiatives advanced under the leadership of Sirleaf include establishing a Liberian anti-corruption commission, improving corporate governance in the mining sector (and the decision to join the Extractive Industry Transparency Initiative), raising the standards for public debt management (and achieving massive debt relief for Liberia), and adoption of the *Freedom of Information Act*.

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17 Osman Antwi-Boateng, "The Transformation of the US-Based Liberian Diaspora from Hard Power to Soft Power Agents," *African Studies Quarterly* 13, no. 1 & 2 (2012): 55-74.

## **B. Driver: A Highly Accomplished Person**

In the above cases, the initiative to advance institutional change was fathered by an achiever. Achievers in this context are diaspora members who left their home country and achieved extraordinary success in their new country of residence. By definition, achievers already accomplished a certain social and/or economic status. Therefore, when they look at their home country for new opportunities, they have the luxury of sharing this status and reputation, as well as professional and financial resources with their new ventures in their home country, rather than seeking to enhance their status through such new ventures, as might be expected from diaspora members at early stages of their professional careers.

Achievers play a key role in initiating the process of a diaspora's involvement in institutional reforms. When the credibility of institutional change has not yet been established, key individual champions are capable of initiating the change by investing their own social capital. They can bring people together for a cause — in this case, mobilizing other diaspora members and linking them to local partners. The role of individuals in triggering a process of diaspora mobilization is crucial. When few other resources are trustworthy or available, individuals with established reputation are key. They act as connecting elements, mitigate skepticism, and propose project ideas. They move the process forward against the odds. Usually such champions combine their personal commitment with a high position in a formal hierarchy. They use their resources and their organizational weight to launch and sustain the process. Many diaspora initiatives have failed because they did not manage to identify such champions and keep them involved for a sufficient period of time. In the absence of individuals with high personal credibility, there is very little that can lend credibility to an incipient process of diaspora mobilization.

## **C. Motivation: Rents and Intrinsic Motivation**

Yet when these achievers “circulate” into their home terrain, they are driven by two types of motivation: quasi-rents (ambition, expansion of their personal empires) and intrinsic motivation (Maslow's self-actualization). The examples we explored above indicate some kind of conventional motivation: AFC and Ashesi are profit-earning enterprises that have the potential to increase the income and reputation of their sponsors. However, these cases also point to an additional, secondary motivation. For instance, Patrick Awuah decided that Ghanaian students needed the opportunity to get a top-tier education in their home country in order for the country to reach the critical mass of sophisticated businessmen it needed to achieve sustainable growth.

## D. The Clue: “Sticky People”

There is another important group that is conducive to local institutional development: “sticky people,” defined as individuals who have a vision, are able to follow this vision with persistence, share their vision, and bring others around to share it.<sup>18</sup> Sticky people can be local or from the diaspora. An example is Beatrice Gabuka, who envisioned making a profitable flower business in her native country post-conflict. She followed that vision with persistence: she managed to open a business in a regulatory environment that was ranked 148 out of 182 in the Ease of Doing Business ranking.<sup>19</sup> Gabuka would have had to spend at least 74 working days to follow the procedures to start her business. However, vision and persistence are not enough for sustainable change. Only by sharing their vision and convincing others of it can sticky people start serving as the “glue” that helps to build a coalition for change.

Changing norms and beliefs inherited from the past is possible if the individuals who advocate the change are sticky. They must not only stick to their ideas, but also be persistent with other people, getting them to share the vision and thus contributing to making the vision come true. For instance, Gabuka’s brother shared her vision to such a degree that he provided the necessary seed capital. She also shared her vision with her workers, increasing their motivation and, in consequence, their productivity. Muhairwe relied significantly on his deputy, Dr. Charles Wana Etyem, in the execution of his visionary and ambitious 100-Day program. Etyem, who was the leader of the task force in charge of executing the program, had “stuck” with the company despite all odds.

## IV. Moving from Anecdotal Evidence to Assessing Diaspora-Induced Institutional Change

Most of our examples from sub-Saharan Africa can be called promising rather than successful. It takes time and stability for the first mover’s promise to mature and ripen. The above examples are promising, but the evidence is anecdotal. Diaspora members live outside the country, but once they get engaged into their home country, they become constrained by its institutions. They can do much, perhaps more than anyone expects, to relax these constraints in the longer run, but in the short term they will feel their bite quite strongly. So far, the evidence

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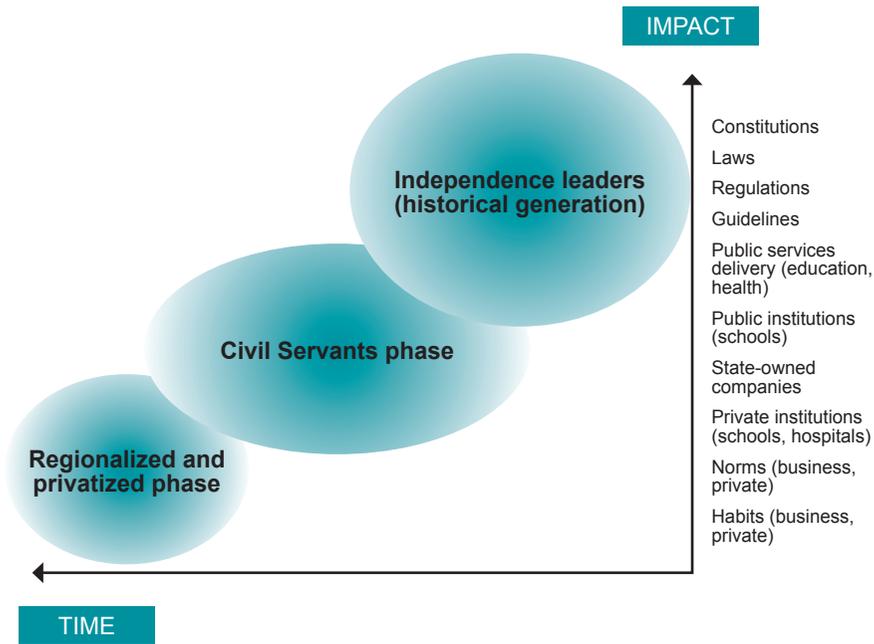
18 Bob Hodgson and Yevgeny Kuznetsov, “Sticky People (Who Stick Around) — Individuals Who Persist and Persevere Against Many Odds” (Washington, DC: World Bank, 2011).

19 World Bank, *Doing Business 2008* (Washington, DC: World Bank and the International Finance Corporation, 2007), [www.doingbusiness.org/reports/global-reports/doing-business-2008/](http://www.doingbusiness.org/reports/global-reports/doing-business-2008/).

presented above only indicate potential, or at best opportunity. The success of institutional change cannot be measured only on the basis of the success stories of individual businesses. Additional evidence is needed to demonstrate that these successes of diaspora first movers either are capable of forcing a change in the prevailing rules of the game (e.g., by improving government regulations) or at least generating some tangible follow up (e.g., the formation of similar businesses by local entrepreneurs).

Yet, as the changes are only incremental, in the short-and medium term the existing quality of home country organizations determines how strongly, quickly, and influentially these opportunities will translate into actual institutional change. In many cases a diaspora could be populous, rich, and entrepreneurial and its members might be enthusiastic about getting involved, but the home country's organizations become binding constraints.

**Figure 2.A Monitoring Framework for Diaspora-Induced Institutional Change in Sub-Saharan Africa**



Source: Author's rendering.

A monitoring framework could be useful to generate a better picture of whether the opportunity translates into real institutional change. Figure 2 illustrates a first scheme along which such an impact-monitoring framework could be developed. On the vertical x-axis, institutional

development is measured through a proxy: what Douglass North calls the “formality of the rules and norms that govern interaction in a society.” The horizontal axis indicates time.

Diaspora initiatives can shape the rules of the game in their home countries, yet only with time can the fruits of those efforts be seen. Individual cases — such as those presented above — accumulate over time and translate into gradual institutional change. Yet those cases, considered along the two axes, demonstrate a flocking, indicating “clouds.” Further analysis needs to be conducted to understand if these clouds go beyond correlation and indicate causal relationships. 

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## CHAPTER 5

# MOVING SKILL: THE INCORPORATION OF MEXICAN IMMIGRANTS IN THE US AND MEXICAN CONSTRUCTION INDUSTRIES

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### Introduction<sup>1</sup>

To date, analyses of the relationship between migration and economic development, and the policies designed to strengthen that tie, have borrowed the very specific, and somewhat narrow, notion of skill used in studies on the labor market participation of migrant workers. This definition of skill has tended to equate skill development with formal education, using years of schooling or training certification as a proxy for capacity.<sup>2</sup> Based on this view, analyses and the policies they inform have divided migrants into two camps. In the first group are those with formal education equal or superior to the median level of workers in the receiving labor market, and who

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1 This chapter grows out of a research project entitled “Hidden Talent: Latino Immigrants and the Politics of Skill,” which was funded in part by the MacArthur Foundation.

2 Ilana Redstone Akresh, “U.S. Immigrants’ Labor Market Adjustment: Additional Human Capital Investment and Earnings Growth,” *Demography* 44, no. 4 (2007): 865-81; George Borjas, “Assimilation, Changes in Cohort Quality, and the Earnings of Immigrants,” *Journal of Labor Economics* 3, no. 4 (1985): 463-89; Barry Chiswick, “Is the New Immigration Less Skilled Than the Old?,” *Journal of Labor Economics* 4, no. 2 (1986): 168-92.

are able to enter labor markets with high skill entry requirements.<sup>3</sup> In the second group are those with a level of formal training below that threshold, or those who are not able to enter high skilled labor markets due to a mismatch of their skills with those of the receiving labor market.<sup>4</sup> The migration and development policies geared toward these two groups are vastly different: those that target highly-educated migrants focus on the contribution that these workers make to the firms and industries in which they work, especially the ways they support innovation and the development of new knowledge practices and create institutional vehicles to support the transfer of knowledge and innovation practices back to their countries of origin.<sup>5</sup> Policies that target less-educated workers, by contrast, focus on the monies that migrants send back to their communities of origin, and interventions are designed to direct those funds to uses considered more economically productive than household consumption.

This division of migrants into high-skilled and low-skilled categories overlooks an important and understudied group of migrant workers: those with mid-level skill. These are typically migrants with relatively lower levels of formal education but who have acquired significant and complex skill through on-the-job learning. Very little is currently known about the skills that they have at the time of arrival and those that they continue to develop over time. What this means is that there are no functional policies or institutions designed to foster the contribution that migrants with mid-level skill can make to the economic development of both their receiving and sending countries.

To fill this gap, we examine how skill mediated the labor market incorporation of Mexican immigrant workers in the construction industries of Raleigh-Durham, NC, and Philadelphia, PA from 2007 through 2011. Our research draws on the concept of *tacit skill*, a term that is increasingly used in organizational management scholarship but until now has not been integrated into studies of immigrant labor-market incorporation. Tacit skill is skill that is learned through hands-on experience, rather than through formal training or classroom instruction.<sup>6</sup> It is

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3 AnnaLee Saxenian, *The New Argonauts: Regional Advantage in a Global Economy* (Cambridge, MA: Harvard University Press, 2006); Devesh Kapur and John McHale, *Give Us Your Best and Brightest: The Global Hunt for Talent and Its Impact on the Developing World* (Washington, DC: Center for Global Development, 2005); Yevgeny Kuznetsov, ed., *Diaspora Networks and the International Migration of Skills: How Countries Can Draw on Their Talent Abroad* (Washington, DC: World Bank, 2006).

4 John Durkin, "Immigration, Assimilation and Growth," *Journal of Population Economics* 11, no. 2 (1998): 273-91; George Borjas, "The Labor Demand Curve Is Downward Sloping: Reexamining the Impact of Immigration on the Labor Market," *Quarterly Journal of Economics* 118, no. 4 (2003): 1335-74; Michael J. Piore, *Birds of Passage* (Cambridge, UK: Cambridge University Press, 1979).

5 AnnaLee Saxenian and Charles Sabel, "The New Argonauts, Global Search, and Local Institution Building," *Economic Geography* 84, no. 4 (2008): 379-94.

6 Michael Polanyi, *The Tacit Dimension* (London: Routledge, 1966); Richard Sennett, *The Craftsman* (New Haven, CT: Yale University Press, 2008).

skill that cannot be easily articulated, nor easily parsed out from social interactions on the jobsite or from the physical movements required to complete job tasks.<sup>7</sup> Because it is not codified and easily identifiable, the ways that migrants acquire, develop, and demonstrate tacit skill, as well as the implications for immigrant social mobility, have until now remained unclear and understudied.<sup>8</sup> Moreover, the tacit skill that migrants often bring and the ways that they are able to leverage that skill in receiving economies have been poorly understood. Finally, the processes through which migrants may transfer mid-level skill acquired abroad back to their countries of origin have received little, if any, analysis.

To analyze the movement and development of tacit skill among Mexican migrants, we use a transnational approach to understand how construction skills and learning practices move back and forth between immigrant sending and receiving communities. We conducted field research in three areas of Mexico: the Monterrey metropolitan area, a center of commercial and residential construction; Mexico City, a destination site for many return migrants from our two US research sites; and northwestern Puebla, a sending area for migrants to Philadelphia. We investigated which skills and learning practices immigrants developed before entering the US construction industry, and which US-acquired skills and practices they transmitted back to their home communities during periods of return.

At our two US sites, we used a research design that combined a micro-level study of immigrant learning processes at specific worksites with an analysis of the institutional context that shaped and reinforced these learning processes and practices. In order to capture some of the variation among labor market environments across US regions, we chose two labor markets that fall on opposite ends of the institutional spectrum: Raleigh-Durham, a region in a nonunion or “right-to-work” state where union density is extremely low and where skill formation for native-born workers is traditionally governed by industry associations and community colleges, and Philadelphia, where industry training and credentialing processes for native-born workers are tightly controlled by labor unions. For the most part, these formal training supports were inaccessible to Mexican immigrant construction workers in both Raleigh-Durham and Philadelphia. This, however, did not result in similar labor market experiences for immigrant workers in these two settings. Rather, the distinct institutional environments of each labor market greatly affected the location and type of jobs that were available to immigrant workers. They also influenced the social

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7 Ikujiro Nonaka and Georg von Krogh, “Tacit Knowledge and Knowledge Conversion: Controversy and Advancement in Organizational Knowledge Creation Theory,” *Organization Science* 20, no. 3 (2009): 635-52; Meric Gertler, *Manufacturing Culture: The Institutional Geography of Industrial Practice* (Oxford, UK: Oxford University Press, 2004).

8 Allan M. Williams, “Listen to Me, Learn with Me: International Migration and Knowledge Transfer,” *British Journal of Industrial Relations* 45, no. 2 (2007): 361-82.

process of learning on the job, as well as the types of pathways for overcoming obstacles to skills-based occupational security or career advancement that were open to immigrants.

We conducted over 200 interviews with Latino, and primarily Mexican, migrant construction workers in the United States. We conducted 105 interviews in Raleigh-Durham and close to 100 interviews and three focus groups in Philadelphia. We also conducted interviews with employers, city officials, union representatives, personnel at training programs, and staff at social service organizations that serve migrants, especially churches, at both sites. We supported our research with numerous site visits to construction projects where Mexican migrants were well represented to observe their integration into construction practices. In Mexico, we conducted over 60 interviews, speaking with construction workers, contractors, industry associations, and migrant support organizations. We also conducted site visits to numerous construction sites and observed pilot training programs for workers and supervisors.

We found that migrants were coming to the United States with significant construction-related skill from Mexico. In other words, migrants were bringing tacit construction skill into the US labor market. However, we also found that the ways Mexican migrants were able to use and build on those skills depended very much on the institutions that structured the construction industry in the city in which they worked. Because the skill they brought was tacit and thus expressed and enacted on site and through workplace interactions, it was extremely sensitive to institutional context: the way that the industry was organized shaped how well migrants were able to convey the skill they held, how they are able to develop it further, and how they were able to use it to contribute to industry-related innovations. In particular, we noted two main channels of effect of institutional structures on immigrant use and development of tacit skill: the employment practices in the segment of the construction industry in which Mexican workers were prevalent, and jobsite work processes. These varied dramatically between Raleigh-Durham and Philadelphia. So pronounced were these localized effects that saying that migrants transferred their skill does not capture the in-depth processes of translation in which migrants engaged in order to adapt their skill to the context in which they work. Instead, we argue that these processes so profoundly reshaped the abilities that migrants brought that it is more accurate to say that migrants *transformed* their tacit skill.

While migrants transformed skills from Mexico for use in US labor markets, the evidence for skills transfer back to Mexico is weaker. We found that there were a few informal pathways for skills transfer back to Mexico, but that these may not have been significant vectors for skills transmission. Our findings do suggest, however, that there may have been important untapped possibilities to harness the skills

migrants brought back to Mexico for the development of the Mexican construction industry. We found that these opportunities were untapped due to two main factors. First, the skills migrants brought home had been overlooked and undervalued by relevant actors, including migrants themselves. Second, migrants faced significant barriers to entry that prevented their integration or reintegration back into the Mexican construction industry, making it difficult for them to deploy the skills they had acquired abroad.

We begin this chapter by characterizing the construction skill developed in Mexico. We then explore how migrants deployed and transformed their skill — largely tacit in quality — in our two research sites. We first provide a profile of the construction industry in Raleigh-Durham and Philadelphia, and describe the way that work was organized in the segments of the industry that depended heavily on Mexican migrants. We then detail how migrants were able to reshape and adapt the skill they brought from Mexico to local industry needs and note the ways this process supported their advancement in local construction labor markets. In both of our research sites, the construction industry drew heavily on Mexican migrants during the construction boom of the mid-2000s. As construction in both cities slowed toward the end of the decade, the employment of Mexican migrants dipped. Although the construction industries in Raleigh-Durham and Philadelphia have continued to depend on Mexican workers, many of these workers were laid off and a small minority returned to Mexico. In the final section, we look at the obstacles return migrants have faced to using the skills they acquired in the United States in the Mexican construction industry. In the conclusion, we review our main findings and suggest their implications for policy.

## **I. Construction-Related Skill Migrants Bring from Mexico**

Our research shows that in Raleigh-Durham and Philadelphia, many Mexican migrants brought construction-related skills acquired in Mexico when migrating to the United States. In Raleigh-Durham, based on our interviews, we estimate that 50 percent of the Mexican labor force in construction brought construction experience from Mexico. In Philadelphia, our interviews indicate that 60 percent of Mexican workers in the construction industry had construction or construction-related experience (such as experience or training as an architect or engineer) before migrating.

The skills that Mexican migrants did bring with them were informed by the structure of the construction industry and building practices in Mexico, and they differed in important ways from building trade skills

in the United States. We have identified three critical areas of difference as they pertain to building skill in Mexico. The first is the delineation of skill categories, the second is the process of skill development, and the third is the process of skill demonstration.

## **A. Delineation of Skill Categories**

Through our fieldwork, we observed that skill categories in Mexican construction tended to be more broadly defined than in the United States, and tended to encompass a wider gamut of abilities. Building skill in Mexico, on sites ranging from small-scale residential to large-scale commercial, tended to be at once more generalized and more attuned to detail. For example, workers who fit in the category of *albañiles* — masons — who worked on the structure of the house were very skilled in the use of concrete and in the construction of concrete structures. They had the tendency to become extremely adept at creating and working with the different consistencies of concrete, as they were required to do everything from structural work like pouring foundations, laying floors, and erecting walls, to detail work like applying plaster finishes, creating moldings, and creating different effects in concrete (like color and texture). Similarly, carpenters in Mexico seemed to develop a broader array of skills than many construction carpenters in the United States. They acquired skills in tasks ranging from building wooden molds for concrete and erecting temporary scaffolding that holds a structure in place, to detail work such as building cabinets and furniture and carving decorative elements into moldings, doors, and furniture. The broader skill categories allowed for an ongoing deepening and broadening of skill over time, as workers acquired more experience engaging with their construction material at different jobsites.

### **I. Conceptual Understanding of Building Structure**

We also found that workers in the Mexican construction industry tended to develop a conceptual understanding of building structure and a sense of how to deploy their particular ability to maintain the structural integrity of a building. As workers in these broader skill categories developed their skills, they also acquired an integrated understanding of how the elements of a structure fit together; in particular, of how the elements for which they were responsible fit with other elements in a building. For example, a mason whose tasks included working on foundations, floors, and walls also developed the ability, in a Mexican context, to articulate the relationship between how deeply a foundation is dug and the structural integrity of a second floor bearing-wall. Similarly, a mason who had to allow for electrical wiring and plumbing to be embedded in concrete walls as he built them tended to develop a familiarity with those elements that was complete enough for him to understand how they related to the overall structure and function of a building, even though those elements did not fall under

his task area as a mason. Workers we interviewed called this relational understanding of the interaction and interconnection between building elements “the theory” of construction, and stressed that this conceptual piece is an indispensable part of building skill in Mexico, regardless of one’s task area. In other words, it was as important for a mason to understand electrical fixtures as it was for an electrician to understand the basic qualities of concrete and the basic processes of foundation, wall, and floor construction. Workers interviewed also commented that this requirement made learning construction skill in Mexico more difficult than in the United States, where skills were more specialized and compartmentalized. Several immigrant workers referred to this as a more “craftsman” kind of approach to construction work and construction skill development.

## **2. Adaptive Skill**

Additionally, we found that a central component of the broad skill categories in the Mexican construction industry was the ability to problem-solve on site, an ability we call *adaptive skill*. Because of the structural understanding — the conceptual understanding of the inter-relationship between building elements — that Mexican construction workers tended to develop, they were better able to adapt their construction practices to modify a building element as they were building it. For example, a mason in Mexico would have the ability to adjust a wall, even while erecting it, to accommodate changes in the electrical layout and wiring necessary for the building. Similarly, a mason in Mexico tended to develop the ability to alter the raw materials used — concrete in particular — according to factors as variable and ancillary as weather, altitude, and the slope and density of the plot on which the building is constructed.

Although broader skill categories were prevalent in construction throughout Mexico, we did observe some differences in skill and skill-sets based on where these skills were learned. Skill development in urban construction markets in Mexico was very different from learning in rural areas — in part because in urban areas, building standards may have been more uniform, and there may have been access to specialized equipment. Still, even for the high-end Mexico City market, many aspects of this “craftsman” style of learning and knowledge development still hold.

## **B. Processes of Skill Development**

The primary mode of skill development in the Mexican residential and commercial construction industry was guided on-the-job learning, in what can be considered informal apprenticeships. Formal training programs, whether short modules or longer skill-building arrangements, were not well established in Mexico. Learning typically happened at the work site, with more experienced workers introducing novices to skill

at a more or less individualized pace, based on the worker's mastery of foundational skill as well as the worker's capacity and readiness to absorb new skill. On Mexican construction worksites, it was not unusual for workers to spend a long time first mastering the foundation skill for their construction area: supervisors would task new masons, for example, with the physical mixing of cement for quite a while before the novices were allowed to use the cement to pour floors and foundations or erect walls. Supervisors and more experienced workers on Mexican worksites reported that they took particular care in observing new workers and calibrating their readiness to be introduced to a new skill in their broader skill area.

### **Engagement with Building Materials**

In the on-site learning practices prevalent in Mexico, direct engagement with construction materials appeared to be a significant channel for skill development. Through direct interaction with materials and building tools, workers developed a profound but tacit understanding of the quality those materials must display — or rather, the qualities that must be coaxed out of the material — to meet various construction challenges. For example, by mixing cement and observing its performance under various conditions, workers learned to evaluate “by feel” the correct consistency of cement required for functions as varied as creating a plane floor or a sticky mortar, as well as the appropriate texture to compensate for varied climactic and topographic conditions. The same is true of materials like wood, tile, and various types of metal: workers learned by feel how they needed to be manipulated to produce the characteristics necessary for the material's function in the building. This tacit but intimate familiarity with materials was especially important in the context of Mexican construction because the range of tools used is narrower than in the United States. The evaluation by feel served many functions that in the United States were mechanized, whether on the construction site through specialized tools or before construction through the production of prefabricated materials (like drywall). Workers with experience in Mexico reported that learning through engagement with materials was easier and more helpful for skill building: they could see and feel how a material performed under different conditions and how different construction elements tangibly fit together in a building. Workers reported that this was more straightforward than learning through an explanation or a manual, where they had to visualize results without being able to observe them. Learning through materials also developed the acuity of workers' observational abilities, better equipping them to identify when small, time-sensitive adjustments in construction practices or materials were needed. In other words, learning through materials strengthened their adaptive skills.

### **C. Skill Demonstration**

In the Mexican construction industry, social networks were vehicles for informal skill certification. Since formal training programs played a negligible role in Mexican construction labor markets, workers in Mexico relied on social relationships to secure employment and communicate their skills. The networks were often family-based, but as workers spent more time in construction and/or worked on larger construction projects (residential or commercial developments), their social networks expanded to include those that were industry-related. Members of social networks would vouch for a worker's skill. Because the legitimacy of those networks as employment intermediaries depended on whether or not the worker had the professed skills, the self-assessment tended to be roughly accurate. Thus, social networks, especially those embedded in the construction industry, acted as forms of "informal certification." This informal certification, or "vouching," applied to a worker's potential as well. A worker may have claimed that a person had skills that he did not have if he believed that he would have the opportunity to train that person in the position and that the person had the capacity to quickly pick up the skill.

## **II. The Organization of Work and Migrant Participation in Raleigh-Durham and Philadelphia**

Our research found that the skill Mexican workers brought with them to the United States was characteristically broad, developed through informal apprenticeships, and honed through engagement with materials. However, we found the way that migrants were able to harness and further develop those skills depended very much on the institutional and procedural characteristics of the local construction industry in which they worked. We noted significant variation in how skills were leveraged and developed between Raleigh-Durham and Philadelphia, but we also observed important differences between types of worksites in both cities.

One of the most central institutional factors that shaped migrants' ability to use and develop further the skill they brought was the organization of work at construction sites. The way that construction work was organized in Raleigh-Durham and Philadelphia was very different. However, within each city, and within the segment of the industry that relied heavily on Mexican migrants, the organization of work at different sites had consistent traits, and there was little variation among worksites.

## A. Raleigh-Durham: Supervised Job Ladders

In Raleigh-Durham, Mexican migrants were employed on a variety of formal construction sites, ranging from commercial structures to large-scale residential developments. Work at these sites was generally subdivided across multiple subcontracting crews that specialize in one task area and, in some cases, within very narrow subtasks, such as drywall hanging, taping, or finishing. Migrant workers tended to secure jobs with subcontractors rather than with general contractors, who often required and encouraged broad-based skill development involving multiple tasks. This was due to a larger process of industrial restructuring that began in the 1980s and that has reduced direct control by general contractors over the project labor supply. The general contractor did, however, maintain considerable control over project management and quality control and, in most cases, materials purchasing. The increased reliance on subcontracting to coordinate local labor flows enabled general contractors to expand their territorial reach.

Based on our description of the broad skill sets that Mexican immigrants brought with them to their US worksites, it is important to note that North Carolina's detailed division of labor across multiple subcontracting crews may have led to the underuse or undervaluing of existing migrant skills. Still, migrant workers that arrived with prior construction knowledge developed innovative strategies for leveraging their existing skills. The main strategy they used was that of job jumping, which enabled them to use their knowledge of multiple tasks to move between different employers in North Carolina. The immigrants stopped jumping once they secured work with an employer that provided better advancement opportunities.<sup>9</sup>

This strategy of jumping was reinforced by a second important institutional feature of this local labor market: subcontractors varied greatly in their support for career advancement. Our interviews suggested that many subcontractors in North Carolina simply treated their immigrant workforce as disposable and easy to replenish, and thus provided few opportunities for them to advance. Under these employers, there were few opportunities for guided skill development. Rather, skills were learned indirectly, through observing the work of others at the site. Still, there were also many subcontractors in Raleigh-Durham that did create a supportive environment for structured learning and skill development, and explicitly linked this to advancement opportunities within the firm. In these cases, advancement opportunities were structured around a well-defined internal career ladder. This career ladder was hierarchically organized. Immigrants who worked their

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<sup>9</sup> Jacqueline Hagan, Nichola Lowe, and Christian Quingla, "Skills on the Move," *Work and Occupations* 38, no. 2 (2011): 149-78; Natasha Iskander and Nichola Lowe, "Hidden Talent: Tacit Skill Formation and Labor Market Incorporation of Latino Immigrants in the United States," *Journal of Planning Education and Research* 30, no. 2 (2010): 132-46.

way up the internal ladder often did so because they had demonstrated their capacity to deepen their knowledge of a particular task. There was also a social dimension to advancement, insofar as those advancing to the top of the ladder had usually demonstrated their loyalty to their employer and had, in the process, developed strong relationships with native-born employers or superintendents at these companies. In fact, we often heard native-born employers or high-ranking superintendents mention the name of a specific Latino immigrant and refer to this individual as “my guy” within the company. Once in this elevated position, the immigrant worker had considerable influence over hiring and training decisions, and as such was often in a position to ensure other immigrant workers had access to jobs and advancement opportunities within the company.

### ***B. Philadelphia: Autonomous Teams***

In Philadelphia, by contrast, Mexican immigrants worked primarily on small-scale and often informal residential construction or rehabilitation projects. Workers self-organized into loose heterarchical teams, wherein the worker with the most skill relating to the task at hand would tend to take a leadership role. Teams generally worked together for periods ranging from several weeks to several months, depending on the size of the renovation project and whether their employer was renovating more than one site. As they worked together, they problem-solved together, with experienced workers and novices all drawing on their previous construction exposure in the United States and Mexico to contribute ideas about how to complete a given construction task. The interactive learning that occurred as a result allowed workers to learn tacit skills from one another and to experiment in a manner that was sustained enough for them to discover new techniques and approaches.

This process of ad hoc problem solving and experimentation occurred primarily in spaces that escaped direct employer supervision, arguably — or perhaps precisely — because these spaces escaped employer control. At the jobsite, workers had the latitude to try out new approaches because their employers were, for the most part, absent. Most employers were small contractors, or “flippers,” who remodel — or flip — houses for profit but had day jobs as professionals, and were therefore not present at the jobsite during the day. A majority of workers we interviewed reported that their employers would arrive in the morning, give instruction and provide the tools and materials necessary for the tasks indicated, and then leave for the rest of the day, only occasionally returning in the afternoon to inspect completed work. Moreover, employers were also figuratively absent. Mexican workers, who were mostly new arrivals to the United States, had limited English language ability and few of their employers spoke Spanish. The resulting communication difficulties opened up room for

Mexican workers to experiment. Many recounted that they very often did not comprehend their employers' directions. With a rough idea of the task at hand, however, the workers tended to improvise with tools and materials to complete it.

The team-based organization at the worksite and the absence of direct employer intervention allowed workers in Philadelphia to leverage the skills they had as a group on the jobsite to cross-train one another and to innovate within building practices. This enabled them to protect their current employment and provided them with the skills to secure future employment on residential construction jobs.

The organization of work in both cities also shaped how and whether skills were transformed and developed at individual jobsites. Jobsite work practices could greatly affect how and when skills brought from Mexico are transformed in ways that could improve building practices at those sites. What is important to note, however, is that the organization of work in each city influenced the extent to which existing and newly developed skills were used as a resource for improving site-based building practices. In Raleigh-Durham, for example, task-specific specialization reinforced rule-based learning, in which tasks were learned and deepened through step-wise instructions that often reflected an engaged employer or superintendent's preference for how that task should be completed. The strong role of the employer or superintendent in determining the steps through which a specific task could be performed could greatly limit the extent to which immigrant workers could make significant and lasting changes to work practices at the jobsite. In contrast, while immigrants in Philadelphia had fewer opportunities to harness their existing skills for industry advancement purposes, they were in a better position to transform and significantly change local building practices.

### ***C. Side Jobs in Raleigh-Durham and Philadelphia***

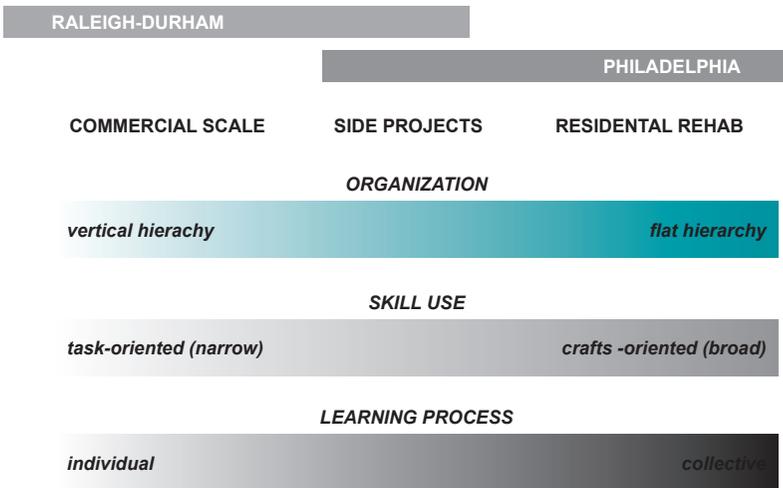
It should also be noted that in both cities, Mexican workers, at least prior to the 2008-09 recession, had an opportunity to work on side jobs outside of their more regular employment in construction. In both cities, a single worker or a small group of two or three workers would complete such a construction task — generally minor renovations, additions, or remodeling. The organization of work at side jobs was substantially different than the prevailing model at construction sites that employed immigrants: for the most part, work organization and flow was ad hoc, informed by the task to be completed, and leadership on the jobsite was determined by a combination of expertise in the task at hand and entrepreneurial initiative (i.e., who secured the job). Side jobs played an important role in skills transformation in both cities in that they complemented and extended processes of skill adaptation and development that occurred at more mainstream worksites. In North

Carolina, as we will see, this enabled immigrants to utilize and augment a broad-based skills set. In contrast, side projects are often used to deepen task-specific knowledge within the immigrant workforce in Philadelphia.

### III. Processes of Tacit Skill Transfer and Transformation

The organization of work prevalent in each city on jobsites where Mexican immigrants were employed shaped how the skill brought from Mexico was used and developed, and how the skill acquired both in the United States and in Mexico was demonstrated in US labor markets. Taken together, we would argue that the strategies migrants used in both settings to leverage their existing skills should be viewed as innovative and transformative. Still, their relative contribution to immigrant worker status needs to be critically examined and understood in relation to the structure of work in both cities. The discussion below outlines the ways in which work organization and practices at both mainstream construction sites and side jobs transformed the skills that Mexican immigrants brought with them. We consider how migrants drew on and reinvented the three features we identify as central to Mexican construction skill and its deployment in the Mexican construction industry: the broad delineation of skill categories, the processes of skill development, and the processes of skill demonstration (see Figure 1).

**Figure 1. Institutional Differences in Research Sites**



Source: Author's rendering.

## **A. Delineation of Skill Categories**

For Mexican migrants, participation in the construction labor markets and jobsites of Raleigh-Durham and Philadelphia meant redrawing the boundaries that defined their skill base. Some aspects of their skill were parsed out and deepened; others were broadened and connected to new skill areas; still others were revalued, becoming either more central or more peripheral depending on local industry needs. This transformation of the tacit skill base migrants brought with them grew out of their engagement with the different day-to-day routines and institutions that structured the segment of the construction industry they had joined in either city.

### **I. Skill Deepening**

In Raleigh-Durham, the vertical organization of jobsites into work crews that were organized around a specific skill or task, sometimes quite narrowly defined, promoted the deepening of knowledge about that particular task. Concentration on one task area, or even partial area, allowed for the acquisition of detailed knowledge and the development of skillful practice about that particular function; this occurred through focused observation and intensive repetition of the task functions. For migrants whose existing skill was defined and experienced more broadly, integration into highly specialized teams on Raleigh-Durham's worksites meant teasing out the segments of their knowledge that were applicable to the task at hand and modifying their practices to fit a more disaggregated approach to construction. The fairly strict hierarchical organization of work crews enabled migrants to build on their applicable skills in a structured way. The job ladder in the crews was roughly equivalent to the complexity and subtlety of the task required, with the most experienced and most skilled worker often supervising and training his crew. As a result, migrant workers were able to develop their skill progressively, mastering the simpler tasks of their specialization and moving stepwise toward more difficult functions as they moved up the hierarchy. As indicated earlier, however, there was also a social dimension to one's status in this hierarchy, insofar as advancement was also influenced by the nature of the relationship between an established immigrant and his employer or supervisor.

In Philadelphia, by contrast, where the integrated approach with loose heterarchical teams promoted a holistic development of construction skill, side projects were the main vector for skill deepening. Consisting of a small and often task-specific job — laying tile, building a deck, finishing a basement — side jobs provided Mexican immigrants with the opportunity to further develop one skill or set of skills. These one-off jobs provided workers with the space for self-directed experimentation at the edge of their knowledge level, allowing them the opportunity to increase their mastery in areas where their command was still tenta-

tive. A tile-laying job, for example, may have allowed a worker to test out and perfect his ability in that skill area at a site that was not his primary source of employment and where the risk of failure was thus lower.

## **2. Skill Widening Across Skill Areas**

In Philadelphia, work organization and practices at the jobsite emphasized the development of skill across multiple task areas. With small work teams at residential construction sites completing a wide compendium of building tasks, developing proficiency in a number of task areas was essential for participation in the residential construction labor market. As a result, immigrant workers with construction experience from Mexico drew on skills in all of the task areas with which they were familiar. Moreover, as workers collaborated in the loose heterarchical teams prevalent on residential sites, they tended to cross-train one another, drawing on skill acquired in Mexico and the United States to show their coworkers how to complete the task at hand. If, for example, a worker on the team brought carpentry experience from Mexico, that worker tended to take the lead on carpentry tasks, showing his coworkers how to complete them and coaching and supervising throughout the process. Since workers rotated as masters and apprentices in these teams, and across multiple jobsites, they acquired a wide range of skills. Moreover, as workers confronted distinctly American construction styles and materials with which they were often unfamiliar, they broadened their skills even further, adapting them to the building approaches and construction materials used in Philadelphia residential construction and rehabilitation. They stretched their skill base to include innovative hybrid approaches to construction that were prevalent in neither Mexico nor the United States.

In Raleigh-Durham, skill widening happened through two channels. First, by jumping to a new employer, immigrants could widen their skills and pick up new or deeper knowledge of a specific task. In some cases, established immigrants that benefitted from greater job stability with a subcontractor would facilitate this movement by recruiting co-ethnics to their company. This also enabled immigrants who arrived with less construction knowledge to expand their repertoire of skills. Additionally, skills widening could happen through work on side projects. Side jobs were significantly less structured than the hierarchical formal construction sites, and less specialized in terms of construction task, and thus allowed workers either to test out practices at the edge of their skill level in familiar task areas, or experiment with new tasks that were outside their area of proficiency. Side jobs also allowed workers to draw on skill acquired in Mexico that they were unable to use at their formal work sites, and develop their abilities in relation to US materials and construction styles.

### 3. Conceptual Understanding of Relationships between Skill/Task Areas

The conceptual understanding Mexican migrants in Philadelphia brought of the relationship between skill areas — or rather, the relationship between different components of a building structure — proved to be extremely valuable in the home renovation sector in which many of them were employed. Immigrants with previous construction experience in Mexico were able to apply the understanding developed before migrating about interdependencies between structural elements in a given building to the late nineteenth-century townhouses they were renovating. Rarely were reliable blueprints of the houses available, and many of the houses, from having been remodeled several times, displayed unexpected idiosyncrasies, including: bearing walls that had been removed, causing other walls to serve as structural support; foundations that were eroded at the seam with the above ground structure; add-ons (rooms and decks) that were causing the house to slant and/or rely more heavily on adjoining houses for support; and settling, which in many houses produced bowing of the walls. Plumbing and electrical infrastructure in houses was also often old and in need of replacement, and had often been re-engineered.

While the conceptual understanding of the relationship between building elements and the skill areas they represent was invaluable in situations where removing a wall or re-leveling a floor had implications for the structural integrity of the house, Mexican immigrants could not simply apply the “raw” skill they had acquired in Mexico in this domain. Rather, migrants *translated* their understanding of relationships to US materials. They used their structural knowledge to infer how the different construction materials in the building functioned based on analogies they drew with material with which they were already familiar.

In Raleigh-Durham, the conceptual understanding of the relationship between skill areas and building elements was rarely drawn from on formal construction sites, which were organized into highly specialized teams concerned with one category of building element. However, in side jobs, migrants did use their familiarity with interdependencies to impute how the elements they were working with related to other elements in the structure. In this way, they also translated this conceptual skill to US contexts, but to a much less intensive extent, as these side projects took up less time and focus.

That said, one area of mainstream construction work in Raleigh-Durham that was closer in form to what we found in Philadelphia was “green construction” — that is, the construction subfield that is governed by strict environmental building standards such as LEED standards. At the green building sites we studied, there appeared to be more opportunities for immigrant workers to leverage and coordinate a broad-based repertoire of skills for problem solving.

## **B. Processes of Skill Development**

For Mexican migrants working in Raleigh-Durham and Philadelphia, the processes through which they developed their construction skill were profoundly intertwined with processes through which they translated their existing skill to new contexts. This combination of learning and translating supported the transformation of the tacit construction skill migrants often possessed when they came to the United States. In both Raleigh-Durham and Philadelphia, the learning processes in which migrants engaged differed significantly from those characterizing the informal apprenticeships in Mexico, but the processes also differed in meaningful ways between the two cities. The two main areas of difference involved the processes through which migrants “made sense” of their new work environments and adapted their knowledge to new settings. These were the areas through which migrants engaged in sense-making and determined the extent to which the process of sense-making was individual or collective.

### **1. Sense-Making Processes: Medium (Tools/Materials)**

In both Raleigh-Durham and Philadelphia, engagement with construction materials and building tools was an important vector for the translation of Mexican construction skills to US contexts. As workers interacted with unfamiliar materials and sophisticated tools, they extrapolated how their building knowledge could be applied. In construction, materials and tools were the lexicon for tacit knowledge. As workers engaged with the new products they encountered on US building sites, they developed a new vocabulary — literally and figuratively — about construction, but they related it constantly (especially when first entering the US market), if implicitly, to the vocabulary of construction they used in Mexico.

Although we have observed the process of skill translation through engagement with materials, the way in which it occurred differed significantly across the two sites and was deeply informed by the institutions that governed immigrant participation in the two labor markets. In Raleigh-Durham, the exploration of unfamiliar materials and tools depended on whether the site encouraged guided or observed forms of learning. In the latter case, there was less support for immigrant workers to actively learn through structured guidance. Instead, migrants were forced to observe the work of others and to try and replicate the steps they saw in use. At other sites, skill development was actively encouraged and was typically provided by a worker’s superior, be it another worker or a supervisor. Where the supervisor guided the learning process, the workers were inducted into established practices for using the materials and tools in proscribed ways at that worksite. In many cases — especially when it came to tool use — that training occurred step-wise, with workers being introduced to more advanced material and tool uses only once they had mastered the skills

associated with more basic uses. Because of the specialization of work crews on the larger construction sites to which migrants had access in Raleigh-Durham, this guided introduction to new materials and tools was extensive. Eventually workers were exposed to, and often learned to use, very sophisticated tools and high-end materials, many of which were particular to the specialized tasks undertaken on the site. This included specialized safety materials for the tasks they worked on at large construction sites (specialized harnesses, etc.).

In Philadelphia, the process of translation that occurred through engagement with new materials was not as directly guided. While workers with more experience in US construction would introduce newcomers at a jobsite to US tools and materials, the primary form of skill translation occurred through group exploration of possible uses and manipulations of tools and materials at that worksite. Workers would try out various Mexican construction techniques on the materials and would experiment with tools that were for the most part new to them. This process was one of trial and error. While the misuse and destruction of materials and tools did occur through this exploratory engagement, it often produced innovations in building practices. Workers developed new ways to manipulate materials to complete construction tasks better — for example, an improved technique to tape drywall — that drew on Mexican skill translated to American building approaches. Workers would also use tools “off-label” to complete construction tasks, sometimes with innovative and superior results. However, compared to Raleigh-Durham, the spectrum of tools and materials with which workers engaged was much narrower, and tools and materials themselves tended to be much less sophisticated and more generalist. It was unclear how much innovation this exploratory self-teaching approach would produce at a higher level of construction complexity, such as that typically observed in Raleigh-Durham worksites.

Due in part to how the nature of the work structured engagement with tools and materials on both sites, side jobs facilitated learning through material and tools in somewhat different ways. In Raleigh-Durham, side jobs provided workers with the opportunity to adopt a more exploratory form of interaction with tools and materials. Removed from the strict supervisory practices and structures at formal jobsites, the workers had the space to experiment with new uses of the materials and tools in ways that drew on their experiences in Mexico more freely and fully than was possible where their actions were more guided and controlled. Interestingly, this also seemed to be true at green building sites, where building practices were less established and therefore encouraged greater experimentation. Green building sites often required greater task coordination to ensure the facility was compliant with basic environmental building requirements, which also encouraged greater experimentation with building practices on the jobsite.

In Philadelphia, side jobs acted as laboratories for the most innovative uses of materials and tools. If workers had an idea for a new way to manipulate a material, and if they were uncertain about whether it would work, they would use side jobs to try out their approach as a test before they used it at their primary jobsites, where the stakes, in terms of current and future employment, were much higher. Once they had used the new approach and found it to be successful, they would often ask the employer at their primary worksite to “come see” the results at the side job. If he approved, they would use it in their primary job.

## **2. Collective and Individual Sense-Making Processes**

The processes of skill development in Raleigh-Durham and Philadelphia displayed aspects of individual learning as well as collective skill development. However, due to the organization of work at the sites in the two cities, the individual model of learning dominated in Raleigh-Durham, whereas a collective process of skill development seemed most prevalent in Philadelphia.

In Raleigh-Durham, two kinds of individual learning practices predominated. The first was tutelary, and approximated a condensed master-apprentice model. A senior worker or supervisor would demonstrate techniques to a more junior worker, observe the junior worker attempting those same practices, offer feedback, and often determine at which point the junior worker — or the apprentice — is ready to move on to the more difficult skill. The second form of individual learning that occurred in Raleigh-Durham was the classroom pedagogical model. Here, learning may have occurred in a group, but, as in a classroom where the teacher may lecture to the class as a whole but where absorption is individual, the primary vector for skill development was directed toward the individual. Examples of settings in which this kind of learning occurred were toolbox talks, the presentation of safety videos, and more loosely structured safety training classes and on-site demonstrations. The process of sense-making, a critical component of the learning process, thus occurred primarily on an individual level, as the worker developed skills demonstrated in the ad hoc master-apprentice relationships that emerged on site, and absorbed the knowledge presented in classroom-like settings.

According to those interviewed, in Philadelphia, the individual learning practice of ad hoc master-apprentice teaching did occasionally occur, especially on side jobs where the number of workers was few (often no more than two) and where experienced workers who acted as informal contractors preferred to hire less-experienced and thus cheaper helpers. However, the dominant model in Philadelphia was a collective practice of sense-making. At the worksite, this took the form of interactive commentary and experimentation as building tasks were being completed. Workers made verbal observations and physical interventions in the work process in collaborative ways, collectively

attempting to solve the problem of how to complete the construction task they were charged with. Occasionally, the worker with the most experience in the task at hand would lead the collective sense-making process, but just as often, there was no clear direction or organization to this process. Collaborative sense-making continued off-site through a narrative exploration of work practices and employment arrangement. Through storytelling about their experiences with other workers in social encounters or informal gatherings, workers revisited challenging tasks and drew on the experiences of others to think through alternative approaches to those challenges. One particularly compelling subject that supported collective sense-making through storytelling was injury: many of the construction mistakes workers make result in injury, and in telling the story of how they got hurt, workers explored these mistakes, as well as any underlying causes. For example, a story about falling from a scaffold could lead to a collective reflection of what was wrong with the manner in which the scaffold was erected — was it poor leveling, strong wind conditions, missing safety barriers, or something else? — and why.

### **C. Process of Skill Demonstration**

Migrants' construction skill was largely tacit, impossible to fully articulate, and thus difficult to demonstrate and defend. This was true of the skill that Mexican migrants brought with them as well as the skill they acquired in the United States. However, it was doubly true of the Mexican skill they had transformed in order to adapt it to the US labor markets in which they worked. This transformed ability was, in essence, an unknown quantity that did not fit neatly with the strategies for skill demonstration used in Mexico or in the United States. Consequently, migrants developed strategies inspired by those used in Mexico but that fit the profiles of local labor markets in Raleigh-Durham and Philadelphia. In both cities, these strategies included a reliance on social networks, side projects, and entrepreneurship as vectors for skill demonstration.

#### **I. Social Networks as Informal Certification of Demonstrated Ability or Potential**

In neither of our research sites did immigrant workers have easy access to certification programs that could attest to their skill. Nor did they have access to formal intermediaries that could facilitate their employment and occupational advancement. As a result, ethnic social networks played an important role in helping migrants access jobs that required certain skills. In both cities, migrants on the job vouched for the skill level of friends and relatives seeking work in the industry, and employers relied on these assertions when hiring. The skills migrants vouched for included actual demonstrated ability in a skill area, or potential ability — that is, ability that the migrant worker knew their

acquaintance could easily acquire on the job because he brought related skills in that area from Mexico, or because he had a strong skill base and the vouching worker felt he would have the opportunity to train his friend or relative before the employer detected the misrepresentation.

In Raleigh-Durham, this skill vouching was often more specific than in Philadelphia. Since workers on construction sites in Raleigh-Durham were organized into crews that focused on particular tasks and that required specialized skill, task exposure or knowledge could be a key factor in hiring decisions and referrals. While migrants were often asked to make recommendations for new hires, employers and high-ranking superintendents often expected to observe the work of a prospective hire in order to determine their existing skill level and fit within the company. In this environment, the referring migrant tended to make a recommendation on the basis of existing task knowledge. Still, with some subcontractors, migrants who had demonstrated their skill and risen up the local job ladder carried great weight in hiring and training processes. In these cases, established migrants could make hiring recommendations on the basis of other qualifications, as they were in a position to mentor or train a new hire. Task exposure may have been less important. Rather, hiring criteria tended to be closer to what we found in Philadelphia, where the skills required were more general in nature and were as nonspecific as simply “being a good worker” or “being easy to work with.”

In Raleigh-Durham, the networks that were used to identify and recruit migrant workers were loosely formed, and often reflected relationships that were established at large project sites, at residential housing complexes, or at motel chains where workers lived or rented temporary accommodation. To enter the North Carolina labor market, many migrants initially drew on existing family ties and networks. However, once based here, their movement across employers was typically facilitated through a broader set of social relations. Their ability to find new work often rested upon recommendations by immigrants who observed their work at a specific project site or learned of their skills and experience through work-based social networks.

In Philadelphia, these networks were based either on family ties and friendships forged in Mexico or through employment in the United States. Because Philadelphia was a relatively new receiving site for Mexican immigrants, their networks were still fairly concentrated. That is to say, Philadelphia had large populations from a few towns in Mexico, most of them located in northwestern Puebla. (In contrast, North Carolina had a plurality of immigrants from Mexico City, Guanajuato, and Veracruz.) Family connections and friendships from those towns served as the infrastructure for migration, as relatives followed relatives to the United States, and served as an important means of accessing employment in residential construction. The other kind of significant network that emerged in Philadelphia was relationships

forged on jobsites in other industries in which Mexican immigrants were employed. This was particularly true of the restaurant industry. Migrants who moved into construction would recruit workers from the restaurants where they themselves used to work to expand their construction teams. The importance of this method of recruiting suggests that the ability to collaborate in a team setting was as, if not more, important as construction skill on Philadelphia worksites.

## **2. Side Projects**

In Philadelphia, side projects emerged as an important vehicle for skill demonstration. Side projects offered tangible evidence that a worker was able to complete a certain task, often using a technique that was a blend of US and Mexican approaches. While not as important in fostering employment opportunities in places in which being a “good worker” tended to be as important as skill, side projects empowered workers to exercise more autonomy over their work practices at the jobsite and in settings where the work team was very small (two people), or when the worker was the sole employee at the worksite. This proof of skill could afford workers more responsibility and opportunity to work on a wider array of task areas.

In Raleigh-Durham, side projects enabled workers to demonstrate that they could combine different skill areas that were considered separate on mainstream projects. They were able to demonstrate this ability through working directly with clients, which created opportunities for immigrant workers to make construction-related recommendations and suggestions and in the process utilize their breadth of knowledge. Side projects were especially important to workers seeking to demonstrate skill to a possible mentor. In some cases, an established immigrant foreman or “patron” would use side projects to identify and augment the skill level of members of the work crews they managed during their day job. Side projects were also used as a springboard for immigrant entrepreneurship, as they provided skilled workers with an opportunity to develop client networks and business management skills.

## **3. Entrepreneurship**

Entrepreneurship has traditionally been a vehicle through which immigrant construction workers have been able to formalize their skill in settings in which certification is difficult or impossible. As they become contractors and establish their own firms, migrants make their skill visible through the promotion of their businesses or through subcontracting arrangements. This model held in Raleigh-Durham, where skilled construction workers became subcontractors to larger construction companies, often on whose sites they previously worked as employees of a specialty subcontractor. In their role as entrepreneurs, these workers demonstrated not only their construction-related skill but also, more importantly, their supervisory and managerial skill.

In Philadelphia, by contrast, laws restricting unauthorized immigrants' access to the permits they needed to set up a construction business made it nearly impossible for skilled Mexican workers to become entrepreneurs. The most important of these restrictions was the provision that unauthorized immigrants in Philadelphia could no longer obtain a driver's license: without a driver's license, workers could not legally drive a vehicle to transport themselves, their workers, and, most importantly, construction materials to the jobsite. The penalty for getting stopped was a fine and the impounding of the vehicle being driven, the total cost of which was above \$2,000 to the immigrant. Several stops over the course of a year were enough to put a small contractor out of business: between the delay in construction caused by the impounding of the vehicle and the fine, the cost of having a vehicle was prohibitive. Additionally, unauthorized immigrants who were caught driving without a license were often detained and deported if they had other legal violations on their record. As of July 2009, the Philadelphia police department enrolled in US Immigration and Customs Enforcement's (ICE) Secure Communities program, which means it began transferring all information collected on a detained person to ICE; which, if the person is unauthorized, can initiate deportation proceedings. As a result, the barriers to entrepreneurship have become even higher.

## **IV. Process of Skill Transformation from the United States to Mexico**

We found that the skills that migrants developed in the construction industry were occasionally transferred back to Mexico. The channels through which skills were transmitted, however, were not well established. The primary vehicle for skill transfer back to Mexico was migrants themselves. Because tacit skills were learned and shared through hands-on experience and direct interaction, migrants could only transfer their skill in person when they returned to Mexico, either temporarily or permanently. However, migrants were only able to transfer their acquired skill when they controlled the construction process. Otherwise, they faced significant obstacles.

