

Reversing the brain drain?

Skilled return migration and the global movement of expert knowledge

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Dissertation Abstract

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My dissertation explores how skilled return migrants adapt the expertise they gained working abroad to workplaces in their home countries with data from an original survey of 4,183 skilled returnees from 81 countries, who had worked abroad in the U.S. First, I find that whether returnees are successful at transferring knowledge depends less on their individual ability and more on features of the professional environments in their home countries. Also, returnees who are effective brokers of knowledge bring back ideas about management practices more than they do technical knowledge. Third, returnees are more likely to become entrepreneurs if they have strong local ties to their home countries, the effect of which is stronger in countries with already high rates of self-employment. Finally, the very returnees who are most successful as knowledge brokers are also most likely to venture abroad again. These findings challenge the conventional notion of return migrants as agents of economic transformation, suggesting that many institutional challenges stand in the way of their ability to broker resources across borders.

Category: Sociology: Organizational Theory: Organizational Learning

Keywords: Globalization, employee mobility, reverse brain drain, knowledge transfer, social networks

My dissertation explores how skilled return migrants adapt the knowledge they gained working abroad to the workplaces of their home countries. Prior work casts skilled returnees as ideal conduits of overseas economic resources in regions that have long endured the outmigration of talent. However, evidence for returnees as stewards of cross-border knowledge spillover is scant, coming chiefly from anecdotes of successful returnees in studies that select on positive outcomes. Informed by work on organizational learning and networks, I develop a theory of contingent brokerage, arguing that the ability of returnees to use their host- and home-country ties for expert knowledge transfer depends on the organizational and cultural pressures of their surroundings.

To study this, I conducted a survey of 4,183 skilled returnees from 81 countries, who had worked abroad in the U.S., collecting information about career histories, attitudes, and work activity. Comprised mainly of engineers and financial analysts, the respondent pool came from U.S.'s largest organizational sponsor of J1 Visas for professionals, making this the largest survey of skilled returnees ever compiled. Along with 161 interviews with returnees, my dissertation uses these data to overcome the empirical challenges plaguing prior case-based work on reverse brain drain, which has been unable to generalize claims on the relationship between skilled migration and the global flow of expertise.

The primary aim of this effort has been to explain why some returnees are better cross-border brokers of knowledge resources than others. To do so, I divided my analysis into three related questions. First, do returnees transfer knowledge transfer knowledge back to their home countries? Second, how do they transfer this knowledge? And finally, what is the aftermath of their knowledge transfer? Chapter 1 in this manuscript attends to the first question. Here, I demonstrated that successful returnee knowledge transfer is contingent on the organizational

environment in which returnees work and the cultural environment of their home countries. Specifically, I frame returnees as structural brokers. A skilled returnee's advantage over his domestic and foreign peers in being able to transfer knowledge back to his home country lies in his *dual embeddedness* in two geographically separate professional and cultural environments. That is, almost by design, the returnees in my population (and more broadly) are individuals who have had meaningful professional experiences abroad and also possess intimate ties to their home countries. In other words, returnees all have the potential to serve as cross-border intermediaries.

Given this assumption, it is easy to overlook the everyday challenges returnees must face in their home countries as workers and outsiders attempting to readjust back to their home countries. Overall, I found that the more embedded returnees were abroad (in the U.S.) and in their home countries, the more likely they were able to successfully apply the knowledge they gained abroad in the workplaces of their homelands. However, the advantages of having stronger ties abroad for knowledge transfer are erased for those returnees who have lower workplace authority and those who work in environments in which there are other returnees. In addition, having strong professional ties to the U.S. becomes a disadvantage for knowledge transfer for returnees in countries with more prevalent xenophobic attitudes, such as Jordan and South Korea, while conversely, having stronger ties to one's home country becomes a even greater advantage for knowledge transfer in these same antipathetic environments.