Migrants who returned to Mexico on a temporary basis were able to transfer and translate US construction skill to Mexican contexts through home construction. One of the first investments migrants used their earnings to support was the construction of a family home, either for themselves or their relatives. When migrant workers returned and constructed their family home, they often adopted American architectural styles. Migrants reported that they were interested in replicating the building aesthetics that they encountered in the United States, and community members in their hometowns reported that

these US styles became a statement of status. In construction, migrants also often adopted US techniques even while using materials that were more readily available in Mexico. For example, migrants who worked in Philadelphia favored external concrete finishes that mimicked the red brick facades they had admired in the United States. As they built their homes, they often self-constructed, enlisting family and friends and occasionally local workmen to help. Participation in the construction of migrant homes served as an introduction to US building aesthetics and construction techniques.

In addition to drawing on US architectural aesthetics, many migrant homes were significantly more complex in structure than many of the traditional homes in their communities — they may have had, for example, multiple floors, modern plumbing and electricity, or complex supporting mechanisms. We found that many migrants in the source communities for Philadelphia employed architects and/or engineers to translate ideas formed in the United States into a building that is structurally sound. As those architects and engineers worked with migrants to draw up the blueprints for the US-style homes, they were exposed and forced to engage with US building notions, especially in terms of structure and spatial distribution.

Apart from the construction of a family home, however, avenues for skill transfer back to Mexico were extremely limited. We found, for example, that those who returned to Mexico on a permanent basis faced significant obstacles to participation in the construction industry. This was true even when they had acquired considerable construction skill while abroad and had the ability to translate this skill to fit Mexican construction styles. When Mexican workers migrated to the United States, they often found that maintaining their social networks in Mexico was difficult. When Mexican workers migrated without the legal status that allowed them to return frequently and easily, keeping the social networks required for employment in the construction industry became prohibitively challenging. In a labor market context where hiring and skill certification occurred through social networks, disentanglement from these relationships had a drastic impact on access to opportunities for employment and advancement. Return migrants reported that they found the labor market to be essentially closed to them. Migrants who accrued significant construction experience and skill in the United States found entering the Mexican construction industry as a contractor to be also difficult. They were outside the social networks with architects or engineers who could support them in their enterprises, and they lacked the access to a client base, also typically acquired and developed over time through social connections.

Moreover, we found that return migrants faced difficulty re-entering construction industry labor markets in Mexico despite intensive demand for the skills many of them acquired while in the United States.

We found that several construction companies and building material fabricators were adopting construction styles and habits that were prevalent in the United States, especially an increased reliance on pre-fabricated materials ranging from drywall and molding finishes to pre-fabricated concrete walls. In one example, a major paint manufacturer in Mexico began producing versions of drywall that were marketed aggressively and successfully to builders in Mexico City and adjoining regions. Faced with a dearth of workers skilled in drywall hanging and finishing, this company began training workers in Mexico City and Puebla. Meanwhile, we encountered numerous return migrants who had become skilled in US construction techniques while abroad but who were working in unrelated industries upon their return.

A small number of Mexican actors observed this disconnect between industry demand and the ability of skilled return migrants to access employment, and launched pilot programs to assist return migrants in scaling barriers to entry. These experimental programs included, for example, one by the government of the state of Mexico that was designed to offer business development training to return migrants with advanced construction skills. The goal of the program was to enable migrants returning with skills that were in high demand to open their own firms and act as their own contractors. Another was a pilot program by a large cement company to certify workers, including return migrants, in construction skills related to concrete construction, ranging from pouring cement to reading construction plans. Although programs such as these showed promise and could facilitate the return migrants' participation in the Mexican construction industry and support their ability to transfer and transform the tacit skill they acquired while in the United States, we found initiatives that were still in the planning or pilot stages but none that had been fully launched.

## V. Conclusion

Based on a three-year research project, over the course of which we conducted more than 300 interviews, including 200 with Mexican construction workers, we found that skills do move, and that when they move, they are also transformed, often in ways that support innovation. We found that a significant portion of Mexican migrants — over half — entered the US construction industry with a solid construction skill base. However, their skill was very much tacit, and thus difficult to articulate, demonstrate, and defend. Moreover, the skill they brought reflected construction styles, building materials, and work processes that were specific to Mexico, especially to the large urban areas in Mexico in which they had worked.

We found that migrants were nevertheless able to leverage the skills

they brought to participate in — and often improve — construction processes in the United States. However, the ways in which they were able to use their skill was deeply informed both by the institutions that governed construction labor markets in receiving areas and by the work practices on specific construction sites. We found that workers' ability to draw on and adapt their tacit skill to American construction techniques was extremely sensitive to labor market and jobsite contexts. We found that in Philadelphia, migrants pooled their skill, acquired both in Mexico and the United States, on work-based teams. In the process, they cross-trained one another and were able to use their combined tacit skill to innovate new hybrid building techniques. In Raleigh-Durham, by contrast, migrants used their skill as leverage to carve out pathways for learning and, more specifically, to access opportunities for skill development. Our interviews in North Carolina did indicate some effort by immigrants to organize crews in ways that supported cross-task learning and collective program solving in ways that were closer in form to what we found in Philadelphia.<sup>10</sup> However, we found these cases to be more the exception than the norm; learning processes oriented toward and motivated by the individual dominated.

While the transfer of construction skill to the United States was an important, if largely unrecognized, resource for the US construction industry, we found that the transfer of US-acquired construction skill back to Mexico was limited. Although we did find minimal skill transfer back to Mexico, we observed that it was largely informal and confined to the construction processes involved in the building of migrants' personal homes. Functional formal skill transfer or certification mechanisms were still not well established in Mexico. However, we did find potential opportunities where existing construction businesses could leverage migrant skill. We also found industry changes in Mexico that suggest that increasingly, there may be areas in which migrants, if provided the proper support, could enter the market as entrepreneurs.

We believe that our central finding — that Mexican migrants do transfer significant skill but that the way that they leverage their skill and adapt it to local contexts is profoundly informed by localized industry institutions — has vital policy implications. First, it suggests the importance of ensuring that local institutions at the very least do not impede possible skill transfer. Institutional obstacles are myriad: they range from institutions or routinized practices at the worksite that do not allow workers the autonomy to demonstrate their skill, to immigration controls that increase migrants' dependence on their employer and confine them to low-status jobs in their industry, to informal networks that block entrance into labor markets. To leverage the substantial tacit skill that migrants move, we recommend that at a minimum, govern-

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10 Natasha Iskander and Nichola Lowe, "The Transformers: Immigration and Tacit Knowledge Development," (NYU Wagner Research Paper No. 2011-01, January 2011), <http://dx.doi.org/10.2139/ssrn.1745082>; Iskander and Lowe, "Hidden Talent: Tacit Skill Formation and Labor Market Incorporation of Latino Immigrants in the United States."

ment agencies, industry actors, and labor intermediaries should review their policies and actions carefully to verify that they do not interfere with skill transfer and transformation.

Further, our finding underscores the value of policy supports that enable workers to make their tacit skill visible and easy to defend — and thus easier to leverage to author institutional change. Interventions could include the creation of transnational certification programs that would allow workers to demonstrate their skill easily even as they move across labor markets. Another possibility is immigrant visa programs for workers with mid-level skill, evaluated through skill that is demonstrated through practice and vouched for by employers. We would suggest that any visa program be extended to immigrants already participating in the labor market without authorization, possibly functioning as a legalization program for unauthorized immigrants. Finally, we also envision policy supports in the country of origin that facilitate migrants' ability to transfer acquired tacit skill back upon temporary or permanent return.

Migrants with mid-level skill move considerable ability across contexts, and they represent a substantial asset to the industries in which they work. Few industry or government actors take policy or institutional initiatives to support this transfer, in part because the skill that migrants move is tacit, and thus often overlooked. Our research suggests that this oversight results in a lost opportunity to support industry performance and economic growth. 

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# CHAPTER 6

## TALENT ABROAD PROMOTING GROWTH AND INSTITUTIONAL DEVELOPMENT AT HOME: SKILLED DIASPORA AS PART OF THE COUNTRY

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### The Twin Problem of Second-Generation Reforms

**A**s developing countries embark upon and advance second-generation reforms — changing the rules of the game in public finance, education, innovation, health systems, or infrastructure provision — they face an acute shortage of competent, motivated people to lead and manage those reforms. And it is not just the reforms that need to be managed. Vested interests (those that stand to lose from change and therefore defend business as usual) need to be tackled as well. These are the twin problems of reform. In this situation, competent individuals who know the country well yet do not have vested interests, can function as the proverbial Archimedean levers to trigger and sustain change. Indispensable yet rare, they become institutions themselves. The search for these skilled or educated workers often goes abroad — to skilled diasporas. The Africa region, where the grip of vested interests is particularly strong, is at the forefront of this trend for recruiting diaspora members (the president of Liberia and finance ministers of Nigeria are recent examples).

To confront established and entrenched interests, diaspora skills alone will not suffice. Credibility, reputation, a risk-taking attitude, a long-

term planning horizon, tenacity, and perseverance are also essential. Individuals with such qualities are considered “high achievers,” which denotes their willingness to share their skills and education with their home country rather than only seek personal gain. Diaspora high achievers’ motivation and modes of engagement with home countries are the focus of an ongoing action learning project.<sup>1</sup> This chapter highlights two findings from the project regarding the process of engagement of high achievers with home countries, and the process of institutional development. First, a massive return of talent to the home country is typically neither realistic nor necessary: diaspora high achievers can just as effectively engage in joint continuous projects with the home country without returning “home” — a phenomenon called “brain circulation.”<sup>1</sup> When diaspora members formulate joint projects, they do not think about far-reaching reforms or institutional development. Yet, and this is the second message, the institutional development impact can be significant.

## I. Examples of Diaspora Impact on Institutional Development

In 1997, Ramón L. García, a Chilean applied geneticist and biotechnology entrepreneur with a PhD from the University of Iowa, contacted Fundación Chile, a private-public entity charged with technology transfer in the area of renewable resources. García is the chief executive officer of InterLink Biotechnologies, a Princeton, New Jersey-based company he cofounded in 1991. After jointly reviewing their portfolios of initiatives, Fundación and Interlink founded a new, co-owned company to undertake long-term research and development projects. These projects were needed to transfer key technologies to Chile to sustain the competitiveness of its rapidly growing agribusiness sector. Without the combination of García’s deep knowledge of Chile and his advanced US education, exposure to US managerial practice, and experience as an entrepreneur, the new company would have been inconceivable.

The fact that skilled expatriates can create enormous benefits for their countries of origin has come to sudden attention in recent years through the conspicuous contributions that the large, highly skilled, manifestly prosperous, and well-organized Chinese and Indian diasporas have made to their home countries. But García’s collaboration with Fundación Chile suggests that diasporas do not need to be large and voluminous to produce an impact: Ten cases such as Ramón Gar-

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1 AnnaLee Saxenian, *The New Argonauts: Regional Advantage in a Global Economy* (Cambridge, MA: Harvard University Press, 2006); Yevgeny Kuznetsov, *Diaspora Networks and the International Migration of Skills: How Countries Can Draw on Their Talent Abroad* (Washington, DC: World Bank, 2006).

cia's could transform entire sectors of the economy in relatively small countries like Chile. Moreover, García's collaboration with Fundación Chile suggests that even sparsely populated, informal diaspora networks linking small home countries with their talent abroad have some institutional resources, and may prove capable of developing more. Overall, García has created three biotech firms with Fundación Chile.

Chile Global<sup>2</sup> — a network of about 100 high achievers of Chilean origin — was established in 2005 to institutionalize contributions that people like Ramón García can make to the Chilean innovation system. However, this is not where the story ends, but rather where it begins. Chile Global promotes mentoring between innovation start-ups in Chile and Chilean high achievers abroad. In this endeavor, the Chileans can study a now-famous Taiwanese experience of creating an early stage venture capital (VC) industry.

When the Taiwanese government decided to promote the VC industry in the beginning of the 1980s, it had neither the capabilities nor a blueprint. Many were opposed to the idea because the concept of VC was foreign to traditional Taiwanese practice, in which family members closely controlled all of their businesses' financial affairs. Entrenched interests in maintaining the status quo were strong.

The decision by tens of thousands of Taiwan's most talented university students to pursue engineering graduate degrees in the United States in the 1960s and 1970s, and to take jobs there after graduation, turned out to be part of the solution for the VC industry. Opportunities in the United States, in terms of salaries, were superior to those at home. One indication of the pessimistic view of Taiwan of that time is the case of Taiwan's large Hsinchu Science Park, which opened in 1980 and was unable to find tenants despite aggressive efforts to lure multinationals. Outsiders in Silicon Valley, the immigrants found each other in technical associations and alumni networks that also allowed them to stay in touch with their counterparts in Taiwan. But few considered returning home permanently. Policymakers complained about this "brain drain" and sought to limit it; none foresaw that it could be an asset.

A search network (a network to identify successive constraints and then people or institutions that can help mitigate these constraints), consisting initially of dynamic, and forward-looking members of the Taiwanese government and leading overseas Chinese engineers in Silicon Valley, was central to the emergence of the VC industry. This network did not have a blueprint, yet it did have a role model — Silicon Valley — and a clear idea of what to do next. By defining each subsequent step along the way, the network became wider and eventually incorporated skeptics and opponents. Through a process of intense interactions with the Taiwanese diaspora in Silicon Valley, new laws for the VC industry were put in place by the government and institutions such as Seed Fund provided matching capital contributions to

private VC funds. Two American-style venture funds, H&Q Asia Pacific and Walden International Investment Group, were also created in the mid-1980s. They were managed by US-educated Chinese living overseas who received invitations to relocate to Taiwan. Once the first venture funds proved successful, domestic banks and large companies created their own VC funds. Once those started to pay off, even the conservative family groups that dominated the economy decided to invest in VC funds and information technology businesses.

By the late 1980s, when companies like Acer and the returnee company Microtek were publicly listed on the Taiwan Stock Exchange, the VC industry in Taiwan took off. The conspicuous success of these venture-backed startups attracted growing numbers of Chinese back from the United States to start businesses. By 1996, more than 2,500 engineers and scientists had returned to work in the Hsinchu Science Park, and 40 percent of the 203 companies based in the park were founded by returnees.

The extension of diaspora entrepreneurial projects from cofounding joint firms in their home countries to cocreating institutional infrastructure so that many similar firms can flourish is natural. The initial objectives of Ramón García and his peers from Taiwan were both modest and specific: to advance their professional interests by setting up technology firms in their home countries. Yet, as the constraints of the home country's institutional environment became apparent to them, they engaged in advancing institutional reform to remedy some of these constraints. The successful growth of knowledge-based firms and the formation of a favorable institutional environment became two sides of the same coin. Innovation entrepreneurship has blossomed into institutional and policy entrepreneurship.

## II. Analytical Framework: Heterogeneity of Institutions

To develop operational recommendations for diaspora engagement with home countries, one needs a compelling theory of institutional development at home, a view that helps to identify entry points for diaspora contributions. The central conceptual block of such a theory is the heterogeneity of home country institutions.

The recent literature on growth shows that growth is not hard to start, but that keeping it going is not easy: doing so requires attention to the context of growth-binding constraints and situation-specific ways to

resolve them.<sup>2</sup> The same goes for institutions: it is almost always possible to find any that are working.<sup>3</sup> The challenge is using the ones that work to improve those that don't. This hypothesis assumes that there are nearly always opportunities for development in a given economy, and that some actors, private and public, begin to take advantage of them. But while development in this view is not hard to start, neither is it self-perpetuating. Senior public-sector officials with drive, vision, and an ability to take risks (usually public-sector or policy entrepreneurs) introduce new programs and policies. Often they do that on an organizational periphery, outside the grip of entrenched interests. The key is to explain how these institutional and policy start-ups evolve, expand, scale up, get transformed, or expire.

The example of Chile's provides a good illustration. The country's institutional framework is far from perfect, yet it does have a segment that performs well enough to take calculated risks in developing new programs and approaches, to be accountable for such calculated risk-taking, and to ensure continuity of performance during the change of administrations.

The heterogeneity of public sector institutions is matched by the heterogeneity of the diasporas of the highly skilled. Only a few are experienced, successful, and resourceful enough to engage in a dialogue about creating innovation firms and institutional dynamics. But these few individuals could be enough to trigger a process of reform. Search networks may then match and link better-performing and dynamic segments of diasporas and home country institutions, which would be tantamount to Archimedean levers initiating change and introducing new institutions.

There are generally two issues at play. First, as already noted, the local elite is often entrenched. Diaspora members, in contrast, know their countries intimately, but they are not necessarily entrenched. Recall our Taiwan example of venture capital industry: high achievers in Silicon Valley not only brought expertise on VC industries, but they also helped a champion in the government make the case for establishing that industry in Taiwan in the first place, despite overt resistance from a conservative and closely held local financial sector. Diaspora high achievers can be indispensable in providing a wake-up call thanks to their unique combination of credibility, motivation, and expertise.<sup>3</sup>

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2 Ricardo Hausmann, Dani Rodrik, and Charles Sabel, "Reconfiguring Industrial Policy: A Framework with an Application to South Africa" (working paper RWP08-031, Harvard Kennedy School, August 2008), <http://ssrn.com/abstract=1245702>; Charles Sabel, "Bootstrapping Development: Rethinking the Role of Public Intervention in Promoting Growth," in *On Capitalism*, eds. Victor Lee and Richard Swedberg (San Francisco, CA: Stanford University Press, 2007).

3 Sabel, "Bootstrapping Development;" AnnaLee Saxenian and Charles Sabel, "Venture Capital in the 'Periphery': The New Argonauts, Global Search and Local Institution Building," *Economic Geography* 84 (2008): 4.

The second consideration relates to the so-called learning or switching costs of introducing a new institution. In the medium term, a new institution (say, a private credit bureau) can benefit all stakeholders, yet in the short run there are switching costs for actors (such as local banks) to learn new skills and routines, and to overcome initial resistance to innovation. The switching costs can be high. For instance, many international firms that attempted to establish private credit bureaus in Armenia were deterred by high switching costs, but a diaspora high achiever from California (who had the usual combination of striving for profit maximization and intrinsic motivation to get involved in Armenia) had a planning horizon long enough to make the switching profitable and worthwhile.

Ultimately, it is the dynamic segments of home country institutions that will do the work. However crucial the Silicon Valley high achievers were in triggering the Taiwanese VC industry, it was a set of new national programs and procedures that made the difference: the diaspora members participate in the search for individuals, expertise, and institutions to articulate a missing component of development.

All well and plausible, an enlightened skeptic might say, but how are these examples from Chile and Taiwan relevant for a typical developing economy with weaker institutions and entrenched elites? This is a valid point, and the next section is written specifically to address the concerns of our enlightened skeptic. Let us turn to an unlikely case of institutional development — electricity-sector reform in Morocco — that had unlikely change agents: a group of low-skilled migrants returning to Morocco.

When a French steel plant in the city of Argentière-la-Bessée was closed down in the wave of heavy industry retrenchments of the 1980s, laid-off workers received seed funding to start local enterprises. Defying the French authorities' local development plan, 50 Moroccan migrants decided to return to their region of origin, the Souss valley. Rather than carrying out individual projects, the migrants used these subsidies to address the key binding constraint to the development of their own villages — lack of electricity — through self-organizing. They invested in the development of electrification, a task that Moroccan authorities had for a long time considered too impracticable to carry out in this politically neglected region. Unknowingly turning into social entrepreneurs, these outsiders with a new vision engaged with their communities of origin in an iterative process of technology adaptation and institutional development. A key to their success was the ability to serve as interfaces between local needs and external resources, and a basic understanding of the technology they were trying to transfer. Through the establishment of a search network, the association tapped into urban migrants interested in investing in a credible project. Providing a platform for technical assistance, the project took advantage of consultants from the French Cooperation Agency and overcame

technological constraints. Perhaps the most telling evidence that the search for solutions worked is that the public electricity company eventually adopted the association's technical standards and participatory processes to scale up electrification across the Souss valley and beyond. More broadly, the experience produced significant reform in the national provision of electricity. Scaling up the initially successful electricity grids involved a long gestation process — about 15 years — yet the process created quite complex search networks involving the migrants, French consultants (as sources of formal expertise), and the local and, ultimately, national governments. The example is significant; it goes beyond high achievers. The agents of change in these examples have humble origins, yet the projects they undertook resulted in the relaxation of constraints (including political constraints) that were perceived as unchangeable.

To be able to see such developments, one needs to pay careful attention to the details and recognize the existing heterogeneity of both diasporas and home country institutions. With such a high degree of resolution, promising developments are ubiquitous. Take, for instance, Armenia, which was painted in broad strokes as an example of stalled institutional development.

After efforts to invest in real estate in Armenia, an Armenian-American who was a reasonably successful real-estate businessman from Los Angeles, decided to launch a credit registry. At this point several international investors, such as KFW (a German government-owned development bank), had seen this business opportunity, but had been unable to actually realize the project. Cultural intermediation by a diaspora member made this investment happen. In January 2004, ACRA Credit Reporting LLC, the first credit bureau in Armenia, was founded by an American parent company. The World Bank and other donors have been supportive, financially as well as in becoming members of ACRA's advisory board. Only one year after its founding, ACRA had attracted reputable institutional investors, including Dun and Bradstreet International (United States) and D&B SAME (UAE). Today ACRA is owned by leading local banks and the Central Bank. In February 2007, ACRA launched online credit reporting for its members, which indicates its high technological capacity and professionalism. In this case, well-established diaspora members found local champions such as a foreign-educated management team to partner with. An interesting feature of this case is the involvement of donors such as the World Bank in advising and cofounding the registry; this indicates that there is space to successfully foster promising cases of diaspora-initiated first-mover institutions in home countries. Donors such as the World Bank can act as “honest brokers” and support the creation of support and search networks.

As economic growth in Armenia picked up around the turn of the millennium, instances of micro reforms proliferated and domestic elite

in the financial sector and industry became more amenable to taking advantage of reform opportunities by joining them and scaling them up. If in the 1990s Armenia was suffocated by established interests, in recent years the elite have become much more heterogeneous and entrepreneurial, displaying dynamics similar to the Taiwanese case.

What do these examples, different as they are, tell us about institutional change and reform?

### III. Archimedean Lever Hypothesis: Inside-Out and Outside-In Reforms

Let us now come back to the argument of an enlightened skeptic. Micro reforms and promising changes in general are possible and successful precisely because they emerge on an organizational periphery — far from entrenched local interests. But would they spread? There is no guarantee they would. It is far from clear whether the Chilean process will follow the Taiwanese dynamics and go beyond the top-level discussions and the number of tantalizing success stories that provoked them. Transition from promising entry points to vibrant national reforms is hinged upon involvement — usually incremental and reluctant — of the established elite. To trace such engagement we juxtapose and look in greater detail at the dynamics of the Taiwanese and Moroccan experiences mentioned in the previous section.

The two processes evolved at the same time — from the beginning of 1980s to the mid-90s — and in both cases resulted in a significant institutional change: the establishment of the VC and high-tech industries in Taiwan and the reform of rural infrastructure provision in Morocco. But in virtually all other details, they could hardly be less similar. The agents of change are strikingly different: in the case of Taiwan, highly educated high achievers from the professional elite in Silicon Valley worked from a distance and through frequent travel with senior officials at the government. In the case of Morocco, uneducated (and often illiterate) migrants returned to Morocco after losing their jobs in France, dragged reluctant government officials into the discussions about their pressing needs, and turned these conversations into projects. Yet the processes underlying the institutional change they engendered are not so different. For the purposes of exposition, the unfolding institutional change can be structured in three phases.

## A. Informal Search Network around a Strategic First Mover

A strategic first mover is an agent with an unusually long planning horizon.<sup>4</sup> A longer-than-usual planning horizon makes them patient in awaiting the results of their efforts while the search networks they create allow them to find solutions to the problem at hand. In Taiwan, the origins of a deliberate strategy for building institutions to devise and revise strategies in the context of this brain drain trace back to the efforts of a strategic first mover — Kuo-Ting Li, a minister without a portfolio — to form an alliance with foreign advisors, some of whom were members of the diaspora, to establish a VC industry in Taiwan. An engineer by training, Li headed both the Ministry of Economic Affairs (1965-69) and then the Ministry of Finance (1969-76). He is widely regarded as the architect of Taiwan's technology strategy. During the 1960s and 1970s he met regularly with Chinese engineers and entrepreneurs in Silicon Valley (many of whom were his college classmates) to seek advice on making Taiwanese industry more globally competitive. Li was especially impressed with the newly emerging US VC industry and the institutional support it created for entrepreneurship.

By 1982, Li and his influential allies, such as Stan Shih, the CEO of Acer, a leading PC maker, and Ta-Lin Hsu, an IBM executive based in Silicon Valley, convinced the Ministry of Finance to introduce legislation, including comprehensive tax incentives and financial assistance, to create, develop, and regulate VC in Taiwan. Li's group saw the conservatism of Taiwan's established financial institutions as a major barrier to the incubation of high-technology start-ups, and thought of VC as a corrective. Most Taiwanese financial institutions at the time were commercial banks, and provided only mortgage or debt financing. Moreover, the public Development Fund and other financial-incentive programs were controlled by risk-averse government officials who were unwilling to take chances on new technology enterprises that did not qualify for support from the commercial banks. Therefore, only a publicly supported VC industry would provide sufficient capital for such high-risk, high-return ventures.

In Morocco, the organization of migrants from the Souss area of Morocco formed in France as *Retour et Développement* (Return and Development) has adopted the more encompassing title *Migrations et Développement* (Migration and Development), after it became clear the obstacles to returning and setting up profitable ventures were more formidable than initially contemplated. As one of the members of the organization from *Imgoun*, a village where it began its activi-

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4 For elaboration on strategic first movers as agents who search and learn (including a discussion of why their planning horizon is longer than economic actors in similar positions) in contrast to eccentric first movers who don't, see Kuznetsov, *Diaspora Networks and the International Migration of Skills: How Countries Can Draw on Their Talent Abroad*.

ties, stated, “You have to get involved, the state won’t do anything for you. Let’s take the initiative ourselves. With your participation and ours, we can breathe life back into our villages.”<sup>5</sup> The association contracted French consultants to perform a study on a possible electricity project. The study revealed that providing Imgoun with electricity was both more viable and more urgent than previously thought. The ensuing search for solutions resulted in the articulation of appropriate technological solutions — a local electricity network powered by a generator — and a social solution: a village association. Formation of a village association was critical to maintain and manage the network. When government representatives came to question the village dwellers about the people behind the initiative, they responded that it was the migrants who did it and they were currently residing in France. This was a smart way of defying the authorities because it is much more difficult to locate relevant people in France. Eventually, due to migrant efforts, 126 households were connected to electricity in Imgoun.

### **B. Because Pilot Experiments Are So Successful, They Spread in Spite of and Against Many Obstacles**

But even with strong incentives, development was slow in Taiwan. When Acer founded Taiwan’s first VC firm in 1984 as a joint venture with the Continental Engineering Group, there were, at first, no followers. K.T. Li invited the overseas Chinese community to establish VC businesses in Taiwan. In response Ta-Lin Hsu, a prominent diaspora member and policy advisor, set up Hambrecht & Quist Asia Pacific in 1986. Hsu reports that it was not easy to raise the initial \$50 million fund: Li “twisted lots of arms” to raise \$26 million from leading Taiwanese industrial groups such as Far East Textile, President Enterprises, and Mitac. The balance (49 percent) came from the government.<sup>6</sup>

It was only in the late 1980s, when companies like Acer and the returnee company Microtek were publicly listed on the Taiwan Stock Exchange that the VC industry in Taiwan took off. The conspicuous success of these venture-backed startups attracted growing numbers of overseas Chinese back from the United States to start businesses. The availability of VC finally transformed Hsinchu Science Park into a fertile environment for the growth of technology firms.

In Morocco, in contrast, the Imgoun innovation spread. By 1996, Migrations et Développement had worked with over 70 villages to set up electricity networks. Between 1989 and 1996, the migrant organization was providing electricity to an average of ten villages per year, while

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5 See Natasha Iskander, “Diaspora Networks for National Infrastructure: Rural Morocco, 1985-2005,” in *Diasporas and Development: Exploring the Potential*, ed. Jennifer Brinkerhoff (Washington, DC: Lynne Rienner, 2008): 171.

6 Interview with Ta-Lin Hsu, San Francisco, CA, June 1, 1997, by AnnaLee Saxenian.

the Moroccan government was only hooking up 70 villages to electricity a year in all of rural Morocco.<sup>7</sup>

### **C. A New Consensus Emerging: National Policies and Environmental Change**

By 1996 over 2,500 engineers and scientists had returned to work in the Hsinchu Science Park, and 40 percent of the 203 companies based in the park were started by returnees. The industry remained highly localized as it grew, the personal computer industry in the greater Taipei region and semiconductor and component firms in Hsinchu creating a corridor roughly the same size as the Silicon Valley cluster. An important indication that the VC-based policy was fast becoming the consensus was that firms in traditional industries like petrochemicals that until then had avoided the “new economy,” also began investing in technology-related venture funds and businesses. In Morocco, electrification success in one part of rural Morocco (called “useless Morocco” by the government planners) did not go unnoticed. The state claimed the authorship of the experiment, and on the basis of it dramatically redesigned its rural electrification programs and policies. A similar set of major changes occurred in two other areas of rural infrastructure in which migrants were involved: water provision and road construction. Hard budget constraints faced by the state actually helped, as technological and social solutions pioneered by migrant associations were both more efficient and cost effective than those adopted by existing programs and policies. As “useless Morocco” became connected to the outside world, it revealed itself as quite productive, as new export-oriented crops blossomed. Migrant associations not only changed the way a nation provided electricity, roads, and water to hundreds of thousands of its citizens, but also altered key precepts of national economic development.

The reforms described here share the following characteristics. First, champions — individuals and organizations with an ability to take a fresh look (which usually means they come outside of the established organizational structure or have significant autonomy within it to act autonomously) that initiate changes — are crucial because they act despite and against obstacles. If they are inside established hierarchies, as in the case of Taiwan, they tend to have two identities. On the one hand, they have an organizational identity, a position in the hierarchy — such as Kuo-Ting Li, who was a minister. On the other hand, they are risk takers, entrepreneurs willing to explore new domains. The former enables leveraging the resources of established organizations, while the latter enables redefining organizational objectives and channeling these resources in innovative directions (Li’s position was, after all, minister without portfolio). These strategic first movers are agile and

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7 Iskander, “Diaspora Networks for National Infrastructure: Rural Morocco, 1985-2005.”

entrepreneurial while relying on existing organizations to reach their objectives. Thanks to this blend, they act as the Archimedean levers of the institutional platforms to effect change.

Second, depending on the origin of these champions — government or diaspora — the process of scaling up the change (in other words, the institutionalization of search networks) has two complementary dimensions: inside-out reform (when it is driven by domestic champions) and outside-in reforms (when the impulse comes from returning migrants and diaspora members). Usually one dimension is more visible and predominates: the case of Taiwan can be characterized as inside-out reform, whereas Morocco as outside-in. Yet almost by definition, the growth of reform dynamics implies the convergence of both perspectives. In the Morocco case, national government officials became reluctant authors and champions of rural infrastructure reforms piloted earlier by migrants.

Third, it is the ability to search for and recombine new knowledge and practices, not the formal education of the change agents (migrants and diaspora members), that is crucial in this circumstance. What matters is not technical knowledge in a specific domain, but a partly tacit organizational knowledge of how things are done both at home and abroad, and an ability to search effectively for new, outside-the-box solutions to improve and adapt existing organizational practices.<sup>8</sup> Laid-off workers returning from France to remote rural areas of Morocco are first movers compared to the local population because of the amount of resources and connections to the outside world they bring to the communities. True, formal education amplifies the ability to search for and recombine relevant knowledge, but it is neither always necessary nor is it sufficient. More important than a formal education is a motivation to search, usually stemming from an acute sense of urgency. This is our final insight. Such a sense of urgency — more specifically, irreconcilable constraints mandating creativity and institutional innovation — can come from diverse and often unexpected sources: the migrants' children's refusal to come back to Morocco because of a lack of electricity there (and all the entertainment options it precludes) is one example of a constraint that creates urgency.

The transformations we discussed are sometimes called reforms by bootstrapping — incremental bottom-up changes in which a favorable balance of risks and returns encourages the first steps from many diverse entry points. In this process, each move increases the chances of initiating the virtuous cycle of institutional reforms and private sector development.<sup>9</sup> Table 1 summarizes the main phases of the reform dynamics discussed in this section.

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8 The author is grateful to Natasha Iskander for helping to articulate this insight.

9 Michael Dorf and Charles Sabel, "A Constitution of Democratic Experimentalism," *Columbia Law Review* 98, no. 2 (1998): 323-27.

**Table I. Bootstrapping Reforms: A Three-Phase Model**

Levels of Diffusion	Change Agents and Outcomes of Their Action	Inside-Out Dimension: Taiwan High-Tech Example	Outside-In Dimension: Morocco Rural Infrastructure Provision
Micro Level	Strategic first mover emerges and articulates entry points and micro reforms.	Minister without portfolio Li establishes an informal group of Silicon Valley advisors. Pilot funds are established (early to mid-1980s).	Association of returning migrants is formed. It establishes a search network involving state officials and French consultants. Imgoun rural electrification project is initiated (beginning and mid-1980s).
Mezzo Level: Changes on Sectoral, Cluster, and Regional levels	Piloting and experimentation results in successes impossible to ignore or resist. Pilot experiences spread.	Taiwanese companies Acer, Microtec, and others are listed on Taiwan stock exchange. Banks and financial groups invest in high-tech (late 1980s).	Successful Imgoun pilot spreads all over "useless Morocco" (late 1980s to early '90s).
Macro Level: National-Level Changes	Emergence of a new consensus: Redesign of national practices and programs.	Massive return of overseas talent. Visible innovation clusters emerge and establish links with the established big business (beginning and mid-90s).	Rural electrification programs and policies redefined. Similar reforms occur in water provision and construction of roads (mid-90s).

## IV. Skills Abroad as Change Agents at Home: Toward a Typology

Economists are familiar with top-down and bottom-up institutional dynamics. Diaspora experiences provide ample evidence of both. Reform teams are often composed of returning students and experts, as in Indonesia (the Berkeley Mafia) and South Korea (returning experts played a role in the formation of the Economic Planning Board and Government Research Institutes in the 1970s and 1980s). The Middle East and Africa provide further examples. Even more numerous and diverse are examples of bottom-up dynamics, in which a single institutional entrepreneur establishes an enclave organization, by design disconnected from the domestic institutional fabrics of the country, in higher education, health, or another sectoral domain. Reform dynamics initiated by a group of returning migrants that led to gradual but far-reaching changes in electricity and other rural infrastructure provisions in Morocco in the 1980s and 1990s are another example.<sup>10</sup>

Yet, in spite of the apparent differences, both top-down and bottom-up reforms are vertical and somewhat exceptional, as they crucially depend on individuals: reform teams in the top-down transformation or a policy entrepreneur in a bottom-up case. Accordingly, the transformation is vulnerable: a new institution established by an entrepreneur functions well as long as it remains an enclave within (dysfunctional)

<sup>10</sup> Natasha Iskander, *Creative State: Forty Years of Migration and Development Policy in Morocco and Mexico* (Ithaca, NY: Cornell University Press, 2010).

domestic institutions or an exclave of the world economy, but it hits a wall once it attempts to diffuse or scale up. Similarly, reform teams leading top-down transformation can either be removed or can become, with time, part of the established elite they sought to transform. Top-down reform is also vulnerable because it relies on return migration — often an unrealistic or expensive proposition, because of the cost of salary subsidies to make salaries comparable to the opportunity costs of the returning talent. In addition, as soon as the diaspora member has returned, he or she is likely to become part of the entrenched vested interest again. All of these considerations make an attractive alternative reform by bootstrapping: lateral and horizontal inside-out reform (see Table 2).

As the Taiwanese example illustrates, inside-out transformation bets on the heterogeneity of the elites: it creates an alliance between forward-looking and dynamic segments, incorporating the diaspora high achievers into the elite. The transformation often starts with institutional innovation ignored by established players (large banks and firms didn't take seriously the VC program in Taiwan). Inside-out transformation occurs by incorporation — turning the established elite into an ally of institutional innovation.

**Table 2. Skills Abroad as Change Agents at Home: Typology**

	Top-Down Transformation	Bottom-Up Change	Inside-Out Reform
Change Agents	Returning students and other experts form reform, policymaking, and policy advice teams.	Policy or institutional entrepreneurs establish new institutions at home.	Diaspora high achievers and government champions jointly initiate and sustain multiple, incremental changes from diverse entry points.
Examples	Indonesia: 1966-83 – Berkeley Mafia. South Korea: 1970s and '80s – Economic Planning Board and Government Research Institutes. Nigeria: ongoing, top decision-making positions in government. China: Science and Technology Parks for returning technical talent.	Single institutional entrepreneur establishes an enclave organization in higher education, health, or other sectoral domain.  Reform dynamics initiated by a group of returning migrants: electricity and other rural infrastructure provision in Morocco in the 1980s and '90s.	Taiwan: Creation of VC industry in the 1980s. India: improvement in the legal and institutional framework for entrepreneurship in the 1990s. Russia, after 2008: support for VC industry and techno-entrepreneurship.
How Does Transformation Occur	<i>Mobilization</i> : top decisionmaker facilitates university education abroad and installs reform, policy advice, or technical teams on the basis of returning skills.	<i>Entrepreneurship</i> : individuals acting in spite of obstacles.	<i>Bootstrapping</i> : joint search for solutions relying upon and leveraging better-performing segments of government and public sector.
Vulnerabilities/Risks	Reform team is removed or becomes entrenched.	Reforms hit the wall. Enclaves fail to expand, scale up, diffuse, and turn into role models that others would follow.	Transformation is incremental: it is relatively robust, but is slow and may fizzle out.

	Top-Down Transformation	Bottom-Up Change	Inside-Out Reform
Specific Assets (Skills, Motivation) of Talent Abroad	Technical skills in a specific domain (economics, science and technology areas, technical expertise).	Both technical skills and unusually high motivation to succeed and prevail.	Creative and pragmatic problem-solving: while technical skills are useful, the key is capability to search and combine knowledge from diverse policy domains.
Dealing with Entrenched and Vested Interests	<i>Shake-up</i> : effective in the short term but risky in the longer term (as vested interests regroup and strike back).	<i>Assault</i> : direct confrontation (may work in specific domains).  <i>Strategic bet</i> : that the institutional innovation would be initially ignored by the vested interests as an oddity and then could be protected by its own success.	<i>Transformation</i> : turning forward-looking segments of vested interests into allies. Robust and effective in the long run but vulnerable as transformation can occur the other way around (change agents are incorporated into vested interests).
International Migration Perspective	Starts with return migration, which may turn into brain circulation (as fired or failed reformers return to the diaspora).	Typically, return migration.	Starts with brain circulation which, if the reforms succeed, leads to return migration (as the talent abroad creates conditions and opportunities for its own return).

## V. Towards Policy Implications: A Rough Guide for a Policymaker

Interactions between the diasporas and domestic institutions described in this chapter are highly contextual: reform dynamics emerge (or not) in a specific context. This makes any generalization and taxonomy difficult and tenuous. Positive reform dynamics can emerge under circumstances less demanding than is normally assumed. For reform to start all that is needed are pragmatic and forward-looking segments within both the government and the diaspora who could jointly take initiative in doing new things, rather than uniformly good and transparent government (though the start of the reform does not guarantee that it would continue). These segments can emerge even within relatively small diasporas, as illustrated by the case of Chile discussed earlier.

Two dimensions seem to be instrumental for the emergence of pragmatic segments on both sides and their joint search for solutions. On the home side, the capability and motivation of governments (and, more broadly, domestic elites) is critical. On the outside, a quantity of first-generation migrants who are connected to the homeland via family ties, frequent home visits, and more, are necessary.

On the inside, there are three cases. On one extreme is a strategic, hierarchical government with an ambition to set clear rules of the games and engage whatever actors can help advance development without threatening elites. China, South Korea, and Taiwan all fall into this category. On another extreme are rent-abundant societies where

elites capture rents from natural resources, remittances, donations from the diaspora, or international financial organizations and assure their perpetuation by blocking any sustained change. In many respects, Armenia in the 1990s, Nigeria, and states in Central Asia belong to this category. Since the elites are so entrenched, the intentions and experiments of the diaspora do not evolve: exceptions and promising experiments fail to evolve into outside-in reforms. An intermediate case — and the most typical for middle-income economies — is characterized by great heterogeneity of performance. Government organizations may be dysfunctional, but within each of them, there exists a pragmatic segment actively searching for relevant solutions. This segment has certain continuity; for instance, it survives changes of administration.

A second dimension is the sheer number of first-generation migrants and their connectedness to the homeland — family ties to the homeland, frequent visits home, and more.

It is not coincidental that the most vivid descriptions of outside-in reforms, according to Iskander, occur in Mexico and Morocco: countries characterized not only by large numbers of first-generation migrants, but also by migrants who often leave their children at home.<sup>11</sup> Often, but not always, large first-generation diasporas also have a large number of members in positions of influence in the private and public sectors in the receiving countries (China, India, Ireland, Korea, Scotland, and Taiwan have such a critical number of high achievers, whereas Mexico and Morocco do not.)

However, a contrasting case is emerging diasporas that are, due to geographical distance, relatively unconnected with their home countries and relatively small. Examples include Russia, Argentina, and Chile. The potential for interaction and for positive reform dynamics for these diasporas is as great as in other cases, and there is a diverse portfolio of tantalizing success stories. Yet these success stories have not yet had the time to evolve into significant inside-out (or outside-in) reform dynamics.

Juxtaposing these two dimensions, we arrive at five situations of migration-domestic elite interaction (see Table 3):

- **Inside-Out Reform:** initiated by a strategic segment of the government with the active engagement of diasporas (illustrated by Taiwan VC case)
- **Articulation of Promise:** active engagement with diasporas by strategic domestic elites (this is relatively rare, and probably reserved to a small number of Asian economies with proactive governments but emerging diasporas)

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11 Natasha Iskander, "Diaspora Networks."

- **Outside-In Reforms:** migrants and diasporas are more pro-active and strategic than the government, at least initially (illustrated by the Morocco case)
- **Tantalizing Promise:** diverse portfolio of visible success stories containing embryos of outside-in reforms. This is probably a most typical case for middle-income economies, as many countries, including Russia, South Africa, Argentina, and Chile, fall in this category
- **Diasporas as Social and Economic Shock Absorbers:** when interventions of diasporas perpetuate rather than transform domestic elite. In an optimistic reading, this is a temporary situation that disappears once a country and its elites discover new opportunities for engagement with the world besides extracting rents from natural resources and its diasporas. This was a transition in Armenia recently, when the elites discovered, with the assistance of its high-tech diaspora in Silicon Valley, possibilities associated with high-value added exports of information technology and other innovation-intensive services.

**Table 3. Diasporas, Migrants, and Domestic Elites: Diversity of Impact**

Characteristics of Diasporas			
		Strategic: Large and Connected to Home Country	Emerging: Focused on Professional Development of its Members
Characteristic of Domestic Elites	<b>Strategic</b>	<i>Possibility of inside-out reform: South Korea, China, Israel, Ireland, Scotland, Taiwan.</i>	Articulation of promise in areas to make an impact:  <i>Japan, Malaysia, Thailand.</i>
	<b>Heterogeneous: Existence of a Pragmatic Segment</b>	Outside-in transformations: <i>Mexico, India, Morocco, El Salvador, and Armenia in present circumstances.</i>	Tantalizing promise: diversity of successes stories:  <i>Philippines, Chile, Argentina, Russia, South Africa, Turkey, Egypt.</i>
	<b>Rent-Abundant Societies: Dominated by Entrenched Interests</b>	<i>Social and economic shock absorber: Armenia (in the 1990s), Nigeria, some other countries in sub-Saharan Africa and Central Asia.</i>	

## VI. Conclusions

The chapter has attempted to develop an appreciative theory<sup>12</sup> of inside-out and outside-in reforms of institutional environments of home countries, reforms in which migrants and diasporas are an essential part of the dynamics. Assuming the theory is plausible, what are its implications for development theory in general, and studies of international migration in particular?

Highly influential work by Dani Rodrik and Ricardo Hausmann has demonstrated that growth is not hard to start. It almost starts by itself at different times and in different places: growth spurts are ubiquitous.<sup>13</sup> The problem is maintaining growth. Their paper suggests the same conclusion for reforms. Reforms at the micro level are ubiquitous if only because pragmatic talent (searching for solutions to alleviate constraints) is ubiquitous, particularly in countries with large diasporas. The question remains, however, whether and how such reforms continue to the national level. In terms of the three-stage model outlined in Table 1, the question is scaling up entry points (the first phase of reform) to mezzo (second phase) and macro levels.

The sustainability and continuation of micro reforms could be related to specific constraints. Morocco's story of rural electricity reforms displays intriguing parallels with a revisionist view of the emergence of a famed development state in South Korea). This view emphasizes not intelligent bureaucrats with a lot of discretion, but individuals forced to be creative under the burden of many conflicting constraints, experimenting and groping in the dark. More generally, Doner et al. put forward a hypothesis that "systemic vulnerability" — an urgent need to cope with multiple irreconcilable constraints — is at once the origin and motivation for doing new things.<sup>14</sup> Systemic vulnerability compels creativity, and the creativity leads to development.

Venture capitalists developing a portfolio of talented individuals and their projects view pragmatic talent displaying creativity in response to the constraints they face and thereby relaxing these constraints as a given. Reforms by bootstrapping are a VC view of development. Development can be conceived as the growth of a portfolio of micro reforms (with pragmatic talent behind them). Most of them will not grow and

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12 According to Richard Nelson, "appreciative theory" is storytelling that is close to the empirical details: "It provides both interpretation and guidance for further exploration. Mostly it is expressed verbally and is the analyst's articulation of what he or she thinks really is going on." Such a theory is particularly suited for the discussion of emerging phenomena like the nascent institutional reforms discussed in this chapter. See Richard Nelson, "The Agenda for Growth Theory: A Different Point of View," *Cambridge Journal of Economics* 22: (1998): 497-520.

13 Hausmann, Rodrik, and Sabel, "Reconfiguring Industrial Policy."

14 Richard Doner, Dan Slater, and Bryan K. Ritchie, "Systemic Vulnerability and the Origins of Developmental States: Northeast and Southeast Asia in Comparative Perspective," *International Organization* 59, no. 2 (2005): 327-61.

very few would result in exceptional development impact (such as in the cases of Morocco and Taiwan). Yet whether the reform is a home run or failure can be established only in hindsight: institutional transformation takes decades. Developments in the making — illustrated by the incipient VC dynamics in Chile and in Armenia’s financial sector — are akin to “living dead.” “Living dead” is yet another technical term in VC parlance, describing a project with an uncertain future — one that barely covers its social costs.

A VC perspective of development is at once more optimistic and more pessimistic than a conventional view of institutional development. It is more optimistic in the long run, because strategic bets on projects the pragmatic talents construct can result in significant and counter-intuitive transformations. And given the ubiquity of pragmatic talents, there is a fair chance that the portfolio of projects they create will yield at least some successes. But in the long run, as John Maynard Keynes noted in 1923, “we are all dead.”<sup>15</sup> To have a diverse and rich enough portfolio of micro reforms, one needs to have an acute sense of urgency — a systemic vulnerability. As Mancur Olson noted, systemic crises and the renewal they bring are the best solutions for self-entrenchment.<sup>16</sup> But in addition to crisis, one also needs discretion and leverage, and a balance between the two — between urgency and the discretion to act — is tenuous.

Therefore, from a medium-term perspective, the suggested view is more pessimistic: what one observes, contemporaneously and in real time, is a series of sleepy and slow moving living deads, not a stellar performance of home runs. A sense of urgency is lacking, and the portfolio of projects is too small. Structuring a process to monitor a project portfolio to make informed and accountable strategic betting is the focus of a so-called new industrial policy. International migration, because of a unique “insider-outsider” view of migrants, provides many insights to new open industrial policy. 

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15 John Maynard Keynes, *A Tract on Monetary Reform* (New York, NY: Penguin Books, 1990).

16 Mancur Olson, *The Rise and Decline of Nations: Economic Growth and Opportunities for Prosperity* (Cambridge, MA: Harvard University Press, 1984).

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# PART THREE

EXPATRIATE TALENT AND  
TRANSFORMATION OF  
INNOVATION SYSTEMS AT  
HOME



# CHAPTER 7

## HOW ARGENTINA AND MEXICO ARE LEVERAGING THEIR TALENT ABROAD: A COMPARATIVE STUDY OF THEIR TECHNOLOGICAL DIASPORAS

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### Introduction: Objective of the Study

**T**his chapter performs a comparative study of the Argentinean and Mexican technological diasporas, and argues that, in order to materialize the potential of professionals abroad, two prerequisites must be met. First, countries of origin must have a minimum threshold of public and private absorption capacities in the diaspora's areas of the specialization. Second, home countries require a solid capacity for leveraging global connectivity to develop and sustain concrete projects aimed at the creation of high-potential businesses either based or with a strong presence in home countries. We test our hypothesis with a survey of both diasporas and interviews with entrepreneurs, scientists, policymakers, and diaspora members of both countries.

Based upon interviews with key local players and surveys of both diasporas, this chapter proposes strategies to engage these diasporas in joint projects with local ecosystems to help build more dynamic knowledge economies in both countries. In Section 1 we discuss each

country's institutional policies regarding science, technology, and innovation, and how they are trying to insert their diasporas into their current strategies. We also briefly present the main organizations dealing with the Argentinean and Mexican diasporas at home and abroad. In Section 2 we present a summary of interviews with key professionals and policymakers in Argentina and Mexico. Section 3 presents the results of the surveys of both diasporas that evaluate a) their main characteristics, b) their involvement in knowledge networks, c) possible areas of collaboration with institutions and colleagues in their home country, d) their engagement with private and public organizations in their countries of origin, e) incentives sought by the diasporas to engage in joint projects, and f) a summary of the survey's main results. Finally, in Section 4 we provide a summary and our main policy recommendations.

## I. Argentina and Mexico: Their Potential to Generate Strong Technology-Based Economies

Argentina and Mexico share many characteristics that make a comparison between the two fruitful. In terms of the general framework conditions, both countries have similar economic and well-being indicators. After going through structural and economic reforms in the last few decades that eventually led to recessions and severe economic crises, both countries now have similar levels of GDP per capita. Argentina, which had a deep recession in 2001 and 2002, has shown high growth rates (of about 10 percent) in the last ten years. Mexico has been growing more slowly in the last decade. In terms of other basic economic indicators related to business creation and attraction, Mexico and Argentina have identical ratios of exports over GDP, gross capital formation, and net flows of foreign direct investment (FDI) over GDP.

Despite its weaknesses, Argentina has more encouraging indicators in terms of education and investment in science and technology — which favors a greater absorption capacity — while Mexico boasts a larger group of highly qualified émigrés. The two countries are engaged in efforts to develop knowledge-based economies at federal and local levels. Specifically, in the software and technological services industries, Mexico outperforms Argentina in turnover, number of firms, and personnel, although some of this difference can be associated with the larger Mexican software service and outsourcing industry. Argentina has a smaller but higher value-added industry that develops software products, infrastructure, and games, but Mexico has benefited from the size of its internal market and its closeness to the United States. In biotechnology, Mexico's growth rate has surpassed that of Argentina,

but neither country is close to its potential in this sector. In addition, Argentina has developed a strong agribusiness industry that can successfully compete globally and has been one of the pillars of the country's strong growth from 2002 to 2012. Both countries have some top scientists in fields such as material sciences (e.g. nanotech), nuclear science, and plant genomics (e.g. high-yield crops). However, with only a few remarkable exceptions, neither has yet been capable of leveraging the knowledge generated locally by commercializing new developments or launching new companies in the global market

In building a knowledge-based economy, each country has the following relative advantages:

**Argentina:**

- higher expenditure (as percentage of GDP per capita) in education, at both primary and secondary levels
- 10.2 percent probability (access x graduation rate) of ending up in a science, technology, engineering, and math (STEM) profession, compared to 6.9 percent for Mexico
- better gender balance (especially in tertiary education and STEM disciplines).

**Mexico:**

- higher share of high-tech exports in total manufacturing exports (19 percent vs. 9 percent)
- greater ease of doing business and better rankings in the competitiveness index and in the Global Integrity Index
- bigger internal market, closeness to the United States, and economic integration as a result of the North American Free Trade Agreement (NAFTA).

## **A. Institutional Policies Towards Science, Technology, and Innovation**

The results of a comparison between Argentina and Mexico, analyzed from the institutional point of view, are ambiguous. On the one hand, Mexico appears to have some solid advantages because of its multi-institutional coordination scheme and the amount of its budget dedicated to technical, scientific, and entrepreneurial endeavors. However, these efforts have been introduced without a coherent strategy and have involved many ministries and institutions, following cumbersome rules and/or unclear processes. On the other hand, Argentina has enjoyed a better-defined focus on its smaller efforts launched by some

entrepreneurial individuals such as the Minister of Science and Technology and his top advisers (see Box 1), which resulted in more agile processes, although actions still rely heavily on individuals.

The Secretary of Science and Technology (SECYT) of Argentina was upgraded to a ministry position in 2007. The first minister, Dr. Lino Barañao, is a well-known scientist and the former president of the National Agency for the Promotion of Science and Technology (ANPCYT), which played an important role in the advance of science and technology (S&T) in the country in the last decade. ANPCYT, created in 1996, brought a major shift in the national S&T system by separating the promotion of S&T from the execution of research. To achieve this, two separate funding agencies — Fondo para la Investigacion Cientifica y Tecnologica (FONCyT)<sup>1</sup> and Fondo Tecnologico Argentino (FONTAR)<sup>2</sup> — were created, installing in the country the practice of competitive R&D funding and bringing about, for first time, collaborations between academia and industry.

The upgrading of SECYT to a ministerial rank in 2007, with the creation of the Ministry of Science and Technology (MINCYT), reflects the importance attributed by the Argentinean government to knowledge and innovation as drivers of development. It represented a major overhaul of the the previously fragmented S&T system in Argentina by placing a greater emphasis on multidisciplinary and flagship initiatives with potentially high economic and/or social impact.

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- 1 The mission of the Fondo para la Investigacion Cientifica y Tecnologica (FONCyT) is to support projects and activities aimed at generating new scientific and technological knowledge, both basic and applied topics, developed by researchers from public institutions, and from private non-profit organizations based in the country.
  - 2 The Fondo Tecnologico Argentino (FONTAR) manages resources from different sources, public and private, and funds innovation projects through various instruments, which are implemented through the process of open bid.

### **Box 1. Interview with Dr. Lino Barañao, Argentina's Minister of Science and Technology**

Lino Barañao emphasized several priority areas to guide the ministry's actions under a development framework expected to bring major economic and social impact for the country. In particular, Barañao has proposed to: (1) change the specialization pattern of the country to create human resources for technology-based firms; (2) create quality jobs and increase the ratio of R&D to GDP; (3) create new institutions and foster cultural change; (4) develop absorption capacities in incumbents firms; and (5) leverage the role of the diaspora in this process. The development model he proposed requires diversifying the specialization pattern to support a knowledge-based economy catalyzed by technology-based companies.