Having established how workplace and cultural context influences *whether* returnees become successful brokers, in the following three chapters, I ask *how* returnees transfer knowledge back to their home countries. In Chapter 2, with the help of interview data, I outlined a conceptual framework for understanding how returnees engage in knowledge transfer activity.

Here, I focus attention on inter-organizational knowledge transfer as an individual-level phenomenon. Rather than modeling knowledge transfer between organizations as a quantifiable accounting problem, which would treat knowledge as discrete resource units, I explain how returnee knowledge transfer is situationally defined. In particular, I suggest that knowledge transfer is a way for returnees to make sense of their workplace surroundings in their home countries after re-entry. By implementing some aspect of their knowledge abroad in their work environments in their home countries, returnees recreate some aspect of their internalized worldviews, which had been influenced by their time spent working abroad. I term this entire process as *selective structuration*, which refers to how returnees, as differentially empowered entrants into new environments, adapt knowledge from abroad to workplace contexts in their home countries as a response to disruptions in their sensemaking.

In Chapter 3, I further explore returnee motivations for knowledge transfer by comparing two distinct returnee groups – those who came to the U.S. as part of temporary international assignments with the same organization, and those whose mobility was self-initiated. More broadly, these two groups represent the two major forces that have driven the growth in skilled migration. The international assignment group signals the increasing number of formal channels for global mobility, established by spread of multinational corporations and supply chains, while greater access to information about labor markets abroad has motivated more and more self-initiated skilled migrants. Using the same survey data, I show that self-initiated returnees, compared with returnees from international assignments, share knowledge that is more tacit with organizations in their home countries. In addition, knowledge shared by self-initiated returnees is less likely to be adopted by a receiving home country organization. However, knowledge from self-initiated returnees, when successfully implemented, tends to affect more aspects of the

organization, whereas international assignment returnees tend to contribute more incrementally to their home country workplaces.

Chapter 4 investigated returnee entrepreneurs, a distinct subset of skilled returnees that has received disproportionately large amounts of media and scholarly scrutiny. Much research on skilled returnees holds up the successful returnee entrepreneur as a poster child of reverse brain drain. In many cases, these are individuals, usually working in technology, who have founded companies in their home countries after some measure of career success abroad. My sample of returnee entrepreneurs, however, covers a much broader array of backgrounds and industries. Recognizing that forming a new venture is a special form of cross-border knowledge transfer for returnees, I investigate how returnees' structural advantages as boundary-spanners influence their propensity to found companies in their home countries. Here, I found that returnees were much more likely to start businesses if they had strong ties abroad. However, whether having strong ties to their home countries boosted their chances was contingent on the environment for entrepreneurship in their homelands. Specifically, having stronger local home country ties increased a returnee's probability of forming a new venture only in countries where entrepreneurship was common. In countries with little entrepreneurial activity, having strong local ties did not help returnees in starting new businesses. In other words, the advantages of strong local ties for potential returnee entrepreneurs must be activated by environments that are rich in opportunity and activity.

Finally, Chapter 5 engages with the final question of my dissertation about the aftermath of re-entry. Specifically, I explore whether or not returnees tend to stay in their home countries. The findings here offer a paradoxical conclusion about the skilled returnees in this sample. In particular, the returnees who reported the most success transferring knowledge back to their

home countries were also the least likely to report wanting to stay in their home countries for the long term. That is, the returnees who hold potentially the greatest value for their home countries are also the most likely to leave their homeland shores again. Why would this be the case? In my analysis, I found that returnees are more likely to wish to return to the U.S. for work in the long term if they were more deeply embedded in working environments in U.S., even controlling for salary preferences and career expectations. Thus, having stronger ties to the U.S. drives returnees' knowledge transfer success because they serve as strong channels of knowledge flow, and simultaneously serves to attract returnees back abroad because they expose them to greater career opportunities outside their home countries.