The minister focused on four vertical segments: energy, health, agribusiness, and social development. In addition to these segments, Barañao proposed three technology platforms that cut across the four segments: biotechnology, nanotechnology, and information and communication technologies.

*Source:* Authors' interview with Lino Barañao.

In the last ten years the research policy in Argentina has shifted its focus from an exclusive emphasis on horizontal instruments towards a growing role for specific sectors considered strategic. Nowadays, sectorial funds are the backbone of this new generation of policies via a portfolio of different promotion instruments that bring to center stage the creation of knowledge-intensive firms and promote private-public alliances for R&D.<sup>3</sup>

The S&T sector in Mexico has also undertaken several changes in the last decade to bring a more multi-disciplinary approach to science and technology and the engagement between academic and industrial sectors. This led to changes in the Mexican S&T regulatory system, most notably the decree of the S&T Law and CONACYT's Organic Law

3 These instruments include: a) technological infrastructure and equipment aimed at expanding the operational capacity of R&D institutions to facilitate business and/or technology-based companies' incubation; b) training programs for managers and technological linkers that enhance the innovation and technological development capacities at companies and scientific-technological institutions; and c) EMPRETECNO—technology-based companies in charge of promoting the development of technology-based companies in the different productive areas. The newly created sectorial funds (i.e., FONSOFT on software and FONARSEC aimed at health, energy, agro-industry, and science for social inclusion) were responsible for financing 30 percent of the total number of grants allocated during 2011, representing 27 percent of the total funds granted by the National Agency for the Promotion of Science and Technology (ANPCYT).

(CONACYT is the Mexican National Research Council), and the adoption of the PECiTI (Special Program of Science, Technology and Innovation). These changes have resulted in the reorganization of CONACYT's programs in support of S&T, giving increased importance to intermediary and advisory organizations in shaping S&T policies in Mexico. Unfortunately, some of these changes have made the decision-making process more complex by involving a significant number of ministries.

Among the Mexican government S&T main initiatives are the R&D and innovation stimulus package and the Intermediary Institutions and Knowledge Transfer Units initiative. Sectorial S&T priorities — defined in accordance to the National Development Plan — are mainly implemented through the 17 CONACYT sectorial funds,<sup>4</sup> which encourages academia-industry collaboration and multidisciplinary efforts but lacks policy focus. Each fund opens a yearly competitive process for research projects based on established priority areas. In a nutshell, Mexico has built an institutional setting that formally does not differ much from other Organization for Economic Cooperation and Development (OECD) countries but lacks similar specialization patterns.

## ***B. Diaspora Organizations in Argentina and Mexico***

In this section we briefly characterize the Argentinean and Mexican technical and scientific diaspora, and the main public and private organizations that are engaged with the professional diasporas either abroad and/or in their countries of origin.

According to the OECD, there are 324,000 Argentineans abroad, 33 percent of whom hold tertiary degrees. The current emigration rate of those with tertiary education is 2.0 percent. According to Albornoz et al., there are about 5,000 to 7,000 scientists abroad.<sup>5</sup> Mexico has over three times as many immigrants with tertiary education (465,000) as Argentina. The current emigration rate of Mexicans with tertiary education is also over three times that of Argentina (6.5 percent).

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- 4 The currently running sectorial funds are focused on the following areas: airport development and air navigation; energy; water; technical innovation in forestry; housing and growth of the housing sector; agriculture, livestock, aquaculture, agro-biotechnology, and plant genetic resources; social development; naval sciences; environmental research; education; and health and social security.
  - 5 Mario Albornoz, Luchilo Lucas, Arber Gustavo, Barrere Rodolfo, and Raffo Julio, "El Talento que se Pierde. Aproximación al Estudio de la Emigración de Profesionales, Investigadores y Tecnólogos Argentino" (Redes, Centro de Estudios Sobre Ciencia, Desarrollo y Educación Superior, Documento de Trabajo Nro. 4, Buenos Aires, 2002).

The main organizations engaged with the Argentinean and Mexican diaspora are listed and then summarized below.

**Argentinian diaspora organizations:**

- RAICES, *Red de Argentinos Investigadores y Científicos en el Exterior*
- CEGA, *Centro de Estudiantes y Graduados Argentinos*
- APARU, *Association of Argentinean Professionals in the United Kingdom*
- ECODAR, *Encuentro de Colaboración Diáspora – Argentina*

**Mexican diaspora organizations:**

- Instituto de Mexicanos en el Exterior (IME)
- Red de Talentos, *The Talent Network*
- TechBA, *Technology Business Accelerator*

**Latin-American diaspora organization:**

- Latipnet

## **Summaries of These Organizations**

***Raíces – Red de Argentinos Investigadores y Científicos en el Exterior***  
[www.raices.mincyt.gov.ar/](http://www.raices.mincyt.gov.ar/)

This initiative was created in 2000 and launched in 2003 by the Argentinean government. It initially belonged to the Secretary of Science and Technology, and is now part of the Ministry of S&T (MINCYT). Based on the notion of “brain drain,” the program’s main aim is to reduce the negative impact that the emigration of Argentinian researchers and technologists has on the development of the country’s scientific and technological capacities. In order to do so, the program encourages those still based in Argentina to remain in the country and fosters the return and reintegration of those abroad into firms with technological bases, universities, and research centers. The program also promotes links between locally based researchers and professionals abroad through networks of scientists, encourages involvement in neglected areas of research, publicizes Argentina’s science and technology activities in other countries, and improves the exchange of information between local scientists Argentinian researchers abroad.

In 2007, a group of technology-based companies (Techint, IBM, Siderar, Siderca, Core, and Tecpetrol) signed an agreement with the Secretary

of Science and Technology to create positions that could be filled by returning Argentinian professionals. The aim of this agreement was to expand the courses of action of the Raíces' program, improving connections with Argentinian professionals abroad so that they could return to the country and work there. This was the start of the Volver a Trabajar (return and work) program, which works in collaboration with the Ministry of Foreign Affairs and its consulates abroad.

***CEGA – Centro de Estudiantes y Graduados Argentinos***

[www.centroargentino.org/](http://www.centroargentino.org/)

CEGA is a space to meet and celebrate cultural traditions for Argentines and friends of Argentina in the United States. CEGA builds a network, organizes social events, and promotes initiatives that contribute to the development of Argentina. The organization has branches in Washington DC, New York, and Miami.

***APARU – Association of Argentinean Professionals in the United Kingdom***

[www.aparu.org.uk/site/](http://www.aparu.org.uk/site/)

A high proportion of the Argentine community in the United Kingdom is employed, studying, or working independently in the health, finance, science, engineering, arts, linguistic, management, technology, and law professions. APARU is the only organization that represents this segment of the Argentine community in the United Kingdom. A particular strength of the association is its ability to bridge two missions, a professional as well as a charitable one. By doing so, APARU is in a position to mobilize notable and committed Argentine residents in the United Kingdom as well as attract and motivate a large non-Argentine public to participate in and support numerous charitable fundraising events that help the poor and disadvantaged in Argentina.

***ECODAR – Encuentro de Colaboración Diáspora – Argentina***

[www.centroargentino.org/inicio/iniciativas/intercambiodeconocimiento/ecodar](http://www.centroargentino.org/inicio/iniciativas/intercambiodeconocimiento/ecodar)

ECODAR is a diaspora organization launched in 2004 by CEGA, APARU, and several professionals who reside in Argentina and abroad, mainly in the United States and England. ECODAR has organized several meetings and workshops in Argentina, the United States, and Europe (specifically, in New York, Washington, Silicon Valley, London, Paris, Buenos Aires, and Mendoza), some events bringing together over 200 Argentinean professionals. Some of these events had government support, including from high-level officials and policymakers. The focus of the events has been on designing models for collaboration between the diaspora and local scientists, technologists, and entrepreneurs, and on exploring areas of and possible projects for collaboration. ECODAR

is a volunteer organization, funded by its members. This reflects the interest of the diaspora and local professionals in keeping the collaboration agenda alive, but also a weakness, as there is not yet a clear path to self-sustainability (ECODAR has not received any funding from the government).

As an example of activities developed by ECODAR, in 2008, the World Bank joined with Endeavor Foundation<sup>6</sup> and ECODAR to launch the Mendoza Empeñe 2008 program. It was designed as a pilot program that aimed to develop the entrepreneurial skills of young people in the province of Mendoza using the knowledge and experience of the Argentinian diaspora. A group of highly qualified Argentinians were selected by Argentinian NGOs to serve as mentors and advisers for business plans presented by Mendozan participants.

***Instituto de Mexicanos en el Exterior (IME) - Institute of Mexican Abroad***

[www.ime.gob.mx/](http://www.ime.gob.mx/)

The Instituto de Mexicanos en el Exterior (IME), an entity that depends on the Ministry of Foreign Affairs, was created in 1990. The program promotes links between Mexico and Mexican communities abroad in the areas of health, education, sports, culture, and community organization. The aim of IME is to promote strategies, integrate programs, and gather proposals and recommendations from communities, their members, organizations, and advisory bodies in order to raise the standard of living of Mexican communities abroad.

***Red de Talentos - The Talent Network***

[www.redtalentos.gob.mx/index.php](http://www.redtalentos.gob.mx/index.php)

The mission of Red de Talentos is to assist highly qualified Mexican professionals who reside abroad in generating high added value to the Mexican high-tech sector, contributing to improve Mexico's insertion in the global economy. The network is driven by IME and the United States-Mexico Foundation for Science (FUMEC), with support from CONACYT and the Mexican Secretary of Economy.

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6 Endeavor is a nonprofit organization that pioneered the concept of high-impact entrepreneurship in emerging markets. Established in 1997, Endeavor is headquartered in New York City with a satellite office in San Francisco. It also has offices in Argentina, Brazil, Chile, Colombia, Egypt, Jordan, Indonesia, Lebanon, Mexico, South Africa, Turkey, and Uruguay. Endeavor aims to identify and support those entrepreneurs with the greatest potential for impact.

## ***TechBA – Technology Business Accelerator***

[www.techba.org/techba3/index.php](http://www.techba.org/techba3/index.php)

TechBA is a program of business acceleration, created in 2004 by the Secretary of Economy and the US-Mexico Science Foundation (FUMEC). TechBA operates in eight regions: Arizona, Austin, Madrid, Michigan, Montreal, Seattle, Silicon Valley, and Vancouver. The main goals of TechBA are:

- To bring Mexican technology-based companies to global markets
- To facilitate these companies' interactions with global actors from private and public sectors that can propel their growth, allowing them to generate sales, strategic alliances, and investments.

Every year TechBA supports dozens of companies entering the United States and global markets. Companies are selected based on their readiness, innovation potential, commitment to discovering new opportunities, and growth rate. Each company is mentored during the preparation of their product or service marketing plan and sales strategy prior to entering the sales phase of the program.

## ***Latipnet***

[www.latipnet.org/](http://www.latipnet.org/)

Latipnet, launched in 2007, is a nonprofit organization headquartered at the NASA Research Park in California that works with Mexican, Argentinean, and other Latin American diasporas in the United States, as well as with leading organizations in Latin America, to catalyze the development of new ventures and assist academic centers in technology transfer. In particular, it helps universities and institutes in Mexico, Argentina, and other Latin American countries to commercialize their technology, build patent portfolios for valuable inventions, and form partnerships with US academia and industry. Several companies, either based or with a strong presence in both Mexico and the United States — such as Simply Agave (nutraceutical), StelaGenomics (agrobiotech), and Poyoville (multilingual social network for kids) — have been launched with Latipnet's help and through its network. These companies leverage the Latin American diaspora in the United States by building partnerships with local scientists and entrepreneurs in Mexico, Argentina, Colombia, and more. For example, in the State of Guanajuato, Latipnet has helped leading research institutions such as CINVESTAV (plant genomics), CIMAT (math and computer science), and CIO (optics) develop over a dozen US patents; licensed technology to companies such as BASF; and launched new global companies such as Stelagenomics.

## II. Interviews with Local Professionals and Policymakers

### A. *Argentinean Professionals Residing in Their Home Country*

We interviewed founders and active members of ECODAR in Argentina to help us characterize the process of establishing mediation among local professional with their diaspora counterpart, and the mechanisms necessary for sustaining the collaboration between the two parties. The representatives of ECODAR discussed mechanisms for establishing cooperation and partnership on projects. They admitted that there is a range of projects that could be matched to individuals either at home or abroad in good positions to contribute to them, but that this matching process is not always straightforward. On a few occasions, these interactions have resulted in active engagements or new projects or collaborations.

The ECODAR representatives admitted to being “somewhat distanced from the activities that the Raíces program has been carrying out,” which tend to be focused on the return of talent.<sup>7</sup> They also stressed that it would be of interest to collaborate with Raíces, as the two organizations can complement each other, and that if some sort of institutional framework were to be established, it would need to be public-private rather than exclusively government-run.

The interviewees from ECODAR suggested a list of successful local firms in which individuals with professional experience abroad (mainly in the United States) have played a key role. They stressed that the experience these individuals acquired abroad, in specific technical areas and/or management or business culture, was quite important for their current endeavors. For example, several interviewees who created their own business commented that many of their customers originate from their network of contacts and prior experiences. In the course of this study, almost every interviewee was able to refer us to some other members of the diaspora with whom they are connected. Examples included entrepreneurs from companies such as Flaptor, Popego, Hexacta, Patagonia Ventures, Core Technologies, KillerStartups, and Sonico, among others.

In many cases, the connectivity of the network has been enhanced by

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<sup>7</sup> Interviews with ECODAR representatives on file with authors.

organizations such as the Endeavor Foundation<sup>8</sup> and Barcamp.<sup>9</sup> These networks involve many young (under the age of 30) entrepreneurs, a large percentage of whom are engaged in the game industry, social media, and the software industry.

For example, the founder and CEO of Flaptor (a software company which specializes in search technology and is based in Buenos Aires), Diego Basch, has a range of professional experiences in the United States, including work experience at Inktomi, LookSmart Ltd., and Xooplt Inc. Basch stressed that this experience allowed him to understand North American business culture, and also helped him to attract his main customers. Several interviewees mentioned that if Basch hadn't worked in the United States, it would not have been possible for his firm to prosper in the local ecosystem. Hexacta is another example that demonstrates how important members' international experience is to business development. The firm's first international client came on board through personal contacts the interviewees acquired during their time abroad. One of our interviewees, Santiago Ceria, admitted that despite his prior experience, the company faced the problem of how best to expand in the United States, and admitted being fundamentally limited by issues of "know-how." He stressed that every opportunity that allows one to have access to relevant people abroad could become significant, thus pointing to a need for programs that will promote the internationalization of companies.

Similarly, Linus Spatz, the founder of several biotechnology firms in Argentina, commented that the sector would benefit from members of the diaspora being more involved in providing contacts and network access. This would facilitate access to financing, partners and customers, and more, while complementing existing technical skills. He also observed that local knowledge of the regulatory aspects of medicine in the United States is insufficient. He stressed that the main needs seem to be in relation to regulation and management, rather than technical skills.

## ***B. Mexican Professionals Residing in Their Home Country***

In Mexico the government has been more involved in the different stages of interaction with the diaspora. Despite its guiding role, the network has not been without moments of unpredictability and dif-

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<sup>8</sup> See footnote 4.

<sup>9</sup> BarCamp is an international network of user-generated conferences primarily focused on technology and the Web. Conferences are open, participatory workshop-events, the contents of which are provided by participants. The first BarCamps were focused on early-stage web applications and open-source technologies. The format has since been used for a variety of other topics, including public transit, health care, and political organizing, as well as adapted for specific industries like banking, real estate, and social media.

ficulty. An officer of the Red de Talentos said that “the network slowly and increasingly found focus and learned about their own role. Of course, this learning process included some mistakes, false starts, and some degree of uncertainty about what they were involved in.”<sup>10</sup> Specifically, the officer admitted, “at the very beginning, we didn’t know exactly what to expect. We all agreed that the initiative was important but we didn’t totally grasp what to expect from it or how to set about it. Later the network sharpened its focus to specific sectors, and established nine national group coordinators, one for each focus, each group aimed to: (a) map local capabilities and infrastructure in the relevant sector; and (b) follow the projects and proposals that were expected to emerge.” The officer is enthusiastic about the Red de Talentos’s current status. He considers it to be at a crossroads in proving its value and reaching self-sustainability in matching projects and firms.

In the opinion of a former leader of CONACYT and Red de Talentos, the latter served to raise awareness of global high achievers, diaspora members who have gained international recognition either in academia or business, and bring excitement to the scientific and entrepreneurial communities in Mexico about global opportunities. Although the officer mentioned a few “Latin heroes” working in the United States, he also said that Mexico and other countries in the region are still lacking “an account of success stories and role models.”

A member of the Mexican diaspora, a successful entrepreneur who launched several medical device companies in the United States, mentioned several cases of companies that had offices in Mexico and in the United States (usually Silicon Valley) that were either launched by or have received strong support from diaspora members, who worked with local Mexican entrepreneurs and/or scientists. Among these companies, he mentioned Prefixa (optical instruments), Echopixel (medical devices), Simply Agave, Aonori Acquafarms (sustainable seafood), and StelaGenomics. Organizations such as TechBA and Latipnet have been active in catalyzing these opportunities.<sup>11</sup>

Some of the experience of “learning to play the game” in more demanding markets for Mexican entrepreneurs and emerging companies has been provided by TechBA<sup>12</sup> at its various locations in the United States, as well as via activities across Mexico. Several interviewees stressed the importance of the business acceleration system and the informal network of people around them. Although there are several cases of business partnerships mediated by TechBA, perhaps one of the most noteworthy is the engagement between Digital B2B and Interdata. After the former received a subsidy from PROSOFT, a government funding agency for software projects, and was invited to apply to TechBA, the two firms’ CEOs met in TechBA San Jose and agreed to

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10 Interview with Red de Talentos official on file with authors.

11 Mexican entrepreneur interview on file with authors.

12 For a brief description of TechBA programs, see Section II.B.

cross-sell their products and eventually exchange equities. This provided Digital B2B with a valuable platform for the provision of new services and solutions.

In a similar fashion, a new firm started by Alex Gerson, the founder and president of AlexSystems, was the result of unplanned events catalyzed by TechBA San Jose. One of Gerson's clients was having difficulties with the outsourcing he contracted from Asia. When this client asked Gerson to evaluate alternative locations in Eastern Europe, Gerson suggested Mexico as a possibility. TechBA contacted Gerson with the names of state-run Mexican institutions interested in creating high-tech employment opportunities in the country. In order to combine these two opportunities, Gerson developed and implemented a software and mobile application development center in Mexico, which was jointly financed by the client, COMECYT (a governmental organization that fosters the creation of high-value jobs in Mexico), and a consulting firm.

### **III. Findings from the Surveys: Argentinean and Mexican Talent Abroad**

#### **A. Survey Overview**

In order to analyze the characteristics of Argentina's and Mexico's technological diasporas, similar questionnaires were developed for both groups, and distributed electronically to a relevant sample of more than 750 professionals in the United States, Europe, and Asia. The surveys gathered information about diasporas' competencies, their participation in networks, their willingness to collaborate in business development and policy formulation in their countries of origin, and their interest in being part of specific projects in their fields of expertise. The surveys also included a section evaluating a portfolio of a possible activities (visits, mentoring, etc.) aimed at promoting enterprising practices and skills. They also investigated the perceived dynamism of a range of academic institutions and government departments in the countries of origin. We aimed to identify actors and practices recognized by the diaspora that will foster a new generation of policies designed to develop and internationalize firms and make use of enterprising skills or experience.

In the case of Mexico, both IME and CONACYT took part in designing the questionnaire, selecting suitable individuals from the Mexican technological diaspora. Some 565 Mexicans residing abroad were invited to take part in the survey, all of whom were either registered at Mexican consulates abroad, had taken part in conferences organized by Red de Talentos, formed part of different local chapters of the network, or received scholarships or grants to study abroad. In other words,

the survey was by a subset of Mexicans residing abroad who had prior contacts with Mexican institutions of science and technology.

In the case of the Argentinian technological diaspora, a list of 200 potential respondents was drawn up based on the contacts and recommendations of software, biotechnology, and nanotechnology specialists in Argentina, and using lists of contacts from a prior survey of the diaspora (Kuznetsov, Nemirovsky, and Yoguel), which was mainly provided by associations of Argentinians abroad (APARU, CEGA, ECODAR) and local agencies (the Ministry of Science and Technology's Raíces program and ProsperAr).<sup>13</sup> Some of the lists used were gathered over seven years ago, thus introducing some biasing to the sample (towards older members with higher engagement in academia).

We received answers from over 400 individuals: 139 members of the Argentinean diaspora and 283 of the Mexican diaspora (approximately 70 percent and 50 percent of the contacted individuals, respectively).

## **B. Main Demographic Characteristics of the Diasporas**

There are both interesting similarities and differences between the Argentinean Technology Diaspora (ATD) and the Mexican Technology Diaspora (MTD) (see Table 1). For one, the vast majority in both groups are men. Spanish is the language that predominates in their homes. Among the ATD, the proportion of professionals with at least doctoral-level education is significant, while those with master's degrees constitute the largest group in the MTD. This is related to a lower average age among the Mexicans, as well as their lower average length of time abroad. We believe that some of these differences are due in part to the following reasons:

- Some of the Argentinean diaspora organizations, such as Raíces and APARU, have focused more on academic members (usually PhDs) rather than on individuals working in the industry (who generally hold master's, bachelor's, etc.). This is in contrast to efforts from Red de Talentos and IME, which have focused on Mexicans abroad working in the industry.
- We believe that Argentinean databases are generally older than those from Mexico, thus providing a bias towards older diaspora members.

In spite of those possible biases in the databases, we believe there are significant lessons that can be learned from the answers to the questionnaires. Specifically, the ATD members emigrated in various

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13 Yevgeny Kuznetsov, Adolfo Nemirovsky, and Gabriel Yoguel, "Burgeoning of Talent Abroad, Weak Institutions at Home," in *Diaspora Networks and the International Migration of Skills: How Countries Can Draw on their Talent Abroad*, ed. Yevgeny Kuznetsov (Washington, DC: World Bank, 2007).

waves over the last 40 years, in different commercial, social, and political contexts. Just over one-third have been living abroad for over 20 years as a consequence of either the military dictatorships of the 1960s and 1970s or the periods of crisis that occurred over the course of import substitution industrialization. Less than one-fifth emigrated between 1980 and 1993, coinciding with the final years of Argentina's most recent dictatorship, the impact of the external debt crisis, and the growth of the convertibility regime. Together, these two groups make up over half the sample. The remaining respondents have been living outside Argentina since 1994 or later. Although there have also been different waves of immigration in the MTD, these are more closely related to local economic cycles than to political issues.

With regard to place of residence, most ATD respondents (61 percent) live in the United States, which is home to 35 percent of MTD members. One surprising finding was the high percentage of MTD respondents who reside in Southeast Asia. It is possible that this figure may be due to some bias of the sampled MTD population.

**Table I. ATD and MTD: Main Demographic Characteristics of Respondents (%)**

	Argentina	Mexico
<b>Gender</b>		
Women	10.8	19.5
Men	89.2	80.5
<b>Highest level of education</b>		
Bachelor's	3.9	25.9
Master's	12.7	46.3
Doctorate	45.1	18.0
Post-doctorate	36.3	8.3
NR	2.0	1.5
<b>Age</b>		
Below 30	-	9.3
30 to 39	31.4	34.1
40 to 49	36.3	26.8
50 to 59	20.6	18.0
60 or over	8.8	3.9
NR	2.9	7.8
<b>Years since last academic degree</b>		
Less than 5	14.7	19.0
Between 5 and 10	33.3	24.9
Between 10 and 14	13.7	17.1
15 or more	38.2	36.6
NR	-	2.4

	Argentina	Mexico
<b>Time abroad (in years)</b>		
Less than 5	3.16	19.7
Between 5 and 9	22.1	24.6
Between 10 and 14	22.1	22.4
Between 15 and 19	17.9	9.84
20 or more	34.7	23.50
<b>Current place of residence</b>		
USA	61.8	35.1
UK	-	4.9
Canada	7.8	2.0
Germany	2.0	1.0
France	6.9	6.3
Brazil	3.9	0.5
Israel	2.0	2.0
Rest of Europe	7.8	10.8
Rest of the Americas	2.0	5.4
Asia	2.0	17.1
Africa	2.0	2.0
Oceania	-	4.4
NR	2.0	8.8

Source: Authors' survey.

Another feature that distinguishes the two diasporas is that more professionals work in the private sector in the MTD than in the ATD (see Table 2).

**Table 2. ATD and MTD: Main Characteristics of Respondents with Regard to Place of Work and Area of Specialization (%)**

	Argentina	Mexico
<b>Type of work</b>		
Independent	20.4	23.4
Firm (employee)	36.1	52.8
Academia	43.5	23.9
<b>Area of specialization</b>		
ICT and software	19.0	9.9
Biotechnology	24.6	6.9
Nanotechnology	10.8	1.9
Natural resources	2.6	8.9
Engineering	13.8	13.1
Basic sciences	not included	1.9
Management	13.8	21.9
Education	6.2	8.7
Other	9.2	28.7

Source: Authors' surveys.

Some 46 percent of ATD respondents work in the business sector, laboratories, or consulting. The second-largest group is made up of those who work in academia (41 percent) in science and technology. Almost 10 percent work in both the business sector and academia (for example, university professors that are industry consultants). Finally, only 3 percent work in academia with no links to private firms. In turn, just over half (52 percent) of MTD respondents work as employees at firms, while 23 percent work independently as consultants or owners of their own companies. The rest are employed by academic or technological institutions. Around two-thirds of the respondents state that they have decision-making capacities in their private-sector jobs.

Finally, one element that the ATD and MTD have in common is that the two countries' specialization profiles have little to do with the interviewees' profiles. This disassociation has favored the development of brain drain processes in a cyclical manner.<sup>14</sup> As such, there are interesting differences between interviewees' areas of specialization and those considered to be areas of opportunity in the two countries.

Almost 60 percent of ATD respondents have experience in one of the three technologies declared by MINCYT to be priorities in Argentina (software, biotechnology, and nanotechnology). The distribution of specialties among the respondents is strongly associated to their age, with software predominating among the young; biotechnology among those

<sup>14</sup> Ibid.

in their 30s and 40s; and nanotechnology, natural resources, and engineering among those aged 50 or over. Interestingly, 51 percent claim a single specialization, 29 percent claim two areas, and 18 percent claim three. At the same time, there is a wide variety of sub-specialties among the respondents, which is valuable in terms of their potential collaboration on projects with local scientists and entrepreneurs.

Respondents specializing in software tend to work in the private sector regardless of whether or not they also are employed within academia, while those specializing in biotechnology and science are mainly employed within academia. In turn, professionals in management, natural resources, and engineering work mainly in the private sector, and those specializing in education are found equally in the private sector and academia.

With regard to MTD respondents' specialties, it is worth noting that only 23 percent have single specialties. Almost half of the MTD respondents work in business, while three out of four MTD respondents work in information and communication technologies (ICT). Contrary to what might be expected, there is no association between the number of specialties claimed by respondents and their ages: those under 40 predominate in all groups. The number of specialties is significantly higher amongst those residing in the United States and Europe.

Most of the MTD respondents' experience is in marketing (24 percent), engineering (16 percent), and software (11 percent). Less common are natural resources, life sciences, or international cooperation for development. Other occupation areas that Mexico has declared of interest, such as automobile and aerospace industry, are almost nonexistent among the respondents.

Based on the MTD characteristics the questionnaires revealed, we classified the different professional trajectories into five different groups. The largest group (39 percent) includes the respondents who claimed their specialties to be, at the same time, software and business, with the exception of biotechnology and natural resources. The second group (23 percent) is made up of those specializing in software with or without another specialty, with the exception of biotechnology, natural resources, or business. The third group (13 percent) is made up of respondents specializing in software and biotechnology and/or natural resources, and may or may not include other specialties. Together, these make up three-quarters of the total. The fourth group (16 percent) includes those specializing in biotechnology or natural resources and/or other specialties, excluding software. Finally, 9 percent of the respondents have other combinations of specialties not included in the above groups. Membership of these groups is independent of the respondents' ages.

The opportunities for Argentina identified by ATD respondents predict-

ably tended to favor their own sectors. However, biotechnology, nanotechnology, and specialties related to engineering, areas of priority according to MINCYT, were identified less frequently. In contrast, the natural resources sector stands out for the opposite reason. As such, the specialization pattern that emerged focused on (1) life sciences and biotechnology, (2) software, and (3) natural resources.<sup>15</sup>

In the MTD, the possible areas of interest for the country are much more varied than the respondents' specialties. As such, 15 percent of those surveyed think that natural resources hold the greatest opportunities. In second place are engineering and marketing, at 11 percent. Only 10 percent of respondents suggested software — which was the most significant specialty among respondents — as a development opportunity for Mexico. With regard to the comparative long-term advantages for Mexico in their area of specialization, almost one-fifth of the MTD respondents specified cost-related advantages, 17 percent mentioned logistics, 16 percent regional R&D advantages, and 14 percent regional businesses advantages. If the opinions of MTD respondents are grouped according to the type of advantage they felt Mexico offers, those focused on R&D (25 percent) and technology business (24 percent) dominate.

### ***C. Involvement of the Diasporas in International Knowledge Networks***

In this section we characterize the information available about existing initiatives, the fluidity of the diasporas' visits to their home countries, and their meetings with government employees.

Most ATD respondents state that they have strong international connections in their professional area, attending numerous conferences or seminars and belonging to some professional networks, more than half of which are connected to Argentina. Two-thirds of respondents belonged to a network of a scientific nature, while only one-quarter are business-related or oriented towards problem solving. However, despite strong general involvement in networks, the respondents did not declare themselves to be members of networks that bring together Argentinean professionals abroad. This is markedly different from the MTD.

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15 Some 64 percent of those who indicated software to be one of their specialties mentioned that, in addition to software, Argentina has development opportunities in other areas such as biotechnology and natural resources. In turn, those specializing in biotechnology and related areas tend to show inclinations towards software and natural resources, after their own specialties. At the same time, only 28 percent of those specializing in software and 33 percent of those specializing in biotechnology recommend nanotechnology as an area in which Argentina should specialize. It is interesting to observe that proposals for the country to specialize in education are at least as significant as those for engineering. Furthermore, the area of specialization respondents chose for Argentina is not dependent on their age or the length of time they have resided abroad.

The proportion of MTD respondents that belong to business, technology, or science networks stands at 57 percent, lower than in the ATD. However, these networks have stronger commercial objectives than those of the ATD. This is evident when one analyzes the actions the Mexican government has taken to contact the most highly qualified Mexican migrants. That is to say, as a group, MTD respondents are clearly linked — either directly or indirectly — to Red de Talentos, as was to be expected since the database used has been provided, in large part, by the Red de Talentos. In contrast, the ATD have far fewer connections to the Argentinean government.

With regard to the frequency of visits to the home country, half of ATD respondents return once per year, and 21 percent do so two to four times per year. This means that 71 percent visit Argentina at least once per year. Two reasons for their visits stand out: (1) all return for personal reasons or to visit their families, and (2) 41 percent go back to take part in conferences. In significantly smaller proportions are those who return for consulting (17 percent) and business (14 percent). Finally, only 10 percent come for interviews with government employees. The frequency of interviewees' visits does not depend on their age or professional specialization.

The frequency of MTD interviewees' visits to Mexico is higher than those of ATD members. Eighty-five percent of MTD respondents return to Mexico at least once per year, and almost 50 percent do so twice or more per year. Unsurprisingly, those residing in the United States and Canada visit Mexico more frequently than those living elsewhere.

In contrast to the ATD, most of the MTD interviewees' trips in the last three years have been connected to business or consulting (44 percent). A further contrast is that only 28 percent of the MTD return to attend conferences, markedly less than the ATD. Finally, a smaller proportion (21 percent) return to Mexico for meetings with government employees. Once again, this is a significant contrast to the ATD, which is more oriented towards family visits. ATD and MTD respondents were also consulted about their subscriptions to newsletters and periodicals, and indicated that their sources of information about their home country come from abroad.

Furthermore, in the case of the ATD, the majority of those interviewed knew little about the programs run by the Ministry of Science and Technology and the Ministry of Production. Almost 80 percent were unaware of government programs for science, technology, and tech commercialization, and/or programs for boosting the creation of new businesses.<sup>16</sup> This indicates that ATD respondents had few connections with the government agencies responsible for promoting technologies and new businesses for building the country's knowledge-intensive

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16 Programs include, among others, FONTAR, FONSOFT, Sectorial Funds, FAN, and the Secretary of SMEs and of Regional Development.

paradigm. It is interesting to note that there is no correlation between the number of times respondents visit Argentina and their knowledge of, for example, Ministry of Science and Technology programs.

In order to evaluate the sources of information that the ATD customarily use to acquire information about Argentina and business opportunities in the country, the survey listed options that ranged from talking to friends, family members, colleagues (both in Argentina and abroad), companies, professional organizations, and government agencies. Informal and personal relationships stand out among these sources. Seventy-seven percent get their information from colleagues and professional relationships in Argentina, 36 percent from colleagues abroad, and 25 percent through family members or friends. The remaining possible sources of information were only selected by a very small number of interviewees: firms or subsidiaries in Argentina (7 percent), firms abroad (6 percent), professional organizations both Argentinian (9 percent) and international (6 percent), and organizations linked to the Argentinean government (6 percent). In light of the last number, it is clear that government agencies need to extend their reach by promoting their work through consulates and embassies. In this sense, Mexico's Red de Talentos and the sector-based contacts initiative could be a source of inspiration for Argentina.

In the case of the MTD, the majority of respondents use between two (44 percent) and three (25 percent) sources to obtain information about opportunities for developing technological exchanges or technology-related business in Mexico. The main sources are colleagues living in Mexico (25 percent) and abroad (14 percent). The third and fourth most important sources of information are international professional organizations to which respondents are connected (14 percent), and family and friends (12 percent). Together, these four sources account for 65 percent of responses. In contrast, organizations linked to the Mexican government only account for 9 percent of responses. It would seem that despite Mexican government efforts to reach out to and make contact with the MTD, it is not regarded as a useful source of information. Similarly, personal and informal relationships are the prevailing source of information about business.

#### ***D. Diasporas' Competences and Possible Areas of Collaboration with Their Home Countries***

With regard to the business skills of ATD interviewees, a strong specialization was observed in the development of new products or services, the development of technological and commercial strategies, and the identification of business opportunities. The most significant differences by age group are the higher relative incidence of younger respondents among those with skills for developing new businesses, and of those over 40 able to take advantage of changes on the techno-

logical stage. The three most important business skills among MTD respondents are: (1) directing and leading teams to develop a new product or service (23 percent), (2) identifying business opportunities (22 percent), and (3) developing new business (14 percent).

According to the interviewees, promoting relationships and institutionalizing the role of the diaspora members as consultants will provide great opportunities for technology-based firms in their home country. The diaspora's possible contributions included mentoring; providing technological strategies; and helping to develop/analyze product viability and identify business opportunities. These four skills represent half of the potential forms of contributions mentioned by interviewees.

Some 80 percent of the organizations where ATD respondents work do not have subsidiaries in Argentina, a proportion that accounts for almost all of those who work in academic institutions. In turn, 38 percent of the respondents working in private companies stated that their employer has an office in Argentina. Their influence within the organizations at which they work is generally connected to new technologies and new products and is less significant when it comes to specific operations, especially issues such as entering new markets and/or participation in the chain of suppliers.

It is interesting to note that respondents who work independently or within companies have greater influence than those who combine one of these activities with academia or who only work in academia. However, those in academia do have significant influence on new technology and product strategies. Furthermore, the self-identified influence of the group that combines work in private companies with academia is greater than that of those who only work in the private sector, with respect to almost all the strategies considered. As expected, those over 50 have greater relative influence.

In terms of specialties, the respondents with the greatest relative influence are generally those in software, management, and engineering. However, those specializing in nanotechnology stand out because they have strong influence on new technologies and products and on the reconfiguration of the supply chain.

### ***E. The Dynamic Segments and Their Relationship with Government Agencies and Private Initiatives***

With regard to the local capacities of a variety of institutions (both public and private, research- as well as business-oriented) to be receptive to possible collaboration with the diaspora, just over half the ATD respondents suggested universities and academic institutions as potential partners for international companies. Business incubators came second, with 47 percent of respondents naming them as potential

business partners. They were followed by business entities and consulting firms (45 percent and 30 percent, respectively).

As mentioned above, if the knowledge and availability of the technological diaspora are to be used effectively, there needs to be a critical mass of local skills and organizations with absorption capacities that are receptive to collaboration and engagement with the diaspora. Table 3 presents the interviewees' perception of the quality of organizations and institutions in their home country (academia, governments, chambers of commerce, etc.).

**Table 3. Quality of Institutions in Argentina and Mexico According to Their Diasporas, Based on Surveys of the ATD and MTD**

	Argentina		Mexico	
	%*Significance**		% Significance	
<b>Quality of business</b>				
Low <sup>(a)</sup>	53.80%	(+)1%	26.50%	(-)1%
High <sup>(b)</sup>	46.20%	(-)1%	73.50%	(+)1%
Lowest <sup>(c)</sup>	10.80%		0.70%	(-)1%
Highest <sup>(d)</sup>	20.00%	(-)5%	39.10%	(+)1%
<b>Quality of universities</b>				
Low <sup>(a)</sup>	47.70%		33.30%	(-)1%
High <sup>(b)</sup>	52.30%		66.70%	(+)1%
Lowest <sup>(c)</sup>	10.20%	(+)1%	1.80%	(-)1%
Highest <sup>(d)</sup>	25.00%		31.60%	(+)10%
<b>Quality of R&amp;D institutions</b>				
Low <sup>(a)</sup>	47.60%		42.90%	(-)1%
High <sup>(b)</sup>	52.40%		57.10%	(+)1%
Lowest <sup>(c)</sup>	7.30%		1.90%	(-)1%
Highest <sup>(d)</sup>	24.40%		26.10%	
<b>Quality of government</b>				
Low <sup>(a)</sup>	75.30%		62.30%	(-)1%
High <sup>(b)</sup>	24.70%		37.70%	(+)1%
Lowest <sup>(c)</sup>	27.30%	(+)5%	11.70%	(-)1%
Highest <sup>(d)</sup>	6.50%	(-)1%	16.20%	(+)1%

<sup>(a)</sup> Corresponds to the proportion of respondents whose answers that rated 1, 2, or 3 (on a 5-point scale where 1 stands for lowest quality and 5 for the highest quality)

<sup>(b)</sup> Corresponds to the proportion of respondents whose answers were 4 and 5 (on a 5-point scale where 1 stands for lowest quality and 5 for the highest quality)

<sup>(c)</sup> Corresponds to the proportion of respondents that answered 1 to the question (the lowest answer on a 5-point scale)

<sup>(d)</sup> Corresponds to the proportion of respondents that answered 5 to the question (the highest answer on a 5-point scale)

\* % is a percentage of of total respondents.

\*\* Significance is significance sign and level.

Source: Author survey results.

These data show that MTD members tend to be less critical than their colleagues in the ATD with regard to the quality of local institutions. This is reflected not only by the higher proportion that believe the quality of institutions to be good, but also by the greater number that indicated that the quality of institutions to be as high as was possible. There is a particularly significant difference regarding the way the two groups perceive the government sector

In order to identify potential partners and/or key institutions, respondents were asked to indicate the institutions and agencies they consider most dynamic. The universities and academic institutions most frequently mentioned by the ATD are those oriented towards biotechnology — Instituto de Biología Molecular y Celular de Rosario (IBR), Instituto de Investigaciones en Ingeniería Genética y Biología Molecular (INGEBI), Fundación Leloir — and health: Fundación para la Lucha contra las Enfermedades Neurológicas de la Infancia (FLENI). Also listed were the Instituto Balseiro and the Department of Natural Sciences from the Universidad de Buenos Aires, which have a broader range of research and application. The business chamber most mentioned was the Cámara de Empresas de Software y Servicios informáticos (CESSI), which groups software and information service companies. The foundation most mentioned was Endeavor Foundation.<sup>17</sup>

With regard to dynamic government segments, the respondents highlighted (in decreasing order of number of mentions) the Agency for the Promotion of Science and Technology (ANPCyT), the Argentina National Research Council (CONICET), the Ministry of Science and Technology, and the Raíces program. It is worth clarifying that respondents stated that these institutions maintained or have maintained contact with them. However, a comment needs to be made on this issue. The Ministry of Science and Technology leads the list by a wide margin, but most respondents who mentioned having had contact with the ministry specified that these had mainly been informal encounters with the minister himself. Although this indicates the legitimacy the minister enjoys among ATD members, it also raises questions about the sustainability and institutional nature of these connections over time.

In the case of MTD, although respondents emphasized the high quality of institutions, less than half mentioned universities, research centers, companies, and business chambers as being receptive to change, in

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17 For additional information about Endeavor, its history, and activities, see footnote 6.

contrast to the ATD. When Mexican respondents were asked to identify the institutions that could potentially partner with diaspora firms, they tended almost unanimously towards the Tecnológico de Monterrey. Furthermore, 47 percent of respondents believe there is a dynamic segment within the government. When we asked for a list of institutions or agencies they considered to be dynamic, the respondents stressed the Secretariat of Foreign Affairs and the network of consulates and embassies (26 percent), as well as institutions responsible for promoting business with Mexico, such as Proméxico (20 percent). Sixteen percent also noted the importance of CONACYT. Ten percent of respondents mentioned IME, and 7 percent the Secretariat of the Economy.

## ***F. Incentives for Diasporas to Participate in Projects at Home***

If the skills and experience of Argentinian and Mexican professionals residing abroad are to be leveraged, a host of incentives must first be established, and fluid interactions with the diaspora put into place. ATD respondents stressed that they were willing to take part in Argentina's development not only by promoting specific firms, but also by debating policy. A large proportion of respondents were interested in contributing to this process by using the access they have to key figures in Argentina (24 percent); being part of committees that debate promotion policies and incentives for high-technology firms (19 percent); and collaborating in the design and implementation of a program oriented towards the internationalization of local high-technology firms (14 percent).

Members of the ATD are interested in: (1) being involved in government advisory committees to evaluate and propose reforms in areas such as education, and areas related to the specialization profile being promoted by MINCYT; and (2) participating in projects that are promoted by national and international organizations. Slightly less accepted than the above two ways of engagement were participating in programs led by the Ministry of Science and Technology, ECODAR, APARU, CEGA, and the Raíces program. With regard to the rewards that would encourage their participation, 17 percent of respondents stated they were interested in receiving consulting fees, 13.8 percent wanted to be members of the firms' board of directors or advisory committee, and 7.1 percent wished to become shareholders if they were involved in business development. In contrast, MTD respondents showed interest in advising companies and being rewarded for these consulting services (43 percent), but a large proportion (33 percent) also thought it was vital to gain access to key people in government spheres.

When asked about actions the Argentinian government should take or support, respondents expressed a clear interest in two types of poli-

cies that are, in our opinion, complementary. The first set of specified actions were connected to business development and promotion. Establishing specialized business development organizations abroad was the most frequently cited option (14 percent). The other two options were the need to expand support programs for local small and medium-sized enterprises (SMEs) (12 percent), and providing support to SMEs for setting up of offices abroad to launch their businesses globally (seven percent).

A second group of answers included suggestions for actions that would bring local business practices and local businesspeople closer to international best practices and experience. Some 38 percent of these answers mentioned internship programs in leading global companies, visits by entrepreneurs and businesspeople to innovation regions such as Silicon Valley, and visits to Argentina by successful entrepreneurs, executives, and high-level consultants. There was relatively less mention of other more general actions, such as reducing barriers to investment and commerce or establishing commercial visits.

Eighty-one percent of MTD interviewees — regardless of their ages or area of specialization — showed interest in helping firms/entrepreneurs with great potential gain access to international markets for new technologies. The areas in which respondents felt they could help Mexican firms are numerous and varied, but 45 percent mentioned one the following four activities: identification of business opportunities and market analysis (16 percent), technological knowledge transfer (11 percent), business plan development (10 percent), and mentoring activities (9 percent).

A high proportion of the ATD agreed that changes are needed if endogenous capacities are to be developed. According to the respondents, it is fundamental to have a long-term strategy and guaranteed funding for its execution, given that the lack of a coherent mid- to long-term strategic plan is the greatest limitation to technological progress. Respondents suggested that it is easier to create intellectual predisposition to such change than to bring about the change itself. The idea is thus to generate public policies that protect Argentina's science and technology policies from sudden changes by those in charge of implementing them.

Also mentioned: the need to improve the technology transfer mechanisms from universities to the private sector and eliminate bureaucratic barriers for collaboration. The ATD believed it is advisable to implement mechanisms to generate cooperation with public and private organizations abroad, for academia and firms to sponsor joint workshops, and for joint teams with high international competences to generate studies of prospective technology. Some respondents proposed encouraging the inclusion of scientists residing abroad in research activities in collaboration with colleagues based in Argentina; this has begun to occur in recent years. It was also suggested that there

needs to be a policy that will promote Argentinian technological firms abroad, just as Mexico does through its program for promoting its IT industry. Other respondents suggested that it was vital to improve the prestige of business creation within university engineering and science departments, and to develop programs that provide incentives for industrial development, help develop intellectual property, and support business development.

Respondents from the Argentinean diaspora also put forward a set of general recommendations that varied greatly in terms of their agreement with the issues discussed in this section. One point on which respondents seemed to agree is the need for greater financing for science and technology programs, but they also mentioned the need to re-evaluate the way this funding is managed. Almost all the respondents agreed on the need for generating initiatives that allow knowledge-intensive activities to be developed within the framework of a credible long-term plan in which actors and agents are collectively involved. In this vein, almost all respondents remarked on the need to rethink the relationship between universities and private firms, build or strengthen efforts to commercialize technology developed by academia, and launch new technology-based companies. In relation to this, various respondents expressed the need to generate win-win programs in which the technological diaspora and qualified human resources from the home country can actively participate.

With regard to policies, MTD respondents named a wide range of actions that the Mexican government should carry out, possibly working with leading companies in the United States and other leading technological centers. These proposals included the expansion of support programs for SMEs (12 percent), the establishment of specialist business development organizations (11 percent), internship programs in leading global businesses (10 percent), and high-level consulting (10 percent). These four alternatives account for 43 percent of the answers. Respondents who put forward two or more answers predominate over those who provided just a single answer to this question. In terms of the level of acceptance for each of the policies that were proposed to respondents, it is worth pointing out that answers were not related to age or area of specialization, nor was the number of specialties they stated a relevant variable. This means that the suggested policies are representative of all Mexican respondents.

## ***G. Main Results from the Surveys***

ATD and MTD respondents represent significant potential resources for their countries of origin. They might collaborate in the design of new technology and businesses platforms in both countries if policies were pursued to leverage their expertise and networks, working in conjunction with selected local individuals and institutions.

Some noticeable differences between the ATD and the MTD are that the latter is three times larger and has younger members, with a higher percentage engaged in the private sector. In terms of specialization, almost two-thirds of the ATD are engaged in TICs, biotech, or nanotech, while a combination of specializations is more common among the MTD, members of which have a higher proportion of professionals engaged in technology business and the software industry. The age of respondents is a significant variable when identifying ATD members' areas of specialization: younger members tend to specialize in software and older ones in sciences, nanotechnology, and engineering. Age is not significant in the specialization profile of the MTD.

The survey's results also revealed respondents' interest in taking part in various programs in their home country, supporting the development of emerging technologies and new businesses. Furthermore, the interviews undertaken with government employees, researchers, and the private sector in both countries also revealed a wide range of possible forms of cooperation. In both cases, it can be concluded that the possible collaboration of professionals working abroad in leading technological areas could be productive if local counterparts from the public or private sector with considerable absorption capacities are seriously engaged. Although the areas of specialization for their countries of origin suggested by the ATD and the MTD tend to be associated with members' own areas of specialization, both lean towards natural resources. The level of involvement in networks is highly significant for both diasporas, although it is somewhat higher for the ATD and more oriented towards business among the MTD. In turn, MTD members visit their country of origin twice as frequently as their Argentinian counterparts, and these visits appear to be more connected to business.

ATD members do not declare themselves to be members of private networks bringing together Argentinian professionals abroad (ECODAR, CEGA, APARU) or public networks (Raíces), while members of the MTD emphasize institutional constructions associated with networks such as IME and Red de Talentos. However, the effectiveness of these interactions appears to be limited. In this regard, despite the MTD recognizing institutional constructions, only a very small proportion of respondents is well informed about opportunities in the home country. In the case of the ATD, little connectivity was observed between respondents and government agencies responsible for promoting science, technology, and new businesses in the country. However, budding business and contact networks were observed between ATD members and local businesspeople. These have taken the shape of informal groups and institutional constructions independent of government agencies, both of which are highly promising.

In both cases, respondents suggested it is desirable to leverage the knowledge of professionals residing abroad and to integrate diaspora members into activities in the country without attempting to get them

to return to the country. Both surveys reveal that the participation of professionals in consulting and mentoring activities, policy recommendations, and advisory committees and discussion groups could be very significant in terms of their collaboration with local ecosystems, in particular in globalization processes. According to the respondents, promoting relationships and institutionalizing the role of the diaspora in these activities is a major opportunity for local technology-based firms.

Furthermore, the involvement of diaspora scientists and technologists could derive from the design of specific policies oriented towards the promotion of entrepreneurial activities, which could include visits, expanding (MTD) or starting (ATD) business accelerator projects abroad, and mentoring, among other things. For the MTD, IME, Red de Talentos, and TechBA are all examples of intervention and intermediation that aim to channel diaspora capacities and competences into concrete, productive commercial projects. Respondents stressed that these institutions have the legitimacy necessary to create open dialogue and develop greater institutionalization in this area in the future. However, to date, there seems to be limited evidence of solid results.

## IV. Conclusions and Policy Recommendations

In this chapter we studied the talent networks of Argentina and Mexico, and their interaction with their countries of origin. We interviewed local entrepreneurs, scientists, technologists, and government officials from both countries. We also surveyed both diasporas to evaluate their characteristics and explore existing and potential interactions with local ecosystems to build more competitive technology-based businesses.

As expected, there are some differences and many similarities in the diasporas' main characteristics and in their relationships with their home countries. Similarly, Argentina and Mexico have some similarities in their science and technology policies, and in the role they assign to their professional diasporas in their current policies. Overall, the MTD is larger and younger than the ATD. The MTD is also more engaged in IT and technology-based business. The Mexican government has organizations engaged with the diaspora, such as Red de Talentos and IME, and business incubators in various locations (Silicon Valley, Madrid, Vancouver, and several US locations). The Argentinean Ministry of Science and Technology has an organization, Raíces, which deals with the diaspora, its main focus being talent repatriation. There are several private Argentinean diaspora organizations in the United States and Europe. Particularly noteworthy is ECODAR, launched by several Argentinean

professionals at home and in the diaspora, which builds partnerships with local players in industry and academia to globalize their efforts and commercially leverage locally generated knowledge. On the other hand, neither country has yet made substantial progress in leveraging their diaspora to build a strong knowledge-based economy. Below we present our thoughts on why only limited progress has been achieved, and provide some recommendations for future policies.

Neither country is strongly integrated in global knowledge value chains, in spite of some outstanding work by locals and diaspora members. Integration requires some critical size of expertise in certain technical areas linked with leading global players in academia and industry. Although there are a few areas of scientific and/or technical excellence in both countries, they usually fail to leverage these advantages to generate solid commercial value. Diaspora members can provide some of the missing pieces, and usually show initial interest in engaging with colleagues in their country of origin, but they do not have enough incentives to make the mid- or long-term engagements required to successfully complete complex projects, and are often frustrated early in the process when dealing with bureaucratic organizations and cumbersome procedures in their home countries.

In Argentina, two returning diaspora members — Lino Baranao and Ruth Ladenheim — have been instrumental in raising the credibility of the National Science and Technology Agency and making the case for transforming it into the Ministry of Science, Technology, and Productive Innovation and increasing its budget. As in the Russian case, described in Chapter 8, it is high-profile individuals who make an impact; in general, both our findings and recommendations are similar to those regarding the Russian diaspora. We believe that substantial emphasis should be placed on brain circulation (rather than in brain return) and in joint projects with the diasporas that have simple rules and procedures. As shown by many researchers, for over 20 years diasporas from countries such as India, China, and Israel have played key roles in the positive evolution of knowledge-based economies in those countries. Only recently, when conditions at home (e.g. in China) became more favorable to successfully absorbing some of the talent abroad, did a small percentage of key contributors from Chinese professional diasporas begin returning to the native country.

To this end, we propose that instruments (such as grants awarded as prizes to the ten leading projects in certain area of interest) be created to stimulate joint projects, involving distinguished local players and key diaspora contributors that can impact the global market. The projects may involve collaboration between top players in academia and industry from either Argentina or Mexico, and leading global players. These joint projects require teams to be executed. We believe team excellence should be the central criterion to award prizes. The goal is that an international committee of experts, for example, selects

a limited number of high-quality projects with a strong chance of competing in the global arena. The prizes should be substantial and competitive with grants awarded by the United States, the European Union, and so on. Some possible ways to do this include the contest model proposed by Lev Freinkman et al. in Chapter 8, and a variant of the Bird Foundation model,<sup>18</sup> which has been quite successful in enhancing collaborations of technology-based companies in Israel with leading US partners.

Our central recommendation is to incorporate skilled diaspora members into the everyday practices of science and technology ministries and agencies. For instance, those agencies are now opening up selection procedures and monitoring practices to include international experts. Relevant diaspora members could be considered international experts who have the added advantage of knowing their home countries.

Another recommendation is building human capital at home and abroad to drive a strong knowledge-based local economy that has strong global connectivity. This involves building a strong STEM background in K-12 and college students, and promoting brain circulation and study-abroad grants. Collaboration grants could have outreach components to generate public enthusiasm in STEM. Diaspora members can help with this endeavor by, for example, supporting exchange programs and internships, and providing short courses at their home country institutions. Similarly, we believe that encouraging top graduate and upper undergraduate students to continue their studies in top science and technology centers in the United States, Israel, etc., and young entrepreneurs to spend a “sabbatical” term at leading innovation firms in Silicon Valley, Israel, etc., would be a strong investment for the countries, even though many of these students or entrepreneurs may decide to reside abroad. This is because, as discussed in this work and by other authors, leveraging the scientific and technological diaspora and building good connections between organizations where diaspora members can have some say within top home institutions can create high value for the country and help build strong ecosystems integrated with the global value chain. 

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18 See Israel-U.S. Binational Industrial Research and Development (BIRD), “The BIRD Model,” [www.birdf.com/?CategoryID=54&ArticleID=375](http://www.birdf.com/?CategoryID=54&ArticleID=375).