Together, these chapters shed light on what had been an incomplete narrative of returnee experiences in scholarly work. Rather than portraying all returnees as entrepreneurial agents capable of cross-pollinating their home countries with their knowledge, skilled returnees encounter a variety of organizational, cultural, and network pressures that can influence their ability to transfer knowledge and affect their calculus for future global mobility. In short, the re-entry experience of skilled returnees is not glamorous, and the process of returnee knowledge transfer is in no way formulaic. Whether skilled returnees become catalysts of growth in their home country depends largely on the micro-environments in the workplace that structure their professional activity and interactions that can lead to the transfer of valuable knowledge resources.

Theoretical Contributions

My analysis of skilled returnee experiences contributes to three principal areas of sociological research—social networks, the sociology of immigration, and organizational theory.

Some of these findings illuminate connections between these area that have received scant attention in the past while others expand the territory of empirical research covered by these subfields. In addition, with the aim of understanding the variation in return migrant outcomes, it is possible to bring together sociological theories from these different domains to make sense of other contemporary migration phenomena.

Social networks. In this dissertation, I take a critical view of brokerage as a network mechanism. First, in Chapter 1, I distinguish between structural and functional brokers. Specifically, I suggest that although returnees might be structurally positioned as boundary-spanners, they do not always engage in brokerage activity – in this case, brokerage activity refers to the transfer of knowledge resources. Similarly, for the returnee entrepreneurs in Chapter 4, the advantage of being able to access institutional and financial resources from separate host and home country environments did not always lead to the successful founding of a new venture. To a great extent, the benefits of having such boundary-spanning social capital for returnees are conditional on certain environmental cues. In other words, functional brokerage must be activated; simply defining returnees as structural brokers does not necessarily mean that they will engage in brokerage functions and activities. The broader theoretical point is that there is a need to articulate a more coherent framework for understanding the context of network capital as it relates to individual social and economic outcomes. It behooves future scholarship to consider the taken-for-granted benefits that social capital confers on individuals as a baseline null hypothesis, rather than as an assertion to be illustrated empirically again and again. A clear understanding of the contextual scope of these benefits still eludes us.

Sociology of immigration. My dissertation represents one empirical pathway into a more coherent theoretical framework for understanding skilled international migration. Past work in

the sociology of immigration has primarily built on findings from data on low skilled or unskilled migration. High skilled immigrants, by contrast, are employed in systematically different professional and organizational environments. As such, the manner in which informal and formal social networks, labor market opportunities, and the nature of work structure migratory flows vary between high-skilled and low-skilled immigrants.

For example, as Chapter 3 shows, many of the returnees in my sample traverse country boundaries but not firm boundaries in their international careers. In addition, high-skilled immigrants are largely motivated by career advancement and skill-acquisition goals more than wage and earning goals in comparison to low-skilled immigrants. The consequence of these differences is that whereas a target-earner perspective might predict that immigrants will eventually return to their home countries to settle after achieving a financial goal, a theoretical approach that is more sensitive to skilled worker contexts suggests that immigrants are engaged in migratory careers that might feature more back-and-forth movements. This dissertation offers insight into scholarship that might analytically separate skilled and unskilled migration to better theorize the global movement of skilled populations.

Organizational theory. The preceding chapters have also taken an individual level perspective on organizational learning. Indeed, the outcome variable around which much of the analysis in these pages is framed – knowledge transfer – can be characterized as an organizational level phenomenon. How knowledge is actually shared between organizations, however, at least through employee mobility, requires interpersonal contact. As such, this work joins a growing chorus of organizational scholars who have moved away from conceptualizing the knowledge that organizations can share as discrete units, and instead defined knowledge transfer as socially-situated encounters that result in knowledge transformation. Moreover, when

organizations learn through the addition of new employees, they are not simply mimicking peer organizations through the adoption of seemingly interchangeable behaviors; instead, they are recombining different elements of external and internal knowledge that in many cases produces novel organizational change.