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# CHAPTER 8

## LINKING TALENT ABROAD WITH A DRIVE FOR INNOVATION AT HOME: A STUDY OF THE RUSSIAN TECHNOLOGICAL DIASPORA

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### Introduction: Study Objectives

Russia's science and technology diaspora is too visible and successful to evade attention from home. However, the public debate in Russia so far has been focused almost exclusively on return migration and on the science diaspora, rather than on successful techno-entrepreneurs. The primary objective of this chapter is to help to refocus the debate on "brain circulation" — that is, facilitation of business links between high-tech entrepreneurs in the diaspora and at home — and thus to better understand the current demand in the diaspora for stronger contacts of this kind, as well as to identify the existing barriers that hamper such cross-border business contacts.

Another objective of our analysis is to identify a number of success stories in the diaspora and the key people behind them — so-called "overachievers" (successful individuals in a position to share their professional success with the business community in the home country). These people may become a core of future diaspora networks that could be instrumental in upgrading the nature of Russia-diaspora cooperation. As the experience of other countries suggests, such networks could potentially support Russia's various initiatives in the area of innovation policy, including the promotion of early-stage venture capital, innovation start-ups, and spin-offs.

The immediate research objectives of the project were to:

- Learn the extent of the diaspora's interest cooperating with Russian partners
- Understand the emerging formats of such cooperation
- Identify factors that may influence the diaspora's interest in getting engaged
- Develop recommendations for government policy.

To achieve these objectives, our research included:

- An online survey of Russian technological and scientific diasporas
- Face-to-face interviews with selected diaspora "overachievers," as well as with government officials responsible for the country's science and technology policies.

## I. The Scope of the Russian Skilled Diaspora in OECD Countries: Ballpark Estimates

This section presents some very rough estimates on the number of skilled Russian migrants. It is based primarily on sources from the Organization for Economic Cooperation and Development (OECD),<sup>1</sup> in particular the one-time OECD census of the foreign-born population undertaken in 2000, and additional data on annual migration flows. To the best of our knowledge, this is the best dataset on this issue.

Still, these are highly imperfect estimates for two primary reasons. First, the 2000 data are clearly outdated, and do not reflect the change in migration patterns in Russia during the economic boom of 2000-08. Significant improvements in Russia's economic conditions, including growth in dollar wages (in excess of 20 percent a year on average) and improved funding of educational and research and development (R&D) activities, may have had a profound impact on net migration outflows in recent years. However, the scale and even the direction of such change are not easy to estimate. On the one hand, improved domestic opportunities clearly reduced the migration premium for skilled labor, and may have slowed the outflow of mature professionals, as well as stimulated the return of earlier migrants and "brain circulation." On the other hand, various political developments under President

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1 See Organization for Economic Cooperation and Development (OECD), OECDstats, <http://stats.oecd.org/wbos/Index.aspx?usercontext=sourceoecd>.

Vladimir Putin alarmed some segments of Russia’s educated class and further fueled interest in migration. In addition, the recent boom was marked by major growth in the number of Russians enrolled in tertiary education in the OECD countries (at both undergraduate and graduate levels).

The second critical deficiency of the OECD data relates to the fact that they do not cover Israel, a key migration destination for skilled Soviet and Russian labor until approximately the mid-1990s. We would guess that Israel is potentially home to about one-third of skilled Russian-speaking migrants who were registered in OECD countries in 2000.

Table 1 presents the data on annual inflows of registered Russian migrants to OECD countries. The average migration inflow for the period from 1996 to 2006 amounted to about 85,000 per year. There has been a clear decline since 2002. The 2006 immigration flow declined by 30 percent from its all-time high in 2002.

At the same time, the migration flow became much more diversified by destination country. At the beginning of the period, migration to Germany and the United States constituted the bulk of migration to OECD countries (the combined share of these two countries was 75 percent in 1996). In 2006 these two countries’ share declined to 40 percent. The drop was due primarily to Germany’s shrinking share, which halved to 23 percent of the total.

**Table I. Emigrants from Russia (Inflows of Foreign Population by Nationality) into OECD Countries (thousands), 1996-2006**

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Average
Germany	33.70	28.93	26.41	32.84	32.73	35.93	36.48	31.78	28.46	23.08	17.08	29.77
US	19.66	16.62	11.52	12.32	16.94	20.31	20.77	13.94	17.41	18.08	13.19	16.43
TOTAL OECD	71.27	65.95	67.88	72.25	89.75	106.97	108.32	90.89	94.86	87.19	75.57	84.63

Source: Organization for Economic Cooperation and Development (OECD), *International Migration Database*, <http://stats.oecd.org/Index.aspx?DatasetCode=MIG>.

Table 2 presents some characteristics of the Russian emigrant population, as reflected in the 2000 OECD census. The main highlights of this structure could be summarized as follows:

- About 1.5 million people were registered in OECD countries as migrants from Russia. Sixty-one percent resided in Germany and 19 percent in the United States.
- About 65 percent of all Russian emigrants were of primary working age (25-64).
- About one-quarter (380,000) could be considered highly skilled, i.e., having a tertiary degree (which corresponds to educational levels five and six of the International Standard Classification of Education (ISCED) by UNESCO). However, there is considerable cross-country variation by education level. More than half of Russian immigrants in the United States are highly skilled, compared to only 17 percent in Germany.
- Eighty percent of all skilled Russian migrants in OECD countries resided just in two of those countries, the United States and Germany. As of 2000, these two countries had roughly similar numbers of Russian immigrants (about 155,000 each) who were skilled migrants, but showed drastically different dynamics.
- About 65 percent of skilled immigrants (247,000) were employed at the time of the survey.
- Only about 14 percent could be considered new immigrants, which is defined as having been in the destination country for less than five years by the time of the survey. But the structure of this new inflow was quite different from the overall immigrant population. It was much more educated and more US-centered. Among new immigrants 41 percent were highly skilled, versus 25 percent in the sample on average. The share of the United States in the new inflow was about 41 percent, compared to only 19 percent on average for the entire sample. Overall, the data suggest a dramatic decline in the popularity of Germany as a destination for Russians, especially among skilled migrants.
- On average, skilled migrants left Russia more recently. Twenty-three percent of all skilled migrants were in the destination country for less than five years, while in the entire sample only 14 percent were new immigrants.

**Table 2. Structure of Russian Immigrant Stock in OECD Countries (thousands), 2000**

	Stock of All Russian Immigrants	Working-Age (25-64) Immigrants	Share of Working-Age, 25-64	Skilled Migrants*	Share of Skilled Migrants	Employed Skilled Migrants	Share of Employed Skilled Migrants	All New Immigrants, < 5 years	Share of New Migrants	New Skilled Immigrants, < 5 years	Share of Skilled Migrants in New Inflow	Share of New Migrants of Skilled Migrants in Pool
Immigrants from Russia	1524.4	989.3	64.9%	379.6	24.9%	246.9	65.0%	207.4	13.6%	85.7	41.3%	22.6%
in US	287.5	184.9	64.3%	152.9	53.2%	97.4	63.7%	85.7	29.8%	48.1	56.1%	31.5%
in Germany	929.8	614.6	66.1%	155.2	16.7%	92.4	59.5%	53.3	5.7%	5.6	10.5%	3.6%
Immigrants from FSU	87.6	60.7	69.3%	32.5	37.1%	22.8	70.2%	12.5	14.3%	7.2	57.6%	22.2%
US share	18.9%	18.7%		40.3%		39.4%		41.3%		56.1%		
German share	61.0%	62.1%		40.9%		37.4%		25.7%		6.5%		

\* The definition of skilled migrant is someone reaching educational levels five and six of UNESCO's the International Standard Classification of Education (ISCED).

Source: OECD, International Migration Database.

Finally, based upon some bold assumptions, we tried to estimate the current stock of skilled Russian migrants in OECD countries. The assumptions were as follows: The annual inflow of migrants in 2001 to 2008 was at the same average level as it was in 1996 to 2006, i.e. 85,000. The share of skilled migrants in this flow was at the same average level as in 1996 to 2000, i.e. 41 percent.

This would mean the overall 2001 to 2008 inflow of new skilled migrants to OECD countries was 280,000. Taking into the account the 2000 stock, and assuming some retirement of earlier migrants and a modest rate of return to Russia, our best estimate of the current stock is 650,000, out of which about 450,000 are employed. More than half likely live and work in the United States. We would also guess that Israel might be home to additional 150,000 to 200,000 highly skilled people of Russian origin.

Table 3 presents a summary of official Russian statistics, published by the government agency Rosstat, on labor migration. These are the best data from Russian sources we were able to locate. The main features of this dataset could be summarized as follows:

- Russian labor outflow has been growing steadily, from about 46,000 people a year in 2001 to 73,000 a year in 2008.
- About half of all migrants move to work in the developed countries of Europe, the United States, and Canada. Meanwhile, labor migration to Europe has been somewhat stable recently, while migration to the United States and Canada shows a strong trend towards expansion.
- Most reported migrants (more than 80 percent) are male.
- About one-third of all Russian labor migrants have a university degree.
- The prominent feature of the Rosstat dataset is that it captures largely short-term migrants. The share of those who intended to stay abroad for more than a year was less than 8 percent in 2008,<sup>2</sup> indicating that registered migrants are mainly the people who have short-term contracts and are likely to return to Russia after the contract ends.

The Rosstat dataset has two obvious limitations:

- It reflects only officially registered labor migrants; namely, people who explicitly report that their reason for leaving Russia is that they have labor contracts with foreign employees. As such, these statistics would not capture three important channels of labor migration: a) studying abroad and

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2 This may be an underestimation of actual intentions. Migrants may have incentives to hide their real reasons for staying abroad for longer periods of time.

staying after graduation, b) explicit emigration (without a labor contract), and c) labor migration labeled as tourism (e.g., “I went to see friends abroad for a week and stayed forever”). For these reasons, the above data may underestimate the actual migration outflows.

- At the same time, the reported data contain a lot of double-counting because almost 70 percent of all people registered as labor migrants leave for less than six months. Many of these people are seasonal migrants who go back and forth every year and as such do not contribute much to the increase in the stock of Russian migrants abroad. A prominent example of such migrants is Russian crews on foreign ships. For this reason, the Rosstat data overestimate the net migration outflow.

These two biases may to some extent balance each other. If one makes the bold assumption that the two biases perfectly match each other, then it is possible to produce a rough, conservative estimate for the current number of Russian migrants staying abroad. To do this we would assume that the average annual labor outflow for the last 20 years was about 50,000 people (the average for 2000-04 in the Rosstat data set). This would result in a ballpark estimate for the current stock of new Russian emigrants of 1 million people, out of which skilled migrants would constitute about one-third, or 300,000 to 350,000. This is considerably less than the earlier estimate of 650,000 people derived from the OECD data. Because more reliable data are not available, these two numbers together may be useful in identifying a potential range of possible estimates.

**Table 3. Number and Characteristics of Russian Citizens who Left to Work Abroad, Annual Flows, 2000-08**

	2000	2005	2008
<b>Total number of labor migrants (thousands)</b>	<b>45.8</b>	<b>60.9</b>	<b>73.1</b>
By destination (%)			
Europe	48.3	36.0	28.5
Asia	37.9	31.4	24.3
Cyprus	18.0	17.2	11.1
USA	2.5	12.2	18.7
By education (%)			
Share of university graduates	36.8	34.3	33.6
By length of stay abroad (%)			
less than 6 months	24.4	49.7	68.8
6-12 months	35.6	32.1	23.3
more than 1 year	38.0	18.2	7.9

Source: Rosstat, *Labor and Employment in Russia in 2011*, Statistical handbook (Moscow: Rosstat, 2011): 308-11.

## **A. The Russian Skilled Diaspora in a Cross-Country Perspective**

A paper by Frédéric Docquier and Abdeslam Marfouk provides a useful global perspective on the incidence of Russian skilled migrants. Their estimates suggest that in 2000, Russia had a relatively large stock of such migrants in OECD countries (263,000), making Russia the 19th largest source country in the world.<sup>3</sup> At the same time, the emigration rate, at 1.3 percent among Russian citizens with tertiary education, was among the lowest in the region (and the 11th lowest emigration rate in the global sample). By comparison, the emigration rate of the skilled population for Poland, Romania, and Hungary exceeded 10 percent in 2000, which means that at least one in every 10 university graduates in these countries had moved abroad by 2000. These data suggest that as recently as in the 1990s the mobility of Russian skilled labor, despite all the dislocations and shocks associated with early transition, remained

3 Docquier and Marfouk in their estimates consider only those who emigrated from Russia after 1991, when it became an independent state. In their study, all pre-1991 emigration from the Soviet Union is treated separately, which leads, in our view, to at least a 50 percent underestimation of the stock of Russian migrants. This bias, however, would not much change the nature of their main observations about Russia's emigration rate during the 1990s. Frédéric Docquier and Abdeslam Marfouk, "Measuring the International Mobility of Skilled Workers (1990-2000)" (World Bank Policy Research Series paper 3381, August 2004), <http://elibrary.worldbank.org/content/workingpaper/10.1596/1813-9450-3381>.

relatively low by global standards.

Moreover, within the global migration system, Russia plays a much more prominent role as a destination country for migrants from the rest of the former Soviet Union (FSU) and some countries in Asia than as a source of migrants itself. Devesh Kapur and John McHale, using UN data, point out that by 2000 Russia had become home to 13.3 million migrants (9 percent of its population), making it the second largest destination country in the world for migrants after the United States.<sup>4</sup> It is worth pointing, however, to essential differences in the skill structures of Russia's immigration and emigration flows. While Russia exports significant quantities of skilled labor, its labor inflows are considered to be predominantly low-skilled (primarily construction, retail, and agriculture workers). At the same time, while the exact share of professionals among new immigrants to Russia is unknown, there is anecdotal evidence that in large Russian cities skilled migrants hold an increasingly large share of jobs in education, health care, and engineering (particularly in housing construction and housing maintenance services).

Another important observation by Docquier and Marfouk is that 60 percent of all skilled migrants worldwide are based in the United States. Thus, studying the pool of skilled migrants in the United States is often sufficiently informative for making broader conclusions about global trends in the stock of such migrants. And US labor statistics and specialized diaspora surveys often provide additional insights on the current trends in Russian skilled migration.

It is worth noting that public perception of the scale of Russian skilled migration and its impact on the domestic economy is much more negative than the above migration statistics would suggest. Russian domestic debate tends to portray the country's brain drain as a catastrophe, and this perspective seems to be shared by many international observers. A global competitiveness study by the International Institute for Management Development (IMD) reflects this pessimistic assessment in its Brain Drain Index, which places Russia in the 60th position, the bottom of the sample, meaning Russia is considered the most affected among the group of OECD and leading developing countries. At the same time, Russia is rated relatively highly (28th) among places that are attractive to foreign high-skilled people (see Table 4). The existence of this gap between being attractive for skilled foreigners and unattractive to skilled locals (whose emigration causes a massive brain drain) makes Russia's position in the *World Competitiveness Yearbook* (WCY) somewhat unique, and even bizarre. In our view, this gap is largely explained by inflated perceptions of the damage caused by the

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4 Devesh Kapur and John McHale, *Give Us Your Best and Brightest: The Global Hunt for Talent and Its Impact on the Developing World* (Washington, DC: Center for Global Development, 2005). The more recently quoted estimate is that Russia hosts almost 15 million new migrants, mostly from the countries of the former Soviet Union.

actual brain drain, which are not consistent with the available data on the scale of Russian skilled emigration.<sup>5</sup>

**Table 4. Brain Drain and Foreign Labor Indices, Ranks for Selected Developing Countries**

	Brain Drain Index: Does Brain Drain Undermine Country Competitiveness?	Foreign Labor Index: Is the Country Attractive for High-Skilled Foreigners?
India	21	32
Brazil	30	29
Hungary	36	18
Slovakia	42	45
Mexico	45	39
Poland	49	50
Argentina	53	59
Romania	56	55
Russia	60	28

*Note:* The sample includes 60 countries and territories.

*Source:* International Institute for Management Development (IMD), *World Competitiveness Yearbook* (Lausanne: IMD, 2005).

Table 5 presents data on the number of foreign PhD recipients in the United States in 2002 to 2008 and on their intentions to stay in the United States after receiving their doctorate. Russia holds the 10<sup>th</sup> position in this ranking, with 195 average annual new PhD holders. This is quite a modest share of the US market for new PhDs, which is 18 times smaller than the number of new PhDs held by Chinese citizens and seven times less than the numbers of PhDs obtained by Indians and South Koreans. Moreover, the number of PhD recipients from Russia did not show a trend toward growth. In fact, the number declined in 2008 to 171, below the average for the period in question, while the numbers of new PhD holders from Asian countries, especially from China and India, increased.

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5 These estimates may need a caveat. They come from the survey of international corporate managers who have been doing business in Russia. This group has been commonly known for being rather pessimistic about Russia with respect to almost everything except their own business prospects. Our own survey results have revealed the same pattern in perceptions.

**Table 5. Temporary Visa Holders among Doctorate Recipients in US and Their Intention to Stay in US after Doctorate Receipt, by Country of Citizenship, 2002–08**

	Number of Foreign-Born PhD Recipients in US	% Staying in US
China	25,037	89.6
India	9,627	87.9
South Korea	9,549	64.6
Taiwan	4,579	53.0
Canada	3265	57.2
Turkey	3062	61.2
Thailand	2,329	22.5
Japan	1,750	51.1
Mexico	1,486	45.8
Russia	1,364	80.5
Germany	1,346	62.9
Brazil	1,127	40.9
Argentina	717	64.7
Chile	428	36.2

Source: National Science Foundation (NSF), “Doctorate Recipients from U.S. Universities: Summary Report 2007-08,” [www.nsf.gov/statistics/nsf10309/start.cfm](http://www.nsf.gov/statistics/nsf10309/start.cfm).

At the same time, the Russian PhD holders’ “stay” rate (intentions to stay in United States after graduation) of 80.5 percent is higher than for most other countries, except for India and China. The average five-year stay rate of PhD recipients in the United States in 2005 reached 68 percent, its highest level up to that date.<sup>6</sup> Overall staying rates in the United States have traditionally been high even for high-income OECD countries such as Germany and Japan, which emphasizes the attractiveness of the US labor market for global talent.

The above data suggest that recent growth in the stock of Russian skilled migrants in the United States has been only marginally dependent on young people who went to America to complete their education and then decided to stay. The number of new Russian PhD holders in the United States is drastically smaller than the annual inflows of skilled migrants, even by the most conservative estimates. The profile of a typical Russian migrant with an academic degree is quite different from typical profiles of migrants from many other source countries, especially from Asia; educated Russians living in the United States are the people who completed their education in Russia and moved to the United States not as students but as professionals, often, but not necessarily, young. For those in academia it

6 Michael G. Finn, “Stay Rates of Foreign Doctorate Recipients from U.S. Universities, 2005” (report prepared for the Oak Ridge Institute for Science and Education, 2007), <http://orise.ornl.gov/files/sep/stay-rates-foreign-doctorate-recipients-2005.pdf>.

usually means accepting a postdoctoral position at an American university as an entry point to the US labor market.

It is commonly believed that the above peculiarity of educational background among Russian migrants makes a major difference in their career prospects.<sup>7</sup> Lack of an American doctoral degree and relatively late arrival makes Russians less integrated into the US academic labor market and generally less competitive. Twenty years since the major liberalization of Russian migration policy, many observers comment that Russian researchers in the United States are disproportionately concentrated at the lower end of the research hierarchy, holding temporary jobs and not able to advance to the positions of permanent professors and managers of independent research project.<sup>8</sup> As a result, because Russian emigrants have relatively fewer people in managerial positions, their combined influence on the research and cooperation policies of their organizations is more limited than their gross numbers could suggest. Overall, this would considerably reduce the potential of the Russian diaspora to cooperate with Russia effectively from the home country perspective.

If one looks at the overall number of Russian students enrolled in universities in OECD countries, there is also little evidence of major growth in enrollment, and therefore no potential for either a major expansion in the number of Russian skilled migrants in the near future or a significant shift in the population's current qualitative structure. According to the OECD Education Database, there were about 36,600 Russian university students in OECD countries in 2007, about 1.4 percent of the total number of foreign students. This is a modest number relative to the students from China (15.2 percent of the total) and India (5.7 percent of the total). While the number of Russian students shows a drastic increase relative to the early and mid-1990s, its recent rate of expansion was moderate, about 16 percent for the entire period of 2004-07. This is lower than the average growth rate in the total number of foreign students in OECD countries, which was almost 10 percent a year in the middle of the previous decade.

It is worth noting that the geographical distribution of Russian students in OECD countries is rather different from students who come from Asian countries. Russian students are much more concentrated in continental Europe, especially in Germany, which is home to one-third of Russia's total foreign student population. Students from China and

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7 S.V. Egerev, "Resource of the Russian science which is abroad," *Resources of Russian regions*, No 5 (2000); S.V. Egerev, "New Russian science diaspora: summing up the recent 15 years," in *Issues in history and the present day of the Russia abroad* (Moscow: The Institute of Universal History, Russian Academy of Science, 2007): 11-25.

8 One of the participants at the Russian academic Internet forum provided the following evaluation of the current situation of Russian representation in US academia in 2009: A dozen have managerial positions, a few dozen have established themselves as leading research figures, a few hundred have positions as professors, while thousands remain with temporary contracts and work as academic helpers ("na podhvate").

India more often chose to study in the United States and the United Kingdom. For instance, 23 percent of Chinese foreign students are in the United States (compared to only 14 percent of Russian students), and only 7 percent are in Germany. This difference in destination preferences seems to have a significant effect on expected students' return rates after graduation. Much more flexible labor markets in both the United States and United Kingdom provide more opportunities for foreign students who want to remain. Thus, the current strength of the Russian student body abroad and its geographic patterns do not suggest possibilities for rapid future growth in the total number of skilled migrants through an inflow of younger and better-integrated newcomers.

Available US statistics show that rapid growth in the number of foreign students in the United States who study science and engineering has been one of the key drivers for simultaneous growth in the number of foreign-born employees who work at technology companies (see Table 6).

**Table 6. Science and Engineering Graduate Student Enrollment and Employment in STEM (Science, Technology, Engineering, and Mathematics) Occupations**

Science and Engineering Foreign-Born Graduate Student Enrollment			
Year	1985	1995	2005
Foreign-born enrollment	79,940	102,885	146,696
Total enrollment	404,021	499,640	583,226
Foreign-born share	19.8%	20.6%	25.2%
Employment in STEM Occupations by the Foreign Born			
Year	1980	1990	2000
Foreign-born employment	284	542,000	1,150,000
Total employment	3,459	5,046	6,871
Foreign-born share	8.2%	10.7%	16.7%

Source: David M. Hart, Zoltan J. Acs, and Spencer L. Tracy, Jr., "High-tech Immigrant Entrepreneurship in the United States" (report developed for the Corporate Research Board, LLC, Washington, DC, July 2009), <http://archive.sba.gov/advo/research/rs349tot.pdf>.

Several studies of diaspora entrepreneurship in the United States suggest that on average, educated immigrants with science and engineering backgrounds are highly entrepreneurial, and that they have made a major contribution to the formation of new companies in the American high-tech sector over the last 20 years. However, these studies did not identify any significant presence of entrepreneurs from Russia and the FSU, especially when compared to a very visible presence of entrepreneurs from China, India, and other Asian countries.

David Hart et al. report the results of a recent survey of a nationally representative sample of rapidly growing, high-impact high-tech companies (HIC)<sup>9</sup> in the United States.<sup>10</sup> This group of companies accounts for a disproportionate share of job creation and economic growth. They found that about 16 percent of the companies in the sample had at least one foreign-born person among their founding teams. This estimate, which is lower than several previous studies of high-tech immigrant entrepreneurship in the United States,<sup>11</sup> still shows that immigrants play a crucial role in this vital economic activity. An important peculiarity of immigrant-founded companies in the sample is that they are about twice as likely as native-founded companies to state that they have a strategic relationship with a foreign firm, such as a major supplier, key partner, or major customer. This observation once again points to the attractiveness of diaspora-run businesses as a source of potential partners to firms in developing countries.

The 250 foreign-born entrepreneurs on whom this study collected data came from 54 countries in all regions of the world. India is the largest source country, accounting for 16 percent of this group, followed by the United Kingdom at 10 percent. Russia is of the source of 2.8 percent of the entrepreneurs (seven firms out of 250), which is not exceptionally high.

An analysis undertaken by AnnaLee Saxenian and Kyoung Mun Shin focuses on the role of emigrants in the transformation of Silicon Valley in the last third of the 20th century.<sup>12</sup> By 2000 more than half of the engineers and scientists working in Silicon Valley (53 percent) were foreign-born, compared with fewer than 10 percent in 1970. The dramatic labor market transformation became a critical source of the region's competitiveness in high technology in the 1980s and '90s. Foreign-born technology workers have also become a resource for local companies for developing global connections, promoting export, and investments. This change was driven by important changes in national immigration poli-

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9 A high-impact high-tech company (HIC) is a firm whose sales have at least doubled over the most recent four-year period and which has an employment growth quantifier of two or greater over the same period. There were 376,605 HICs (approximately 2.2 percent of all companies) in the United States between 2002 and 2006.

10 David M. Hart, Zoltan J. Acs, and Spencer L. Tracy, Jr., "High-tech Immigrant Entrepreneurship in the United States" (report developed for the Corporate Research Board, LLC, Washington, DC, July 2009), <http://archive.sba.gov/advo/research/rs349tot.pdf>.

11 Among founders of larger and generally more successful high-tech companies the role of emigrants may be even higher. Wadhwa et al. found that 25 percent of high-tech companies founded between 1995 and 2005 that had achieved more than \$1 million in sales or employed more than 20 people had CEOs or chief technical officers (CTOs) who were born abroad. And immigrants were CEOs or lead technologists in 52 percent of Silicon Valley start-ups. Vivek Wadhwa, AnnaLee Saxenian, Ben Rissing, and Gary Gereffi, "America's New Immigrant Entrepreneurs, Part I" (Duke Science, Technology & Innovation Paper No. 23, Duke University School of Engineering, January 2007), [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=990152](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=990152).

12 AnnaLee Saxenian and Kyoung Mun Shin, "Immigration and the Transformation of the Silicon Valley Labor Force: 1970-2000" (presentation to the Organization of American Historians annual meeting, San Jose, CA, April 1, 2005).

cies, the openness of American universities to qualified foreign students, the tendency of immigrants to concentrate geographically, and the growing demand for skills in Silicon Valley. In the 1990s all the growth in the high-tech workforce in Silicon Valley was due to immigrants, largely from Asia. European immigrants contributed about 14 percent of the total increase in the foreign-born labor force in the high-tech industry in the '90s. Some fraction of this European inflow is clearly of Russian/FSU origin, but Russia is not shown in this analysis as a separate source country. In the authors' view, Russian entrepreneurs in Silicon Valley, in contrast to several other migrant groups, have never played a sufficiently large role to deserve a more detailed analysis.<sup>13</sup>

Our reading of the available data on American high-tech entrepreneurs of foreign origins seems to support the hypothesis that in per capita terms, Russian skilled migrants are less entrepreneurial, as measured by the number of successful new companies they established, when compared to their peers from several Asian and European countries. This observation is fully consistent with the analysis of large-scale skilled migration from Russia and the FSU to Israel, where in the last two decades these migrants formed a considerable portion of total employment in the booming IT sector. However, the number of new high-tech companies established by these migrants is considered to be negligible.<sup>14</sup> And this makes the latest wave of Russian emigrants quite different from Russians who came to the United States in the pre-communist era (before 1917), who were seen as highly entrepreneurial.

It is worth mentioning that we do not consider this weaker entrepreneurial drive among recent Russian emigrants as a common feature of the entire Russian population, a kind of anti-business legacy of the communist system. Overall, over the last two decades, there has been an improvement in the supply of entrepreneurial skills in Russia. In the IMD global competitiveness survey the quality of entrepreneurial skills in Russia is rated relatively high: Russia holds the 36th position in the sample of 60 countries and locations.<sup>15</sup> This is reasonably close to the entrepreneurial ranks of India (32) and South Korea (28), and significantly above, for example, Argentina (56), Germany (49), and Japan (59). The issue seems to be related to some anti-entrepreneurial self-selection bias among Russian skilled migrants. Our own hypothesis, which got considerable support from our interviews, is that Russia's transition in the 1990s was a time of great business opportunity at home for entrepreneurial types of all sorts who had varied educational backgrounds. Thus people with entrepreneurial skills had lower incentives to leave Russia during that period. In contrast, those

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13 From private communication with the authors.

14 Dan Breznitz, *Innovation and the State: Political Choice and Strategies for Growth in Israel, Taiwan, and Ireland* (New Haven, CT: Yale University Press, 2007).

15 International Institute for Management Development (IMD), *World Competitiveness Yearbook* (Lausanne: IMD, 2005). For most institutional indicators Russia ranks in the bottom quintile.

with a stronger interest in migration were driven not as much by new business opportunities abroad as by a desire to continue their established professional (non-entrepreneurial) career, opportunities which deteriorated drastically in Russia in the 1990s due to budget squeezes and institutional changes. And those who actually emigrated looked for possibilities that allowed them to stay within their established academic and engineering careers, and their employment of choice was with universities and large corporations but not with start-ups.<sup>16</sup>

Our conclusion from the available research on skilled diasporas in the United States and elsewhere is that key characteristics of the Russian diaspora are likely to be considerably different from those of much larger diaspora groups of Asian origin — specifically, those from China, India, South Korea, and Taiwan — on which this literature has largely been focused.<sup>17</sup> We expect that, due to the reasons discussed earlier in this section, the Russian diaspora is on average less professionally advanced and less integrated into the respective specialized labor markets in the United States. While Russian emigrants to the United States have on average a higher level of education and academic credentials, they remain under-represented at the management level in both academia (at the department chair level) and especially high-tech business (as managers and founders of new, dynamic high-tech companies). This may, again on average, limit both their interest in cooperation with Russia (the benefits of which could be seen as too risky) and their ability to influence their organizations in favor of such cooperation. At the same time, this conclusion about “averages” does not mean there may not be groups of overachievers who may have considerably different motivations.

From the level of both professional advancement and self-organization, the following simple classification of skilled diasporas may be seen as an informative:

- China, India, South Korea, Taiwan – advanced diasporas, with members who collectively control significant amounts of investment and managerial resources
- Russia, Argentina, Iran – intermediate cases with much weaker organizations and less prominence at the senior managerial level
- Mexico, Philippines – relatively young but rapidly growing skilled diasporas.

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16 I. Dezhina, “Hunt for heads: Would Russian scientists come back from America?” (mimeo, 2008).

17 This statement requires qualification. Not all large Asian diaspora groups are similar. For instance, the Philippines’ diaspora is massive and well established. Historically it used to be largely a low-skilled diaspora. Its high-skilled segment has been growing recently, but still remains relatively young and less established and prominent when compared to several other skilled diaspora groups.

## **B. Recent Studies of the Russian Academic Diaspora**

Over the last few years, several studies were undertaken in Russia to explore the prevailing motivation and attitudes of Russian skilled migrants. The peculiar feature of this research is its focus on academics (scientists whose primary employer is a noncommercial entity). This analysis was based on either mailed-in surveys or face-to-face interviews, and commonly the samples and response rates were rather low.<sup>18</sup>

Sergey Egerev argues that oft-cited numbers of scientists of Russian origin who work abroad are highly inflated.<sup>19</sup> This is because they reflect the professional background of emigrants but not their current employment status. In reality, as he claims, most these migrants, especially in Germany and Israel, were unable to obtain a research position and had to change their professional occupation. In his view, based on the analysis of actual publications and conference activity, there are not more than 30,000 active scientists from Russia who work abroad, out of which 60 to 70 percent are based in the United States and Canada. In addition, roughly the same number of scientists has been working abroad part-time, regularly sharing their work between Russian and foreign research entities.

Furthermore, recent Russian diaspora research<sup>20</sup> points to the existence of considerable interest among diaspora members in cooperating with Russian partners, but this interest remains largely unrealized, and there is significant room for expansion in cooperation. At the same time, the studies did not find any real potential for return migration among the respondents. The papers also note that diaspora perceptions of cooperation with Russia have improved since the late 1990s, but still reflect prevailing skepticism toward government policies for international cooperation in research. There are also complaints within the diaspora about problems in the Russian institutional environment (bureaucracy, inflexible funding arrangements, insufficient openness of academic institutions), as well as inadequate demand for foreign cooperation from Russian research organizations. Tvorogova also makes the point that administrative barriers for cooperation are particularly strong for more junior diaspora members, who are unable to mobilize large amounts of resources and secure long-term cooperation programs between foreign and Russian organizations.<sup>21</sup>

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18 It is worth noting that these almost simultaneous and uncoordinated survey attempts around 2008 by the researchers based in Russia to undertake several email-based surveys of the Russian diaspora created some apprehension within the diaspora community. In the environment of insufficient trust, this apprehension could also contribute to a relatively low response rate in our own survey.

19 Egerev, "New Russian Science Diaspora: Summing up the recent 15 years."

20 See S.V. Egerev, "There will be no mass return of Russian scientists," *Science and Technology of Russia* (2009); Dezhina, "Hunt for Heads;" and S. Tvorogova, "Russian Diaspora in Economic and Social Sciences: Examples of Ongoing Collaboration" (mimeo, Higher School of Economics, Moscow, 2009).

21 Tvorogova, "Russian Diaspora in Economic and Social Sciences."

Based on her own analysis of the current trends, Dezhina argues that while calls for designing a new government program to facilitate return migration for Russian scientists are currently popular, there is a much more practical need to intensify day-to-day academic contacts and build research partnerships with diaspora academics.<sup>22</sup> This may require an ideological shift in the way Russian research establishments are managed. Egerev makes the point that to facilitate such cross-border cooperation it is important to address various legal and administrative barriers that hamper international research cooperation, such as administrative limitations for the short-term employment of foreign researchers in Russia.<sup>23</sup>

## II. Government Initiatives to Expand Collaboration with the Skilled Diaspora

The Russian government policy of cooperation with the skilled diaspora remains largely focused on cooperation with and the potential return of Russian academics working abroad. This topic remains popular among the general educated public in Russia, which has nostalgic feelings about the times when Russia, as many still believe, used to be a global leader in fundamental science. The theme received additional public attention in September 2009, when a large group of Russian scientists working abroad sent an open letter to Russia's president and prime minister called "Basic Science and the Future of Russia."<sup>24</sup> The letter's authors believe that upgrading the country's capabilities in fundamental research is critical for Russia's development, and they called for urgent measures to expand research funding, reform mechanisms for both research financing and program evaluation, and move aggressively toward the global integration of Russian research programs.

The major recent policy development in the area of diaspora cooperation relates to the approval, in 2008, of a new initiative (the so-called "Action 1.5") within a government program called "Academic and teaching staff of innovative Russia." This initiative is explicitly aimed at strengthening research cooperation with diaspora academics through the competitive allocation of small research grants to joint Russia-diaspora teams. The key requirements for participants include the minimum two-month stay of a diaspora team member in Russia, and the participation of young researchers from the Russian side. It was expected that about 100 grants would be given annually and the program would help facilitate the transfer of global knowledge to a new generation of Russian scientists.

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22 Dezhina, "Hunt for Heads."

23 Egerev, "There will be no mass return of Russian scientists."

24 See Overseas Vietnamese Club for Science and Technology, "Welcome," [www.ovsclub.com.vn/show\\_article.php?aid=26445&lg=vn](http://www.ovsclub.com.vn/show_article.php?aid=26445&lg=vn). About 200 scientists ultimately signed the letter.

The program was implemented in January 2009 and it received 380 applications from joint research teams, of which 110 were selected as winners. The average grant amount was about US\$65,000, half of which could be spent on foreign partners' salaries. More than one-quarter of diaspora winners were based in the United States, but over 20 countries were represented overall. The key institutional partner on the diaspora end was the Russian-speaking Academic Science Association (RASA).<sup>25</sup> RASA members participated in the review and evaluation of applications.

At the same time, early reactions to this government initiative from the Russian academic community were quite cautious.<sup>26</sup> Skeptics expressed the usual list of concerns relating to the gaps in administrative infrastructure to support cooperation with the diaspora (such as unresolved issues with multiple visas, work permits, recognition of foreign academic degrees, etc.). Nevertheless, the early experience with this program was positively assessed, and the government made the decision to scale it up. The next round of funding would allow support for three-year joint research programs with the size of single grant up to \$3 million. In addition, the government announced a separate program of competitive grants aimed at attracting additional diaspora-based human capital to Russian universities. This program will be open to diaspora researchers who are interested in teaching and joint research. The total program budget is 12 billion RBL (\$300 million) for 2010 to 2012.

With respect to applied science and research commercialization, it was major state corporations, such as Rusnano and the Russian Venture Corporation (RVK), which had recently been actively exploring various potential formats for engaging the diaspora, in particular diaspora members with global experience in venture financing and technological entrepreneurship. There have been active discussions on establishing special advisory and expert panels with diaspora representation, which would help these corporations' senior managers with specific project selection as well as with addressing the broader challenge of upgrading Russia's institutional and regulatory framework for investing in high-tech start-ups. There has also been a systemic effort by Rusnano to reach out to the Russian technology diaspora, including within the framework of the Russian Nanotechnology Forum. As of late 2009, all these activities remained largely at the stage of active discussion and concept development. There is also evidence of strong diaspora interest in participation in the Nanotech Forum and other high-level events sponsored by the government.

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25 The association was founded at a workshop in France on October 5-11, 2008. According to the association's website, it had about 100 registered members in early 2010; Russian-speaking Academic Science Association (RASA), "Members," undated, [www.dumaem-porusski.org/members.php](http://www.dumaem-porusski.org/members.php).

26 See *Science and Life*, "Brain Drain or Circulation of Talent?" November 19, 2008, [www.nkj.ru/news/14700/?ELEMENT\\_ID=14700&print=N](http://www.nkj.ru/news/14700/?ELEMENT_ID=14700&print=N).

Another 2009 policy development in Russia relates to the adoption of a new federal law that allows state universities and research entities to establish new business subsidiaries whose primary purpose would be the commercialization of the intellectual property owned by these universities and research entities. There have been strong expectations that this law would trigger a major change in attitudes within the research and education establishment in Russia toward the commercialization of research findings, and more generally toward strengthening the linkages between academia and industry. To the extent that the law may help to realign the incentive structure within Russian academia and make it more interested in systematic search for a commercial return on investments made in research, it may encourage research administrators to start building new partnerships with the players who have stronger marketing and commercialization expertise, including those from the diaspora.

In addition, the government has launched a top-level initiative called Innograd Skolkovo, under which a separate new research town and high-tech business development area will be established close to Moscow. The location will have a special tax and regulatory regime aimed at attracting high-tech players and research talent from around the globe. Expectations are high that the new center will be able to attract diaspora researchers and entrepreneurs. The government spent more than \$1.5 billion on the development of Skolkovo between 2010-12.<sup>27</sup>

In a separate development, in May 2010 the Russian Parliament adopted new legal amendments aimed at creating a more attractive working environment for highly skilled foreign specialists. The new law lowers taxes for foreigners working in Russia and simplifies the complex process of obtaining work permits. Work permits will now be issued for three years, and qualified foreign workers have the right to multiple extensions. The law also regulates employment rules for workers from the countries with which Russia has a visa-free travel regime (including Israel).

## **Main Conclusions from Interviews**

The detailed interviews (about 20) we held were very informative and helped to provide us with a better understanding of both the motivation that drives Russian diaspora activists as well as the main constraints they face in attempting to expand their professional and business links with Russian organizations.<sup>28</sup>

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27 Margarita Papchenkova, Lyutova Margarita, and Biryukova Lilia, "Kremlin will Supervise Skolkovo," *Vedomosti*, May 16, 2013, [www.vedomosti.ru/newspaper/article/450211/kreml\\_prismotrit\\_zaskolkovo#ixzz2UZRIWNVp](http://www.vedomosti.ru/newspaper/article/450211/kreml_prismotrit_zaskolkovo#ixzz2UZRIWNVp).

28 Interviews were conducted either face-to-face, over the telephone, or via Skype. In addition, two interviews were recorded by our partners in the Higher School of Economics, Moscow.

With respect to government policymakers, we have been lucky to meet senior officials from the two major state high-tech corporations (Rusnano and RVK), the former CEO of the state Foundation for Support of Small Businesses in the High-Tech Sphere, the general manager of the Science Park from Moscow State University, and the senior department director at the Ministry of Science. At these meetings we made an effort to understand how much government officials know about actual experiences of Russian-diaspora cooperation in the high-tech arena.

Interviews with the diaspora representatives were conducted according to a format developed prior to their beginning. The key themes related to respondents' business experiences, including in Russia; views on Russia's business partners and counterparts; views on the government (qualifications of government counterparts, ease of doing business, assessment of government innovation policies); motivation for doing business in Russia and business expectations; and recommendations on policy reform priorities.

The main messages from the interviews could be summarized as follows.

1. The Russian skilled diaspora has several peculiar features, which makes it quite different from the well-studied Asian diasporas. Overall, these features limit the medium-term "cooperation potential" of the Russian diaspora.
  - The origins of expatriate talent that migrated to OECD countries from Russia are very different from the origins of those that migrated from Asia. In Asia the typical career path relates to students who went to study abroad, stayed in the country that gave them an education, gained practical experience, and then either went home (as in South Korea, Singapore, and, increasingly, China) or engaged with the country in brain circulation mode (as is often the case for Taiwan). In contrast, in Russia (as well as in Mexico and Argentina) a typical expatriate is a person who was formed professionally in the home country and moved abroad to advance his or her careers. This pattern seems to reproduce itself, as the above data on a number of Russian students abroad suggest. Late arrival of diaspora members limits both their career prospects in destination countries and their ability to initiate productive cooperation with the home country.
  - The level of social capital within the Russian diaspora community is relatively low, which is reflected in the fact that Russian diaspora organizations form at a slow pace. Russians in the diaspora show a low propensity to bond with each other at the community level. This may be related to the post-Soviet legacy of a weak tradition of civic engage-

ment, participation in community organizations, and so on. It is in stark contrast to various other diasporas, such as Armenians, who have a century-old tradition of building and sustaining organizations to support cultural and charitable activities.

- The entrepreneurial skills and instincts within the Russian diaspora are somewhat weaker than among Asian diasporas. This may be a reflection of self-selection bias among those who left Russia during the 1990s (as noted in an earlier section). This may also reflect the aforementioned weakness of local social networks within the diaspora, which limits the scope of informal support a new entrepreneur could rely upon.
2. Several specific institutional features of the current Russian business environment complicate technology cooperation between Russian organizations and the Russian diaspora. As a result, the existing potential for diaspora cooperation, which is not enormous to start with, is heavily underutilized. The following barriers are particularly worth mentioning.
- The Russian economy has a fundamental problem: insufficient demand for innovation. This is an economy in which large chunks of economic activities remain state-controlled (though firms are sometimes privately owned), that has access to huge resource rents, and hosts a number of giant state-controlled corporations. The level of market competition remains depressed, while reforms in the innovation system have been slow (“import of new technologies to Russia is hampered by lobbying of local academics and bureaucrats who do not need competition,” as one respondent put it). The structural deficiencies of the Russian economy were further aggravated by the high growth rate of the Russian market from 2004 to 2007, which further undermined demand for innovation. While public spending on R&D has expanded recently, this happens within the established institutional structure and without adequate expertise and accountability. The bottom line is that the main economic players, large corporations in particular, face insufficient competitive pressures and have little incentive to either undertake R&D or implement new ideas. This triggers a slew of consequences, including a lack of interest in building new partnerships, domestic and foreign alike.
  - Russian organizations, including those in R&D, remain inflexible and insufficiently open for cooperation. This problem goes far beyond the matter of international cooper-

ation; it affects the intensity of cooperation in the domestic market as well.<sup>29</sup>

- The business environment remains challenging, with high entry and transaction costs, which makes life especially difficult for small companies and new players. Consequently, large organizations are best positioned to deal with the existing administrative barriers. As a result, many representatives of the Russian diaspora, whose efforts are not backed by large foreign corporate structures, find that doing business in Russia is too taxing. Thus, one person we interviewed described doing business in Russia as follows: “It is too slow, too expensive, and generally not competitive when compared to China.” Our respondents complained about Russian customs (“takes a year to import chemicals that are necessary for ongoing research”), Russian embassies (“continue to treat former Russian citizens as traitors”), difficulties with obtaining multiple visas, and more.

3. Despite the existing constraints on both supply and demand sides, the interviews reveal that there has been considerable experience in diaspora cooperation, and we did identify a number of impressive success stories. As expected, there is tremendous heterogeneity among diaspora players: they show a high degree of variation in capabilities, motivation, and strategies. But, as our interviews suggest, such success stories remain rather isolated events, driven largely by strong motivation in their diaspora backers with practically no support from organizations from either side of the border. There is little follow-up and replication, and these positive experiences remain obscure and poorly reflected by policymakers. Formation of effective diaspora networks that have reliable partners in Russia has been slow.

4. The wealth of experiences with diaspora cooperation reflected in the interviews could be, with some simplification, classified as follows. It is clear that each of these cooperation formats brings considerable benefits to Russian partners and the Russian economy as whole, and as such they all deserve some support and recognition from Russian policymakers. Government policies should avoid the potential trap of excessive focus on dealing with diaspora mega-entrepreneurs and investors. Instead, a broad inclusive policy that would also expand opportunities for smaller players would be much more appropriate, given the high level of diversity of the diaspora.

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29 This seems to be consistent with the IMD survey data: the assessment of global competitiveness gives Russia the 48th place out of 60 for the quality of inter-firm technological cooperation. This level is close to Argentina, Greece, and Turkey. Taiwan (15th), India (18th), and South Korea (19th) have much stronger capabilities for inter-firm cooperation.

- Megastar entrepreneurs are responsible for some cooperation. For example, IPG Photonics is the world's leading provider of high-power fiber lasers and fiber amplifiers, which are revolutionizing performance in an array of materials processing, telecommunications, and medical applications. The company was established by Valentin Gapontsev in 1990 in Russia and has since expanded globally. In 2009 it had about \$500 million capitalization and 1,400 employees worldwide, of which 25 percent were based in Russia (and involved in both manufacturing and R&D).
  - Cooperation was also initiated by managers of large multinationals that were instrumental in influencing their corporate development strategies so that they would result in the expansion of corporate operations in Russia, including establishment of R&D facilities. The better-known stories of this kind of cooperation include Russian operations of Boeing, Intel, Microsoft, and EMC.
  - Another source of cooperation is through traditional high-tech start-up entrepreneurs, who for various reasons decided that a significant part of their business (often R&D activities) would be based in Russia.
  - Finally, software firms of different types and sizes undertook traditional outsourcing to Russia. The case studies suggest that Russia has occupied its own niche in the market for software outsourcing, where it is highly competitive, but that this niche is relatively small. There is limited potential for the expansion of this line of business in Moscow due to labor constraints, but the situation seems to be much more promising in a number of other industrial centers.
5. There are also signs of promising institutional developments in the form of emerging institutional structures, that with time may become "bridging institutions," capable of supporting more intensive Russia-diaspora technological cooperation. Some of these structures are described below.
- Tomsk Technical University (TUSUR) has recently become a national leader in developing close links between its traditional training and research programs and the operations of numerous local high-tech firms. The university supports the alumni association, which serves as a primary tool for bringing private investors to the university incubators and for mobilizing private firms owned and managed by TUSUR's graduates to cooperate with the university in various ways. A number of such alumni investors, who in recent years have opened subsidiaries at the TUSUR incubator, are from the

diaspora, and they provide the entire local business cluster with improved access to the global marketplace and expertise.

- AMBAR, the association of Russian businessmen in California, is rather typical for a California “ethnic” IT association. It started its activities with a heavy focus on addressing the immediate business needs of its local members: networking and career development. As the experience of similar associations suggests, AMBAR has the potential to reach the stage at which it is capable of initiating and sustaining collective cooperation programs with Russian partners.
- Moscow State University Science Park is one of the most advanced of Russia’s high-tech incubators and know-how commercialization facilities. Because of its high profile and sophisticated management team, it seems natural that with time it may expand its bridging role to reach out to diaspora partners as a source of marketing, technical, and investment expertise.

6. The discussions with diaspora representatives are commonly gloomy, and negative perceptions dominate the conversations. But diaspora members who are among the most successful in their dealings in Russia often admit “that the reality on the ground is less difficult than the perceived risks as seen from diaspora,” as one put it. Those in the diaspora who do not have immediate business experience with Russia generally tend to overestimate the scale of the problems. This observation is similar to experiences of other diasporas, such as the Armenian one. This negative bias derives from poor communication, particularly in the form of a severe shortage of information on diaspora success stories. In our own analysis we came across several cases of rather successful Russian diaspora companies with well-established operations in the home country, but were unable to arrange an interview with the companies’ principals. Some people seem reluctant to share their success stories and prefer to stay away from publicity — to remain, as the saying goes, “below the radar.”

7. It was unexpected that many of the success stories of diaspora cooperation that we gathered are happening outside of the capital cities of Moscow and St. Petersburg, in the industrial centers of the second level (Novosibirsk, Niznii Novgorod, Kazan, Tomsk, Chelyabinsk). This is the industrial heartland of Russia, housing the established universities and research facilities. At the same time, however, these are cities with limited access to either resource or administrative rents.

Much smaller rents, in combination with a relatively strong human-capital base, likely explain how these cities are facing competitive pressures that result in a very different incentive structure. Their administrations become more strategic in their dealing with potential investors, including those from the diaspora.

8. Diaspora representatives who engage with Russia via their businesses are driven by a typical mix of motivations. Their enlightened self-interest often prevails as the immediate justification for their ventures in Russia: talent is in such short supply that access to a pool of high-quality Russian human capital at a reasonable cost is a major attraction. But other motives are also on display. Self-made men are proud and desire recognition at home (according to Abraham Maslow's hierarchy of motivation, specifically self-actualization and self-esteem).<sup>30</sup> There is also evidence of a traditional alumni incentive: giving back to the alma mater (in this case, the local university or local research facility that was critical in shaping the member's professional career).

### III. Findings from the Survey<sup>31</sup>

Empirical research on emerging Russian diaspora networks has been growing since the Russian government designed a specific policy to get professional emigrant workers better integrated into the Russian research and education system. Since 2008 several surveys have been launched by the Higher School of Economics as well as by the Ministry of Education and Science. However, these studies have been focused on academics and their interaction with Russian partners and, to the best of our knowledge, our study is the only one to date that focuses on emerging networks that cover relations between emigrants and their colleagues in Russia not only in academia, but also in business-oriented fields.

#### A. Survey Overview

The survey targeted professionals of Russian origin (including Soviet Union- and Russia-born emigrant engineers and scientists) with the aim of documenting their emerging networking arrangements with

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30 Abraham H. Maslow, *The Farther Reaches of Human Nature* (New York, NY: Penguin Compass, 1971).

31 The quantitative characteristics of Russia's survey sample (as compared to two other countries) are as follows: Mexico: 565 were invited, 283 participated, 205 are being used in the comparable dataset. Argentina: 200 were invited, 139 participated, 102 are being used in the comparable dataset. Russia: 578 were invited, about 120 responded, and 109 are being used in the comparable dataset.

home country institutions and individuals. It also aimed to study factors that affect the intensity and scope of these interactions. We expect that the insider-outsider position of emigrants, coupled with their specific capabilities (such as access to partner institutions in both the new and native lands, knowledge of business customs and social traditions, understanding of potential customers and suppliers, and language abilities) create some opportunities conducive to high-tech cross-border entrepreneurship. Emigrants may see new opportunities in home country markets, having a larger “search space” in which opportunities are sought.<sup>32</sup> On the other hand, there is reason to expect that relatively recent immigrants, who left in search of secure and well-compensated professional positions abroad, may show a lower propensity to engage in business in Russia.

The sample for the survey was constructed from a random listing of people registered with different professional associations, universities, research labs, and immigrant communities outside Russia. We followed the sampling strategy first tested in the survey of Silicon Valley immigrant workers.<sup>33</sup> The initial list included about 600 names; all potential respondents received a letter of invitation to take part in the online survey. Among other things, the letter of invitation stressed the survey organizer’s commitment to non-disclosure.

Sources of information for the survey database included:

- Alumni associations of the leading Russian universities;
- Russian Technology Investment Conferences in Silicon Valley;
- Key US conferences (e.g., NASA conferences, US nanotechnology conferences);
- Key US academic publications (e.g., American Physical Society meeting papers);
- Forbes publications;
- Authors’ personal contacts.

The long list of people whom we approached seemed to us adequate in terms of its geographic coverage: out of 600 people, about two-thirds reside in the United States and Canada and about 15 percent in the European Union, while the remaining 20 percent are from the rest of the world, including Israel, Singapore, Taiwan, and South Korea. About

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32 Bo Carlsson and Staffan Jacobsson, “Diversity Creation and Technological Systems: A Technology Policy Perspective,” in *Systems of Innovation*, ed. Charles Edquist (London: Pinter, 1997): 266-94.

33 AnnaLee Saxenian, Yasuyuki Motoyama, and Xiaohong Quan, “Local and Global Networks of Immigrant Professionals in Silicon Valley” (paper prepared for the Public Policy Institute of California, San Francisco, 2002), [www.ppic.org/content/pubs/report/r\\_502asr.pdf](http://www.ppic.org/content/pubs/report/r_502asr.pdf).

90 percent of the people in the database hold a PhD or its equivalent. However, only about 25 percent have a clear affiliation with high-tech businesses. The rest are primarily academics with unclear ex ante involvement in commercial applications of science. In other words, despite our intention to focus the survey exclusively on applied scientists and people who have direct commercial experiences, it proved to be impossible to fully follow. This is in part because researchers are generally more visible than businessmen. Researchers seek personal recognition through the publication of their papers and their presentations at conferences. Businesspeople tend to promote their businesses, not themselves, so it is not always easy to identify successful corporate founders of Russian origin. At the same time, as already mentioned, Russia's skilled diaspora may include far more academics than businesspeople involved in start-up activities and high-tech entrepreneurship. In this sense, the professional structure of the database may be an accurate reflection of realities on the ground.

In terms of professional specialization, the people on the list were roughly equally divided between medical and biological professions (genetics, pharmaceuticals, physiology, etc.), and mathematics, physics, and IT applications.

The survey questionnaire, administered in late 2009, was restricted to 40 short and focused questions, and it included a core block of comparable questions asked on similar surveys of emigrants of Mexican and Argentinean origin. The additional questions included in our questionnaire reflected particulars of professional migration from Russia and included issues related to the recent liberalization of migration legislation, aspects of competitiveness of highly-skilled workers on the international scene, shocks during the transition that impoverished Russian domestic research organizations, and the low level of high-tech entrepreneurship in Russia. In addition, we added several questions related to the respondents' interactions with the government in the wake of recent government initiatives.