My dissertation work illustrates this process by revealing the challenges returnees face in transferring knowledge back to the workplace in their home countries. Chapters 1, 2, and 5 document the resistance that returnees sometimes face in communicating their knowledge to domestic counterparts in the home country organizations. This resistance can come from supervisors and co-workers, and in some cases, can result in the failure of a returnee's attempt to share knowledge from overseas. However, in other scenarios, this resistance can also lead to innovation on the part of the returnee as part of a compromise to implement their ideas and practices from abroad. Here, it is conflict that can result in novel solutions to workplace problems. In other words, returnee knowledge must frequently be *adapted* by their home country organizations as opposed to simply adopted.

Lessons for practice and research

Returnees in the workplace. Past work on skilled return migration and reverse brain drain have underscored the advantages that returnees hold over their domestic and foreign counterparts as agents of economic and institutional change. To a great extent, however, this work overlooks the everyday challenges that returnees face upon their re-entry into their home countries. The experience of 'reverse culture shock' has been well documented in scholarship but the social psychological barriers to re-adjustment receive little attention in macro-level models of how return migration can generate growth. Indeed, countries worldwide have adopted

immigration policies that encourage the return of members of their skilled diasporas; however, many workplaces in returnees' home countries are inhospitable environments, as many returnees report encountering xenophobia and distrust from their co-workers.

To be sure, the immediate re-entry experience itself is usually free of challenges for returnees. Usually, returnees report difficulties in readjustment after they begin to re-integrate in the workplace. For this reason, there exists an inconsistency in the value that overseas work experience provides for returnees in their home country labor markets and workplaces. Specifically, many returnees report that having experience working in the U.S. has value as a signal for potential employers in their home countries, but this often does not translate into value that returnees can add to the workplace in terms of transferring their skills and ideas from overseas to initiate innovative change. This is because returnees face the pressure to re-integrate into their home country work environments, often requiring them to relinquish their overseas work identities. In other words, returnee labor market and workplace experiences are characterized by two contradictory forces – on one hand, their overseas work experience acts as a skill premium that can springboard returnees into better labor market outcomes, but once they become employed in their home countries, they often disavow their overseas ties as a way of gaining trust from their coworkers and reintegrating into their home country workplaces.

Country level policy. Past work on skilled immigration has also correctly noted that country-level immigration policies tend to do a poor job of disaggregating high-skilled and low-skilled immigrant populations, which I and other have argued, exhibit systematically different patterns of migratory flows. For example, although the U.S. has special visa categories for skilled immigrants (such as the J1 trainee and intern visas under study in this dissertation), its primary heuristic for issuing permanent residency status – or green cards – is still a fixed country

quota. Thus, the issue is not that the U.S., for instance, is entirely insensitive to the differences between skilled and unskilled immigrant groups, but instead that its immigration policies are inconsistently constructed given these widely-acknowledged differences.

One proposal that some economists have popularized is the idea of open borders. Economists, in fact, make a strong case based on historical data on trade gains and economic growth between European countries in the 19th century that employed open or near-open border policies. Such a proposal would be consistent with how skilled immigrant populations engage in cross-border movement in the 21st century. As I showed in Chapter 5, most skilled returnees in my sample had some desire to leave their home countries again, either for the short-term or the long-term. The value they bring to their home countries comes from their ties to overseas networks and resources, which they continually refresh through back-and-forth movement. Open borders policies can facilitate this type of circular migratory flow for skilled populations. By contrast, some researchers have argued returnees only provide value to their home countries if they intend to settle, and that home countries should invest in infrastructural development to raise the wages and living standards for returnees in their home countries to retain them. Based on my analysis, however, it is clear that even controlling for these more economic incentives, returnees largely frame their global movement decisions based on their embeddedness in professional communities abroad and their own career advancement goals. For this reason, home countries should focus on policies that encourage returnees to contribute to economic growth of their homelands while allowing them the freedom to engage in transnational economic activity.