One of the active professional associations of Russian diaspora workers in the United States — AMBAR — duplicated on its website both the survey instrument and the letter of invitation. The questionnaire was only available through the internet and in English. The survey remained online for four months. The final sample is comprised of 103 observations. The response rate accounted for about 15 percent of invitees.

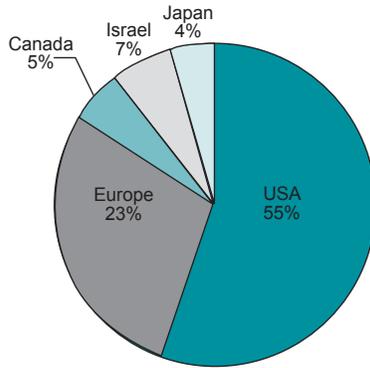
From an analytical perspective, one important question might be how well this sample represents the entire population of Soviet Union- and Russia-born emigrant professionals. Since our knowledge about the size, structure, and behavioral models of the Russian emigrant community is scarce, we can only recognize that the sample is not representative of the unknown general population of diaspora professionals

and is likely to be biased toward more active respondents. Though not strictly representative, the sample may offer insights about the specificity of the active part of the Russian professional diaspora, in terms of its propensity to get integrated into international networks and affect home country high-tech entrepreneurship.

Our respondents share the common characteristics of diasporans. As a rule they are the first generation emigrants born in the Soviet Union or Russia who left for a new country after graduating from university and getting some work experience in their native country. Contrary to expectations, a significant share of respondents reported studying abroad or studying in both the Soviet Union or Russia and abroad (38 percent, including 12 percent who received their highest degree abroad). They settled outside Russia between 1955 and 2007 in search of international academic or entrepreneurial advancement and careers. However, a majority (87 percent) settled abroad after 1990, when reforms in Russia liberalized labor migration. On average, respondents have spent 16 years outside Russia. Academic researchers dominate the sample (constituting two-thirds of respondents), while the rest is divided equally between people working in high-tech businesses as employees and independent professionals/business owners. The United States is home to the largest share of respondents (55 percent), followed by Europe (29 percent; see Figure 1). Germany is the main host country for Russian respondents in Europe. With respect to the employment status, a majority reported non-managerial occupations in both business and research.

Another specificity of the Russian sample is that it is predominantly male (almost 80 percent) and of mature age (90 percent of respondents are older than 40). And more than half of the sample graduated from the two most prominent Russian schools — Moscow State University and Phystech (Moscow Institute of Physics and Technology). The majority (65 percent) hold a PhD.

**Figure 1. Distribution of Russian Respondents by Country of Current Residence**



Source: Authors' survey of Russian diaspora members conducted during late 2009.

### ***B. Involvement of Russian Emigrant Professionals in International Knowledge Networks***

Our analysis of international knowledge networks is driven by the desire to assess the so-called social capital of Russia-born skilled emigrants. Higher social capital may potentially reduce the costs of access to valuable resources — for example, money, talent, contacts, and knowledge<sup>34</sup> — and help to build mutual trust that is usually scarce among individual emigrants. One question of interest is whether diaspora organizations may serve as an entry point to the development of linkages with the home country and provide an important platform for collective action by Russian-born researchers and engineers.

The survey showed that about 62 percent of the sample reported membership in international professional organizations. One-third of respondents are members of organizations that have established connections with Russia. How does this membership affect the nature and intensity of interactions with the home country? To study this, we looked at the distributions of members and non-members of international networks across groups that reported visits to Russia, participated in business ventures in Russia, and that had interest in helping Russia-based colleagues gain access to international markets (see Table 7).

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34 Hart, Acs, and Tracy, Jr., "High-tech Immigrant Entrepreneurship."

The distributions show that general membership does not significantly increase the likelihood of business involvement in Russia, while the established connection of the network with Russian individuals and institutions is associated with higher frequencies of business ventures in Russia. Among respondents who reported membership and links of their network to Russia, the share of people with business ventures in Russia was 26.9 percent, compared to 10.4 percent for the rest of the sample and a sample average of 15.4 percent. Also, general network membership slightly increases the frequency of visits to Russia. Positive answers to the question “Please indicate if you could assist/help (or may be already helping) high-potential Russian firms/entrepreneurs to gain access to international markets for new technology as buyers, sellers or collaborators” appeared to be strongly associated with both membership in international networks and linkages of these networks with Russia: the share of those ready to help is almost three-fold higher among members of international associations compared to non-members, and twofold higher among members of associations with ties to Russia.

**Table 7. Respondents Participating in Business Ventures in Russia, Visiting Russia, and Intending to Help the Home Country by Membership in International Networks**

Groups of Respondents Who Reported	Share of Groups Among Members and Non-Members of International Networks (%)			Share of Groups Among Members and Non-Members of International Networks with Connections to Russia (%)		
	Members	Not Members	Chi-sq. test, P	Members	Not Members	Chi-sq. test, P
Business Ventures in Russia	18.8	7.7	0.123	26.9	10.4	0.039
Visits to Russia	75.0	71.8	0.720	80.8	71.4	0.349
Interest in Supporting Russia's Businesses	42.2	15.4	0.05	53.8	24.7	0.06

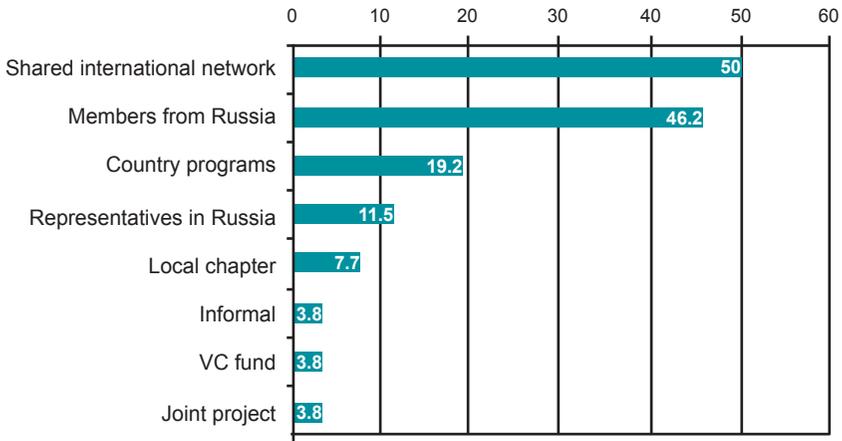
*Notes:* “participating in business ventures” is a group comprised of respondents who reported either the existence of a joint venture, a subsidiary, or commercial contracts with Russian institutions or individuals. The “visits to Russia” group is comprised of respondents who visited Russia no less than once in two years. “Inclination of respondents to help” is a group who positively answered the corresponding question. All missing answers in these groups, as well as missing answers in the question about international networks, have been treated as a “no.”

*Source:* Authors' survey of Russian diaspora members.

Thus we may conclude that international networks help to accumulate social capital among Russian professional immigrants, and channel this capital toward the reestablishment of their business relations with Russia, especially in cases when networks are already connected to Russia. We should note that expressed interest to help is more strongly associated with international networks than the existence of actual business projects and visits.

Figure 2 demonstrates that the most common instrument of interaction within the networks is the joint membership of Russian and diaspora participants in professional organizations. More formal initiatives — specific Russia country programs, local representation, and the like — are ranked much lower among reported types of network interactions.

**Figure 2. Types of Connections Respondents’ Professional Networks Have with Russia (Share of Respondents Among Those Who Reported Membership)**



Source: Authors’ survey of Russian diaspora members.

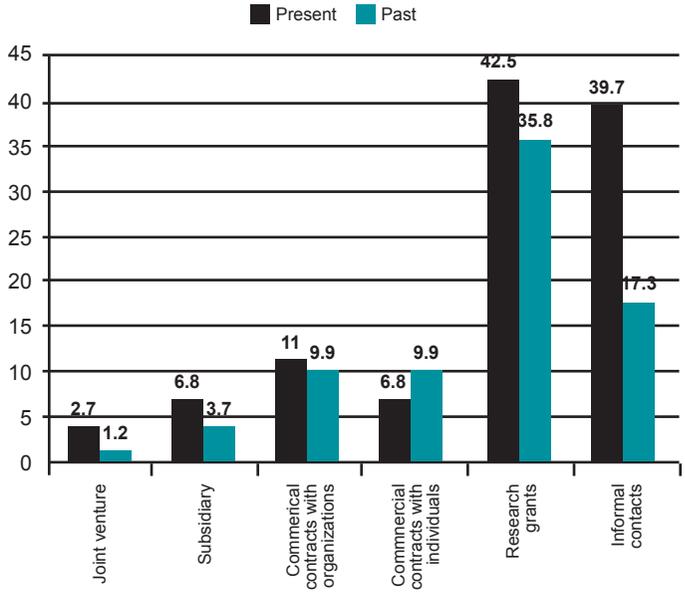
It is worth mentioning that international professional networks have already been acknowledged as legitimate and effective partners of the Russian government in facilitating linkages to the skilled diaspora. According to former Russian science and education minister Andrey Fursenko, the government consulted professional associations of emigrant researchers on the structure and focus of the 2009 government program of joint research grants, and the researchers also participated in evaluation of received applications.<sup>35</sup>

### C. Linkages with Domestic Institutions and Individuals

In general, 71 percent of respondents reported that their organization had some activity in Russia, either formal or informal. Informal contacts and research grants were the leading instruments of cooperation, followed by commercial contracts with Russian organizations, and these priorities had not changed recently as compared to the past, except for the visible growth of informal contacts (see Figure 3).

<sup>35</sup> See Ministry of Science and Education, Russian Federation, “About Ministry,” [http://минобрнауки.рф/static/ministry\\_eng.html](http://минобрнауки.рф/static/ministry_eng.html).

**Figure 3. Share of Respondents Among Those Reporting Linkages of Organizations Where Respondents Work with Russian Institutions and Individuals, Past and Present**



Source: Authors' survey of Russian diaspora members.

The predominantly informal character of the existing linkages, as shown by the structure of information sources and forms of interaction, may be the result of the nature of knowledge circulation itself. Networks, cultural values, personal attitudes rather than organizational hierarchies, and established rules often guide the interests of our respondents. We suggest that professional linkages are often started through informal contacts and gradually become more formal/institutionalized. Therefore, recent significant growth in a number of informal contacts could indicate that the nature of cooperation has the potential to become more intensive and more formal in the future.

Russian-born researchers and engineers maintain relatively weak business links to their home country compared to Indian and Chinese diaspora members. Though even this modest level of interaction appeared to be above our expectations, given the long isolation of Russia, a low professional emigration rate compared to other countries with a long tradition of labor movements, and the prevailing negative perceptions of emigration in Russia. The low levels of high-tech entrepreneurship in Russia may also serve as a demotivating factor for business knowledge circulation, since there is reason to believe that diaspora workers willing to contribute to the home country's high-tech businesses would be attracted by the

synergy of a local and global entrepreneurial environment. Moreover, as informal interviews demonstrated, some regions in Russia appeared to be more conducive to knowledge circulation than the country on average due to the relatively more developed local innovation clusters (the city of Tomsk, for example).

Below we examine in more detail the patterns of circulation of information, people, and businesses.

### **I. Circulation of Information**

How well are Russian emigrants informed about the state of affairs in the home country, and which sources of information do they most frequently use? We expected that increasingly open flows of information would result in a diversity of information sources, with the focus shifting from informal personal exchanges to more organized information hubs facilitated by international professional associations or government agencies.

The survey proved that this expectation is premature: the nature of information exchange remains largely informal, personal links being much more important than official or organized flows. The Russian diaspora is not well informed about events directly related to technology-related collaboration between Russia and emigrant professionals.

The distribution of information sources about Russian technology and business opportunities across different groups of respondents with linkages to Russia and in the sample on average (see Table 8) shows that that the overall pattern for all groups is to rely primarily on colleagues who remain in Russia. This source of information is the most popular, followed by colleagues outside Russia. Much less frequently, emigrant professionals rely on formal institutions within the academic and technological spheres: government, firms, or professional organizations are ranked low in the list of information sources about technology-related business opportunities in Russia (even in the case of government programs concerning the diaspora). International professional networks are only emerging as coherent organizers of information flows about Russian business opportunities, being somewhat popular (above the sample average) only among the groups of respondents who reported business ventures in Russia or expressed interest in assisting Russian technological entrepreneurship.

**Table 8. Frequencies of Answers to the Question “Indicate your two most important sources of information about technological exchange opportunities or technological business opportunities in Russia” by Groups, Share of Respondents within the Group**

Groups of Respondents	Group of Respondents Who Reported Business in Russia (%)	Group of Respondents Who Reported Frequent Visits to Russia (%)	Group of Respondents Willing to Assist Russian Technological Entrepreneurs, (%)	Group of Respondents Who Reported Awareness of the Russian Government Program of Joint Research Grants (%)	Sample Average
Colleagues in Russia	93.9	75.6	93.9	92	69.1
Colleagues outside Russia	53.3	53.7	45.5	44	42.3
Friends/Family	0	9.8	6.1	8	19.6
International Professional Organizations	13.3	7.3	12.1	0	9.3
Media, Internet	6.7	7.3	6.1	92	5.2
Firms, Subsidiaries in Russia	3.4	4.9	6.1	0	2.1
Firms outside Russia	0	4.9	3.0	0	2.1
Russian Professional Organizations	0	0.0	0.0	0	2.1
Government	6.7	0.0	3.0	0	1
No. obs.	15	41	33	25	103

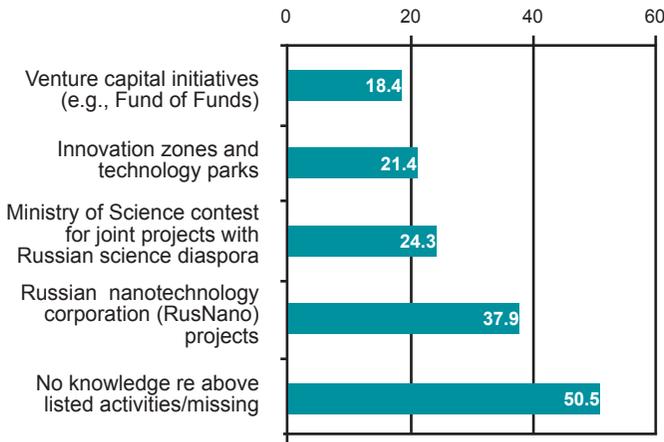
Source: Authors' survey of Russian diaspora members.

It is also interesting to note that links to colleagues in Russia do not only support information exchange, but also promote practical joint projects. Our interview with the head of the international department of the Russian fund for basic research (RFFI), Alexander Sharov, revealed that diaspora researchers take advantage of linkages to Russia and participate in competitions for RFFI research grants, using their Russian citizenship (they often hold double citizenship) and “good relations” with local players. The Russian lab or institute is usually interested in adding the emigrant’s resume to its team, thus increasing the strength of the bid and its chances of winning the grant. In turn, a diaspora researcher may be interested in preserving his or her social network in Russia and strengthening it through joint projects.

The survey provides only limited information on respondents’ general awareness about the state of affairs in Russia. We can only assess how well the diaspora is informed about recent government initiatives on the basis

of answers to the question “Are you aware about recent initiatives of the Russian government to bring new international players into the innovation field?” The results show that half of the sample knows nothing about any of the initiatives that are directly related to diaspora professionals. Projects of the Russian state’s nanotechnology corporation are better known than other recent initiatives (almost 38 percent respondents are informed about them), followed by joint projects with the diaspora by the Science Ministry and innovation zones. To sum up, the Russian skilled diaspora is not adequately informed about recent policy developments (see Figure 4).

**Figure 4. Share of Respondents Who Reported Awareness about Recent Government Initiatives to Bring New International Players into the Innovation Field**



Source: Authors' survey of Russian diaspora members.

## 2. Circulation of People

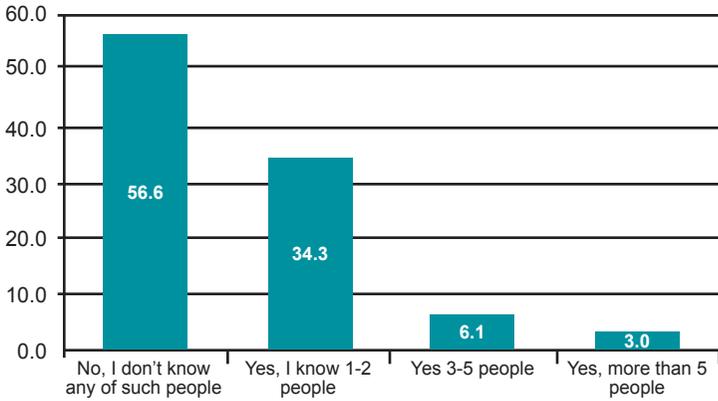
Since the basic nature of information sources about technological opportunities in Russia remains informal, it is only logical that majority of respondents — 80 percent — report that they travel to the home country. Forty percent report being frequent travelers (defined as visiting once a year or more). Only 30.3 percent of visitors travel for regular business purposes; family affairs and participation in conferences remain the main motivations for travel to Russia.

With respect to interest in returning to the country of birth, we did not find enough evidence to support the finding of Saxenian that foreign-born professionals often regard residence abroad as a temporary home and that the majority thinks about return.<sup>36</sup> Though almost half of our respondents say they know people who returned to Russia to participate in the development of technology firms, these cases seem to be

<sup>36</sup> Saxenian, Motoyama, and Quan, “Local and Global Networks.”

exceptions, meaning there has not been scalable return (see Figure 5). This result does not vary by age, frequency of visits to Russia, or intentions to provide technological assistance to the home country.

**Figure 5. Distribution of Answers to Question “Do you know people who have recently returned to Russia (or spend most of his/her time there) to participate in the development of new technological firms and/or conduct technological research?”**



Source: Authors' survey of Russian diaspora members.

The survey asked specifically about attitude to the idea of returning to Russia to get involved in technological business ventures. Overall, 17.5 percent of respondents report that they may be willing to relocate to Russia during the next three to four years, assuming they are presented with the right conditions and incentives. We have checked how this consideration differs across groups, distinguished by age, position, frequency of visits and specialization (see Table 9).

We did not find evidence of a negative relationship between age and willingness to return. Younger people, in spite of possibly weaker links to their new country of residence, are not the more eager potential returnees. People positioned as independent professionals/business owners are more likely to consider returning to Russia, as well as to be frequent visitors. Specialization is a significant predictor: respondents who specialized in natural resource sciences and IT are most likely to consider returning and running business in Russia, while people specializing in life sciences, business, management, and law are much less willing to return. However, when we checked associations between specialization and intention to return in a regression that controls for age and other personal characteristics, only IT specialization was statistically significant.

**Table 9. Frequencies of Positive Answers to the Question “Are you willing to be located during the next 3-4 years for most of your time in Russia with the intention of participating in business or technological cooperation initiatives?” by Groups**

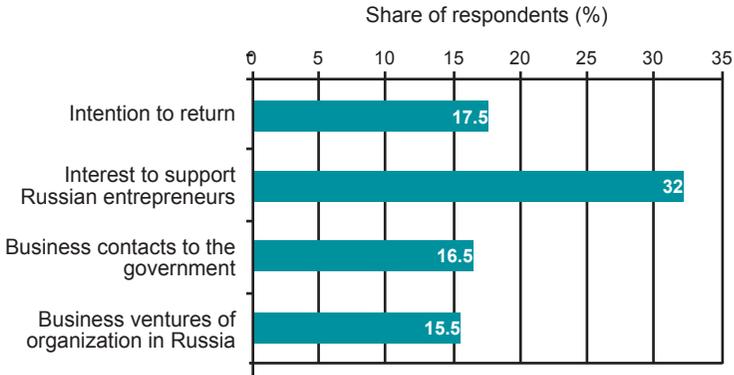
Groups	Share of Respondents in the Group Interested in Returning (%)	Share of Respondents in Rest of Sample Interested in Returning (%)	Chi-sq. Test, P
Age: 40 Years and Younger	30	16.1	0.272
Frequent Visitors to Russia	26.8	11.3	0.042
Independent Position	46.7	12.5	0.01
Specialization			
IT	46.2	13.3	0.04
Life Sciences, Bio	8.5	25	0.028
Nanotechnology	11.1	18.8	0.434
Natural Resources	45.5	14.1	0.01
Engineering	22.2	17.0	0.695
Basic Research	18.4	16.7	0.820
Business, Management, Law	50.0	15.5	0.031
Education	0	18.4	0.291

Source: Authors' survey of Russian diaspora members.

### 3. Circulation of Technological Business and Commercial Research

One of the key findings of the survey is that 15.5 percent of respondents reported that their organization had some kind of business relations with Russia. We measured business linkages by asking, “What kind of activities does your organization undertake in Russia?” and aggregating the responses on joint ventures, subsidiaries, and commercial contracts with Russian organizations and individuals. Generally those Russian partners are small-scale businesses (those that have, on average, 16 employees). The share of respondents who reported that their organizations had business ventures in Russia is comparable with the share of respondents who reported having had business-related contacts with the Russian government (see Figure 6). Many more people (32 percent) expressed interest in supporting Russian technology entrepreneurs. As shown above, 17.5 percent of respondents may be considering a return to Russia to get involved in technological business ventures.

**Figure 6. Linkages of Russian Emigrant Workers to Home Country Institutions and Individuals**

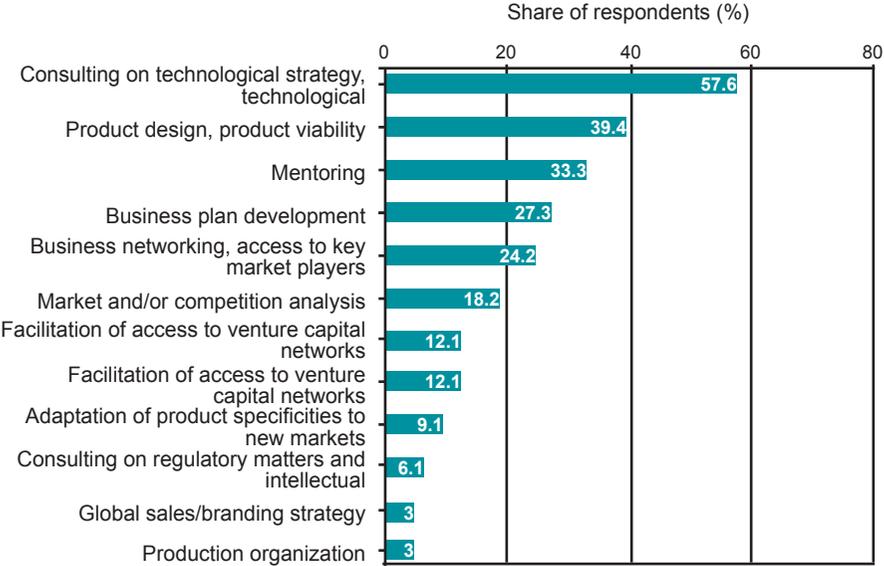


*Notes:* “Frequent visits” is defined as visits every year or more; “interest to support Russian entrepreneurs” is defined as a positive answer to the corresponding question; “business ventures in Russia” can be established joint ventures or subsidiaries, or commercial contracts with Russian institutions or individuals.

*Source:* Authors’ survey of Russian diaspora members.

Those willing to collaborate on technological ventures with Russian partners see their possible role in Russia as consultants, contributors to product design, and mentors rather than entrepreneurs or hired managers (see Figure 7). Moreover, consulting fees are the most frequently cited incentive that would inspire diaspora professionals to return to Russia and integrate themselves in a local technological business (see Figure 8). Thus there is a reason to believe that potential returnees are more likely to engage in technological cooperation with the existing institutions than in taking entrepreneurial risk in Russia themselves.

**Figure 7. Share of Respondents Reporting Willingness to Provide Specific Forms of Possible Assistance to Russian Technological Entrepreneurs**



Source: Authors' survey of Russian diaspora members.

**Figure 8. Respondents Answers to Question “What types of incentives would encourage you to actively participate and/or collaborate with Russian firms or government agencies?”**



*Note:* Respondents were allowed to list as many options as they considered relevant.

*Source:* Authors’ survey of Russian diaspora members.

#### 4. Regression Analysis of Business Linkages to Russia

We have also conducted a regression analysis to control for the above revealed correlations for the different individual characteristics of respondents — age, gender, position, and specialization, frequency of visits to Russia, availability of former business experience, and education. The model of binary logic regression was employed.

Our study relies on several indicators of business linkages, including existing business ventures in Russia, interest in assisting Russian technological entrepreneurship, and interest in returning home, as dependent variables. All dependent variables are coded as 1 if the answer is yes and 0 if not. The fact of frequent (at least once a year) visits to Russia is used both as a dependent variable and as a predictor in other models. This is because we do not only try to find associations between respondents’ involvement in business and circulation of people, but also to understand factors that drive this circulation. Our research hypotheses are summed up in Table 10.

**Table 10. Main Hypotheses about Drivers of Linkages to Russia Tested in the Analysis**

Hypothesis	Explanation	Indicators
Factor of Age/ Experience and International Exposure	Interest in cooperation with Russian partners is age- and experience-dependent. We expect that people who are well established abroad (50+ years of age, also senior managers) will be better represented in the group of those with established business links to Russia.	Age of respondent Foreign education.
Mobility Factor	Those who travel to Russia regularly are more prepared to engage with Russian businesses.	Frequent visits to Russia.
Networking Factor	Membership in international professional associations is positively correlated with actual business ventures and potential interest in cooperation with Russian partners.	Membership in international associations, especially in those with connections to Russia.
Path Dependency	Informed and experienced entrepreneurs are less pessimistic than the "theoretical entrepreneurs," i.e., those who do not have much recent experience doing business in Russia. They are also more prone to engage with Russian partners.	Answer to the question "Indicate if you are either currently involved in operations of any technological business venture or used to be involved in such a venture at some point in the past."
Trade-off between Job Security and Entrepreneurial Risks	Academics or people with secure employment in firms would be less interested in taking the risk of entrepreneurship in Russia.	Respondents with independent positions/owners vs. academics and people employed in firms.

Source: Authors' survey of Russian diaspora members.

The results of the regression analysis (shown in Table 11) confirm that Russian emigrants positioned as independent professionals or business owners are more likely to get involved in business ventures in Russia and also to express interest in supporting home country technological entrepreneurship. Experience and path dependence also matter, but in a different manner than we predicted. Age appeared to be insignificant in all specifications of the model, though the negative coefficient warns us that Russian emigrants do not become more entrepreneurial, risky, and mobile as they get older. Experience studying abroad, on the contrary, significantly increases the likelihood of business ventures, interest in supporting Russian technological entrepreneurship, and travel back and forth, including interest in returning to Russia. People with any business experience are more likely to volunteer support to Russian businesses, but this factor is insignificant in cases in which people have business ventures in Russia or a tendency to travel frequently and to return. Membership in international networks does not increase the probability of business ventures or mobility, but significantly increases the likelihood of interest in returning. Membership in international associations with linkages to Russia is the strongest predictor of frequent visits and interest in supporting Russian businesses.

**Table 11. Survey of Russian Diaspora Members, Results of Regression Analysis**

Predictors	Dependent Variables											
	Business Ventures in Russia			Interest to Assist			Frequent Visits			Interest to Return and Work in Technological Ventures		
	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.
Frequent Visits	1.594	0.045	0.630	0.228	0.021	0.972			2.058	.008	1.503	.064
Foreign Education	2.103	0.013	0.924	0.093	0.947	0.086	-1.063	0.029	-1.300	0.019	1.615	.037
Age	-0.027	0.540	0.000	0.989	-0.020	0.574	-0.035	0.295	-0.063	0.109	.043	.307
Gender	1.544	0.251	1.213	0.152	1.372	0.112	0.014	0.982	-0.337	0.608	.965	.420
Position: Independent/Owner	3.847	0.004	2.292	0.096	2.508	0.068	-0.447	0.691	-0.798	0.543	.821	.533
Position: Employee of the Firm	3.045	0.040	1.506	0.284	1.314	0.358	-1.412	0.269	-2.501	0.092	-.302	.851
Position: Academic	1.143	0.405	1.253	0.382	1.470	0.297	-0.913	0.464	-1.152	0.428	-1.833	.223
Business Experience	-0.708	0.546	1.158	0.093	1.293	0.068	1.037	0.103	1.071	0.129	700	.492
Membership in International Networks	-0.015	0.985	0.881	0.119			-0.192	0.684			1.991	.035
Membership in International Organizations with Connections in Russia					1.351	0.035			2.273	0.000	2.058	.008
Constant	-7.356	0.066	-6.006	0.046	-5.014	0.095	2.756	0.279	4.483	0.128	-7.664	.037
Model	Binary Logistic											
No. Obs.	95		95		95		95		95		95	
RsqNagelkerke	0.446		0.287		0.312		0.12		0.32		0.433	

Source: Authors' survey of Russian diaspora members.

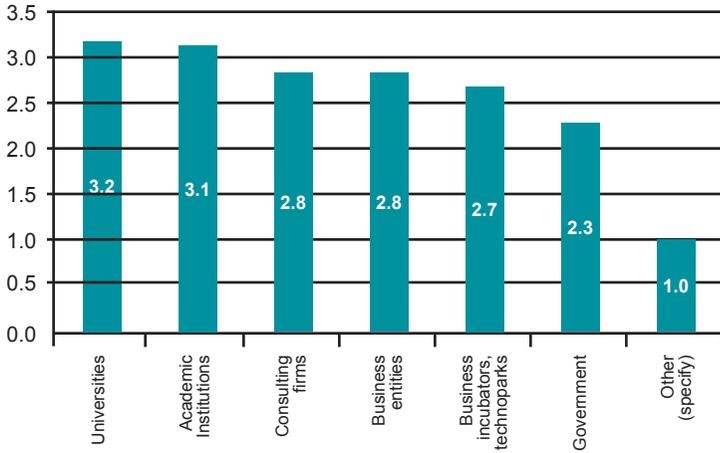
We also studied a model in which the respondent's business position was replaced by his or her specialization, controlling for all other predictors, since specialization and position are highly correlated. The results showed that the likelihood of frequent visits falls (with one percent significance) in the group of biologists and is neutral for all other professions. Specialists in nanotechnologies are more likely to want to assist, which is most probably related to the activities and relative wealth of the Rusnano Corporation. However, belonging to the groups of biologists, specialists in nanotechnologies, and fundamental researchers significantly reduces the likelihood of being currently involved in actual business ventures in Russia. This is understandable, since these research specializations are more distanced from know-how commercialization than other professions.

#### ***D. Relations with the Government***

Diaspora professionals' attitude toward the Russian government is somewhat ambiguous. On the one hand, the majority thinks that the government is an inefficient partner, not necessarily capable of changing and becoming open for collaboration. The government is also seen as responsible for the poor investment and political climate in the country — the main barrier to international collaboration. On the other hand, some government agencies are considered to be better than others, and there is a view that the government may potentially serve as a supporter of business ventures and be an administrative resource. Eligibility for state procurement contracts is ranked second among possible measures that may stimulate international business ventures in which emigrants would participate.

The government is ranked low among Russian organizations that are potential partners for international business ventures (see Figure 9). The government's low rating is at the same within the group of respondents with actual experience of business contacts in Russia, though this group gives preference to business entities and consulting firms rather than to universities and research institutes. Moreover, only 8.7 percent of respondents believe that the government is receptive to change and open for collaboration. In comparison, half of respondents believe in the changeability of universities, academic institutes, and private firms.

**Figure 9. Average Capacity of Russian Organizations as Potential Partners for International Business Ventures**

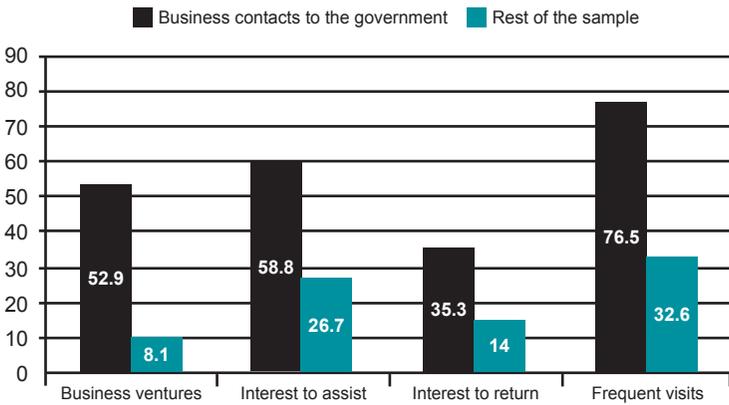


Note: 1 = Weakest, 5 = Most Efficient; Mean Grade.

Source: Authors' survey of Russian diaspora members.

Few Russian diaspora professionals (only 5.8 percent of the sample) reported regular business meetings with Russian government officials. Slightly more (11 percent) meet government officials from time to time. Informal interviews suggest that the purpose of these meetings is generally to encourage emigrant involvement in technological ventures, or to tap their expertise for government programs. Sometimes, the government wants to collect comments on matters concerning legislation, innovation infrastructure, links between universities and industry, and other matters surrounding the development of domestic institutions. The survey shows that the usual objective of such meetings for emigrants is to mobilize the “administrative resource” in support of their own actual or potential business in Russia: the group of respondents with actual business contacts in the Russian government correlates significantly (with one percent significance) with the group of those who reported business ventures in Russia. That group also shows a statistically significant correlation with frequency of visits, potential returnees, and willingness to provide assistance to local technological entrepreneurs (see Figure 10). All this may be interpreted as an indication that doing successful business in Russia makes maintaining contacts with the government necessary.

**Figure 10. Share of Respondents Reporting Frequency of Business Ventures, Interest to Assist or to Return, and Frequency of Visits to Russia by the Groups That Have and Do Not Have Business Contacts in the Russian Government**



Source: Authors' survey of Russian diaspora members.

The respondents understand that the government is not homogeneous, and its overall inefficiency does not mean some of its agencies are not more responsive. The Ministry of Education and Science and Rusnano state corporations are mentioned as entry points for business contacts within the government more frequently than other agencies.

With respect to policy advice on how to enhance Russian firms' international ties, respondents' top recommendation is to reduce investment and trade barriers, a recommendation supported by almost 45 percent of respondents (see Figure 11). This means potential collaborators think that the main barriers to joint business lie in the domestic environment. Interestingly, respondents see more potential in accessing Russian state procurement funds than in less commercial incentives, like internships abroad or strengthening business development organizations. This seems to be another sign of inconsistent perceptions among respondents: at least some of them think that the seriousness of the government's administrative barriers may become less damaging if the government expands its procurement programs for technological products.

**Figure 11. Survey Respondents' Answers to Question "What actions should be supported by the Russian government to enhance international linkages of Russian firms?"**



*Note:* Respondents were asked to select up to three answers.

*Source:* Authors' survey of Russian diaspora members.

Generally speaking, the survey results point to a critical gap between the new government policy on diaspora integration and the limits of its current practical capabilities. The tools that should in theory allow the government to play an effective role in supporting emerging international technology linkages remain grossly inadequate. It is probable that the government is not fully comfortable with the idea of diaspora cooperation because it cannot control or regulate it in the same manner it regulates domestic agents, and because it finds it difficult to place emphasis on global networking logic in its programs and decisions. The diaspora in turn finds it difficult to trust the government, whose political rules do not fit its sense of justice and democratic values.

**E. Benchmarking Russian Responses to Other Countries**

The survey instrument allows some benchmarking of the replies of the Russian respondents to the rest of the sample and to Argentina and Mexico separately. The purpose of this section is to learn what is common and what is different in the perceptions of emigrants across the three countries, and to assess the drivers of cooperation within sending country institutions and individuals.

**1. Limitations of the Benchmarking Exercise**

We understand the limits of a comparative analysis of this kind. Professional labor migration in the three countries differs in nature, duration,

and purpose. The sample populations are also not entirely comparable: Russian respondents are significantly more mature, educated, and more academically oriented than their colleagues from other countries in the sample.<sup>37</sup> Thus we may expect that Russians' entrepreneurial drive is lower. When we compare Russian academics to Mexican managers — the professions that dominate the respective national samples — we risk reflecting on the difference between professions rather than the variation between national models of diaspora integration with the home country. Therefore, the simple comparison of means without controlling for profession and specialization should be taken with caution. On the other hand, it is interesting to search for and interpret any common patterns that exist, because common patterns across such different groups may be a signal of the robustness of these findings. Ironically enough, emigration proved to be more global than the project instrument foresaw; for example, we identified some Russian names in the Argentinean sample. Treating our target countries as pure sources of global brain workers would be misleading.

In addition to the structural differences listed above, we also expected that for fundamental cultural reasons the Russian respondents would be more pessimistic in their replies than their counterparts in the other two samples. Based on our previous experience with empirical studies in Russia, we were ready to warn the reader about a need to be cautious about Russian emigrants' replies, given the entrenched cultural tradition of having a gloomier outlook than the circumstances warrant. We were wrong. Though Russian respondents are most critical in their views about the potential of the Russian government to cooperate, be flexible, and change, their other responses, which were based on guesswork and beliefs rather than definite knowledge, proved that the Russian diaspora strongly believes in the existence of dynamic segments in the home country's society. Moreover, more than 80 percent of respondents from all three countries believe that their home country's organizations have a competitive advantage in at least one area of R&D specialization (see Table 12).

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37 It should be taken into account that contrary to the earlier sections of this chapter, for the purposes of this comparative analysis we removed six incomplete observations from the Russian dataset (103 were left at the end). We also did not divide the frequency of responses by the number of respondents in case of multiple answers, and therefore the sum is often not equal to 100 percent. In the case of several key variables analyzed here (e.g., intention to assist home country entrepreneurs, actual activities in the country of origin, home visits for business purposes), missing observations have been treated as negative answers, because we believe that if the respondent does not know whether he or she has activities in the home country, it is most probable that he or she does not have any.

**Table 12. Degree of Optimism Measured by Share of Respondents Who Believe in Existence of a Receptive Segment among the Home Country’s Institutions and Individuals, a Dynamic Segment in Local Government, and Long-Term Competitive Advantage in their R&D Field of Specialization**

	Russia		Argentina		Mexico	
	Share of Respondents Who Believe Statement (%)	No. Obs.	Share of Respondents Who Believe Statement (%)	No. Obs.	Share of Respondents Who Believe Statement (%)	No. Obs.
People and Agencies in Home Country Are Receptive to Cooperation	80.5	82	60.5	76	42.4	177
Dynamic Segment in Local Government Does Exist	14.5	62	43.8	48	47.1	119
Home Country R&D Has Competitive Advantage (At Least in One Area)	78.6	103	100	102	85.6	205

Source: Authors’ survey of diaspora members.

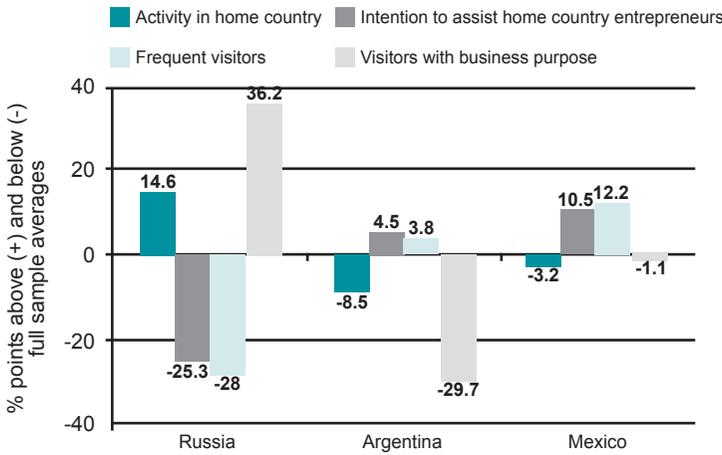
Thus we see that respondents from all three countries strongly believe in the potential of their sending nations to integrate into the international research and business community, and to have competitive advantage at least in one area of R&D. The national governments’ credibility is estimated much lower, with Russians being most pessimistic in their assessment of the government as a potential cooperation partner.

**2. How Significantly Is the Diaspora Involved in the Sending Country’s Development?**

The questionnaire allows us to compare the strength of existing linkages by at least four indicators: intentions to support the home country’s entrepreneurs, actual contacts of the organization where respondent works with the country of origin, instances of frequent visitors to the home country, and share of visitors with business purposes. The results did not confirm our expectation that Russian diaspora members would demonstrate a lower commitment to cooperation given their relatively recent emigration and the short supply of supporting institutions in the host country. The picture is more mixed.

Figure 12 demonstrates that Russian respondents are ahead of the sample averages regarding the share of respondents who work for organizations that have actual contacts in Russia and by the frequency of visits to Russia with business purposes. They are far behind in their inclination to support the home country’s entrepreneurs and in their share of frequent visitors. Actual contacts include joint venturing and commercial and non-commercial contacts to individuals and organizations in the country of origin. Frequent visitors, once again, are defined as those who visit more than once a year.

**Figure 12. Frequencies of Linkages to Country of Origin Across Countries, as Compared to the Three Countries' Sample Averages**



Source: Authors' survey of diaspora members.

Mexican emigrants lead by the share of frequent visitors (which is understandable, given the short distance to the United States, their main destination of their emigration), and especially in their enthusiasm about supporting to the home country's entrepreneurs: 67.8 percent of Mexican respondents would like to support entrepreneurship in their home country, compared to only 32 percent Russians. Thus we suggest that the potential development impact, if measured by the influence of emigrant brain workers on the home country's entrepreneurial culture in the high-tech sector, may be somewhat higher in Mexico than in Russia. However, we should not overemphasize the difference: Russians seem to overcome the obstacles to linkages that their late start engenders. Their frequent and business-oriented visits to the home country, as well as the more established linkages of their organizations, may help them to catch up.

Given the structural differences of the national samples, we have controlled the answers by the professional position of respondent, expecting that the Russian linkages would be significantly related to the academic position of the majority of Russian respondents. Once again the results are mixed: Table 13 shows that intentions to assist the home country's entrepreneurs are indeed always highest among independent respondents in all surveyed countries. In Russia this gap is the highest (60 percent of independent workers are willing to assist as opposed to only 31 percent of academics). However, Russia lags behind other countries not only in the sample average, but also across all professional groups, suggesting that the entrepreneurial drive, including the drive to cooperate in general, is lower among Russian emigrants.

**Table 13. Strength of Linkages to Sending Country by Professional Group, Share of Respondents (%)**

Professional Group	Intention to Assist			Actual Contacts to Country of Origin			Visits to Home Country for Business Purposes		
	Russia	Argentina	Mexico	Russia	Argentina	Mexico	Russia	Argentina	Mexico
Independent	60	72.7	89.1	80	13.6	26.1	40	18.2	63
Employee of the Firm	33.3	82.1	64.4	46.7	38.5	25	80	7.7	42.3
Academic	30.8	53.2	61.7	35.9	4.3	21.3	78.2	14.9	36.2
Sample Average	32	61.8	67.8	41.7	18.6	23.9	75.7	13.7	42

Source: Authors' survey of diaspora members.

Russia leads in the number of respondents in actual contact with home organizations, both commercial and non-commercial. And this leadership is not dependent upon the respondent's professional position. Russia and Mexico have a relatively high share of emigrants paying business visits to the home country compared to Argentina.

### 3. Drivers of Linkages

The data allow us to consider several hypotheses about factors that may influence the likelihood of business and other contacts of emigrants with the country of origin. In addition to structural specificities, we may expect that linkages in all three countries are sensitive to the membership of respondents in international professional associations as well as to the business climate and quality of institutions in the sending country.

In the previous paragraphs it was stated that membership in international professional associations with links to Russia significantly increases the probability of different types of involvement of the Russian diaspora with the sending country. Is this true for the other two countries? Table 14 shows vital commonality: in all three countries members of international associations are more dynamic and have stronger home country connections. However, statistical tests proved that this correlation is significant in the case of Russia and Mexico, but less significant for Argentina. The likelihood of actual contacts increases in Russia more significantly than in the other two countries. The share of business visits is sensitive to membership mostly in Mexico.

**Table 14. Distribution of Respondents Reporting Contacts to Country of Origin, Intentions to Assist, and Business Visits by Country, by Membership in International Networks with Connections to the Home Country**

Groups of Respondents who Reported	Share of Groups Among Members and Non-Members of International Networks with Connections in Country of Origin								
	Russia			Argentina			Mexico		
	Members	Not Members	Chi-Sq. Test, P	Members	Not Members	Chi-Sq. Test, P	Members	Not Members	Chi-Sq. Test, P
Intention to Assist	53.8	24.7**	0.006	72.2	56.1	0.108	81.2	61**	0.004
Actual Contacts	69.2	32.5**	0.001	19.4	18.2	0.876	29	21.3	0.23
Business Visits	80.8	74	0.488	86.1	86.4	0.972	58	33.8**	0.001

\*\* = statistically significant at 5 percent level.

Source: Authors' survey of diaspora members.

Home country institutions often serve as a push factor for professional emigrants: people choose a career abroad because of the poor business climate at home. We expected two opposite patterns in the way institutions affect current linkages to the country of origin. First, that the poor quality of institutions at home would prevent emigrants from participation and the investment of their expertise and capital in the development of the high-tech sector in the country of origin. The other expectation, contrary to the first, was that emigrants, with insider knowledge and increased capacities to stay afloat no matter the local circumstances, may have a significant advantage compared to other foreign players in that environment. Overall, poor institutions might be a neutral factor, not significantly influencing the intensity of emigrants' linkages with the home country. Moreover, it might be the case that poor institutions lead to more frequent visits to the home country, especially when a respondent has launched business there and needs to check on it more frequently than he or she would in a more favorable investment climate.

Descriptive statistics of correlations between engagements with the home country and the quality of the home country's institutions is presented in Table 15.

**Table 15. Distribution of Intentions to Assist, Intensity of Contacts with the Home Country, and Frequency of Visits with Business Purposes, by Assessments of the Quality of Government and Business Institutions in the Home Country, Share of Respondents (%)**

	Quality of Government Institutions (%)						Quality of Business in Home Country (%)					
	Russia		Argentina		Mexico		Russia		Argentina		Mexico	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
Intention to Assist	44.4	30.9	63.2	61.4	72.4	66	53	44.1	70	77.1	78	62.5*
Activities	44.4	41.5	10.5	20.5	29.3	22	67	50	23.3	28.6	29	18
Business Visits	77.8	75.5	10.5	14.5	39.7	43	93	73.5	13.3	17.1	52	43

\*= Statistical significance at 10% level

*Notes:* The dummy for the quality of institutions was constructed from the answers to the question “Please, assess the existing average capacity of various organizations as potential partners for international business ventures (1- the weakest, 5 – the most efficient).” Responses rated from 1 to 3 are taken to indicate low quality, whereas responses rated from 4 to 5 are taken to indicate high quality. Missing answers were treated as low quality.

*Source:* Authors’ survey of diaspora members.

Data from Table 15 show that a high assessment of government and business institutions only slightly increases the likelihood of linkages for Russian and Mexican emigrants. A statistically significant correlation is only observed for Mexican emigrants; however, in the category of intentions to assist a high assessment of local businesses as potential partners is associated with the frequency of positive intentions to assist home country entrepreneurs. Argentina is remarkably different: people who reported frequent business visits and activities in the home country have a more negative view of local institutions. One possibility is that they are better informed.

To check the above hypothesis, we regressed dummies for linkages that may depend on the individual behavior of the respondent — intentions to assist and visits to the home country with business purposes. The exercise was carried out for the integrated sample and separately for the country samples to track differences and common patterns.

The main finding from the regressions relates to the significant similarity of the factors affecting linkages to the home country between Russia and Mexico. In spite of a large gap in the level of reported intentions to assist entrepreneurs, the likelihood of these plans in both countries is strongly associated with membership in international professional associations. Female emigrants from both countries are less likely to be interested in providing assistance, though statistical significance is observed only for Mexico. The quality of business institutions is the most important factor for emigrants from Mexico, and for the sample as a whole. In all three countries independent workers are more likely to engage than those

in other professional categories. A possible explanation for this is that independence or self-employment is a sign of individual commitment to risk and entrepreneurship. In all three countries the perceived quality of government institutions appeared unrelated to the willingness to assist. Thus we suggest that emigrants are more or less equipped to cope with the inadequacies of local government institutions in spite of their complaints.

With respect to visits with business purposes, Russia and Mexico seem to have more commonalities than differences, while Argentina largely differs from the other two. The likelihood of business visits is strongly associated with the positive view of local businesses as cooperation partners for both Russians and Mexicans, while this factor is neutral for Argentina.

The results of the survey confirm that Russian-born emigrant workers are increasingly involved in the circulation of information, people, and business activities between their native and new home countries. We learned from the survey that both path dependence and accumulated personal experiences have an effect on the diaspora's interest in contributing to, and establishing business connections with, Russia. Though this knowledge is not particularly dependent on the age of respondents, it is associated with a better understanding of the rules of the game, the inclination to take entrepreneurial risks, and other competences gained through former business experience and studies abroad. Academics and people employed by firms are less likely than business owners/independent professionals to get involved in Russian business ventures, or forge other types of connections. We may conclude that in terms of specialization, sectors in which Russia has a strong competitive advantage and that are located closer to the commercial part of the supply chain are more attractive for potential returnees: among surveyed professionals, IT specialists and people specializing in natural resources demonstrated a significantly higher interest in returning to Russia.

Informal ties are still the dominant form of interaction with the home country, and formal hubs of information exchange and "brain circulation" are slow to emerge.

From the benchmarking exercise we may conclude that, in terms of business linkages and entrepreneurship, Russian emigrants are less engaged in their home country's development than their Argentinean and Mexican counterparts. But this gap is not as large as it seems, given the much stronger engagement of foreign organizations at which Russian emigrants work with the home country, and the high intensity of business visits to the home country in spite of distances and costs. We have found remarkable similarities in the behavior and perceptions of Russian and Mexican emigrants, while Argentineans almost always respond differently. Membership in international networks and the receptiveness of local businesses to change and cooperation seem to drive linkages in Russia and Mexico more than other factors. Individual risk-taking is strongly associated with linkages to the home country in all three countries.

There is reason to believe that barriers to the Russian diaspora becoming more involved in the development of the technology business sector at home are both within and without Russia. Home country institutions — especially the government — are inefficient, resistant to change, and slow to accumulate the capacities needed to interact with networks. Emigrant workers, in turn, are not ready to take entrepreneurial risks and prefer well-paid business consulting to real business uncertainties. There is also limited knowledge of business success stories that could encourage a broader follow-up.

## IV. Policy Recommendations

Four main recommendations emerge from this study. First, policy focus needs to shift from the current emphasis on emigrants' return to support for joint projects (brain circulation). Second, the diaspora cooperation strategy should be diversified so that there is more focus on joint business projects with diaspora entrepreneurs and managers, as well as joint projects with the academic diaspora, which are already increasingly popular among Russia's policy makers. The third set of recommendations concerns modalities, or the "how-to" of engagement with the diaspora.

Both the interviews and the surveys revealed that diaspora networks emerge in a bottom-up fashion: these networks link entrepreneurs from Russia and its diaspora. Both groups of entrepreneurs are aware of the Russian business environment's numerous problems, but they manage to find solutions to ameliorate these problems. As an illustration, the Russian business environment is viewed as more receptive and friendly by diaspora members who are engaged in joint projects with Russian-based organizations or individuals than by those who are not. This somewhat counterintuitive observation also has emerged in other surveyed countries (Argentina and Mexico) and is supported by earlier studies.<sup>38</sup>

The survey and the interviews show that the major limitation for productive diaspora engagement with Russia's business and academic sector is the inflexibility of domestic organizations and vested interests at home. Yet neither domestic organizations nor the technological and academic diasporas are homogeneous. Thus, the immediate priority should be to put additional resources in support of the relatively few partnerships already established by first movers from both sides of the border to help them to scale up their activities and become a visible model for replication.

Also in the short term, the government might consider improving communication with the diaspora, and making a systemic effort to

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38 Saxonian and Shin, "Immigration and the Transformation of the Silicon Valley Labor Force."

disseminate concrete success stories of particular diaspora members. It is insufficient to discuss the matter at the level of broad government initiatives; potential diaspora partners would like to know how it works at the level of individual projects.

In the medium term, the central policy question is how to match the dynamic segments of diaspora members and the dynamic segments of institutions at home (not necessarily within the government). We propose here a two-pronged approach: a centralized framework (established by the government) that would make diaspora members feel welcome in Russia and determine basic rules of their engagement; and institutional space for bottom-up creativity and initiative for all agents involved.

Needless to say, striking such a balance is far from trivial and experience suggests that the heavy emphasis on top-down government interventions is unlikely to become effective. Ministries established for the diaspora (such as the ones found in India) have so far proved to be at best of limited value in facilitating brain circulation. The relevant policy analogy is the promotion of innovation. To make the economy innovation-friendly, one needs a tolerable innovation climate, yet it is private agents, not governments, who make innovation happen. One practical approach for blending bottom-up creativity with an explicit national framework of rules could be realized in the form of a national contest of diaspora initiatives — a competitive grant scheme.

Drawing on the existing initiative of the Ministry of Education and Science, such a contest would provide matching funds to Russian R&D and educational organizations interested in articulating and running diaspora initiatives that would advance their own missions and objectives. Such organizations would formulate their proposals for a contest committee and the winner would receive matching fund contributions.

Operational details for such a program would need to be refined, but this type of contest would have to have clear eligibility criteria and could, for instance, support institutionalized diaspora initiatives for a period of up to three years, with a limit of \$100,000 in matching grants per year. It could initially support ten to 20 focused initiatives. Ideally, each diaspora initiative would be characterized by the following features:

- The ability to identify and manage strategic first movers from the diaspora. Strategic first movers are individuals with a longer-than-usual planning horizon. These individuals are crucial because the new organizations that they start in the home country provide a model for others.
- Focus on mentoring and skill transfer as key features of joint projects between diaspora and home country organizations.

A way to describe the diaspora members such a contest would target would be to characterize them as mentors who are not expected to do the work so much as to help home country organizations do their work better.

To counteract a likely initial shortage of creative initiatives for diaspora engagement focused on joint, commercially-oriented projects, the federal government could consider two measures. The first would be a national workshop followed by a website focused on emerging best practices in diaspora cooperation. The second would be a portfolio of two to four pilot initiatives at a sub-national level cofinanced by national and regional governments. As already noted, Russia's "secondary capitals" — major cities such as Kazan, Novosibirsk, and Nizhni Novgorod — figured prominently in the ongoing diaspora interactions with Russia. These secondary technological and scientific capitals can create elite diaspora networks similar to Global Scot (see, for instance, Chapter 10 of this book) or Chile Global.

Our fourth recommendation relates to public investing in the Russian talent base in the major global centers of scientific and technological excellence. We propose a subsidy for masters and graduate-level training in science, engineering, and technical discipline in the global centers of technological entrepreneurship such as the United States, the United Kingdom, Israel, or Taiwan. Arguably, this is the most controversial of our recommendations. The following three observations are in order.

- The first relates to the objectives and logic of such investments. The objective is not skill formation in terms of closing the gap between the advanced skills the country requires and the skills domestic higher education can supply. The expectation is that the majority of the graduates (75-80 percent) will not return to Russia upon graduation. Rather, the objective is to foment brain circulation networks. Consequently, the proposed subsidy to higher education abroad should be part of a package of initiatives that include investment into brain circulation networks so that the graduates who stay in these global centers of excellence remain connected to the home country.
- Our second observation is that the program should be designed to reduce possible rent-seeking. Elite higher education is a position usually reserved for the upper-middle class and for a country's elite. Obviously, a subsidy to the elite is a nonstarter. To prevent rent-seeking, one could create a simple rule such as a full-tuition subsidy for those admitted to a graduate course in the approved fields of study in the top ten universities in the United States, the top three in United Kingdom, and so on. Placing the bar sufficiently high would mean a relatively small number of subsidy recipients and less leakage.

- Our third observation is about the institutional home of the proposed program. The program, which subsidizes the brain drain (at least in the medium term), is bound to be unpopular and will be subject to budget pressures. As the purpose of the program is a strategic investment in the country's future, it could be initiated on a pilot basis as a philanthropic gesture by a few Russian oligarchs with a vision, and/or as part of a major innovation initiative such as the Skolkovo Innograd example discussed earlier in this chapter. 

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## CHAPTER 9

# DO WE NEED A DOUBLE-EDGED SWORD? TRIGGERING THE CONTRIBUTIONS OF SILICON VALLEY'S KOREAN DIASPORA TO DOMESTIC INSTITUTIONAL TRANSFORMATION

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### Introduction<sup>1</sup>

The rapid integration of China and India into the global economy has highlighted the contributions of highly skilled diasporas to development. While diaspora members are typically viewed as sources of technology or knowledge, this chapter focuses on their ability to trigger institutional transformation in the home country.<sup>2</sup> In this view, diasporas can function as “search networks that firms and other actors rely on to locate collaborators who can solve part of a problem they face or require part of a solution they may be able

- 1 This chapter is part of a larger project that is supported by the MacArthur Foundation and the Korean Trust Fund. The authors are grateful to Yevgeny Kuznetsov for his contributions to the work, Hyungjoo Kim for her assistance in updating statistics and keeping interview results in Korea, and Shahid Yusuf for his valuable comments.
- 2 AnnaLee Saxenian, *The New Argonauts: Regional Advantage in a Global Economy* (Cambridge: Harvard University Press, 2006); Yevgeny Kuznetsov, ed., *Diaspora Networks and the International Migration of Skills* (Washington DC: World Bank, 2006).

provide.”<sup>3</sup>

This chapter examines the potential for the Silicon Valley-based Korean diaspora to contribute to domestic institutional transformation in an economy that requires a greater capacity for innovative search. The legacies of the developmental state model in Korea are reflected in the strong entrenchment of economic and political stakeholders in the *chaebol* (*jaebol*) system. Powerful conglomerates and the bureaucratic state constrain opportunities for the diaspora to initiate an economic transformation in Korea; the central challenge for diaspora members is to identify local collaborators with whom to initiate institutional change. The chapter draws on the findings of a series of in-depth interviews and participation in the networking activities of the Silicon Valley Korean diaspora during 2008 and 2009.

## I. Immigration Paths of Korean Engineers in Silicon Valley

Highly skilled Asian immigrants have contributed technical and engineering skills to Silicon Valley since the 1980s. Saxenian and Shin argue that the combination of changes in national immigration policy, the openness of US institutions of higher education to qualified foreign students, the growing presence of immigrants in graduate science and engineering (S&E) programs relative to native-born students, the tendency of immigrants to geographically concentrate, and the growing demand for skill by Silicon Valley-based industries combined to create the current concentration of Asian immigrants in Silicon Valley.<sup>4</sup>

Korean scientists and engineers have been a fast-growing — but relatively small — presence in the Silicon Valley workforce. Within the period of 1970 to 2000 the skilled Korean workforce in Silicon Valley had grown from 100 to 5,758; yet this was modest compared to larger Asian immigrant communities from Taiwan, China, India, Vietnam, the Philippines, and so on (see Table 1).

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3 AnnaLee Saxenian and Charles Sabel, “Venture Capital in the “Periphery”: The New Argonauts, Global Search, and Local Institution Building,” *Economic Geography* 84, no. 4 (2008): 380.

4 AnnaLee Saxenian and Kyoung Mun Shin, “Immigration and the Transformation of the Silicon Valley Economy: 1970-2000” (prepared for the Organization of American Historians annual meeting, San Jose, California, April 1, 2005).

**Table I. Transformation of the High-Technology Workforce in Silicon Valley, 1970-2000**

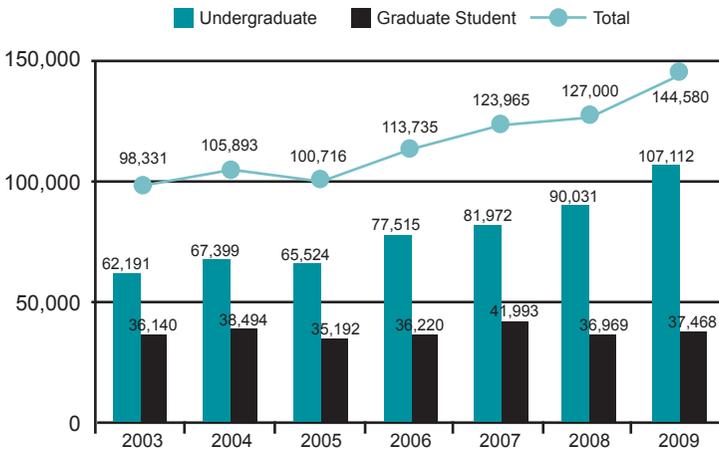
	1970		1980		1990		2000	
	Number	%	Number	%	Number	%	Number	%
<b>Foreign born</b>								
Europe	5410	5	9523	4	16576	4	27413	6
Canada	1203	1	1741	1	2854	1	4638	1
China	100	0	3420	2	10828	2	26594	5
Taiwan	0	0	920	0	6516	1	12907	3
Japan	600	1	1421	1	2939	1	4468	1
<b>Korea</b>	<b>100</b>	<b>0</b>	<b>1500</b>	<b>1</b>	<b>3507</b>	<b>1</b>	<b>5758</b>	<b>1</b>
Philippines	600	1	7250	3	20520	5	23219	5
Vietnam	0	0	3023	1	15248	3	27174	6
India	400	0	1120	1	7371	2	30058	6
All other Asian born	0	0	1121	1	4234	1	9215	2
Middle East	201	0	1141	1	4373	1	7399	1
Australia and New Zealand	0	0	241	0	392	0	1005	0
All other foreign born	2206	2	9941	4	24565	6	26661	5
<b>Native</b>	<b>94151</b>	<b>90</b>	<b>184656</b>	<b>81</b>	<b>325345</b>	<b>73</b>	<b>286772</b>	<b>58</b>
<b>Total</b>	<b>104971</b>	<b>100</b>	<b>227018</b>	<b>100</b>	<b>445268</b>	<b>100</b>	<b>493281</b>	<b>100</b>

Source: AnnaLee Saxenian and Kyoung Mun Shin, "Immigration and the Transformation of the Silicon Valley Economy: 1970-2000" (prepared for the Organization of American Historians annual meeting, San Jose, California, April 1, 2005).

Korea is one of leading exporters of students to foreign institutions of higher education. The tradition of sending students overseas can be traced back to the early modernization of Korea in the late 19<sup>th</sup> century<sup>5</sup> and is still in operation. Between 2003 and 2009, Korea experienced a 6.6 percent annual growth in the number of students going abroad to study, with the count growing from 98,331 to 144,580. Figure 1 shows that undergraduate students comprised the majority of the increase. Their numbers climbed from 62,191 in 2003 to 107,112 in 2009. The number of postgraduate students who went overseas only increased from 36,140 to 37,468 within the same period.

5 Sunwoong Kim, "Brain Drain, Brain Gain, and Korean Global Brain Network: A Critical Literature Survey and Research Agenda" (unpublished manuscript, 2006), <https://pantherfile.uwm.edu/kim/www/papers/Brain%20Drain%20or%20Brain%20Gain.pdf>. Kim explains that their target countries, purposes, and interactions with host countries differ along the pathway of the Korean modernization process: 1890-1910 (Chosun Dynasty period), 1910-45 (Japanese colonialism), 1945-60 (American influence), 1960-90 (brain drain and brain gain), and the period after 1990 (mass internationalization).

**Figure 1. Outflows of Korean Students, 2003-09**



Source: The Korean Ministry of Education, Science, and Technology.

Korean students from the 1970s to the 1990s, unlike Chinese and Indians students, largely preferred the privileged access to local high paid jobs, and thus moved back to their country of origin. The Korean developmental state and economy were institutionalized with the infusion of the foreign-educated science and engineering talent: these returning students were absorbed in large numbers by government research institutes in 1970s, by universities in 1980s, and by large companies in 1990s.<sup>6</sup> This helps explain the modest growth of the Korean workforce in Silicon Valley.

The reliance on foreign education systems, however, reached its limit in the mid-1990s. The stay rate of Korean doctorate recipients from US universities began to increase in the mid-1990s after reaching a low of 9 percent in 1992 and 1993, compared to 91 percent stay rates for Chinese students and 87 percent for Indian students (see Table 2). The stay rate sharply increased in the 2000s. In the period of 2004 to 2007, almost 70 percent of Korean science and engineering (S&E) doctoral recipients planned to stay in the United States.

<sup>6</sup> The process and typical cases of each period will be reviewed in the following chapter.

**Table 2. Stay Rate of Foreign Doctorate Recipients from US Universities After Five Years**

	1987-88	1990-91	1992-93	1994-95	1996	1998	2000-03	2004-07
China	65 %	88 %	92 %	91 %	96 %	90 %	92.5 %	90.8 %
India	72 %	79 %	83 %	87 %	86 %	86 %	89.1 %	88.9 %
Taiwan	47 %	42 %	36 %	42 %	40 %	47 %	66.4 %	64.6 %
Japan	17 %	13 %	21 %	27 %	24 %	37 %	56.7 %	58.9 %
Korea	17 %	11 %	9 %	15 %	21 %	34 %	68.6 %	69.2 %
<b>Total</b>	<b>41 %</b>	<b>47 %</b>	<b>53 %</b>	<b>51 %</b>	<b>56 %</b>	<b>61 %</b>	<b>73.1 %</b>	<b>76.6 %</b>

Source: M.S. Jin, M. S., “Understanding Korean Brain Drain by a Comparison of the Employment Situation between Returned PhDs and Non-returned Ph.Ds with US Higher Education Degree in Science and Engineering,” *The Journal of Educational Administration* 25 (3) (2007): 271-93. (In Korean with English Abstract); and National Science Foundation (NSF) 2000s statistics updated with “Science and Engineering (S&E) Indicators: 2010,” [www.nsf.gov/statistics/seind10/pdfstart.htm](http://www.nsf.gov/statistics/seind10/pdfstart.htm).

This change was reflected in Korea’s fall in the International Institute for Management Development (IMD) brain drain index from 7.53 in 1995 to 3.69 in 2010. Korea’s brain drain ranking has also sharply decreased, from fourth in 1995 to 42<sup>nd</sup> in 2010 (see Table 3). The brain drain grows as the index approaches 0.

**Table 3. International Institute for Management Development Transition of Brain-Drain Index , 1995-2010**

Division	1995	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
USA	8.51	8.55 (1)	8.96 (1)	8.25 (1)	8.19 (3)	7.88 (3)	7.84 (4)	7.22 (5)	7.07 (4)	6.64 (7)	6.84 (5)
South Korea	7.53 (4)	4.11 (39)	4.70 (39)	4.57 (23)	4.50 (44)	5.91 (25)	4.91 (40)	5.89 (19)	5.11 (27)	3.44 (48)	3.69 (42)
Japan	7.46	6.83 (9)	6.00 (21)	6.23 (6)	6.77 (13)	6.53 (15)	6.75 (16)	5.70 (21)	6.24 (11)	6.39 (10)	5.78 (18)
Singapore	7.22	5.58 (24)	6.85 (12)	6.12 (17)	7.14 (7)	6.59 (14)	6.93 (13)	7.08 (8)	6.62 (8)	5.78 (15)	6.13 (11)
India	3.00	3.15 (44)	5.53 (28)	5.98 (7)	6.97 (10)	6.25 (21)	6.76 (15)	5.50 (25)	5.11 (26)	5.73 (16)	5.89 (16)
China	2.62	3.78 (40)	3.53 (46)	3.53 (27)	3.13 (55)	3.51 (54)	3.22 (57)	3.48 (46)	3.66 (42)	2.93 (52)	3.46 (45)

Notes: 0 <Brain-drain index <10, 0 = negative effect on national economies, 10 = no effect on national economies. The figure within parentheses indicates the country’s ranking.

Source: International Institute for Management Development (IMD) *World Competitiveness Yearbook*, annual data, 1995-2010.

This tendency to remain in the United States has been reflected in the change of the educational and occupational profiles of Silicon Valley’s

Korean immigrants.<sup>7</sup> In 1990 the educational achievement of Koreans was similar to that of the region's Vietnamese and Filipino immigrants, with only 39 percent holding a B.S. or advanced degree. However, in 2000, the educational achievement of Korean students grew by 71 percent, closely resembling that of Japanese students. Skilled Korean immigrants also significantly improved their occupational positions during the 1990s. In 1990 the largest number (38 percent) held semi-skilled jobs, whereas in 2000 professional occupations became the dominant category, with 55 percent of students holding jobs in that category.

These educational and occupational changes are associated with the aggressive entry in the 2000s of both large Korean companies and technological small and medium enterprises (SMEs) into Silicon Valley. This in turn contributed to the creation of a Korean ethnic network in the region. The case of Silicon Mitus explains the typical process of Korean SMEs entering Silicon Valley to provide an ethnic pool for the Korean engineers there.

### **Box I. The Case of Silicon Mitus**

The dominance of large Korean companies in the global electronics markets for products such as mobile phones and displays has created opportunities for new start-up companies. MagnaChip Semiconductor, for example, was formed in 2004 to acquire the non-memory operations of Korea's Hynix Semiconductor, one of the world's largest producers of memory devices. Seoul-based MagnaChip offered flat-panel display drivers and silicon foundry (semiconductor contract manufacturing) services; its most frequent customers were companies in the LG group. MagnaChip actively recruited engineering talent in the United States, including in Silicon Valley.

In 2007, a MagnaChip employee started the spin-off company Silicon Mitus, which makes custom power management ICs for flat panel displays, mobile devices, and energy-related hardware. Its customers include LG and Samsung. Silicon Mitus has now received two rounds of funding from US and other venture capital investors, and opened a branch in Silicon Valley. The Silicon Valley office hires experienced Korean engineers to focus on chip design, and the Korean headquarters is focusing on the development and manufacturing of IC in close contact with Korean client companies.

A statistical review has shown that the number of Korean engineers and scientists has only modestly grown in Silicon Valley even though Korea has been one of the largest countries to send talented students

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7 Saxenian and Shin, "Immigrant and the Transformation of the Silicon Valley Economy."

to study overseas. The economic success of their home country has provided quality jobs and opportunities for those educated abroad to return to Korea immediately after finishing their studies. The attraction of their home country, however, was not sustained in the past two decades. Large Korean companies and SME technology companies that have tried to absorb new technologies and find new clients from Silicon Valley have grown as a reservoir for Korean engineers. These have combined to enlarge and upgrade the Korean community in Silicon Valley.

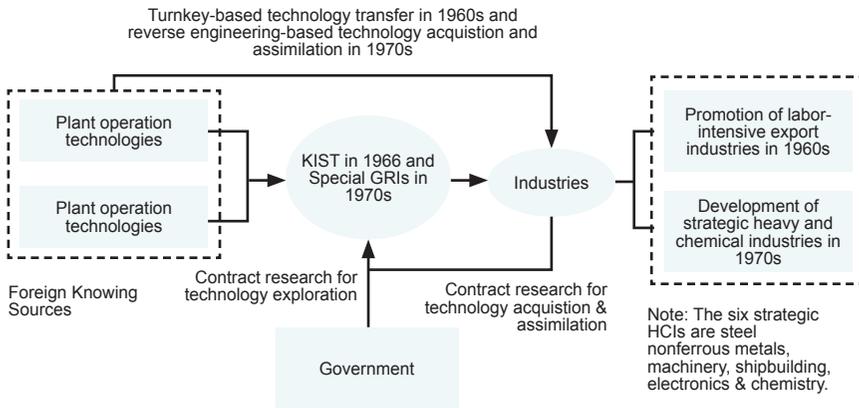
## **II. Evolution of Korean Innovation Systems and the Role of Returned Scientists and Engineers**

Korean scientists and engineers with foreign qualifications have contributed a great deal to their home country via institutional transformation during the last four decades. The investigation to evaluate the contribution of Korean scientists and engineers trained abroad is based on a three-dimensional case study. First, before 1980, Korean government research institutes (GRIs) played major roles in the Korean R&D system. Second, industrial R&D began to dominate the whole R&D system from the 1980s to the Asian financial crisis of the late 1990s. Third, after the Asian financial crisis, the Korean R&D system began to diversify to include universities and technology ventures as well as the sustaining government R&D investment. This investigation will also provide insights on the appropriate role of the Silicon Valley-based Korean diaspora for the continuous transformation of Korean innovation systems.

### **A. Before 1980: KIST and Special GRIs**

During the 1960s and 1970s, GRIs were key players behind technology acquisition and the assimilation of Korean industries (see Figure 2). Contract research from government and industry nurtured the research activities of Korean GRIs. The evolution of Korean innovation systems during this period was fueled by foreign-educated scientists and engineers. In the 1970s, when the Korean government pursued the six strategic industry promotions (automobiles, industrial machinery, shipbuilding, electronics, steel, and petrochemicals), the Korea Institute of Science and Technology (KIST) and special GRIs, along with their foreign-trained scientists and engineers, were present at the center of technology dissemination and triggered the industrial R&D in 1980s.

**Figure 2. The Korean National R&D System Before 1980**



Source: Authors' rendering.

KIST was strategically established to transform the nation's brain drain into brain gain.<sup>8</sup> Former President Junghee Park and Dr. Hyungsub Choi, founder of KIST and former Minister of Science and Technology, considered the presence of Korean expatriate scientists and engineers an opportunity to build up indigenous high-tech capabilities. It is said that some 2,000 Korean scientists and engineers lived abroad in 1968. The creation of a Center of Excellence to lure back Korean talents and contribute to the development of a Korean knowledge base can provide a platform for reversing brain drain.

KIST was established in 1966 by Choi, along with Park, who was a strong supporter. Choi also contributed to the formation of the Korean American Scientists and Engineers Association in the early 1970s, which has continuously facilitated the return of Korean science and technology (S&T) talents from the United States. High salaries and other perquisites such as relocation expenses, free housing, and education expenses for children were also offered by KIST to attract key personnel. This subsequently became the norm in government repatriation initiatives.<sup>9</sup>

During the 1970s a few GRIs were created specifically to support the six strategic industries in Korea. Most of the research institutes were spinoffs of specialist departments of KIST. The Korea Institute of Electronics Technology (KIET) was a KIST department that later emerged to conduct research on the design, processes, and systems of semicon-

8 William Lazonick, *Sustainable Prosperity in the New Economy: Business Organization and High-Tech Employment in the United States* (Kalamazoo, MI: Upjohn Institute for Employment Research, Upjohn Institute Press, 2009).

9 Ibid.

ductors in 1976.<sup>10</sup> Koreans with experience in the US semiconductor industry led KIET's research divisions. KIET's contribution includes setting up Korea's first very-large-scale-integration (VLSI) pilot wafer-fabrication plant in 1978, as well as the launch of a fully operational plant fabricating 16K Dynamic Random Access Memory chips by 1979 in a joint venture with the Silicon Valley chipmaker, VLSI Technology.

From 1968 to 1980, Korean government-sponsored repatriation programs brought home 130 foreign-based Koreans on a permanent basis and 182 on a temporary basis to GRIs.<sup>11</sup> This approach resulted in new knowledge, experience, connections, and leadership in South Korea.

### **B. The 1980s and 1990s: POSTECH and Chaebols**

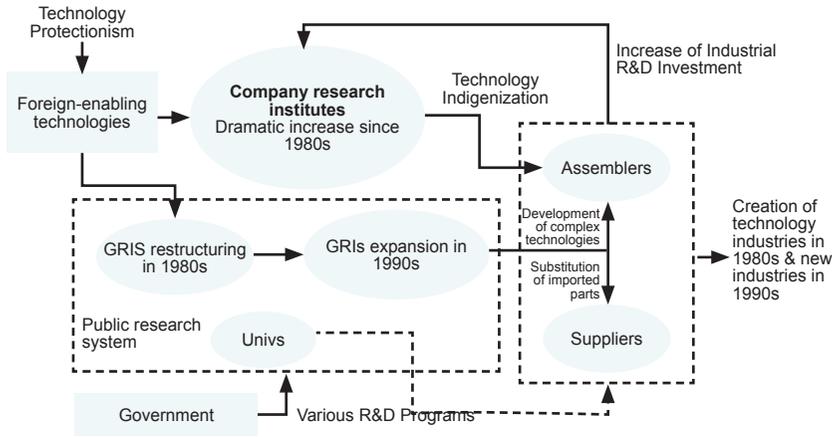
Technology indigenization through company research institutes was the main stimulus for the creation of technology-intensive and other new industries in the 1980s and 1990s in Korea. The public research systems of GRIs and universities also contributed to the collective utilization of foreign essential/enabling technologies, which were partially available for Korean industrial development thanks to strong technology protectionism. The success of Pohang University of Science and Technology (POSTECH) highlights the role repatriated scientists and engineers played in strengthening Korea's innovation system in the 1980s. In the 1990s, Samsung and other large conglomerates called *chaebols* also succeeded in attracting foreign-trained scientists and engineers back to Korea.

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10 Ibid.

11 Ibid.

**Figure 3. The Korean National R&D System from the 1980s to the 1990s**



Source: Authors' rendering.

### I. Pohang University of Science and Technology (POSTECH)

The case of POSTECH has special meaning in the transformation of the Korean innovation system. In the 1980s, when most Korean universities failed to contribute significant research, POSTECH provided a key contribution in transforming university education and research.

In the early 1980s, university graduates failed to meet Korea's industrial needs. Hence, a few large companies tried to establish their own universities. Hyundai established Ulsan University and LG established Yeonam Junior College, which later also proved to be inadequate in producing skilled graduates. Taejun Park, the founder of Pohan Iron and Steel Company (POSCO), believed that establishing a research university would prove beneficial in augmenting the country's economy.

Taejun Park tasked Hogil Kim, a former professor at the University of Maryland and the sixth president of the Korean-American Scientists and Engineers Association (KSEA), to start POSTECH in 1986. The university is now one of the three top engineering colleges in Korea. POSTECH's achievements were only possible thanks to institutional experimentation by the committed Korean American scientists mobilized by Kim through KSEA, as well as the strong financial support and protection he received. POSTECH's success has influenced other Korean universities to focus more on research to contribute toward the betterment of the country.

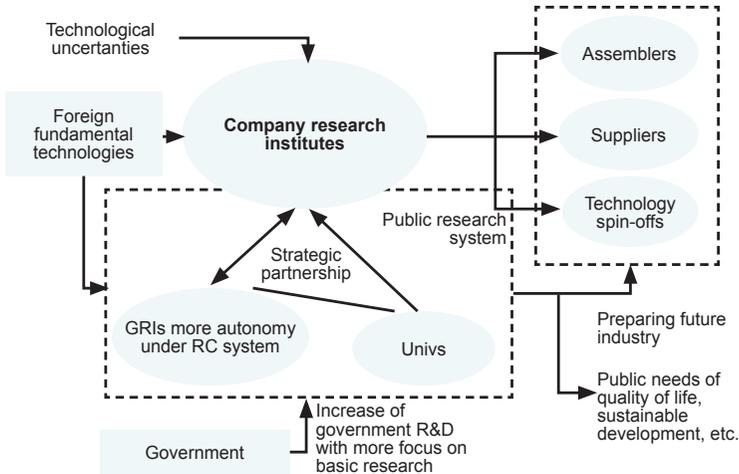
## 2. Samsung and Other Chaebols

By the 1990s, a large number of highly paid jobs were provided to college graduates in Korea. Besides the presence of multinational corporations such as Motorola Korea and GRIs such as KIST, Korean *chaebols* such as Samsung, Hyundai, and LG (formerly Lucky-Goldstar) were the main sources of valuable employment opportunities. The brain drain was reversed by the late 1980s as a result of the employment opportunities created by these leading *chaebols*, and Korea developed to the extent that repatriated talents were utilized effectively and efficiently by the early 1990s. Through rapid expansion of in-house R&D and reverse engineering, they had transformed various technologies originally brought in from abroad into world-leading products in a number of high-technology sectors. The Korean experience through the early 1990s was considered an exceptional reverse brain drain model.<sup>12</sup>

## C. Korea Since the Financial Crisis of the Late 1990s

A handful of *chaebols* began to dominate the Korean technology product market in the 2000s. Faced with growing technology and market uncertainty, company-based research institutions began establishing strategic partnerships with one another and with universities and GRIs to prepare for a more unpredictable future. The nation's research system also diversified during this period to meet public demands for more R&D to address social issues such as environmental sustainability and quality of life. As a result, government R&D expenditure increased sharply in the 2000s, reflecting the expansion of investments in both basic research and more socially oriented research.

**Figure 4. The Korean National R&D System Since the 2000s**



Source: Authors' rendering.

<sup>12</sup> Ibid.

After 1990, private companies hired many foreign-trained scientists and engineers, and contributed to attracting repatriated highly-skilled Koreans. Many of these returnees tried to adapt to the structure and culture of these large companies, but coming from the more meritocratic and flexible firms in the west, they struggled with the organizational hierarchies and the power of entrenched interests in *chaebols*. A small number of venture companies, however, have managed to overcome the legacies of large companies dominating the Korean economy by way of global sourcing. The challenges and opportunities will be investigated, along with the potential contribution from Silicon Valley-based scientists and engineers.

### III. Korean Entrepreneurs in Silicon Valley

A handful of Korean entrepreneurs have succeeded in Silicon Valley. Philip Hwang was the first Korean entrepreneur to list his company, TeleVideo, on NASDAQ. He started his company in the 1970s and tapped the technological opportunities Silicon Valley offered, but his business model was that of an ethnic enclave owned and managed by a Korean founder and producing its products in partnership with a large Korean company. Chong-Moon Lee started Diamond Multimedia Systems in the 1980s and successfully mingled with American business and society; and in the 1990s, David Lee launched Silicon Image, a semiconductor design company that created an innovative business model in the area of digital interface.

#### A. Philip Hwang and TeleVideo in the 1970s

Philip Hwang founded TeleVideo in 1975 to develop and manufacture computer terminals. The company developed smart terminals with Intel microprocessors at a time when dumb terminals were the industry standard. The company was listed on NASDAQ in 1983 and led the video display terminal industry in 1980s. It produced terminals through a strategic partnership with Dongyang, a Korean engineering company that produced TV sets. TeleVideo led technology development and tracked US market trends, while Dongyang did the development work to produce the terminals in Korea. The company, however, has suffered from the shrinking of the terminal market since the late 1980s. Hwang never relinquished his ownership of the company, which is a typical attitude adopted by entrepreneurs in Korea. Some believe that new investment and new technologies were blocked because of his ownership. Though TeleVideo was successful in the beginning, it was a Korean enclave in Silicon Valley, owned and managed by a Korean founder and producing its goods in partnership with a Korean company.

## ***B. Chong-Moon Lee and Diamond Multimedia Systems in the 1980s***

Chong-Moon Lee founded Diamond Multimedia Systems in 1982. The company produced computer graphic cards and successfully went public in early 1995. After retiring from the company in 1995, Lee established AmBex Venture Group to invest in wireless communication, voice-over IP applications, Internet infrastructures, network security, and multimedia applications. He is also well known for his various social activities in the realm of education, culture, and sports. The Chong-Moon Lee Foundation donated \$16 million to the Asian Art Museum of San Francisco, which is named the Chong-Moon Lee Center for Asian Art and Culture. He is commended not only for utilizing technology and market opportunities in Silicon Valley to launch his businesses, but also for his successful engagement in and contribution to the local business environment.

## ***C. David Lee and Silicon Image***

Korean entrepreneur David Lee started Silicon Image in 1995 to design integrated circuits (ICs) for the storage, distribution, and presentation of high-definition content. The company went public on NASDAQ in 1999 and is now a key player in linking global computer and consumer electronics companies and major System on Chip (SOC) providers. The market power of the company comes not only from the technology it developed, but also from its dominance of industry standards in the market for high-definition content. Two of Silicon Image's important standard initiatives were the Digital Display Working Group (DDWG) in 1998 and the HDMI Working Group in 2003, in which major global consumer electronics producers such as Sony, Hitachi, Thomson (RCA), Phillips, Matsushita (Panasonic), and Toshiba participated. According to John Shin, vice president of strategic technology initiatives at Silicon Image, the remarkable success of the company would not have been possible if it had been founded in Korea. The opportunities and resources of the Silicon Valley ecosystem were critical to Silicon Image's success.

## IV. The Contributions of Silicon Valley Korean Entrepreneurs to Korea

The Korean innovation system succeeded in the global market through the strategic coupling of an efficient and committed central government and the *chaebols*. That system is currently a constraint on the creativity and autonomy of small and medium technology companies. The venture dynamics generated by the financial crisis of the late 1990s are now faltering. This is a potential opportunity for contributions from the Korean diaspora. Following a review of the early contributions by Korean entrepreneurs, we examine three vehicles for the transformation of the Korean economy: the large company, the start-up company, and venture investment.

As Korean firms faced the technological and market uncertainty of the 2000s, demand for Korean diaspora members has grown not only for their new technology but also for their management and entrepreneurial abilities. The legacies of the success of the developmental state model, reflected in the strong entrenchment of stakeholders of the *chaebol* system, have limited the opportunities for the diaspora to initiate an institutional transformation in Korea. Three cases of individual diaspora members' experiences in Korea are used to illuminate the lock-in characteristics (constraints) of home country institutions. The first experience is in a large Korean company, the second mostly in small venture companies, and the third in venture capital investment.

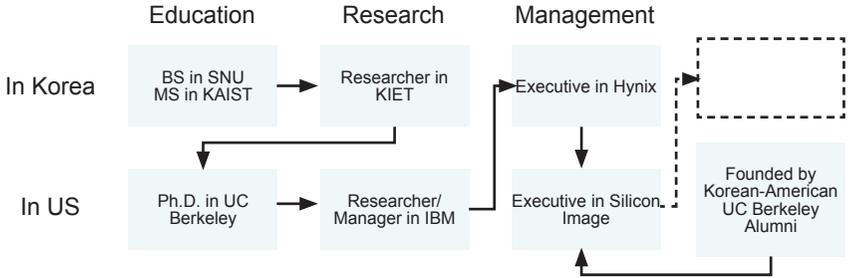
### A. Early Korean Entrepreneurs' Contribution

The early Korean entrepreneurs in Silicon Valley sought to contribute to Korea, but none were successful in spurring lasting institutional transformation. Philip Hwang, for example, established TeleVideo Korea in 1984, but the company was sold after losing clients due to the strikes and industrial unrest of 1988. Chong-Moon Lee chose a different approach: in 1998 he donated US\$2 million to Stanford University for programs including education for Korean venture entrepreneurs. He also donated to the Korea Advanced Institute of Science and Technology in 2004. These contributions, while valuable at a micro level, have had little wider impact. The early generation of entrepreneurs has also played advisory roles in Korean governmental agencies and institutes. Their most lasting effect may have been as models for their domestic counterparts. Woo K. Kim, former president of the Korean IT Network, believes that Philip Hwang motivated large companies like Samsung, Hyundai, and Daewoo to invest in the computer industry in the 1990s, which, by training multitudes of engineers, provided a base of expertise in the country.

## A Korean Argonaut: Bridging Korean and Silicon Valley Technology Industries

Hyun Jong (John) Shin’s career is unusual because he has deep roots in both US and Korean technology companies and industries. His education, technical and managerial experience, and professional networks span Korea and the United States (see Figure 5).

**Figure 5. The Personal Career Path of John Shin**



Source: Authors’ rendering.

Shin was educated at top engineering universities in Korea (Seoul National University, Korea Advanced Institute of Science and Technology) and the United States (University of California, Berkeley) during the 1980s, and he worked for almost a decade on cutting-edge IC design for the IBM T. J. Watson Research Center in New York. In 1996, he was recruited to serve as vice president for Hyundai Electronics, America’s semiconductor R&D lab in San Jose, California. Several months later, he returned to Korea as vice president of memory R&D at Hyundai Electronics. He went on to head the System IC Division, pursuing state-of-the-art technologies. He reorganized the R&D unit and developed early prototypes and technologies, but the projects lacked sufficient technical expertise and resources. Hyundai engineers were committed and worked hard, although Shin felt they didn’t have enough self-motivation and didn’t create the same culture of innovation that he had experienced among IBM researchers. In 1998 he returned to Silicon Valley and established Hyundai DynaLogic in order to recruit US-trained engineers to carry out cutting-edge projects. He had moderate success with high-quality Korean-American engineers there, but it was difficult to hire top non-Korean Silicon Valley engineers. Hyundai did not yet have a strong enough reputation to attract them.

Starting in 1999, when the Korean economy and the Hyundai group were experiencing severe financial crisis, Shin was asked to lead the “Blue Chip Project” in Korea as an executive vice president for memory R&D at Hynix Semiconductor (Hyundai Electronics subsequently became Hynix Semiconductor after acquiring LG Semiconductor). The goal was to enhance the efficiency of product development and manu-

facturing, and to produce next-generation DRAM chips through the optimization of existing facilities. Following his success on this project, Shin returned to the United States. In 2001, he accepted a position as vice president for advanced technology development at Silicon Image, where he served until mid-2009.

## **B. Challenges and Opportunities in Korean SMEs**

T.J. Kim earned a doctorate at the University of Arizona and worked for NEC Research and later for a Silicon Valley company before returning to Korea. Kim initially joined COSET, a Korean start-up, as a founder and chair of the research center in 2001. He was then offered the CEO position by the investors, but ultimately declined because of potential liability risks. He accepted a position as head of technology development at Teralink, a spinoff from the KAIST Lightwave Systems Research Lab. However, in spite of his expertise, Kim was unable to grow the research team because of its lack of managerial and financial autonomy from Teralink. He returned to Silicon Valley in 2005 after working for the Korean Institute of Industrial Technology (KITECH), a Korean government research institute that specializes in industrial extension, and for Inje University.

Chris Piercy began his career as a venture capitalist after a successful IPO and a merger and acquisition (M&A) of his companies in Silicon Valley. Piercy, who married a Korean woman, lived in Seoul for a year. During this time he consulted for Korean SMEs and for an S&T cluster; he also invested in a Korean Internet start-up. He was convinced of the technological competence of the Korean venture companies, but found out that two important venture capitalists' exit strategies — IPOs and M&A — are not easily available to Korean start-ups. Public regulation of revenue makes the IPO strategy almost impossible, while the Korean M&A market is quite limited and large companies such as Samsung are reluctant to acquire small companies. Therefore Piercy's long-term vision was to make the start-up a public company on NASDAQ. He believed that with more customized portfolio strategies, he could overcome IPO regulation, M&A problems, the dominance of large companies, and other institutional and cultural differences.

Ike Lee, who successfully listed six companies on NASDAQ and was involved in many M&A deals in Silicon Valley, reports similar experiences investing in Korean ventures, identifying the managerial control exerted by founding engineers/owners, as well as bad bookkeeping and lack of managerial know-how, as bottlenecks for further investment from overseas Koreans.

The case of the venture company Park Systems is also worth noting. The founder started his company in Silicon Valley after he finished his PhD from Stanford. He made and sold atomic force microscopes (AFMs) to major research institutes. After a decade of successful operation, he

moved to Korea to begin another company developing AFMs for industrial use. His company supplied products to major assemblers of semiconductors, LCDs, and hard discs such as Samsung, LG, Seagate, and more. While he was managing the company, he managed to overcome the dominating market power of large companies and other institutional bottlenecks in Korea with his technological capabilities and global marketing networks, all of which were attained in the United States.

## V. The Networking of Korean Engineers in Silicon Valley

There was limited networking among Korean entrepreneurs and high-tech employees during the 1980s and 1990s. The Korean American Society of Entrepreneurs (KASE) mainly attracted technology workers who were born in the United States or had immigrated there as children. During the 2000s, as the community of Korean engineers and entrepreneurs grew and matured, Koreans actively tried to formalize ethnic networks in Silicon Valley in order to share their experiences with younger generations and to sustain their own activities in Silicon Valley. The Korean IT Network (KIN), founded in 2001, has taken a pivotal position in networking Korean engineers and businessmen in Silicon Valley; later, the BayArea K Group was organized to overcome the limits of KIN. Therefore it is meaningful to review these two networks to identify the characteristics of Korean networks in Silicon Valley.

### A. The Korean IT Network (KIN)

KIN was officially launched in 2001. The Silicon Valley Indian entrepreneurs' network, The Indus Entrepreneurs (TiE), was the most important model for KIN. TiE supports entrepreneurship among Indian engineers in Silicon Valley and the network was strengthened by the strong commitment of members who had benefited from its activities. KIN board member JK Kim believes that the organization can also evolve as a business platform for Korean engineers by providing mutually beneficial resources for members, as well as management training for engineers and technology insights for non-engineers.

The Korean Ministry of Information and Communication was heavily involved in the formation and funding of KIN. The agency provided full financial support for the first three years, and covered half of the costs in subsequent years. KIN did not become financially self-sustaining until 2006. With the support of government, large Korean companies, and other Silicon Valley companies, KIN organized annual conferences and training courses in global business for local governments and Korean SMEs.

KIN failed to mobilize major players from Silicon Valley and Korea, for several reasons. First, most Silicon Valley Koreans are engineers and unlikely to be in a position to hire other Korean engineers. The few Korean vice presidents and project managers at Silicon Valley companies who have such authority were not actively participating in KIN activities because they saw little benefit for themselves. Second, though large Korean companies such as Samsung, KT, SKT, and others could be major resources for the scale-up process of the Silicon Valley Korean engineers' network, KIN could not provide a platform to trigger the match-making processes because of members who were only interested in commission fees and who blocked the process by twisting the relationship to suit themselves.

While financial support from the Korean government may have appeared necessary because of the small number of Koreans in Silicon Valley, as compared to Chinese and Indian networks, the limitations of government support were even greater. Financial reliance on government funding led to the distortion of network activities. KIN meetings and programs did not meet the needs of members because the network has been more concerned with government officials and politicians who have the authority to support them.

## **B. The BayArea K Group (K Group)**

In 2006 a group of young Korean engineers and businessmen in Silicon Valley, mostly in their thirties and with degrees from US universities, recruited T. J. Kim to become an advisor to a network they were starting called the BayArea K Group. The founders of the K Group felt the need for a network to share experiences, to help find jobs, and to encourage entrepreneurship. They believed this network would also contribute to Korea's development, as this excerpt from the website's homepage illustrates:

*There are various ethnic groups in Silicon Valley. Especially the Chinese and Indian networks are famous for helping each other through their networks. Then they could take important positions in Silicon Valley companies and contribute to the job creation and knowledge transfer to their home countries through relocation of R&D centers to their countries. It is the time for the Korean professionals in Silicon Valley to take rank with them. For that purpose, it is necessary to have a practical networking and to share personnel and other expertise information.<sup>13</sup>*

Membership of the K Group grew quickly and by 2009 had reached 800, almost 40 percent of the Korean engineering population of Silicon Valley.

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<sup>13</sup> Translated from Korean. See BayArea K Group, [www.bayareakgroup.org/](http://www.bayareakgroup.org/).

The two pillars of the K Group are entrepreneurship for start-ups and job/career management. It organizes technology seminars, talks with Korean venture capitalists, and informal meetings with senior Silicon Valley Koreans. Small group meetings are also important tools for members to share their experiences and help each other. The K Group has seven subgroups and a special relationship with the independent Bay Area Korean-American Scientists in Biotech and Pharmaceutical (BAKAS). Every activity is voluntarily organized and operated.

The limits of the government-sponsored KIN, as discussed earlier, were among the motivations for the formation of K Group. Peter Bae, the chair of K Group, believes that KIN is now shrinking without financial support from the government because its focus on high-profile public events doesn't meet the networking and educational needs of its members. Bae and his members are reluctant to receive financial support from the Korean government because it would require that they meet government officials' requests and expectations. This is not helpful to the government, companies, or K Group members. Instead K Group chose to collaborate with the KITECH USA Technology Cooperation Center.

The K Group currently faces difficult times, as the Silicon Valley economy was hit by global economic turbulence and many members lost their jobs. This situation may, however, also be an opportunity, because the laid-off members are available to attend meetings to find new jobs or to discuss starting new ventures, which is the K Group's mission.

### **C. Two Different Models of Networking**

The Korean network in Silicon Valley has been actively mobilized since the 2000s. The two main networks, KIN and the K Group, were compared on their formation, evolution, and future prospects. KIN has almost ten years of experience in Silicon Valley. It was installed in Silicon Valley thanks to strong support from the Korean government, particularly the former Ministry of Information and Communication. It is now financially self-sustaining, but is not addressing the real problems Korean engineers in the region face; in fact, its top-down and political model of funding, as well as its association with only the largest Korean companies, suggest that it is better positioned to support the institutional status quo.

K Group, which is only two years old, has already mobilized 800 Korean engineers, scientists, and businessmen. Its affiliation with KITECH, the industrial extension and collaboration agency, has better positioned it to address the real concerns of Korean engineers and entrepreneurs — concerns about new technologies, business models, sources of funding, managerial techniques, and so forth. While the group is struggling to sustain its network activities because of global economic instability

(and its reluctance to receive government support), it has potential over the longer term for building linkages to trigger institutional transformation in Korea.

## VI. Discussion and Policy Implications

During the last four decades, collective coupling of the diaspora has contributed to rapid economic development in high-tech areas. The Korean government played an important role in triggering diaspora network formation, which, in turn, contributed to many professionals returning to Korea. The government, private partners, and the collective network of the diaspora, however, constructed institutions for technology governance that remain inaccessible to new firm start-ups and outsiders. Meanwhile the role of government, though still important, has faded as the system evolves and becomes more complicated.

The Korean model of economic success during the past several decades has limited opportunities for the Korean diaspora to contribute further to economic transformation in the home country. On the one hand, the creation of ethnic networks in the knowledge hub of Silicon Valley was delayed; and the number of Korean diaspora members was small, and they did not even want to be identified as Koreans. On the other hand, Korean political and economic institutions were so strongly locked into previous models of success that the experiences and know-how of outsiders were not welcome. The Korean diaspora networks in Silicon Valley either remained small and fragmented or were mobilized in a top-down fashion by government agencies. These constraints explain why the Korean diaspora's home country approaches remained individual rather than collective.

However, Korean entrepreneurs and engineers have mobilized the resource network in recent years. This self-motivated Korean network in Silicon Valley, along with the need for economic experimentation in the home country, offers new opportunities for diaspora contributions. This detailed research concludes that decentralized diaspora networks such as the BayArea K Group are well positioned to serve as search networks: to identify receptive firms, clusters, and institutions at home and to provide them with access to best practices in technology, business, or policy. Such changes will necessarily be incremental. These changes can be ignited only in a few locations or domains at a time; but experience suggests that the accumulation of incremental changes can contribute to larger-scale transformation over time.<sup>14</sup>

The Korean system of production and innovation is vulnerable to the destructive changes of the open and globally competitive market, particularly if it does not develop groundbreaking technology products

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14 Saxenian and Sabel, "Venture Capital in the 'Periphery,'" 379-94.

and continues to depend on the previous model of fast adaptation to process innovation, a model other countries have adopted and therefore offers less opportunity for growth. The system also suffers from lack of entrepreneurship and the best-trained workers, who, as discussed, have little room to return to Korea. The previous top-down coordination by the central government seems to be no more effective in removing these bottlenecks. The strategic coupling of the Silicon Valley diaspora network with Korea's local supplier networks and institutions could trigger a mutually beneficial process of upgrading that eventually overcomes the legacies of the developmental state. 

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# PART FOUR

IMPLICATIONS FOR  
INSTITUTIONAL  
DEVELOPMENT AND  
DESIGN OF DIASPORA  
INITIATIVES



# CHAPTER 10

## DIASPORAS AS PARTNERS FOR DEVELOPMENT: INDIRECT (PRAGMATIC) VS. DIRECT (ADMINISTRATIVE) APPROACHES TO DIASPORA ENGAGEMENT

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### Introduction

“**A**ll happy families resemble one another; each unhappy family is unhappy in its own way.” The famous beginning of Leo Tolstoy’s novel *Anna Karenina* contrasts the diversity and heterogeneity of failures yet highlights basic similarities among human success stories.

Would this observation apply to a quite different, yet not totally dissimilar area of human endeavor? Would it apply to a high-risk, high-return firm, a child conceived by a highly driven, usually not totally rational entrepreneur and supported by an angel or venture investor? We asked this question to a number (arguably small, so no pretense of statistical accuracy here) of entrepreneurs and early-stage venture capitalists. The group’s opinion was surprisingly similar: every success — even as it leverages some unique features and traits — is unique, and failures tend to resemble one another.

But why even ask these questions, interesting and provocative as they are, in this book about the mobilization of highly skilled diasporas? In

a nutshell, this chapter draws a parallel between a particular venture entrepreneur developing her high-risk, high-return venture with the help of a network of professional service providers and investors, and a diaspora first mover acting to implement, with support from her own problem-solving search networks, a project to upgrade her home country's institutions.

The chapter aims to develop an indirect or pragmatic approach to facilitate this virtuous cycle of diaspora-home country interactions. This approach favors “high-resolution” diaspora policies — ones that cultivate the project-specific relationships and commitments of movers and shakers (both in the diaspora and in homeland institutions) that might make a significant difference and are counted in tens and hundreds, not thousands or tens of thousands. This novel indirect approach is contrasts conventional direct, or administrative, approaches. The indirect approach is currently in its infancy, which is why we had to rely on our personal policy experience perhaps more than is usual in the context of academic literature.

## **I. Diaspora Engagement with the Home Country as a Portfolio of Tangible Projects with Varying Risk-Return Characteristics**

With funding from the Ireland Funds, Pdraig O'Malley, an Irish diaspora member from the University of Massachusetts, brought, with the endorsement of Nelson Mandela, negotiators from all the warring factions of Northern Ireland to South Africa in 1997 for a week-long deliberation with the chief negotiators from all the parties that had reached South Africa's historic settlement in 1994. Two years of intensive discussions with the leaders of the political parties in Northern Ireland were needed to prepare the trip. Factions would not fly on the same plane, wouldn't sit at the same table, wouldn't come within a half-kilometer of each other, and even refused to be in the same room while Mandela addressed them for fear of “contamination.” Predictably, arranging the logistics of accommodating the Northern Ireland sides in South Africa was quite an endeavor, which was continuously on the verge of falling apart because of issues such as the size of the beer bar in one faction's hotel appearing to be larger than in the other. The trip to South Africa and the dialogue there — South Africans sharing their experiences and the Northern Ireland factions identifying with different aspects of those experiences and sharing their own — created a bond between the two rival factions, resulted in a continuing post-conference line of communication between some members of the Irish parties and some of the South Africans. This conference and the

ongoing dialogue that followed were a contributing factor to Northern Ireland's peace agreement in 1998. After that agreement was reached, the negotiators from Northern Ireland were effusive in their praise of the contributions the South Africans had made.<sup>1</sup>

This is an example of a project that is high impact but also high risk. As already noted, this chapter draws a parallel between a venture entrepreneur developing her high-risk, high-return venture (or portfolio of ventures) with the help of a network of professional service providers and investors, and a diaspora member constructing, with support of her own problem-solving international networks, a portfolio of projects to collaborate with her home country's institutions. Such portfolios may consist of three types of initiatives:

- **Low Risk, Low Impact:** These can include, for instance, traditional charity and cultural agendas. Conferences, workshops, and diaspora databases are also in this category: they are useful but in themselves unlikely to generate significant development impact.
- **Medium Risk, Medium Impact:** These are activities that improve foreign direct investment (FDI) flows to the home country, promote skill transfers and export linkages, image building, and improvements to the investment climate.
- **High Risk:** By our definition, a high-impact project is one in which diaspora members become agents of change in triggering institutional modernization in the home country. The Northern Irish peace process is one such example. High-level support for sensitive policy reforms (such as in education and health) can also be in this category.

Such a portfolio-based approach to home country-diaspora interactions underlines the point that there is no "silver bullet" in diaspora collaboration. Instead of trying to identify a perfect combination of diaspora policies and programs to promote home country development, policymakers would be better off engaging in a process of natural experimentation, introducing and observing various policy and project initiatives, social and economic outcomes, and the connections between the two.

The key question for policymakers and donors is how they can help to design, finance, and grow the portfolios of diaspora members' projects in their home countries. To discern emerging solutions to this policy question, we need a theory of institutional development at home, a view that helps to identify entry points for productive diaspora contribu-

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1 This example draws upon a discussion organized by one of the authors at the World Bank on March 4, 2010. See <http://web.worldbank.org/WBSITE/EXTERNAL/WBI/WBIPROGRAMS/KFDLP/0,,contentMDK:22501257~pagePK:64156158~piPK:64152884~theSitePK:461198,00.html>.

tions. The central conceptual block of such a theory<sup>2</sup> is the heterogeneity of home country institutions: the coexistence of (relatively) well-functioning institutions with dysfunctional ones. The heterogeneity of domestic institutions is matched by the heterogeneity of the diasporas of the highly skilled. Only a few individuals in any national diaspora are experienced, successful, and resourceful enough to engage in a dialogue with home country players about creating innovative firms and to accelerate institutional dynamics. But these few individuals are enough to trigger a process of reform. This is the hypothesis of this chapter and the book: that global diaspora networks could be utilized to support collaboration between first movers in diasporas and better performing and dynamic segments of the home country.

The following sections will examine a key question of the institutional design of productive diaspora engagement that takes into account this heterogeneity: how to turn spontaneously emerging diaspora-home country collaborative arrangements into search networks.

### ***Toward a New Generation of Diaspora Initiatives***

How does matching dynamic segments of diaspora talent with dynamic segments of the country's government occur? Centralized top-down schemes, particularly those managed by the government, have proven to be of very limited efficacy in terms of reaching this objective.<sup>3</sup> And so are many recommendations of the current diaspora debate that encourage conducting ever more detailed studies of diasporas, digital diaspora networks, and conferences of diaspora members (for instance, the large-scale Africa Diaspora Initiative launched at the World Bank in 2007 focuses in large part on such activities.) We suggest that these types of initiatives are useful as entry points and introductions, but they are not a substitute for detailed and lengthy discussions over possible joint projects between public sector champions and diaspora talent.

An example that illustrates a new approach to articulating and implementing joint projects between diaspora members and home country organizations is the experience of alumni mobilization programs in Ivy League universities in the United States. Diaspora networks can be usefully compared with alumni networks. Both types of networks connect alumni — of a country in one case, of a university in the other. Both are institutionalized search networks. Well-run alumni programs generate substantial contributions to the alma mater. As in venture

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2 See Chapter 6 in this volume, as well as Yevgeny Kuznetsov and Charles Sabel, "Global Mobility of Talent from a Perspective of New Industrial Policy: Open Migration Chains and Diaspora Networks," in *The International Mobility of Talent: Types, Causes and Development Impact*, ed. Andres Solimano (Oxford: Oxford University Press, 2008).

3 See, for instance, Yevgeny Kuznetsov, ed., *Diaspora Networks and the International Migration of Skills: How Countries Can Draw on Their Talent Abroad* (Washington, DC: World Bank, 2006).

capital networks, financial contributions are important, but they are not the only crucial input: defining a promising project is as important as financing it. Private universities, particularly elite universities in the United States, have perfected the craft of nurturing dispersed alumni, especially an elite group of high achievers. Successful alumni programs at elite institutions can bring in contributions worth 12 times the cost of running the program.

While all alumni are asked for support, actual support is highly concentrated. Typically 1 percent of the alumni base (which often includes 100,000 or more members) provides 90 percent of total donations. The universities are highly skilled at identifying this group of alumni and maintaining contacts with them through individually crafted programs.

More specifically, universities are very careful in selecting and cultivating a small core of alumni who form a group of intellectual leaders for the entire alumni community. These opinion leaders can be critically important for the overall success of alumni mobilization. This core group consists of an exclusive community of the institution's most valuable supporters. The alumni network as a whole must have high regard for these members' professional achievements; these alumni leaders must make all alumni proud of being affiliated with the group. Intensive personal interaction among the leadership group members, often moderated by university staff, leads to major synergies: through group discussions, members gain a better understanding of the needs of their universities. This helps them to produce better institutional development proposals and ultimately, as they get more engaged, they become more generous in their financial support. Internal competition within the group often increases the average size of members' contributions and deepens the depth of their engagement.

Forming alumni leadership groups according to these principles could be difficult for some diaspora communities. The leaders of many expatriate associations are volunteers (often political appointees), whose status and resources do not qualify them to be major development partners for governments in the home countries. Most diaspora organizations were created to support the local needs of expatriate communities in their new countries, not to support the development agenda of the homeland. Their current leadership is often not well prepared for such a new and ambitious agenda. Nevertheless, these leaders feel entitled to participate in (and sometimes dominate) forums about their home country.

The alumni network model suggests that governments in home countries should be proactive in shaping more selective diaspora leadership groups with more strategic views of the home country's development agenda. It also suggests that a way must be found to isolate the traditional type of diaspora activists from leadership group meetings

without entirely discouraging them. Charter members in this new group have to bring status to, not obtain status from, the existing group. Managing an alumni leadership program requires translating benevolence into productive action. Rather than simply asking alumni for money, university fund-raisers usually ask them to participate in a vision-building exercise — the design of a new direction for the university or an important part of it. In the course of discussing the existing problems and their possible solutions, donors come to share an understanding of priorities and become personally committed to implementing the recommendations that were set up with their participation. Once they become part of the “design team,” they support the agreed-upon recommendations with their resources and influence. Such a participatory process also helps to convince major donors to refrain from pushing individual vanity projects.

Few governments or NGOs genuinely adopt this approach to diaspora mobilization. It requires them to see individuals and their idiosyncratic motivations, and the usual scanning and selection procedures are too crude for that: high achievers within diasporas are not accounted for in statistical data, because are not representative of the diaspora population as a whole. Diaspora leaders are rarely invited to help design national or sector development programs and little support is given to form new strategic partnerships between the government agencies and those diaspora leaders that have a strategic vision. Instead, suboptimal forms of cooperation between home country governments and diasporas dominate. These include traditional, i.e., very broad and unfocused, government pleas for support, usually for humanitarian relief; intensive political consultations between governments and traditional political leaders of the diasporas; and sporadic attempts by diasporas to rearrange themselves and establish new umbrella organizations with a stronger focus on home country development, attempts that usually do not receive adequate support from the governments.

In contrast, two diaspora networks have successfully followed the examples of the alumni mobilization approach. Intentionally small groups of diaspora talent were invited to join two elite diaspora programs: GlobalScot (<https://www.sdi.co.uk/>), which has about 650 members, and Chile Global, which has about 100 ([www.chileglobal.org](http://www.chileglobal.org)). The programs are housed within entrepreneurial and capable economic development organizations (Scottish Enterprise and Fundación Chile, respectively) to follow up on joint projects.<sup>4</sup> Significantly, even for those highly capable organizations, the binding constraint remains on the home country’s side: its ability to follow up on and implement ideas and projects generated by the diaspora members. The constraints may be related to the insufficient interest and willingness of home country recipients (i.e., companies) to receive support, or it may have to do

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4 In 2009, ChileGlobal left Fundación Chile. Since then, it has become less effective in transforming diaspora interest to engage in concrete projects in Chile.

with the infrastructure constraints necessary to facilitate matching the supply and demand of project ideas. It could also be a combination of both. Either way, it can create dissatisfaction among the diaspora members.

This observation shows that this “high-intensity” approach to diaspora cooperation is predicated upon sophisticated domestic capabilities, and as such this approach might be too demanding for low-income countries.

## II. Turning Diaspora Networks into Search Networks: Triggering Guided Serendipity

How does the process of matching dynamic segments of diaspora talent and dynamic segments of the government evolve over time? To put it another way, how do search networks emerge and get institutionalized as they develop a portfolio of joint diaspora-home country projects? Our hypothesis is that this process of emergence and institutionalization goes through three primary stages (see Table 1).

In the first stage, informal networks emerge. An example is the case of Ramon Garcia of the Chilean diaspora, discussed in the introduction and Chapter 6 of this book. He was sharing his proposals with many government agencies, but had little success until he found a like-minded individual — the CEO of Fundación Chile. Crucially, the ability to act innovatively and think outside the box, and the reputation and credibility to put this innovative thinking into action, are not necessarily linked to an official position (a high achiever maintains his or her credibility and networks even when he or she is fired). These twin advantages — personal autonomy and the ability to mobilize organizational resources — permits flexibility and opens the door to the institutionalization of personal and informal networks.

The following example from Mexico illustrates the second stage of evolution of search networks: their partial institutionalization. The Mexican Agency of Science and Technology views the approximately 1 million tertiary-educated Mexicans in the United States (about 400,000 of them in managerial positions) as a unique development opportunity which Mexico has yet to explore. Hence, with advisory assistance from the World Bank, the National Council of Science and Technology (CONACYT), a quasi-ministerial body, started Mexico’s Red de Talentos, a network of talent for innovation. But it very rapidly found itself in a precarious situation. To proceed, Red de Talentos required creative and day-to-day collaboration between the Ministry of Foreign Relations, the Ministry of Economy, and CONACYT. But in Mexico nothing similar

to Fundación Chile exists: there is no autonomous organization with sophisticated capabilities to develop and execute innovative projects. Moreover, there is no tradition of meaningful interorganizational communication and joint action. There is no dearth of interministerial councils to coordinate issues, but they tend to be cartels of established interests, an arena where each agency protects its turf.

The solution found by a high-ranking official of CONACYT was simple, yet brilliant. The official instituted a series of meetings with relevant agencies that were held on Saturdays. The fact that the meetings were outside established routines helped to create meaningful discussion and define a new agenda of concerted action. Management of the program was given to the Mexican Enterprise Accelerator in San Jose, California, which was established by the Ministry of Economy. By their very nature, search networks are interdisciplinary and interorganizational: they bridge boundaries and articulate new projects by finding previously unnoticed similarities. This is why bridge organizations such as Fundación Chile and Scottish Enterprise are so critical: they serve as incubators for search networks.

Individual champions remain the key players at the second stage: should they leave their positions, the future of the program is in doubt. Yet they engage their respective organizations in their projects: the program finds an institutional home, receives budget allocations, and gains other attributes of institutionalized experiment. This is an example of how diaspora search networks help formalize domestic networks while making them more effective and project-focused because they allow better coordination between previously disconnected domestic actors such as government agencies.

A third stage — a fully institutionalized search network — is illustrated by the earlier example of GlobalScot. Launched in 2001, GlobalScot is an innovative and successful program that has formed a network of about 650 high-powered Scots all over the world, using their expertise and influence as “antennas,” bridges, and springboards to generate a surprising variety of innovative projects in Scotland. As mentioned, although GlobalScot relies on all the strengths of its home organization, Scottish Enterprise (a highly capable local economic development organization), even GlobalScot has consistently struggled with being able to fully utilize the ideas and project suggestions supplied by its members. While Scottish Enterprise has sought new ways to encourage greater use of the membership, this capability gap has been the key focus of GlobalScot’s network development in recent years. Network demand has been stimulated via the GlobalScot website, an innovative digital magazine, and social media engagement as well as internally through close working relationships with other Scottish Enterprise staff at home and in overseas offices. These enable connections between GlobalScot members and businesses in Scotland to be forged independently of Scottish Enterprise. A series of high-profile conferences at

which companies sign up to hear from keynote speakers as well as take advantage of pre-arranged one-on-one networking sessions has proved very successful.

From its inception, the program's evolution held many surprises. Invitations to join the network to high-positioned Scots were signed by Scottish First Minister, and it was expected that only a small percentage of these very busy and successful individuals would respond positively. In fact, the positive response rate was close to 90 percent. Yet, out of 650, less than 200 (about 30 percent) have been actively involved in projects with Scottish businesses — a dynamic segment, reflecting an internal diversity within the GlobalScot network — and there has been no way of predicting from the outset which particular talent will become part of this dynamic segment. Box 1 provides a sample of success stories from GlobalScot.

## **Box I. GlobalScot as Example of a New Generation of Diaspora Programs: How the Search Network Is Useful for Home Countries**

- An inward investment project was developed by one of the first members to respond to the invitation to participate in GlobalScot. It has now brought an internet licensing company to Glasgow, initially employing eight people, and will, according to the founder, “quickly become a multi-million pound business.”
- An electronic engineering company that designs, tests, and manufactures innovative condition monitoring systems received, within a day of its request, a full day’s advice on how to agree to a licensing deal with a large US blue chip company at a crucial stage of negotiations.
- A specialist training provider to the international oil and gas industry, looking for an entry point into the Gulf of Mexico, was connected to a GlobalScot member (the ex-president of an oil company operating in the Gulf) who introduced the provider to a number of oil and gas companies in the region. This generated business with several of them and a firm foothold in the market.
- A company specializing in the creation of virtual characters for gaming software was able to make valuable connections with a number of GlobalScot members during a trip to California for an exhibition. A non-executive director of the company described the contacts as “an absolute bull’s-eye target for the type of business advice needed...people you would never dream of trying to reach as there would usually be about a dozen gatekeepers between you.”
- A GlobalScot member who is vice president of procurement at a leading global IT firm donated one day a month to working with Scottish Enterprise’s electronics team, providing insight into the global electronics sector by advising on new product developments, growing and shrinking markets, and new opportunities.
- A University of Strathclyde spinout company, developing the application of innovative 3-D display technology for use in the medical imaging sector and oil industries, requested access to US-based GlobalScots who could advise on the commercial development of imaging technology. Thirty-two members in the medical imaging sector responded immediately, resulting in valuable relationships that saved initial consultancy fees and opened doors to commercial entities that would have been inaccessible otherwise.
- A GlobalScot member who is chief scientist and vice president of research and development for a biotechnology company on the West Coast of the United States undertook a two-day tour of the Scottish biotechnology sector that directly influenced Scottish Enterprise’s Biotechnology Framework for Action. Back in California, he engaged other life sciences members in implementing his report, resulting in a program to develop internships for Scottish life science students within California firms.
- ITI Scotland is a £450 million, ten-year project that encourages and supports precompetitive research in key market areas with strong economic and business development potential. GlobalScot members were actively involved in the initial consultation process, ensuring that final proposals were specifically targeted to address the particular strengths of the Scottish economy. One member, the president of the University of Maryland Biotechnology Institute, also delivered a virtual address at the launch of ITI Scotland, observing that “extremely innovative, cross-cutting research is already underway.”

A crucial observation is that the full formalization of diaspora search networks is typically not desirable, particularly in the context of a developing economy. An institutional home is desirable, yet many informal features (characteristic of the second stage of the evolution) should be maintained. Full institutionalization can easily result in stifling creativity and the capture of a theretofore vibrant network by vested interests. In short, interests of powerful organizations may overtake the dynamic networking capabilities of diaspora members.<sup>5</sup>

**Table I. Stages in Institutionalization of Search Networks with Diaspora Participation**

	Characterization of Better-Performing Segments	Examples
<b>Stage 1: Informal Networks</b>	Individual champions, usually high achievers, from the government, diaspora, and private sector.	Ireland in the 1970s, India in the 1970s and '80s. Most middle-income and many low-income countries today.
<b>Stage 2: Some Institutionalization</b>	The champions create institutional platforms to institutionalize interactions.	Taiwan's experience with early stage venture capital. Mexico's Red de Talentos. Diaspora initiatives promoted by private sector associations such as TiE in the United States.
<b>Stage 3: Institutionalized Networks</b>	A process of matching diaspora members and institutions in home countries to generate and support joint projects.	GlobalScot ChileGlobal

### III. Toward a New Generation of Diaspora Initiatives: The Indirect (Pragmatic) Approach

GlobalScot is an example of an indirect (pragmatic) approach to diaspora engagement. In this emerging approach, skilled diasporas are viewed and relied upon pragmatically, for specific tools and purposes, as an extension and continuation of sector-specific reform and development agendas. Engagement with diasporas becomes a part of everyday management practice. Ireland is a paragon of this approach: it relies on the diaspora in many areas (FDI promotion, education, science, and technology). Many government agencies in Ireland have accumulated considerable experience in incorporating collaboration with the diaspora into everyday management practice by promoting a variety of

<sup>5</sup> For examples from India and South Africa, see Devesh Kapur, "The Janus Face of Diasporas," in *Diasporas and Development*, eds. Barbara J. Merz, Lincoln C. Chen, and Peter F. Geithner (Cambridge, MA: Harvard University Press, 2006), and Jonathan Marks's chapter "South Africa: Evolving Diaspora, Promising Initiatives," in *Diaspora Networks and the International Migration of Skills: How Countries Can Draw on Their Talent Abroad*, ed. Yevgeny Kuznetsov (Washington, DC: World Bank, 2006).

search networks, which are not diaspora networks per se but include diaspora members.

This indirect approach focuses on the search for solutions and support for search networks that help to find and operationalize such solutions. “Engaging with diasporas for what purpose?” is a key question of this instrumental perspective. The pragmatic perspective on diasporas as a means or specifically, as a problem-solving device, can be contrasted with diaspora engagement as an end in itself, which we shall call the direct or administrative diaspora agenda.

The administrative diaspora agenda includes familiar diaspora ministries, ministries of foreign relations, and related specialized NGOs. These are the entry points for diaspora engagement that also play a coordination role: for example, they advocate a need to establish a reasonable institutional environment for broader diaspora engagement and maintain dialogue with diasporas. These are diasporas’ “embassies” in their home countries. But, in addition, one needs a diaspora agenda in the instrumental sense — a process of engagement with specialized government agencies (ministries of health, education, science, and technology, etc.) — to elicit credible commitments from both the agents with resources and expertise at home and relevant diaspora members.

So, direct and indirect diaspora policies are both needed and they complement each other. Since diaspora engagement is by definition cross-cutting, other cross-cutting agendas such as science, technology and innovation, investment promotion, or local economic development — areas with vastly superior policy experience — provide useful and telling parallels. Every country, for instance, has a ministry of science and technology, but those more often present a problem rather than a solution, as they tend to represent a cartel of established local interests — primarily ivory tower academics defending their turf. One can easily see how diaspora engagements in the narrow sense can gravitate towards a cartel of established interests focused on securing funding for diaspora NGOs and associations to promote their own specific objectives, which are sometimes limited to short-term survival.

Just like diaspora as a means (the pragmatic and indirect approach) needs to be balanced by diaspora as an end (the direct and administrative approach), there is a need to balance bottom-up (decentralized) and top-down (centralized) approaches to diaspora engagement. The main idea of this chapter is that diaspora engagement with the home country is an act of entrepreneurship, a tool to launch and sustain social, private, and public initiatives. Private, social, and public entrepreneurs develop a portfolio of projects with their home countries that overcome many constraints and imperfections of the local institutional environment. Hence a bottom-up (decentralized) approach to facilitating the formation of a diverse portfolio of projects and initia-

tives reflecting local needs and capabilities should be central. Yet a centralized effort has its role as well, particularly in sharing emerging good practices and in improving the institutional context for diaspora engagement. A contest among domestic organizations for projects with diaspora engagement is one approach to creating an institutional space that mainstreams bottom-up creativity and entrepreneurship and combines it with centralized knowledge sharing.

Juxtaposing direct vs. indirect diaspora agendas, on the one hand, and a centralized vs. decentralized approach on the other, one arrives at a number of diaspora strategy options (see Table 3). Our contention is that centralized and narrow agendas are routinely overemphasized. Diaspora ministries, for instance, which are sometimes proposed as a best-practice solution to design and manage diaspora strategies, have a role to play as an entry point to the diaspora agenda, but they can just as easily stifle and bureaucratize interactions with diasporas. Critically, the diaspora ministry cannot have the capacity for substantive policy dialogue and institutional development in any individual sectors. But there may nonetheless be a need for a diaspora ministry to identify good existing sectorial practices and to consider playing a role in other parts of the public sector.

Centralized focal points for diaspora engagement are useful, but need to be complemented by other approaches, such as:

- Incorporating diaspora networks into everyday business and public sector practices. This is not usually part of the diaspora agenda as it is conventionally defined. Contests for sector-specific projects between domestic organizations (domestic NGOs, for instance) to initiate the formation of search networks with diaspora participation are examples of a relevant policy instruments. Ireland is an example here (see the following chapter for more details).
- Guiding serendipity: support to institutionalized diaspora search networks. Good practice in this policy domain (illustrated by GlobalScot) is context specific and requires advanced institutional capabilities to be adopted and adapted to developing country conditions.
- The articulation of diverse entry points for diaspora engagement. In this approach, a portfolio of diaspora initiatives covering, ideally, all three segments introduced in Section A (high-impact/high-risk, medium-impact/medium-risk, and low-risk activities, illustrated in Figure 1 of the introductory chapter) emerges implicitly through the support of many diverse diaspora initiatives. Continuity and impact are the main risk factors for narrowly-defined diaspora projects (i.e. initiatives that focus on diasporas per se rather than on home country-diaspora interactions).

Drawing on these considerations for emerging diaspora policy agendas, here are some recommendations for the international development community with respect to designing a new generation of diaspora programs:

- Focus on joint projects between exceptional stakeholders in home countries and diaspora high achievers, rather than executing general capacity-building projects. Try to build on and expand emerging cross-border partnerships instead of trying to create new joint ventures from scratch. A crucial point is that the heterogeneity of both diasporas and home country institutions should explicitly be taken into account. A good project links better-performing and forward-looking segments of a home country's institutional setting with similarly dynamic and strategic diaspora individuals. They then formulate and implement a joint agenda against all odds, problems, and obstacles. Better-performing segments exist even where institutions are generally dysfunctional. A good diaspora project leverages this heterogeneity. This is one reason that it is difficult to replicate such projects well on a massive scale.
- Perform surveys as a means to fine-tune actual diaspora initiatives and give a priority to focused “high-resolution” empirical work. As the diaspora agenda is a fairly new one for most developmental organizations, their first impulse is to take stock of diaspora members. Hence their studies are bound to count diaspora groups and correlate their sizes with financial flows such as investments. At best, such aggregate studies at a macro level provide useful background information. If one disaggregates diasporas by level of education and other indicators, the result is still likely to be too aggregate to discern talent for innovation and institutional development impact. High achievers are, for every diaspora community, counted in dozens, not thousands. An example of relevant empirical work is a database of highly influential Indians and their career trajectories abroad and at home. Tellingly, this database starts from home-country institutions — these are individuals who occupy (or occupied) important positions in India while spending a significant portion of their careers abroad. Additionally, the database is constructed in the context of a specific research and policy question: shedding light on the evolving political economy of diaspora-India interactions.<sup>6</sup>
- Be humble and ambitious at the same time. This is a paradox that only makes sense if one considers the time scale. One is humble in the short-run when the pragmatic objective is to get a few tangible joint projects (between the diaspora and

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6 Devesh Kapur, *Diaspora, Development, and Democracy: The Domestic Impact of International Migration from India* (Princeton, NJ: Princeton University Press, 2010).

its home country) going. Yet one is ambitious in the long-run because the stakes are high: the advancement of economic reforms and institutional changes resulting in a critical mass of promising success stories. For instance, it is almost invariably counterproductive to put return migration as a short-term objective. It is usually more practical to focus first on developing joint projects; if those projects develop well, the expatriate talent would have both the motivation and the context to come back for an extended stay. This is one example of how the humble agenda translates into an ambitious one.

Here is another example of the indirect (pragmatic) approach: a contest, pioneered independently in Croatia in 2006, Mexico in 2009, and Russia in 2010, to provide funds to organizations in a home country interested in articulating and running a project with diaspora members that advanced their own missions and objectives. Both in Russia and Mexico the grant beneficiaries are domestic R&D organizations, while in Croatia the recipients are both diaspora members and domestic organizations. These contests are relatively new, so the jury about their performance is still out.

Such a contest would invite innovative solutions, including those developed as a follow-up to the project meeting of high achievers, from groups — partnerships, consortia, or alliances — that support close collaboration between individuals and/or institutions in more than one country. Proposals to create cross-border organizational links that could continue to mutual advantage after the initial government-funded phase concludes must be particularly encouraged.

The triple novelty of the new generation of initiatives we are trying to promote with the contest is that they are focused on:

- knowledge rather than money as the entry point
- joint projects (brain circulation) rather than the return of the diaspora
- sectoral ministries/agencies, rather than foreign/diaspora ministries, as the focal point from the government side.

Consortia of this type have become an established part of international collaborations in academia and in precompetitive research programs, such as those funded through the European Union Science and Technology (S&T) Framework program. The principles of international consortia have been used in national programs to upgrade the S&T development and innovation sector in middle-income countries such as Argentina and Mexico. Their use in diaspora programs, however, would be rather novel.

**Table 2. Designing Diaspora Programs: Combining Direct (Administrative) and Indirect (Pragmatic) Approaches**

	<b>Direct Agenda (Diaspora as an End): Dialogue, Integration, and Coordination</b>	<b>Indirect Agenda (Diaspora as a Tool): Focused on Specific Development Projects</b>
<b>Decentralized Approach</b>	<p>Diverse entry points.</p> <p>Support to diaspora NGOs, associations, research groups, databases, social networks.</p> <p>Main issue: continuity, institutionalization, and impact.</p>	<p>Guided serendipity.</p> <p>Managed networks (as GlobalScot and Chile Global) and specialized NGOs.</p> <p>Main issue: requires sophisticated institutions in a home country.</p>
<b>Centralized Approach</b>	<p>Diaspora ministries and agencies as central focal point.</p> <p>Main issue: self-entrenchment and stifling of initiative.</p>	<p>Incorporation into everyday practice.</p> <p>Reliance on diasporas as an extension of work of sectoral agencies (e.g., diaspora as a tool for FDI promotion).</p> <p>Contests for projects with diaspora involvement (as in Mexico and Russia).</p> <p>Main issue: documentation and sharing of good practice.</p>

As a summary for a policymaker, Table 3 juxtaposes the conventional administrative and the emerging pragmatic approaches to initiate and sustain diaspora engagement with the home country. The key conceptual elements and operational emphasis of this new approach relate to institutional capabilities, the heterogeneity of key participating agents, and the focus of government interventions on the development of specific, tangible projects. This approach, on its own, certainly cannot guarantee an immediate success of the country’s diaspora program, but it may be helpful in screening various diaspora initiatives, in the self-selection of new diaspora leaders, and in building new project-centered partnerships between such leaders and the most effective government champions. It is important to note that while effective utilization of diaspora potential is impossible without successful engagement with a small group of diaspora high achievers, these high achievers are unlikely to find the traditional forms of engagement with the government very appealing. They need more flexible, individually-tailored, and result-oriented institutional arrangements.

**Table 3. Indirect/Pragmatic vs. Direct/Administrative Approaches to Diaspora Engagement**

	<b>Conventional “Administrative” Approach</b>	<b>Alternative Indirect and Pragmatic Approach</b>	<b>Illustrations of the Pragmatic/ Indirect Approach</b>
<b>Focus of the Engagement Effort</b>	Diaspora and its organizations.	Home country institutions and their capabilities.	Sector-specific specialized networks run by Enterprise Ireland to tap into global expertise in high technology. These are not diaspora networks by design or objective, but in practice consist in large part of Irish talent abroad.

	Conventional “Administrative” Approach	Alternative Indirect and Pragmatic Approach	Illustrations of the Pragmatic/ Indirect Approach
<b>Key Binding Constraints</b>	Size and wealth of diaspora and its willingness to get involved.	Flexibility and strength of domestic institutions and their willingness to engage with diasporas.	Ubiquity of frustrated diasporas — rich, enthusiastic, and entrepreneurial — that fail to realize their potential due to inattention to, or an inability to overcome, domestic constraints (e.g., Armenia, Lebanon, Argentina, and Nigeria).
<b>Key Conceptual Blocks of Diaspora Strategy</b>	Diaspora population.  Background conditions in the home country for the engagement of the diaspora.	Diaspora communities as search networks — a network to identify successive development constraints and then people or institutions that can help mitigate these constraints.	Sectoral networks oEnterprise Ireland are examples of institutionalized search networks The ubiquity of informal search networks in most countries, which either do not need or fail to get institutionalized (see the chapters on Russia, India, and others in this book).
<b>Key Assumptions and Questions of the Analysis</b>	Necessity of good background conditions (such as investment climate) for diasporas to get involved Relative uniformity and homogeneity of diasporas.	Substantial heterogeneity and internal diversity of both home country institutions and their diasporas.	Which are the better-performing and dynamic segments of domestic institutions is the first question for analysis. For instance, it could be enclaves (such as special-purpose vehicles in India) or exclaves (extensions of the world economy into national territory, such India’s Institutes of Technology and Institutes of Management) (see Chapter 4).
<b>Central Focus of Analysis</b>	Quantity of diaspora members, their wealth, and their professional occupations.	Characteristics of individual diaspora members: motivation and degrees of success in their life (e.g., high achievers or not). Characteristics of projects diaspora members undertake with home countries.	
<b>Representative Agent</b>	Diaspora organization and/or NGO.	Risk-taking individual, social entrepreneur, a first mover — both in diaspora and at the domestic end.	Individual talent and entrepreneurship are not equated with years of schooling and formal education in general. Tacit skills are also important (see Chapter 5).
<b>Key Operational/ Practical Approach</b>	Inducing diasporas to get engaged and help home countries through remittances, philanthropy, investments, and other forms of resource transfer.	Matching dynamic segments of both domestic institutions and diasporas to develop a path-setting project through cooperation: articulating links among the creative segments of the state, private sector, and civil society.	Resource transfers are secondary in comparison to development/ institutional impact of innovative projects. First-mover institutions — novel in the home country context — as paragons of diaspora engagement (see Chapters 4-6).
<b>Key Home Country organizations</b>	Diaspora, foreign, and migration ministries and specialized NGOs.	Two types of organizations: <i>established</i> and new <i>Established</i> : economic development and sectoral agencies, including health, education, and science and technology <i>New</i> : specific institutional arrangements (“spaces”) to match dynamic domestic institutions with dynamic segments of diasporas.	GlobalScot and Scottish Enterprise in the UK Irish Development Agency and Enterprise Ireland (see Chapter 11) Contest to engage Russian science diaspora (see Chapter 8).

	Conventional “Administrative” Approach	Alternative Indirect and Pragmatic Approach	Illustrations of the Pragmatic/ Indirect Approach
<b>Typical Activities</b>	Comprehensive documents, databases, and events (e.g., diaspora strategies, research, and conferences).	Project cycle determines relevant activities. Preference for “just-in-time” analysis, which helps to transform discussions into projects.	GlobalScot conducted its first major conference after several years of existence, i.e., after its credibility had been firmly established.
<b>If Failure Occurs, Why?</b>	Complementary reasons: 1) lack of momentum of a bottom-up effort; 2) stifling by top-down administrative support; and 3) insufficient demand for change at home.	Fizzling out of the momentum for change at home.	Preoccupation is not so much with clear-cut failure (which is relatively rare) as with “living dead” (a technical term in venture capital parlance to denote a project whose returns barely cover its social costs).
<b>Key Analogy and Benchmark</b>	Aid industry (diaspora helping a home country).	Venture capital industry: high-risk, high-return projects Alumni programs of Ivy League universities in the United States: “courtship before marriage” approach.	Dealing with conflict resolution as a domain of high-risk, high-return projects.
<b>Generative Metaphor</b>	(Diasporas as) <i>helping hand</i> .	(Successful project as an outcome of) <i>guided serendipity</i> .	Good diaspora program as institutional space to cultivate serendipity: the serendipity engine.

## IV. Monitoring for a New Generation of Diaspora Initiatives

Our experience as policymakers shows that diaspora networks proved easy to establish, but difficult to sustain. This is why most diaspora initiatives not only fail, but result in a partial failure: if tangible results visible to all stakeholders are lacking, initial enthusiasm evaporates. Hence results on the ground and visible joint projects between home country institutions and diaspora members are critical to sustain diaspora policy initiatives. However, here comes the catch. Any sort of big and visible result (a technological joint venture, implementation of reforms prepared together by diaspora members and government leaders) takes time — usually years. In the meantime an intermediate monitoring framework is required to make sure that diaspora networks and their initiatives and projects show signs of sustainability and, more generally, advance in the right direction.

Earlier we noted that the variety of informal interactions between diasporas and home countries (Ramón García from Chile striking a deal with Fundación Chile on his own, for example) is a basis for diaspora initiatives and interventions. Such informal interactions between personalities can evolve and grow along two dimensions. First, they can grow due to a collective effort of diaspora members (and the home country organizations that support them) to transform their individual projects into diaspora networks. Such collective effort constitutes

an investment on the part of everyone involved that can be small and short-term (for example, a diaspora database or diaspora conference) or fairly large and necessary over a long-period of time. Second, the interactions can grow through explicit, dedicated support from the public sector and its organizations.

A monitoring framework developed for GlobalScot, which we have modified, addresses the first dimension.<sup>7</sup> The matrix in Figure 1 below juxtaposes the contributions and commitments (in terms of time and other resources) of network members with the outcomes they receive as a result of their collective efforts. As an illustration, the diaspora network of Chile (ChileGlobal) has designed its own matrix (see Figure 2) and found it to be a very useful management tool to guide decisions about its future activities.

As Figure 1 shows, there are four possibilities, which correspond to the four quadrants of the diagram:

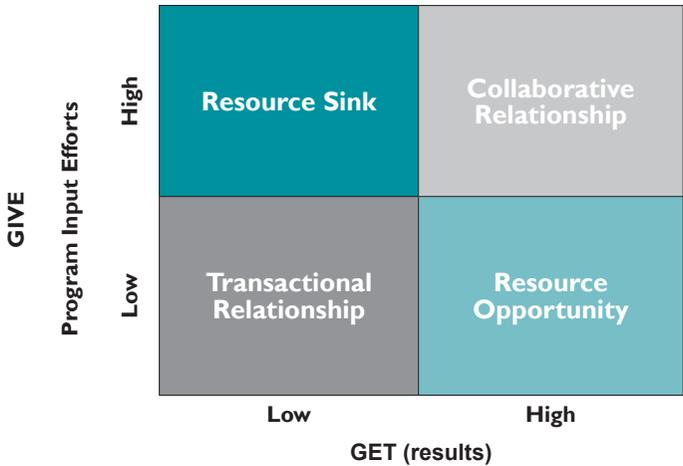
- **Transactional Relationships:** the efforts members make and the outcomes they receive are relatively small. This is the most frequent outcome. Business contacts established by members of the Chilean network with firms in Chile, or a mentoring program through which members of the network provide advice to small and medium-sized firms in Chile, are examples.
- **Resource Sink:** the efforts are more significant than the results. Conferences of members outside Chile and their attempts to provide advice to public sector agencies dealing with innovation in Chile belong to this category. This confirms our own impression that many diaspora initiatives fail because they require a lot of participation (conferences, databases, responding to surveys) but yield few practical results.
- **Resource Opportunities:** the results are greater than the effort. This is clearly a desired outcome, and is relatively rare. An internship program for Chilean engineering students established by a member of the network, the owner of a successful technology firm in Chile, is one example. According to him, Chilean students are far better than American ones in terms of problem-solving skills and creativity, but have weak management capabilities. The motivation for him was to establish a link to global talent that would help Chilean students get exposure to modern management practices in California.

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7 For a description of the framework that we modified for these purposes, see Mark Hallan, "Best Practice Results Framework: Experience of GlobalScot" (presentation at the seminar "How to Leverage Talent Abroad to Benefit Home Countries? Experience and Results Agenda of Diaspora and Venture Capital Networks," World Bank, Buenos Aires, June 2007), <http://web.worldbank.org/WBSITE/EXTERNAL/WBI/WBIPROGRAMS/KFDLP/0,,contentMDK:21375172~menuPK:2882115~pagePK:64156158~piPK:64152884~theSitePK:461198,00.html>.

- **Collaborative Relationships:** this involves relatively high efforts and outcomes. This is the most desired outcome. New first-mover organizations established in Chile thanks to the initiative of diaspora members (such as a software development center established in Chile by the international firm Synopsis) are examples.

**Figure 1. Monitoring Framework for Diaspora Projects and Networks**



Source: Authors' rendering.

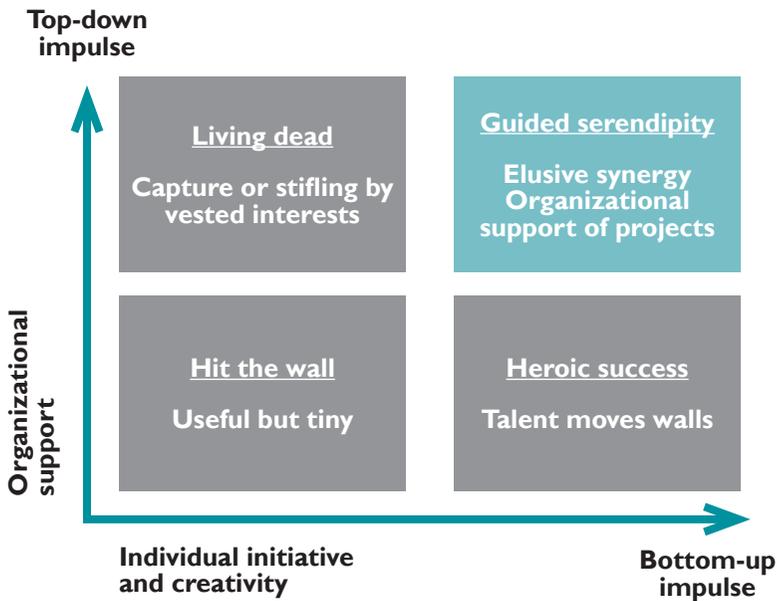
The second monitoring framework concerns the institutionalization of diaspora initiatives. The framework shown in Figure 2 juxtaposes individual initiative and the creativity of a diaspora individual (or group of individuals) with the organizational support they receive. The framework illustrated in Figure 2 helps to chart a trajectory of the institutionalization of diaspora initiatives to help them arrive at a synergy between the creativity and individual drive of project champions and the effective and non-bureaucratic organizational support of respective projects.

A starting observation from this framework is that diaspora initiatives often do many useful things as long as they remain small: this is the “hit the wall” situation illustrated in Figure 2. How can this situation be avoided? In other words, how can small, informal diaspora networks evolve? The diagnostic framework in the figure below answers this question, suggesting the three following possibilities:

- **“Guided Serendipity”:** when organizational support is subtle yet effective, and facilitates and encourages its members’ creativity. GlobalScot is one example, as are Irish business networks, which are discussed in detail in the final chapter of the book.

- **“Living Dead”**: in this situation, there is a number of expensive diaspora initiatives and networks resources, which result in a flurry of activities yet have little impact on home country institutions. “Living dead” is a technical term used in a venture capital vocabulary to denote a project whose returns barely cover its costs. The formal diaspora networks established by the Korean government discussed in Chapter 9 belong to this category.
- **“Heroic Success”**: In this situation, first mover organizations are established by individuals in spite of the many obstacles they encounter. The chapter on Africa in this book illustrates many such cases.

**Figure 2. Monitoring Framework for Organizational Support to Diaspora Initiatives**



Source: Authors’ rendering.

The guided serendipity situation is much sought after, and so far has been a very rare exception. Transforming the “heroic success” of diaspora first movers into guided serendipity while avoiding the bureaucratic stifling of the living dead situation is the key issue the indirect (pragmatic) policy approach strives to resolve.

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## V. Conclusions

Discussions of diaspora contributions to home country development sometimes start with exhortations on how home country conditions, such as the investment climate and governance, must improve (see, for instance, the World Bank's Africa Diaspora initiatives.) This chapter has a different premise. Our questions are different. First, we ask what can be accomplished here and specifically, within the context of such difficult environments? For instance, which first-mover investments from diasporas are possible in unfavorable investment climates? Second, we ask how a highly imperfect institutional environment in a home country can improve, gradually and incrementally, through the participation of diaspora members? An improved institutional context would then be supportive of further and deeper diaspora engagement and initiatives. The focus is thus on a virtuous cycle characterized by the following: a) no institutional preconditions for diaspora involvement are specified ex-ante, b) first movers from both the home country and diaspora can act in an imperfect institutional environment, and c) their actions results in improved conditions for subsequent diaspora contributions.

The chapter outlines an indirect or pragmatic approach to facilitate this virtuous cycle of diaspora-home country interactions. This approach favors "high-resolution" diaspora policies — ones that cultivate the project-specific relationships and commitments of movers and shakers (both in the diaspora and in homeland institutions) that might make a significant difference and are counted in tens and hundreds, not thousands or tens of thousands. This novel indirect approach is contrasts conventional direct, or administrative, approaches.

In terms of practical advice regarding what a policymaker should do and which issues he or she should focus on, this approach can be summarized as follows:

- focus on high achievers and build a diaspora leadership group
- facilitate the creation of partnerships between diaspora groups and local reform-minded agencies
- support diaspora initiatives with clearly defined projects and identifiable outcomes
- emphasize quality over quantity when it comes to diaspora projects
- maintain a balance between the volume of resources channeled to support diaspora projects and the strength and depth of the diaspora leadership group.

The indirect approach is novel in three ways. First, the objective is to solve specific problems by relying on international connections and

networks, including diaspora networks, rather than engage the diaspora for the sake of engaging it. In this vein, GlobalScot includes “friends of Scotland” (people with special affinity to Scotland) in addition to Scottish diaspora members; specialized international networks run by Enterprise Ireland have many individuals of Irish origin as their key and most active members, but are not exclusively diaspora networks, either. The members’ commitments and contributions are targeted indirectly as a second step in the search for a solution. The first step is to examine an initial roster of global expertise, after which the sub-set of diaspora expertise is identified and called upon.

Second, this is an indirect approach in terms of motivation. The ambition is to arrive at intrinsic motivation (the passion to engage, an entrepreneurial drive to overcome obstacles) and to make it blossom. But by definition intrinsic motivation comes from the inside, and cannot be mandated or managed. Rather, diaspora networks can develop room for such motivation to flourish through the development of first-mover projects with the home country.<sup>8</sup> Yet intrinsically motivated individuals are not irrational: this is a key message from the examples of first movers in Chapter 2.

Third, this is indirect in terms of the organizational support for diaspora networks. A light touch and flexible organizational support are emphasized, because they promote rather than stifle individual creativity, commitments, and the initiative of diaspora members. The focus is on serendipitous encounters between individuals, yet the organizational objective is to facilitate this serendipity — hence our term “guided serendipity.” This is in contrast to the direct approach’s focus (some would say an excessive focus) on counting numbers. In fact, we have observed that many diaspora initiatives fail because they require a lot of participation (conferences, databases, responding to surveys) but yield little by way of practical results. For a time, the networks can be sustained by the initial enthusiasm of diaspora members, but if all members do is participate in events and surveys, their interest inevitably gives way to skepticism. This is why diaspora initiatives that emphasize counting diaspora members and extracting information from them can have a negative value-add. Indirect approaches rarely starts there; rather, the activities we advocate are performed on a limited scale to support the design and implementation of tangible projects. ➡

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8 For a more general discussion of how indirect approaches can help to facilitate intrinsic motivation, see David P. Ellerman, *Helping People Help Themselves: From the World Bank to an Alternative Philosophy of Development Assistance* (Ann Arbor, MI: University of Michigan Press, 2005).

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# CHAPTER 11

## DIASPORA FOR DEVELOPMENT: IN SEARCH OF A NEW GENERATION OF DIASPORA STRATEGIES

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### Introduction

Concomitant with a calling into question of the brain drain thesis, in the past decade considerable attention has been given to the ways in which diaspora populations can and do impact the development of their homelands from their overseas locations. Whether construed as selfless patriotism and paternalism or self-promoting meddling, it is clear that at key moments in the past diaspora communities have assumed responsibilities normally held by — and in so doing challenged the autonomy of — sending states. At times, they have acted to infantilize institutions in their homelands. More recently, however, there has been growing recognition that diaspora contributions can play a more progressive and supportive role in helping sending countries to help themselves. This book subscribes to the view that at least some diaspora communities have the potential to play a positive role in the empowerment of institutions in sending states, and thereafter to undergird the emergence of these states as capable and self-determining architects of their own futures. The purpose of the book has been to map, conceptualize, scrutinize, and critique the wide variety of ways in which countries' talent abroad mobilizes and acts to transform, improve, scale up, and fortify the capacity of public, private, and civil institutions at home.

Chronicling *how* diaspora groupings impact domestic institutions immediately begets a follow-up question: is it possible to proactively build and create opportunities for, design, finance, and growth of diaspora-homeland projects and, if so, how might policymakers best intervene? Many countries now believe that such interventions are not

only possible, but also necessary and advantageous, and have pioneered a new area of public policy often referred to as diaspora strategy. While most commonly championed by poorer countries, including Argentina, Armenia, China, Chile, El Salvador, Ghana, India, Jamaica, Mexico, Morocco, Nigeria, South Africa, and Tunisia, diaspora strategies have also been pursued by comparably more advanced nations, such as Australia, Ireland, Israel, New Zealand, and Scotland. A wide range of diaspora strategies and associated diaspora schemes (institutions, instruments, policies, programs, and initiatives) have already been conceived and implemented. Moreover, many countries are now participating in a global dialogue and through joint policy transfer workshops, seminars, publications, toolkit manuals, and conferences, are identifying best practices and swapping and adapting schemes.

While some view this turn to diaspora as a mere extension of existing approaches to development, others view diaspora-centered development as a fundamental departure from existing practice. According to Thomas Faist, for instance, prior emphasis upon either state-led development (examples include the former command economies of Eastern Europe, the developmental states of Southeast Asia, and China) or market-led development (e.g. the neoliberal economic strategies pursued in the western capitalist world and some states in the developing world) has given way to a new commitment to community-led or civil society-led development in which the concept of social capital has come to occupy more central ground.<sup>1</sup> In this context, diaspora constituencies are being positioned by sending states as significant brokers of global economic competitiveness. The objective of the development industry now is to activate and mobilize diaspora agents as enablers of national development projects. In due course, a full audit of the philosophical shifts implied in, and the forms of development promoted by, diaspora-centered development will be required, including who benefits from such development, where, why, and how.<sup>2</sup>

This book addresses a different but related question. It places existing diaspora initiatives under critical scrutiny and asks how these initiatives might be embellished, recalibrated, and developed so as to contribute more effectively to the development of the home country. It builds a case in support of a new generation of diaspora initiatives that are better equipped to harness diaspora groupings in the building of institutions in sending states, and provides an analytical framework and a set of policy prescriptions to guide future practice. Its desire to rethink and refocus practice is rooted in the reservations it has about the unwarranted fanfare and associated cottage industry that appear to be developing around diaspora strategies. In too many cases, it is alleged, ill-defined and overly broad diaspora constituencies are being

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1 Thomas Faist, "Migrants as Transnational Development Agents: An Inquiry into the Newest Round of the Migration-Development Nexus," *Population Space and Place* 14 (2008): 21-42.

2 Elaine Lynn-Ee Ho, "Claiming the Diaspora: Elite Mobility, Sending State Strategies, and the Spatialities of Citizenship," *Progress in Human Geography* 40 (2011): 1-16.

engaged; ineffective blueprints and bureaucracies are being imposed on an already crowded landscape of organic transnational relations; and diaspora strategies are becoming all-consuming ends in themselves. There is a pressing need, it is argued, to adopt a new pragmatic or indirect approach in which specific diaspora elites and champions are prioritized; existing and successful diaspora-to-homeland ties are foregrounded; and diaspora movers and shakers are engaged only if they are able to contribute to concrete projects with clear outcomes.

While this call for a new focus undoubtedly deserves careful scrutiny, we are in broad agreement with the renewed sense of mission articulated by others in this book. This final chapter is therefore less a critical commentary on earlier chapters and more a refinement and extension of the various calls for a reorientation in practice that have been made. We structure our discussion into three sections. In Section I we provide a brief introduction to existing practice and, by way of contextualizing the call for change endorsed in the book, identify two key trends that have marked diaspora strategizing to date: the tendency for strategies to be too state-centric and the excessive emphasis placed upon general nation-building projects. In Section II we outline in greater detail the key components of the alternative pragmatic and indirect approach and draw upon the Scottish and Irish cases to illustrate the approach's utility as a guide for policymakers and practitioners. Finally, in Section III, we identify what we consider to be a crucial supplement to the proposed framework: the importance of building what we term "enabler engagement programs," which mobilize stakeholders and strategic allies from a) countries of destination, and in particular from the Global North, and b) sending states themselves. We examine lessons that might be gleaned from the recent European Commission-United Nations Joint Migration and Development Initiative (JMDI). We conclude by drawing together the strands of our discussion and proposing an overarching schema.

## **I. Diaspora Strategy: A Review of Existing Practice**

### **A. *Diaspora and Development: The Birth of a New Agenda***

Historically, emigration has been viewed as a barometer of the success or failure of national economic development strategies. The loss of talent from a country was considered a sign that the strategy being pursued by that country was not working. In turn, the emigration of skilled labor from any country constituted a brain drain and was assumed to further weaken that country's ability to develop. As

this book has shown, however, in the past two decades, countries of origin have begun to explore the ways in which emigrant populations positively impact development in their homelands from overseas. As a result, countries are increasingly interested in how the energy and talent of émigrés might most effectively be harnessed.<sup>3</sup>

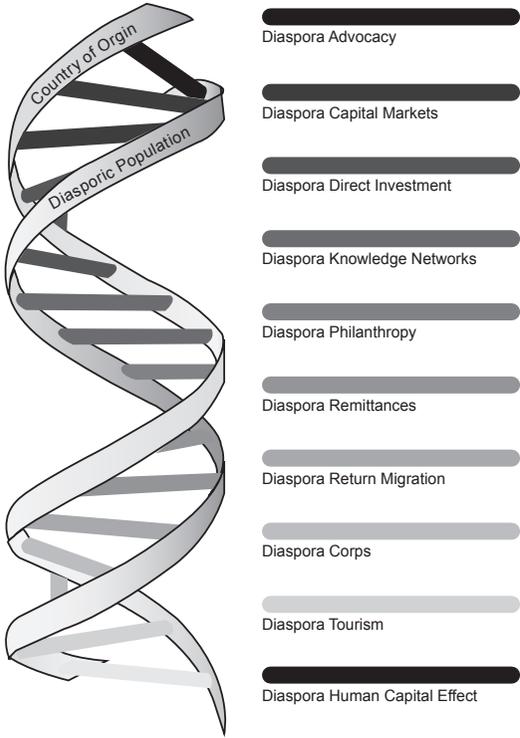
We have identified up to ten pathways through which diaspora populations impact the development of sending states (see Figure 1). Often these impacts are viewed as relatively isolated, if welcome, intrusions. They provide short-term remedial antidotes to failing developing strategies, but are in turn frustrated by weak domestic institutions and capacity. Rarely, however, do diaspora interventions leave domestic institutions intact. From hometown associations to agricultural cooperatives, from charities to advocacy groups, from churches and religions to medical and scientific academies, from small and medium-sized enterprises (SMEs) to pension funds, from political parties to national arts and cultural institutions, from electoral systems to citizenship laws, from terrorist organizations to peace-keeping missions, from satellite TV media to social networking sites, from flood defense systems to disaster management, from university alumni projects to technology transfer, diaspora communities have molded, and are molding, institutions in their homelands in ways that we are only now starting to understand. While it is true that certain kinds of interventions lend themselves better to this mission than others (knowledge

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3 See Yossi Shain and Aharon Barth, "Diasporas and International Relations Theory," *International Organization* 57 (2003): 449-79; Lindsay B. Lowell and Stefka G. Gerova, *Diasporas and Economic Development: State of Knowledge* (Washington, DC: Institute of the Study of International Migration, 2004); Sidney Tarrow, *The New Transnational Activism* (Cambridge, MA: Cambridge University Press, 2005); Yevgeny Kuznetsov, *Diaspora Networks and the International Migration of Skills: How Countries Can Draw on Their Talent Abroad* (Washington, DC: World Bank, 2006); Rubin Patterson, "Transnationalism: Diaspora-Homeland Development," *Social Forces* 84 (2006): 1891-1907; AnnaLee Saxenian, *The New Argonauts: Regional Advantage in a Global Economy* (Cambridge, MA: Harvard University Press, 2006); Steven Vertovec, "Circular Migration: the Way Forward in Global Policy" (Working paper, International Migration Institute, Oxford, 2007); Andrés Solimano, ed., *The International Mobility of Talent: Types, Causes, and Development Impact* (Oxford: Oxford University Press, 2008); Faist, "Migrants as Transnational Development Agents;" Josh Dewind and Jennifer Holdaway, eds. *Migration and Development Within and Across Borders: Research and Policy Perspectives on Internal and International Migration* (Geneva: International Organization for Migration, 2008); Oliver Bakewell, "Migration, Diasporas, and Development: Some Critical Perspectives," *Jahrbucher f. Nationalökonomie u Statistik* 229 (2009): 787-802; Nicola Piper, ed., "Rethinking the Migration-Development Nexus: Bringing Marginalized Visions and Actors to the Fore," *Population Space and Place Special* 15 (2009): 93-203; David Leblang, "Familiarity Breeds Investment: Diaspora Networks and International Investment," *American Political Science Review* 104 (2010): 584-600; Liesl Riddle, George A. Hrivnak, and Tjai M. Nielsen, "Transnational Diaspora Entrepreneurship in Emerging Markets: Bridging Institutional Divides," *Journal of International Management* 16 (2010): 398-411; Liesl Riddle and Jennifer Brinkerhoff, "Diaspora Entrepreneurs as Institutional Change Agents: The Case of Thamel.com," *International Business Review* 20 (2011): 670-80; and Jürgen Scheffran, Elina Marmer, and Papa Sow, "Migration as a Contribution to Resilience and Innovation in Climate Adaptation: Social Networks and Co-development in Northwest Africa," *Applied Geography* 33 (2012): 119-27.

transfer and business mentoring more so than philanthropy and remittances, for instance), we believe that each and every form of intervention retains a capacity to enhance the efficacy of public, private, and third-sector institutions. Figure 1 identifies the key domestic actors and infrastructures most likely to be reworked as a direct and indirect consequence of diaspora-homeland projects.

**Figure 1. How Diasporas Can Impact Sending States**



- 1) Diaspora Advocacy and Diplomacy** – Advocates, activists, agitators, and ambassadors within diaspora communities can exploit their knowledge, contacts, linguistic skills, and cultural insights to promote peace and security in their homelands, and to enhance the strategic, diplomatic, and foreign policy objectives of homelands. *Institutions most affected are social movements, political parties, government departments, and NGOs.*
- 2) Diaspora Capital Markets** – Diaspora members can fuel capital markets (portfolio investment) through holding deposit accounts; securitizing remittance flows; providing transnational loans to diaspora groupings; buying diaspora bonds; and supporting diaspora mutual funds. *Institutions most affected are banking institutions, pension funds, insurance companies, and government treasuries.*
- 3) Diaspora Direct Investment** – Diaspora members can invest in homelands as senior executives in transnational corporations and as venture capitalists; and also can outsource contracts to SMEs in countries of origin. *Institutions most affected are government-inward investment agencies and domestic supply chains.*
- 4) Diaspora Knowledge Networks** – Diasporas can assist companies in sending countries by sharing knowledge and contacts; participating in mentoring organizations; training talented colleagues; and joining think tanks, consultation groups, and advisory councils. *Institutions most affected are SMEs looking to expand and globalize.*

- 5) Diaspora Philanthropy** – Diaspora communities can provide private and voluntary donations for charitable and public good, through such vehicles as private and voluntary organizations (PVOs), religious organizations, corporations, foundations, volunteer citizens, and university and college alumni associations. *Institutions most affected are civil-society NGOs protecting vulnerable populations and universities and colleges.*
- 6) Diaspora Remittances** – Diaspora remittance flows entail private or person-to-person transfers from migrant workers to recipients in the worker's country of origin. *Institutions most affected are extended family networks and neighborhood and community organizations.*
- 7) Diaspora Return Migration** – Diaspora populations can promote bilateral and multilateral agreements to restrict recruitment from especially vulnerable and at-risk countries; increase accountability among recruitment specialists and employers; establish protocols for the treatment of foreign workers; and facilitate return migration. *Institutions most affected are recruitment agencies and public and private institutions requiring specific types of talent for which there is a shortage.*
- 8) Diaspora Corps** – Diaspora groupings can establish volunteering schemes to promote short-term visits to countries of origin to support vulnerable populations, to assist in the administration of aid, not least following a natural or human-induced disaster, and to address key skills shortages. *Institutions most affected are domestic NGOs and public service institutions.*
- 9) Diaspora Tourism** – Diaspora visits to homelands provide an important source of revenue and foreign currency. Such visits include medical tourism, business-related tourism, heritage (or "roots") tourism, exposure or "birthright" tours, education tourism, VIP tours, and peak experience tours. *Institutions most affected form part of the tourist infrastructure and include domestic travel companies and marketing firms.*
- 10) Diaspora Human-Capital Effects** – The prospect of joining the ranks of a sometimes more wealthy diaspora can result in a predeparture boost in the human capital of sending states; migrants prepare for a potential exit by upgrading their competencies and skill set and increasing their likelihood of securing a re-location to a more developed labor market. *Institutions most affected are those with a stake in the domestic labor market, including training agencies and universities and colleges.*

*Source:* Authors' compilation and rendering.

As more people have recognized the contributions that diaspora populations make to the development of sending states, it is entirely unsurprising that diaspora strategizing has emerged as an important new field of public policy for nation-states that have experienced significant out-migration.<sup>4</sup> A wide range of different diaspora strategies and schemes are being developed and implemented across countries. Circumstantial differences between these strategies notwithstanding, joint policy transfer workshops, seminars, publications, and conferences are creating a growing global dialogue as to the optimum design and implementation of diaspora strategies. A number of pioneering countries and cutting-edge diaspora strategies and schemes are being identified as global exemplars of best practices and are being transferred through a myriad of routes to adopter countries, which are reworking them for their own purposes. Many countries now consider that their approach to diaspora strategizing might be enhanced if they draw from the emerging global dialogue on diaspora strategies. In the search for good practice, awareness of the more important and

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4 Kuznetsov, *Diaspora Networks and the International Migration of Skills*; Peggy Levitt and B. Nadya Jaworski, "Transnational Migration Studies: Past Developments and Future Trends," *Annual Review of Sociology* 33 (2007): 129-56; Alan Gamlen, "The Emigration State and the Modern Geographical Imagination," *Political Geography* 27 (2008): 840-56; Kathleen Newland, ed., *Diasporas: New Partners in Global Development Policy* (Washington, DC: Migration Policy Institute, 2010); Kingsley Aikins and Nicola White, *Global Diaspora Strategies Toolkit* (Dublin: Diaspora Matters Inc., 2011); and Mark Boyle and Rob Kitchin, *A Diaspora Strategy for Canada? Enriching Debate through Heightening Awareness of International Practice* (Vancouver: Asia Pacific Foundation of Canada, 2008).

pioneering strategic interventions, institutional innovations, and policy initiatives undertaken globally is becoming a prerequisite. While not exhaustive, Table 1 lists the most commonly discussed schemes.

**Table 1. Examples of Diaspora Engagement Policies Commonly Cited as International Exemplars of Good Practice**

Diaspora-Homeland Connection	Frequently Cited Schemes
<b>Diaspora Advocacy and Diplomacy</b>	In part to capitalize on its history of immigration and re-emigration, Canada has developed the Global Citizens Project, designed to harness the talents of all constituencies in Canada with resources that might help the country enhance its global activities and relations (including with other countries' diasporas in Canada, whether naturalized or not and with Canadian sympathizers living overseas, whether Canadian citizens or not. The role of Irish America in the Northern Ireland Peace Process is another example. For instance, the Clinton administration worked in conjunction with the Ireland Funds and political parties in Northern Ireland to make important contributions to building peaceable relations between Republican and Unionist constituencies.
<b>Diaspora Capital Markets</b>	State of Israel Bonds - Since 1951 the State of Israel has issued bonds specifically targeted at, but not restricted to, diaspora groupings. Over US\$1 billion in bonds are issued each year.
<b>Diaspora Direct Investments</b>	Yozma - Established in 1993, Yozma is an Israeli scheme designed to create joint venture capital funds between the State of Israel and foreign investors, in particular Israeli diaspora members. Other examples include Chinese bamboo networks, investing into the Pearl Delta and other parts of mainland China from Hong Kong, Singapore, Australia, Canada, and the United States in particular; and the Irish Technology Leadership Group, a venture capitalist group set up by Irish entrepreneurs in Silicon Valley.
<b>Diaspora Knowledge Networks</b>	The Indus Entrepreneurs (TiE) attempts to improve the entrepreneurial skills of Indians both in India and in the diaspora through mentoring, networking, and education. TiE's ambition is to create the next generation of Indian entrepreneurs. With 13,000 members, including over 2,500 charter members in 57 chapters across 14 countries, TiE hosts a wide range of programs and events, including TiEcon, the largest professional and networking conference for entrepreneurs. GlobalScot is an elite, global business network comprised of invited, high-achieving members of the Scottish diaspora (almost 50 percent of GlobalScot members operate at company chairperson, CEO, or president levels) established and managed by Scottish Enterprise. GlobalScot currently has over 600 members in Europe, Middle East and Africa, the United States, Asia, and Scotland. KEA New Zealand is a quasi-autonomous NGO that seeks to build broad global networks of professional New Zealanders living in New Zealand and overseas. Established in 2001, KEA New Zealand had 25,000 subscribers in over 174 countries as of 2011. It has 14 international chapters in eight countries, and employs four full-time regional managers to conduct its operations in different parts of the world. Its mission is to harness the Kiwi diaspora in the service of national economic growth. Advance Australia is an NGO-led global business and social network of Australians. Headquartered in New York, Advance Australia has over 12,000 members in 63 countries and has chapters in 14 countries. The network activates and engages overseas Australians to use their expertise, contacts, and positions of influence for Australia. It creates industry-specific networks, partners with tourist agencies in promoting tourism to Australia, and facilitates return.
<b>Diaspora Remittances</b>	The Hometown Association (HTA) model and the 3x1 program, pioneered and managed by the Mexican government and diaspora, provide a template through which remittance transfers from specific destinations might be more productively put to work in specific sending-state villages and towns. The US Department of State's Bureau of Economic, Energy, and Business Affairs introduced the US/El Salvador/Honduras Bridge Initiative to encourage partnership working between the United States, multilateral agencies, and financial institutions and government agencies in El Salvador and Honduras to make remittance flows more impactful.
<b>Diaspora Philanthropy</b>	The Ireland Funds, as well as the International Fund for Ireland and sijn are prime examples of world-class philanthropic organizations. In the main, these funds target social disadvantage, education, and welfare, the peace process in Northern Ireland, community development, and local economic initiatives with the aim of increasing social and economic capital. The Haitian Diaspora Federation (HDF) is a cooperative umbrella nonprofit organization comprising partnerships between a range of Haitian diaspora groupings. The HDF seeks to deploy the Haitian diaspora's resources to support relief from the devastation of a recent natural disaster and to encourage the longer-term reconstruction of Haiti.
<b>Diaspora Return Migration</b>	Talent Scotland is a Scottish scheme designed to provide a one-stop shop for Scottish diasporans who wish to return to Scotland.

Diaspora-Homeland Connection	Frequently Cited Schemes
Diaspora Corps	The Taglit-Birthright Israel and MASA programs repatriate Jewish youth to Israel for short breaks and study visits in order to fortify national consciousness and cement a lifelong sense of attachment to the homeland.
Diaspora Tourism	Scotland's Homecoming 2009—and its main event The Gathering— was a flagship tourist campaign that sought to secure tourist visits from diasporans and use them to build longer-term relationships between Scotland and its diaspora. The Gathering 2013 is Ireland's flagship diaspora tourism event.

Source: Authors' compilation.

Prior to commenting upon the efficacy of existing schemes, it is useful to start with a brief commentary on two key trends that have marked the first decade of diaspora strategizing: first, the tendency of sending countries to fixate on building their emigration state infrastructure and influence; and second, the preoccupation within sending states with overly general diaspora-building and nation-building projects.

## B. The Fixation on Building Emigrant State Infrastructure and Influence

Alan Gamlen developed the useful notion of the “emigration state” to capture the totality of the state actors’ work in managing their relationships with diaspora communities. Gamlen suggests that countries embarking upon diaspora strategies almost always view it as necessary to build new emigration state capacities.<sup>5</sup> Among the models of governance that are emerging are the simple outsourcing of diaspora strategy to voluntary and/or private-sector groups (such as in New Zealand and Australia); the establishment of nimble and flexible cross-department working groups (such as in Scotland); the establishment of diaspora units within cognate state departments and administrative units such as departments of foreign affairs (such as in Ireland and Canada), departments of home affairs, departments of heritage and culture, and enterprise and development agencies; the rooting of diaspora initiatives in prime ministerial and presidential offices (such as in Singapore); and, increasingly in poorer countries, the creation of dedicated new ministries of diaspora (such as in Armenia and India).

The central challenge facing policymakers working in the emigration state is how best to intervene so as to maximize the number and quality of diaspora-homeland ties that result in meaningful transformations of domestic institutions. According to Alasdair Rutherford, state intervention is particularly valuable when three particular types of market failure occur: network effects, transaction costs/information failure, and externalities. Firstly, market failure occurs when projects are judged to be too risky or too unproven to be tackled. Intervention to build diaspora networks can be justified if the cost of network

<sup>5</sup> Gamlen, “The Emigration State and the Modern Geographical Imagination.”

establishment proves to be a disincentive for early adopters. Governments can internalize the costs of network creation and shepherd these networks until they reach the critical size necessary to demonstrate sustainability. Secondly, market failure can occur if transaction costs and the cost of researching opportunities are high. Governments can work to produce and share information and services to bring these costs down beneath the level at which they prove to be a disincentive. Finally, market failure on account of positive externalities occurs when projects produce both private and public goods, but where the profitability of the private good is not sufficient to encourage the private actor to initiate the project. Governments can invest where the aggregate good includes, but is larger than, benefits to private citizens.<sup>6</sup>

Clearly these criteria demand that in practice judgments be made as to when and where to intervene. On a continuum, states can decide to: leave the formation of links between the homeland and the diaspora to the market or to autonomous social, cultural, and political movements, with the diaspora self-organizing its engagement with its home; work with and reenergize existing diaspora organizations and networks; nurture and regulate new and emerging diaspora connections; proactively identify potential engagements and leaders, and mobilize and cultivate them while leaving ownership of initiatives in the hands of the diaspora groupings; and directly create and run diaspora initiatives and networks, perhaps with the intention of letting the market assume responsibility at a later date. States must walk a tightrope between intervening too aggressively when limited or no intervention might be more appropriate, and failing to intervene when it might be necessary and productive. The ideal balance between too little and too much intervention varies from state to state.

We argue that while in the past states relied too heavily upon bottom-up diaspora-led initiatives, today the tendency is towards over-investment in underproductive, centralized, and top-heavy state-led approaches. Sending countries that seek to harness the resources of diaspora populations in the service of homeland prosperity are often hampered by an insufficient understanding of the scale, nature, and impact of prior and existing transnational ties. Out of naive enthusiasm, political expediency, or vanity, they plunge into high-profile diaspora initiatives without first mapping and reflecting upon the base of existing networks. In some cases, having invested publicly and heavily, and financially as well as politically, in new emigrant state institutions and infrastructures, some states feel compelled to be seen intervening in this space. The result is all too often the imposition of unnecessary blueprints and new structures and strategies of engagement on an already dense network of effectual diaspora-homeland connections. Not only are existing networks potentially alienated and disenchanting

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6 Alasdair Rutherford, *Engaging the Scottish Diaspora: Rationale, Benefits, and Challenges* (Edinburgh: the Scottish Government, 2009), [www.scotland.gov.uk/Publications/2009/07/28161043/0](http://www.scotland.gov.uk/Publications/2009/07/28161043/0).

as a result, but the further development of spontaneous organic networks can also be stunted by the new canopy.

Therefore, a first-order issue in designing and mobilizing diaspora engagement policies is to guard against the enlargement of emigration state institutions for enlargement's sake, and the rush by emigrant states to intervene in diaspora-homeland relationships for intervention's sake. There is no ideal institutional framework for coordinating diaspora strategies; each country needs to create emigrant state capacities that reflect their own institutional histories; social, cultural, economic, and political needs; and the histories, structures, and organization of their diaspora. Diaspora strategies require a careful consideration of how state (and other) institutions might be best deployed, not a scaling up of emigrant states per se. Likewise, emigration states have a role to play as creators and custodians of diaspora schemes. However, interventions must always be predicated upon a prior mapping of existing diaspora-homeland relationships and an appreciation of what an additional layer of activity might contribute. A cautious approach, which treats existing diaspora-homeland connections as fragile and precious, will work better than a clumsy approach in which states act first and think later.

### **C. The Preoccupation with Overly General Diaspora-Building and Nation-Building Projects**

Recent hype about the potential role of diasporas in the development of sending states has resulted in a flurry of projects designed to (re) build patriotism among overseas communities. A prerequisite for a successful diaspora strategy is a motivated diaspora that is willing to contribute to national development. While perhaps historically taken for granted, the social and cultural condition, empathy, and inclination of diaspora communities is now recognized to be a crucial resource. Diaspora patriotism varies in time and space, and the patriotic flame is doused and ignited by a variety of origin- and destination-specific triggers. But states can play a role in building and fostering diaspora social and cultural networks. Although at first glance a reasonably straightforward proposition, in fact such a project implies a profound shift in the ways in which nations and territory are imagined. For John Agnew, contemporary interest in building nations at home and in diasporas points to a preparedness by nation states and diaspora to de-territorialize the nation and to cast or re-territorialize the nation as a global network.<sup>7</sup> Only a small number of countries have begun the task of thinking through the implications of this seismic shift in thinking about the relations that exist between geography, nations, and states. Armenia, Croatia, Ireland, and New Zealand are examples.

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7 John Agnew, "Sovereign Regimes: Territoriality and State Authority in Contemporary World Politics," *Annals of the Association of American Geographers* 95 (2005): 437-61.

It is a truism that projects designed to trigger search networks are likely to be most effective in a general climate when diaspora groupings are motivated to help (in other words, feel a loyalty to the home nation); are able to exploit modern transport and information and communications technology connections; and are capable of exercising a wide range of rights as citizens of both the sending and destination countries.

Projects designed to fortify and recharge national pride in those residing abroad have made use of organized short-term visits. Two frequently-cited and classic examples of effective organized short-term visits to the homeland are the Taglit-Birthright Israel and MASA programs, which repatriate Jewish youth to Israel. Many diaspora groups have established homeland-specific social, cultural, and sporting clubs and networks, some accompanied by infrastructure such as theaters, schools, museums, sporting arenas, and libraries. Governments often support these groups through direct and in-kind funding (such as supporting cultural visits by politicians, celebrities, national icons, sporting heroes, artists, writers, and performers) as a way of maintaining cultural identity. Ireland, for example, funds creative artists to visit the diaspora, Irish sporting organizations overseas, and overseas Irish heritage resources such as the Kennedy Library in Boston. These supports are increasingly part of, and coordinated through, national cultural and heritage strategies. Countries may also provide specific services relating to cultural identity. For example, India has set up a state-sponsored genealogy service called Tracing the Roots, which engages a private company (Indiroots) to construct a family tree for a small fee. The Irish Department of Community, Rural, and Gaeltacht Affairs supports the teaching of the Irish language at institutions outside of Ireland. Similarly, the Lithuanian government funds Lithuanian schools to teach the Lithuanian language and cultural heritage to the descendant of emigrants. Some nations also make use of national honors and award systems to build diaspora loyalty by recognizing the contribution of individual diaspora members to the homeland and to society in general. For example, since 2003, the president of India has presented the *Pravasi Bharatiya Samman* awards to overseas citizens who have made outstanding contributions to Indian interests across the world. In 2006, KEA New Zealand started the World Class New Zealand Awards to honor New Zealanders making a significant international contribution in various spheres. In November 2010 China hosted its first high-level consultative forum, the World Chinese Economic Forum (WCEF), under the banner “Building Business Linkages and Charting New Frontiers.” Aimed at government officials, professional institutions, universities, and think tanks, as well as entrepreneurs, professionals, and investors from around the world, the forum sought to generate strategic ideas in support of what organizers deemed a “New Asian century” and the rise of China as a global superpower.

Building a sense of nationhood in a diaspora also necessitates opening up new dialogue with diaspora communities, increasingly through the

use of information and communications technologies. Some countries have set up formal consultation arrangements with their diasporas. For example, Jamaica has established the Jamaican Diaspora Advisory Board. Similarly, the following countries have recently established expatriate parliaments to consult with their diasporas about domestic and diaspora matters: Norway (*Norgestinget*), Finland (*Ulkosuomalais-parlamentti*), Sweden (*Utlandssvenskarnas* parliament), France (*Assemblée des Français de l'étranger*), and Switzerland (*Organisation des Suisses de l'étranger*). India has established the Prime Minister's Global Advisory Council of Overseas Indians, which meets with members of the Indian diaspora twice a year. Many countries seek to inform the diaspora about what is happening at home through newsletters and websites. Website portals, both state-sponsored (such as Connect-2Canada) and run by NGOs, private organizations, or individuals (such as the Canadian Expatriate Network) that detail useful information to the diaspora in situ and about the home country, are seen by many diasporans and those seeking to serve the diaspora community as vital infrastructure. Some of these portals are very broad in nature, often including a social networking facility. Increasingly, Facebook, Twitter, LinkedIn, and other social networking tools are being deployed. While there exist few state-sponsored free-to-view channels aimed specifically at the diaspora, the BBC, SKY, CNN, Bloomberg, Euronews, CCTV (China), NDTV24x7 (India), NHKWorldTV (Japan), and Al Jazeera (the Arab world) all play an important role.

Citizenship in this context can be thought of as the legal status and associated rights and obligations sending governments bestow on migrant populations.<sup>8</sup> These rights and obligations are civil (legal protection, guarantee of freedoms, security), political (voting and political participation), social (social security, education, housing, and health services), and economic (work and taxation) in nature. Dual citizenship refers to the ascription of various kinds of citizenship to emigrants in both the sending country and one or more destination countries. In the past decade, there has been a proliferation of countries that are prepared to offer citizenship to migrants without requiring them to renounce their citizenship status in their countries of origin.<sup>9</sup> But what does this mean in practice?

Four particularly salient issues are at stake. First, embassy and consular services provide a first line of defense and assistance, and the location, resourcing, and remittance of these services needs continual updating. Second, states are faced with the question of the extent to which they are to continue providing civil, political, social, and

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8 Aihwa Ong, *Flexible Citizenship: The Cultural Logics of Transnationality* (Durham, NC: Duke University Press, 1999).

9 For a review of global practice see Audrey Macklin and François Crepeau, "Multiple Citizenship: Identity, and Entitlement in Canada" (IRPP Study No 6, IRPP, University of McGill, Montreal, 2010) and Jean-Michel Lafleur, "Why Do States Enfranchise Citizens Abroad? Comparative insights from Mexico-Italy, and Belgium," *Global Networks* 11 (2011): 481-501.

economic rights to overseas citizens, for how long after departure, in what form, and to what degree. Third, the question of raising taxes on overseas émigrés is important. Only a few countries, including the United States and Israel, tax their citizens on income created irrespective of their location of residence and, even in these cases, a number of exemptions and exceptions are possible. But other forms of finance related to remittances, philanthropy, capital investment, pensions, savings, inheritance, and foreign direct investment are levied more universally. Finally, there exists the possibility of creating new models of citizenship specifically for overseas populations and indeed for any population claiming ancestral ties, no matter how distant.

It is clear that nation-building projects must be central to all diaspora strategies. Diaspora strategies cannot privilege economic ties over social and cultural networks and remain sustainable. Moreover, a diaspora strategy needs to be mutually beneficial for both home countries and diaspora populations. Furthermore, countries that know their diasporas well will be better placed to engage them. In addition, diaspora representatives need to be consulted before any diaspora strategy is rolled out; diaspora strategies that are coauthored with diaspora leaders are likely to be more effective. In many ways, social networking and culture-building strategies create a raft of intangible benefits and create a context within which it is more likely that economic strategies and development projects will be effective. But to date, nation-building projects have been launched with ill-defined aims, and there is a danger that these efforts will dissipate with little to show. The key is not to abandon nation-building projects, nor to subordinate these projects to economic imperatives. Instead, the challenge is to find an appropriate balance between projects designed to fortify social networks and cultural institutions and initiatives designed to harness diaspora populations in the development of sending states.

## **II. Towards a More Pragmatic and Indirect Approach: A Response to the Existing Practice**

This book is one of the first to comprehensively survey and interrogate the role diasporas might play in scaling up the institutional capacities of countries of origin. Underpinning the book is the claim that if in the past the impact of diaspora communities on domestic institutions was somewhat unplanned, haphazard, and occurred by default rather than design, diaspora interventions are increasingly motivated by a desire to build domestic capacity, buttress, and upgrade institutions and infrastructure, and expand opportunities for sustainable development. Diaspora communities are actively working to help countries of origin

become more self-determining actors and more capable architects of their own development. Moreover, the book unambiguously positions itself as an advocate for such a shift. But in taking stock of the existing practice, it concludes that current practices need to be revisited if the full potential of diaspora populations is to be harnessed. In many ways, it sets out a manifesto for a new generation of diaspora strategies that are predicated upon indirect approaches and pragmatic thinking and practice.

This book proposes that diaspora constituencies are most beneficial to sending states when they serve the following functions: as antennas, detecting better active, entrepreneurial, and dynamic segments of domestic institutions; as search networks, identifying ongoing constraints and impairments in these institutions, finding solutions, and mobilizing expertise; and as Archimedean levers, bridging the competencies of the diaspora with more promising domestic institutions so as to grow and institutionalize existing capacity.<sup>10</sup>

The book draws three key distinctions: between high-resolution and low-resolution strategies; between centralized and decentralized management philosophies; and between direct (administrative) and indirect (pragmatic) approaches to diaspora engagement. High-resolution strategies target a small number of key elites and better-performing domestic institutions, whereas low-resolution strategies are pitched to an often ill-defined and overly generalized diaspora audience and fail to recognize the heterogeneity of domestic institutions. Meanwhile, diaspora strategies might be based upon formal models of government (centralized initiatives guided by a blueprint and managed by an overarching agency and strategy) or predicated upon looser forms of governance (decentralized initiatives, merely lightly incubating a portfolio of autonomous and self-sustaining diaspora interventions). Pragmatic strategies capture instances when diaspora groupings are engaged in some respects by default. In the pursuit of wider social, economic, cultural, or political projects, governments mobilize diaspora populations without necessarily thinking that they are engaged in diaspora strategizing per se. Direct approaches, in contrast, begin (and all too often end) by stoking and leveraging the energies and talents of diaspora groupings, and only later find a way in which they might serve the national interest.

The preference in this book is for high-resolution diaspora policies. Movers and shakers — both in the diaspora and in homeland institutions — who might make a significant difference constitute tens and

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10 See AnnaLee Saxenian, *The New Argonauts: Regional Advantage in a Global Economy* (Cambridge, MA: Harvard University Press, 2006); AnnaLee Saxenian and Charles Sabel, "Venture Capital in the 'Periphery': The New Argonauts, Global Search, and Local Institution Building," *Economic Geography* 84 (2008): 379-94; and Yevgeny Kuznetsov, *How Can Countries' Talent Abroad Help Transform Institutions at Home?* (Dublin: Diaspora Matters Inc., 2011).

hundreds, not thousands or tens of thousands. Moreover, the book juxtaposes the latter two distinctions to introduce a quadrant that maps out a series of diaspora strategy options (see Table 2). Decentralized and direct diaspora strategies seek to let a thousand flowers (in this case, self-starting diaspora organizations) bloom; they provide a diversity of engagement options and help to build diaspora patriotism, but risk dispersing effort and fizzling out without generating tangible results. Centralized and direct strategies enable a focused and strategic galvanization of the diaspora, but risk overbearing and killing initiatives that come from diaspora organizations themselves. Decentralized and indirect diaspora strategies are guided by serendipity, but they demand sophisticated, flexible, and well-networked domestic institutions. Finally, centralized and indirect diaspora strategies build diaspora engagement into the everyday working practices of domestic institutions and promote a sharing of best practices, but risk losing the specific contributions which members of diaspora might make. On this basis the book asserts that too often sending states prioritize centralized and direct agendas. Its core hypothesis is that less effort should be put into formulating and implementing centralized and direct diaspora strategies and that, since all segments of the quadrant complement each other, activity in each is necessary and more balanced strategies need to be sought.

**Table 2. Kuznetsov’s Diaspora Strategy Options**

Approach to Diaspora Strategy	Direct (administrative) Agendas (diaspora as an end in itself)	Indirect (pragmatic) Agendas (diaspora as a tool)
Decentralized Bottom-Up Strategies	<ul style="list-style-type: none"> <li>• Diverse entry points</li> <li>• Support for diaspora NGOs, associations, research groups, databases, social networks</li> <li>• Main issue: continuity, institutionalization, and impact</li> </ul>	<ul style="list-style-type: none"> <li>• Guiding serendipity</li> <li>• Managed networks and specialized NGOs</li> <li>• Main issue: requires sophisticated institutions in a home country</li> </ul>
Centralized Top-Down Strategies	<ul style="list-style-type: none"> <li>• Central focal point</li> <li>• Diaspora ministries and agencies</li> <li>• Main issue: self-entrenchment and stifling of initiative</li> </ul>	<ul style="list-style-type: none"> <li>• Incorporation into everyday practice</li> <li>• Reliance on diasporas as an extension of the work of sectoral agencies (e.g., diaspora as a tool for FDI promotion)</li> <li>• Contests for projects with diaspora involvement</li> <li>• Main issue: “Below-the radar-screen” diaspora agenda; documentation and sharing of good practice</li> </ul>

Source: Yevgeny Kuznetsov, *How Can Countries’ Talent Abroad Help Transform Institutions at Home?* (Dublin: Diaspora Matters Inc., 2011).

Three central policy conclusions follow. Firstly, there should now be a greater focus on joint projects between exceptional stakeholders in home countries and elite diaspora individuals and, by implication, a reduced emphasis upon general nation-building activity, including diaspora conferences, diaspora forums, diaspora consultation, and diaspora building. The heterogeneity of diaspora populations and domestic institutions needs to be better appreciated, and energies better concen-

trated upon forging ties that can generate concrete outcomes. Secondly, the research priority must move beyond general censuses, surveys, and profiles of diaspora populations to more high-resolution case study research that better reveals how particular networks are created and developed. In support of an approach that foregrounds guided serendipity, the purpose of research should be to fine-tune policy interventions that seek to create, support, and render more effectual a small number of strategically valuable diaspora-homeland relationships. Finally, diaspora policymaking should be humble and ambitious at the same time. Perhaps in the effort to be seen creating high-profile diaspora strategies, too much is being expected of and claimed for the diaspora with respect to the development agenda. A few projects that support the rollout of a small number of high-potential domestic institutions can quickly create momentum, generate spinoff benefits, trigger exponential developments, and over time create a significant impetus for development.

### ***Applying the Framework to the Scottish and Irish Cases***

The indirect and pragmatic approach this book advocates, and the quadrant of diaspora strategy options it proposes, provides a tool for mapping, reflecting upon, and, where necessary, refocusing effort. The Scottish and Irish cases help to illuminate the utility of using the diaspora strategy options set forth to inform policy and practice (see Table 3). Based upon this schema, the policy diagnosis for Scotland might be to continue to preserve its focus to date on sector-led indirect projects, but also to try to move towards less muscular and more sustainable diaspora-led initiatives. While this may require some further direct nation- and diaspora-building interventions, it is likely that diasporas already have capacity that could be better harnessed. At the very least the Scottish schemes need to test the hypothesis that there is scope to be more diaspora-centered. Direct strategies should be prioritized only when there is evidence that diaspora disengagement is hampering sectorial-led pragmatic initiatives. In contrast, for Ireland, the policy diagnosis might be to continue to preserve a healthy balance between direct and indirect strategies, but also to guard against mission creep in favor of the former. There remains an abundance of commitment from the Irish diaspora. While this commitment cannot be taken for granted and needs to be continuously stoked, it would not be effective to prioritize culture- and nation-building projects. Given the Irish diaspora's energy, commitment, and organization, the Irish state should work to further develop Ireland's already outstanding tradition of light-touch governance. The role of the Irish state should be to unlock the potential of the Irish diaspora; there is little need to create and manage a raft of new state-controlled schemes. We expand upon these in the following section.

**Table 3. Kuznetsov's Diaspora Strategy Options: The Scottish and Irish Schemes**

Approach to Diaspora Strategy	Direct (administrative) Agendas (diaspora as an end in itself)	Indirect (pragmatic) Agendas (diaspora as a tool)
Decentralized Bottom-Up Strategies	<p><b>Ireland</b>                      St Patrick's Day celebrations (global celebration run by Irish diaspora)                      WorldIrish.com and Rendezvous 353 (private web portals for Irish diaspora)</p>	<p><b>Ireland</b>                      Irish Business Networks (66 independent networks lightly incubated by Irish government),                      The Gathering 2013 (citizen-led diaspora tourism campaign)                      The Ireland Funds (diaspora-led philanthropic organizations)</p>
Centralized Top-Down Strategies	<p><b>Ireland</b>                      Irish Abroad Unit (unit within the Department of Foreign Affairs to oversee engagement with Irish diaspora)                      Global Irish Economic Forum (high-level network of influential Irish diasporans to advise government)</p> <p><b>Scotland</b>                      International Projects Division (cross-departmental office to oversee engagement with Scottish diaspora)                      Global Friends of Scotland (government-run advocacy/ambassadorial network)                      Scotland.org (government-run web portal for diaspora)</p>	<p><b>Scotland</b>                      Global Scot (government-run elite business network)                      Homecoming Scotland 2013 (government-led diaspora tourism campaign)                      The Scotland Funds (failed government-led philanthropic organization)                      Talent Scotland (government-led relocation advisory service)</p>

Source: Kuznetsov, *How Can Countries' Talent Abroad Help Transform Institutions at Home?*

In many ways, Scotland's diaspora projects are pragmatic in nature. They have emerged from particular sectors within the Scottish state and have been prompted by a specific need, whether to broker the globalization of Scottish companies (GlobalScot), fill specific skill gaps (Talent Scot), or promote Scotland as a tourist destination (Homecoming 2009). The Scottish government's International Projects Division — instituted by and guided by its *International Framework*, published in 2008 — seeks to promote joined-up thinking and coordination across branches of the state; for instance with respect to the diaspora-relevant work of Scottish Enterprise, Scottish Development International, and VisitScotland. In 2009 the Scottish government hosted a Scottish Diaspora Forum during which invited thought leaders were asked to propose bold new initiatives to better engage the Scottish diaspora. In 2010 the Scottish government published a well-thought-out plan and list of priorities. Some of the proposed actions were motivated by a desire to renew and fortify the “Scottishness” of the Scottish diaspora through initiatives such as Scotland Week and Tartan Day, both promoted vigorously in North America. And Scotland now identifies itself as Europe's leading pioneer in the development of formal and systematic state-led diaspora strategies. Nevertheless its International Projects Division performs more as a nimble coordinator than as a key actor itself, and seeks to bring a range of agencies to support the plan. Projects emerge from real needs and enthusiasm, rather than engaging the Scottish diaspora for engagement's sake.

Within Ireland, the Irish Abroad Unit, a division within the Department of Foreign Affairs, seeks to promote joined-up thinking and coordination across branches of the state; for instance, with respect to the diaspora-relevant work of Enterprise Ireland, the Industrial Development Agency, Failte Ireland, Culture Ireland, the President's Office, and other departments within the state. The Irish state has always prioritized direct strategies in the sense that nation-building in the Irish diaspora has been pivotal to Irish government projects. In the Irish diaspora strategy, culture comes first, second, and third. Moreover, the Irish Abroad Unit has recently emerged as a dominant agency overseeing diaspora-homeland relationships. This has created a further drift towards more direct diaspora agendas. For instance, in September 2009 Ireland convened the Global Irish Economic Forum, which brought together nearly 250 of the most influential Irish diasporans from around the world to explore how the diaspora might contribute to crisis management and economic recovery, and how Ireland might create a more strategic relationship with its diaspora. This has led to the creation of the Global Irish Network, comprising 300 Irish diaspora thought leaders from 37 countries who provide advice to the Irish government. This group meets frequently in Ireland and around the globe. But it remains the case that the Irish approach continues to delegate leadership for coining and implementing specific diaspora engagement policies to sectoral agencies. For instance, Enterprise Ireland works with Irish business networks and Failte Ireland is responsible for *The Gathering* 2013 tourism event. Ireland, then, has a blend of direct and indirect strategies.

The Scottish schemes tend to be highly managerialist in nature. While important exceptions exist, the state functions largely as the lead player in proposing, managing, and reviewing schemes. Managerial structures and processes that emphasize accountability, transparency, productivity, and value for money underpin the Scottish schemes. Scottish government initiatives are accompanied by defined targets and associated metrics for measuring progress and success. A scheme is therefore defined as a success or failure depending on how much economic value it can be demonstrated to have leveraged over a specific (usually very short) period. There is clearly an important rationale for moving to new forms of public administration, measuring value for money, and ensuring transparency and accountability in the expenditure of public funds. Democratic systems require public confidence in the efficiency of state-run organizations. Nevertheless, such managerialism can circumscribe how schemes are conceived, structured, and run, and for all its benefits may limit the development of initiatives that would have a multitude of intangible benefits.

The Irish schemes are slowly transferring to more managerialist interventions, especially with regard to accountability and transparency of public spending, but there remains an underlying inclination to leave diaspora organizations and networks to run themselves, providing

only minimal resources (basic funding, advice, speakers, etc.), and then only when an organization or network needs to be re-energized and requires the short-term backing of the state. To that end, the Irish state supports existing organizations without seeking any control over them, and encourages the development of new social networks run by the diaspora that use the diaspora's own resources. The idea is to foster the organic growth of networks with as little government input as possible. This is partly to keep investment low, but is mainly because of a belief that organic networks are more likely to succeed than those that are highly managed. For instance, Enterprise Ireland invests selective but light resources (some of which are in-kind rather than financial) into over 60 Irish business networks around the world. The metrics used to assess this strategy focus on the quality and strength of the network, feedback from clients, and number of quotations and contracts, but there is no rigorous and robust economic metric. For Ireland, the challenge will be to find appropriate ways of measuring the success of initiatives without stifling the creativity of these efforts.

While Scotland has sought to develop a formal overarching diaspora strategy and has created a new institution to fortify its emigration state, it has effectively built pragmatic diaspora strategies: most of its schemes have stemmed from the needs and demands of sectoral agencies. But it is possible that Scotland has not paid sufficient attention to direct diaspora strategy options, and in particular to the building of Scottishness in the Scottish diaspora. Arguably, this is part of the reason why it has suffered from a tendency to excessively pursue centralized strategies; that is, to create and manage diaspora-homeland engagements. The state has had to be muscular because organic initiatives have not always emerged from the grassroots. But Scotland's top-heavy state-led strategy has been pursued at a cost. The sustainability of projects has proven problematic (for example, the active membership base of Global Scot has shrunk), some projects have failed entirely (for example, the philanthropic Scotland Funds initiative was jettisoned after only 18 months), and some speculative projects have exposed the Scottish government to financial risks and losses (for example, *The Gathering* tourism project, the flagship centerpiece of the Homecoming 2009 campaign, lost money).

The Irish case runs the risk of mission creep. Ireland demonstrates the value of working simultaneously on direct and indirect strategies. The Irish diaspora is a classic example of a victim diaspora: the Irish potato famine of 1845-52, and ongoing political disputations with Britain, have been used to frame the Irish diaspora as an involuntary population emigration driven by a motif of exile. As such, Ireland has historically been assured of strong patriotism among its diaspora communities. Nevertheless, with the economic success of the country (notwithstanding the current economic crises, the Celtic Tiger wave that lasted from 1993 to 2007 brought great wealth to the country), the peace process in the North of Ireland, and the changing demographic

profile of the Irish diaspora, it is clear that Ireland can no longer take its diaspora's commitment for granted. Ireland has grasped the fundamental importance of direct, culture-led strategies that build the Irishness of the Irish diaspora. But it threatens to take direct strategies too far, and arguably the Irish Abroad Unit has ventured into unproductive territory by launching the Global Irish Economic Forum. Ireland needs to remain vigilant and to refocus on projects that are sector driven. With *The Gathering* 2013 tourism project, which is being pioneered by Failte Ireland and Tourism Ireland, as the country's signature diaspora engagement mechanism in 2013, it is arguably on course to do so. But because Ireland has enjoyed a vibrant and self-organizing diaspora, it has been able to pursue light-touch and decentralized approaches to the governance of diaspora-homeland initiatives. Ireland is a world-class example of a sophisticated diaspora strategy driven by the mission of guided serendipity.

### III. The Importance of Building Collaborations With Partners, Stakeholders, and Strategic Allies in Destination Countries and Sending States

#### A. *The Need for Enabler Engagement Programs*

In this final section we suggest that nations might more effectively turn to indirect and pragmatic diaspora strategies if more attention were given to developing enabler engagement programs, which we define as programs that enlist and mobilize stakeholders and partners in a) destination states, and in particular the Global North, and b) sending states themselves.

While much of the focus thus far has been on innovative institutions and programs devised and implemented by sending states, it is imperative to recognize that countries of origin can only do so much to devise and mobilize diaspora strategies. What is often forgotten is that diaspora communities reside in other states, and it is likely that their experience of settlement and assimilation into these countries, and these countries' strategic priorities and policy programs, will play a role in determining the communities' contributions to their home state.

There are five key ways in which host countries can impact the work of the diaspora populations they host: through their aid programs, including during natural or human disasters; through their trade policies;

through their diplomatic and foreign policy agendas; through their security and military agendas; and through their refugee and immigration policies. Destination countries seeking to promote diaspora-centered development need to be attentive to the transformations they might make in all five areas to promote rather than frustrate the reach of diasporas back to homelands. How might external aid and development agendas be better served by forging connections between diaspora populations and harnessing these populations as conduits? How can diaspora populations be used to further exports from destination countries while supporting fair trade for sending countries? How might diaspora populations be harnessed to inform and improve foreign policy and international relations between destination and sending states? In what ways can diaspora groupings be encouraged to play a role in peace building in sending states, and therefore greater security in destination states? In what ways might refugee and immigration policies be improved so as to meet domestic and humanitarian (i.e., family reunification) needs while minimizing unnecessary blockages to diaspora contributions to homelands?

Only belatedly are countries that host a variety of global diasporas now demonstrating heightened interest in building partnerships with these communities to improve the effectiveness and efficiency of their own external aid and development programs. EuropeAid is a new Directorate-General (DG) within the European Union (EU) and is responsible for designing EU development policies, delivering aid through programs and projects to around 140 countries, and contributing to realizing the Millennium Development Goals (MDGs). With a budget of 12 billion euros (0.56 percent of EU GDP, 9 percent of the EU budget) in 2010, the European Union dispenses over 50 percent of all development aid worldwide. Migration has rapidly gained momentum in EuropeAid programs. Alongside the management of legal migration and the asylum application system, and the curbing of illegal flows of migrants to the European Union, EuropeAid has begun to recognize the boost that diasporas can give to sending states. Through initiatives such as the Africa-EU partnership, EuropeAid is seeking to build collaborations between sending states, diaspora communities, and EU countries. Its recent Migration for Development program represents a paradigmatic example of how partnership building can result in meaningful and effectual bottom-up diaspora initiatives that are capable of radically transforming the institutional capacities of public, private, and community institutions in sending states.<sup>11</sup>

Meanwhile, in May 2011, at the instruction of Secretary of State Hillary Clinton, the Global Partnership Initiative (GPI), in collaboration with the US Agency for International Development (USAID) and the Migration Policy Institute (MPI), hosted the first-ever Secretary of State's

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11 European Commission, *EuropeAid Annual Report 2011* (Brussels: European Commission, 2011), [http://ec.europa.eu/europeaid/multimedia/publications/publications/annual-reports/2011\\_en.htm](http://ec.europa.eu/europeaid/multimedia/publications/publications/annual-reports/2011_en.htm).

Global Diaspora Forum and inaugurated a new, US-based International diaspora Engagement Alliance (IdEA).<sup>12</sup> IdEA challenges the US external aid and development community to think anew about migration and development. It promotes partnership building for diaspora-centered development in five areas: 1) diaspreneurship, which means encouraging diaspora entrepreneurs to invest in and build enterprises as well as to stimulate trade in countries of origin; 2) diasplomacy, which means strengthening the existing role of diasporas in diplomacy, advocacy, and peace building, including using nontraditional vehicles such as sports, arts, and culture; 3) This report, undertaken by the Migration Policy Institute through a USAID grant, discusses how today's diaspora organizations, communities and individuals increasingly are seeking to influence government, media, private sectors and other prominent groups in their countries of origin and of settlement. This report provides an overview of diaspora advocacy by looking at five issues: who participates in diaspora advocacy, who or what are the "targets" in these efforts, what means are used to advance these causes, what are the issues on which they focus and the effectiveness of the efforts.

Download Report diasporacorps, which means incubating diaspora volunteerism in countries of origin; 4) This report, researched by the Migration Policy Institute through a USAID grant, examines how nearly 200,000 first- and second-generation immigrants are among the 1 million US residents who spend time volunteering abroad each year. Diasporas often have the connections, knowledge and personal drive to volunteer outside the framework of organized volunteer programs. But many also volunteer through established programs. As skilled migration and the number of U.S. youth with ancestors in the developing world grow over the coming years, the potential for both skilled diaspora volunteers and youth diaspora volunteers will increase, as this report discusses.

Download Report diaspora 2.0, which means fostering innovative communication and information technologies, not least social media, to enhance connectivity to the homeland; and 5) diasphilanthropy, which means encouraging the diaspora to donate in areas such education, health, nutrition, and disaster relief in countries of origin.

But it is not only stakeholders in destination states who need to be included. Beyond the formal institutions of the emigration state, it is often the case that business, cultural, community, sporting, academic, and artistic organizations in sending states lack the capacity to lead or even to be open to and capable of benefiting from diaspora for development projects. At best these institutions are passive beneficiaries of diaspora contributions to homeland development. At worst they are of little interest to diaspora search networks and are not considered worthy of concern or effort. As such, insufficient attention has been

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12 See International diaspora Engagement Alliance (IdEA), "Home," [www.diasporaalliance.org](http://www.diasporaalliance.org).

paid to date to the mobilization of domestic partner institutions and programs designed to build the capacity of sending-state institutions as active stakeholders in their own rights. What is required is the stirring of interest within all public, private, and voluntary institutions in sending states so that they might be receptive to building new diaspora-to-homeland linkages. Of course not all institutions will take the opportunity. But a wider audience will be created for search networks to engage with.

The Scottish and Irish cases illustrate the importance of engaging enabling institutions within sending states. Both Scotland and Ireland have pioneered world-class high-profile diaspora tourism projects; in 2009 Scotland celebrated the Homecoming 2009 campaign and will repeat this project in 2014, while in 2013 Ireland hosted *The Gathering* 2013. Homecoming 2009 drew 72,000 extra visitors for Scotland and created £42 million in additional spend and 870 new jobs. The Gathering 2013 predicts that it will draw 325,000 visitors to Ireland, generating 221 million euros in added spending and 2,100 extra jobs. In both schemes stakeholders from the public, private, and community sectors were mobilized, and central to the delivery of the program.

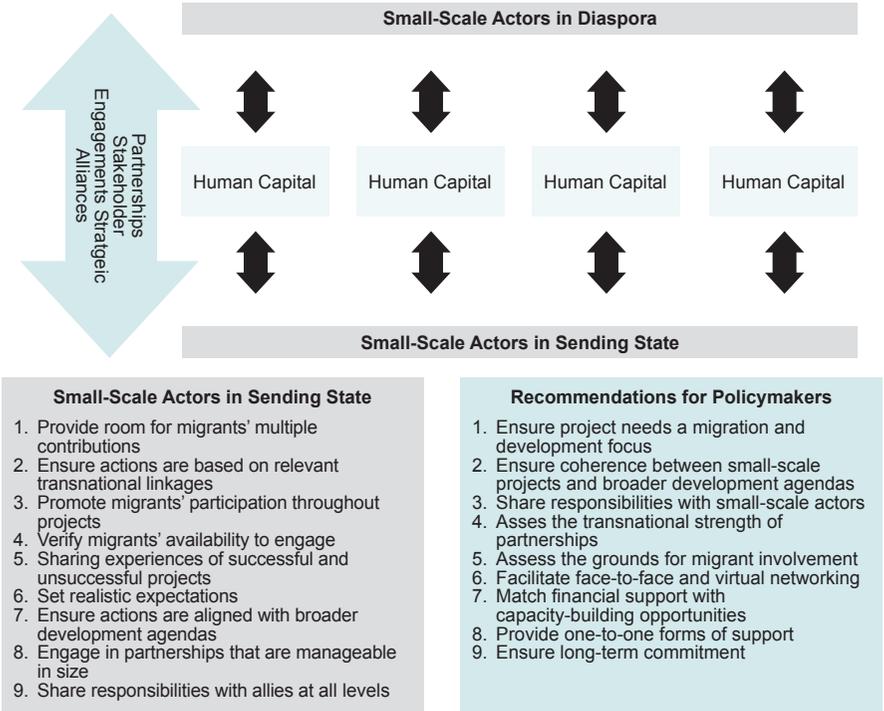
The assumption behind the schemes was that people throughout Ireland and Scotland want to play an active part in their country's economic renewal and development. But civil society and community organizations are insufficiently primed to engage in diaspora-tourist promotions. It is therefore the role of the state to build social capital in communities. While first and foremost a tourism event, in both cases the core legacy has been defined to include the strengthening of individuals and communities, increasing social cohesion, building community capacity, and improving local tourism structures. Consequently, in both cases the state has created universal awareness and understanding of the events throughout the country to win the active support of key influencers and stakeholders and to encourage them to organize their own local homecomings and gatherings. They have also helped build the competencies of Homecoming and *Gathering* organizers through town hall visits, toolkits, grant awards, and mentoring schemes.

## **B. The European Commission-United Nations Joint Migration and Development Initiative**

This wider approach resonates strongly with the key tenets of the European Commission-United Nations Joint Migration and Development Initiative (JMEDI). The JMEDI is a four-year, 15-million-euro project designed to fortify the contribution of diaspora populations in Europe to the development of their countries of origin. The project's aim is to encourage a bottom-up approach to harnessing migrant communities in the development of homelands (see Figure 2). Small-scale actors (such

as community groups, diaspora lobby groups, aid agencies, charities, local authorities, etc.) in both European and sending states were invited to bid for competitive grants for concrete initiatives designed to: 1) set up and reinforce networks of actors working on migration and development; 2) identify good practices in the field and share information on what actually works at the local and international levels; and 3) feed grassroots wisdom back to policymakers working at larger scales. Sixteen target countries were identified — Algeria, Cape Verde, Ecuador, Egypt, Ethiopia, Georgia, Ghana, Jamaica, Mali, Moldova, Morocco, Nigeria, Philippines, Senegal, Sri Lanka, and Tunisia — and 51 projects were funded.

**Figure 2. The EC-JMDI Framework**



Source: European Commission-UN Joint Migration and Development Initiative (JMDI), *Migration for Development: A Bottom-up Approach* (Brussels: JMDI, 2011).

JMDI is designed to build four sets of “capital” in migrant communities so as to enhance the contributions these communities might make to homeland development. *Social capital* refers to the extent, density, and capacity of migrants’ social networks, not least their various connections with communities at home. An example of this is a joint project between the Mona School of Business in Jamaica and the KAJAN’s Women’s Social and Arts Enterprise in the United Kingdom, which

created an online community dedicated to improving policymaking and implementation and development planning in Jamaica. *Financial capital* denotes the economic resources migrants have at their disposal and the ways these resources might be put to productive use for both the migrant and the sending country. An example is the tripartite link between Unlad Kabayan Migrant Services Foundation Inc. and the Migrant Forum in Asia, both located in the Philippines, and the Netherlands-based Commission for Filipino Migrant Workers initiative, which seeks to better deploy remittances so as to promote personal savings as well as community development. *Human capital* refers to migrants' education, skills, and talents, and competencies that might be transferred directly and indirectly to serve homeland labor markets. An example is the partnership between the Egyptian Agribusiness Association and the Athens Network of Collaborating Experts, which facilitates the development of aquaculture and fisheries industries in Egypt. Finally, *cultural capital* refers to migrant awareness of rights — in both sending and destination states — that might enhance their capacity to transfer ideas and values back home. An example is the collaboration between the Algerian Forum for Citizenship and Modernity and the Region of Sicily, which works to provide predeparture information about the rules, rights, and obligations Algerian migrants can expect to encounter in countries of destination.

JMDI also provides guidance to small-scale actors as to how to interact across borders. It identifies three types of alliances and considers the merits of each in different contexts. The first type is partnerships, which refers to alliances between small-scale actors that are necessary for the direct implementation of a joint plan. Partners are hands-on actors who co-own or are jointly responsible for projects. Partnerships work best when there is a joint vision, clearly defined roles, productive complementarities, effective communication, and, when needed, appropriate mediation. Stakeholders are agents who can make a significant contribution to diaspora-homeland projects at specific stages without serving as direct partners. Stakeholder engagement requires partners to map the range of pertinent stakeholders and relevant resources — in both sending and destination states — they might wish to engage and then to draw upon and to manage these organizations and resources. Finally, although they do not directly impact projects, a number of institutions set the structural parameters in which migration for development initiatives must work. Strategic allies are actors in both destination and sending countries whose position of influence and decision-making authority matter insofar as they create, delimit, and constrain the environment in which partners work. They can engage governments, international organizations, and leading policymakers to ensure that projects are better aligned with the prevailing policy environment.

Through the production of a handbook for practitioners, exemplars of best practice, practical toolkits for community organizations, a

discussion forum and blog, and the hosting of icebreaker events and practitioner networking conferences, JMDI will undoubtedly generate an ongoing legacy that will survive beyond its own life. Perhaps JMDI's greatest impact will stem from the lessons for future practice it gleaned (see Figure 2). For small-scale actors, for instance, the project recommends that attention be paid to practical matters such as migrants' other commitments, setting realistic expectations, the scale of partnerships and their governance, equity in the division of responsibility, and equity and inclusivity in project design and delivery. Meanwhile, recommendations for policymakers include creating effective mechanisms to bring migrants and domestic actors into contact, upskilling partners in key competencies, promoting best practice, providing customized support, and engendering confidence that support for initiatives will be durable. It is by attending to these seemingly banal practical matters that partners, stakeholders, and strategic allies will be able to collaborate in the building of successful diaspora strategies.

## IV. Conclusion

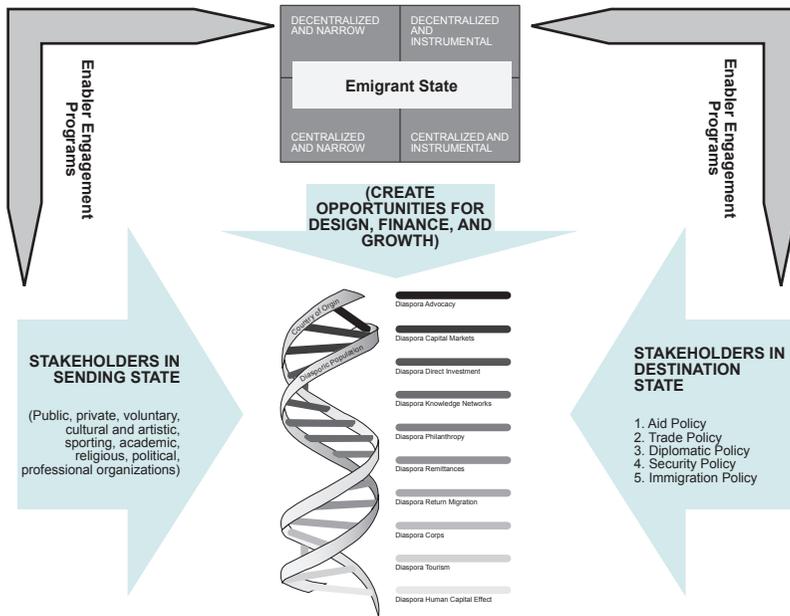
This book has sought to place under critical scrutiny the role of global diasporas in the development of institutional capacity in sending states. Undoubtedly the rise of diaspora-centered development agendas reflects at the least a shift in development thinking and practice; with traditional emphases upon market- and state-led development being variously supplemented, fortified, replaced, and challenged by a new focus upon diaspora networks, social capital, community, and civil-society-led development. The forms of development promoted by diaspora-centered development, including the social and spatial distribution of costs and benefits, remain to be charted in a sustained way. But it is now becoming clear that diaspora groupings can and do impact public, private, and civil-society institutions in countries of origin in significant and positive ways. It follows that the recent flourishing of interest in diaspora strategy is sufficiently well grounded to merit scrutiny and experiment. If diasporas are capable of contributing to development it is incumbent on sending states to bring forth institutions and public policies that harness and lever the talents of diaspora groupings to best effect. The purpose of this chapter has been to digest, comment upon, and develop the conceptual schema that this book has offered as a guide to the policymaking and practitioner community.

The flurry of activity that surrounds diaspora strategizing threatens to cloud the simple core mission of the enterprise: to pursue diaspora-centered development. We applaud the clarity of the conceptual framework advanced in the book, and endorse its call for a new generation of pragmatic and direct diaspora strategies that recognize the heterogeneity of both diaspora populations and institutions in sending states, prioritize triggering search networks, and seek to connect high-achieving diaspora elites with better-performing domestic institutions.

We welcome the book's proposition of a quadrant of diaspora strategy options, cross referencing as they do centralized and decentralized and direct and indirect approaches. Countries will find it useful to map their activities onto this schema and be guided by the call for a renewed decentralized and pragmatic quadrant. We see virtue in the importance of being humble and ambitious at the same time. Case-by-case-led development may look atomized and lacking in coherence, but the sum can be greater than the individual parts. This book presents diaspora-centered development not as an alternative development philosophy or approach per se, but as a disruption of the intellectual habit within development theory and practice of searching for a silver bullet — a magic formula that will accelerate growth. While this claim needs interrogation, it is stimulating to contemplate the reality that diaspora-led development promotes serendipitous growth and as such generates unexpected and historically novel development outcomes.

We propose that the role of global diasporas in the development of countries of origin is conditioned by four mediators. The first is the development of an effective diaspora strategy in sending states, employing an appropriate mix of direct and indirect and decentralized and centralized initiatives in any given context, and the creation of an emigration state apparatus suited to implementing this policy mixture. The second are the capacities and competencies of partners, stakeholders, and strategic allies in sending states, and whether or not programs designed to mobilize, activate, and orient key enablers exist. The third is the existing scale, history, geography, and nature of particular diaspora-homeland relations, including diaspora lobbying and advocacy, diaspora capital markets, diaspora investment funds, diaspora knowledge networks, diaspora philanthropy, diaspora remittances, diaspora return migration, diaspora corps, diaspora tourism, and diaspora human-capital effects. The fourth comprises external aid, trade, diplomatic, security, and immigration priorities of partners, stakeholders, and strategic allies in destination states, particularly the more powerful states and supra-national political institutions in the global North. Figure 3 below illustrates these conditions.

**Figure 3.A Conceptual Framework for a New Generation of Diaspora Strategy**



Source: Authors' rendering.

We propose that there is a unique nexus between all four that energizes, and frustrates, the contributions of diaspora groupings to homeland development differently in the case of different diasporas. Diaspora schemes that are successful and that exemplify best practice are often predicated upon a strong collaborative alignment between all four sending-state diaspora strategies, stakeholder capacity in sending states, diaspora aspirations and agendas, and the priorities of destination countries. Diaspora schemes that are transferred from pioneers to adopters often have more limited success because these adopters display lesser degrees of collaborative alignment.

Should one mediator be privileged above another? Arguably, if any one of the four mediators identified assumes too much authority and fails to grasp the importance of working collaboratively, it is likely that meaningful collaborative alignments will be too difficult to achieve. While the strategic interests of stakeholders in destination countries is a neglected variable, it is important not to allow hosts to dictate terms to sending nations. Destination countries that seek to use diaspora populations to sell particular development agendas to homelands run the risk of creating a schism between these populations and their countries of origin, and weakening diaspora ties. Diaspora groupings that feel exploited are poor conduits to their homelands. Likewise, if

sending states pursue diasporas too aggressively, diaspora strategies can become clumsy, alienating diaspora communities and threatening the sovereignty of host countries, who fear the prospect of foreign interference in their internal political affairs. Meanwhile, if left to nonstate stakeholders in sending states, arguably there exists a risk that entrenched and sectional interests will stifle the capacity of search networks to find and incubate fresh but hidden high-potential talent. Finally, an overly patriotic and militant diaspora can often prove to be as much of a problem as a resource, for both sending and destination states. Diaspora communities that seek to intervene as a special interest group in the domestic affairs of their countries of origin run the risk having their voices ignored or dismissed as too powerful given their geographical distance from the country. They might also fall prey to the accusation that they are mere “flexible citizens” who have little loyalty to their new homes.

We propose, then, that the future of diaspora-centered development requires a new generation of diaspora strategies that are predicated upon cooperation or effective partnerships between sending states, key stakeholders in sending states, diaspora populations themselves, and stakeholders in destination states. Arguably the most critical agenda for the future is to create forums, mechanisms, dialogues, and platforms through which each constituency can negotiate its interests in diaspora strategizing with an awareness of the compromises that might need to be made if the collective union is to succeed. But this cannot be a vague, aspirational, or abstract exercise. As this book has shown collaborative alignment may need to occur on a case-by-case basis and with respect to pragmatic and indirect projects that deliver concrete, demonstrable, and purposeful development outcomes. While it is especially powerful if the four tectonic plates are aligned and create fundamental and cumulative reinforcements at a structural level, it is still necessary, and even desirable, that specific diaspora-homeland projects create even temporary and brittle alignments. Even transient and hard-won collaborations can produce effective and meaningful results with a lasting legacy. 

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## About the Migration Policy Institute

The Migration Policy Institute is an independent, nonpartisan, nonprofit think tank in Washington, DC dedicated to analysis of the movement of people worldwide.

MPI provides analysis, development, and evaluation of migration and refugee policies at the local, national, and international levels. It aims to meet the rising demand for pragmatic and thoughtful responses to the challenges and opportunities that large-scale migration, whether voluntary or forced, presents to communities and institutions in an increasingly integrated world.

Founded in 2001 by Demetrios G. Papademetriou and Kathleen Newland, MPI grew out of the International Migration Policy Program at the Carnegie Endowment for International Peace.

MPI is guided by the philosophy that international migration needs active and intelligent management. When such policies are in place and are responsibly administered, they bring benefits to immigrants and their families, communities of origin and destination, and sending and receiving countries.

MPI's policy research and analysis proceed from four central propositions:

- Fair, smart, transparent, and rights-based immigration and refugee policies can promote social cohesion, economic vitality, and national security.
- Given the opportunity, immigrants become net contributors and create new social and economic assets.
- Sound immigration and integration policies result from balanced analysis, solid data, and the engagement of a spectrum of stakeholders — from community leaders and immigrant organizations to the policy elite — interested in immigration policy and its human consequences.
- National policymaking benefits from international comparative research, as more and more countries accumulate data, analysis, and policy experience related to global migration.

For more on MPI's mission, experts, and research, visit: [www.migrationpolicy.org](http://www.migrationpolicy.org)

For more on MPI's Migrants, Migration, and Development Program, which has conducted significant research over the years on diaspora engagement, visit: [www.migrationpolicy.org/research/migration\\_development.php](http://www.migrationpolicy.org/research/migration_development.php)

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