Migrant Diasporas: New Organizational Forms for Understanding Business Venturing and Underlying Business Norms in Developing Countries

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Abstract

With over 250 million people living abroad, international migrant diasporas are both economically and politically significant. Little research to date, however, has guided our understanding of the role these migrant diaspora play in promoting venture funding and the development of business norms in their home countries. Relying on theories of transaction-costs and small-world networks, we explore the role that migrants’ financial and social remittances play in building up capital markets and ways of doing business. Our empirical analysis of developing countries since 2001 suggests that migrant remittances substantially impact funding opportunities for entrepreneurial ventures and that these migrants also absorb and communicate underlying business norms. We find also that migrants’ influence depends not only on the value of their money, but by the norms and ideas they absorb while living abroad. We conclude with a discussion of future research directions, preliminary related findings, and policy implications.
1. Introduction

Migrant diasporas merit closer attention from organizational scholars interested in understanding whether and how transnational individuals and organizations re-shape the structure of business venturing and underlying business norms, particularly in developing countries. In 2010, the number of migrants exceeded 250 million making “Diasporia” the fifth largest country in the world. That same year, migrant diasporas from developing countries remitted more than $350 billion, a capital inflow second only to foreign direct investment and substantially larger than portfolio and official development aid inflows to the developing world (World Bank, 2010). Additionally, as shown in Figure 1 below, remittances are more stable than FDI and portfolio investments, hence making them a more reliable source of external capital for developing countries.

As much as 20% of migrant diaspora remittances to developing countries may be going to commercial purposes such as funding existing small businesses and starting new ones (Bhatia, 2011). The increasing size and importance of remittances for business venturing purposes in developing countries has only recently attracted the interests of business scholars (e.g., Riddle, Täube, Sonderegger, & Kotabe, 2013; Vaaler, 2011, 2013). Such recency means that organizational scholars have an opportunity to analyze the structure of these emergent and increasingly important organizational forms, and thereby guide future research generating theoretically rigorous and practically relevant insights for managers and policy-makers looking to “harness” migrant diasporas (Leblang, 2010) for private profit and broader economic development purposes.

---Insert Figure 1 Approximately Here---
Our paper provides a guide for analyzing migrant diasporas as host-to-home country transnational organizations providing migrants with home-country investment advantages akin to more conventional transnational organizations such as multinational corporations (“MNCs”). The basic research proposition motivating this paper is that diasporas constitute “small world” venture investment networks, that is, clustered member nodes with relatively short average path lengths and bridging ties between migrant investor-entrepreneurs in a host-countries sending money and ideas home, and extended family or community (clan) collaborators receiving them in the home-country. More broadly, these individual host-to-home country migrant-collaborator ties together comprise larger, loosely-coupled diaspora organizations with common characteristics able to magnify or diminish the strength of individual ties.

Within a small world dyad, migrants are well-positioned to remit money and ideas for venture investment purposes back home (Vaaler, 2011; 2013). Migrants can rely on common social knowledge and shared values inducing trust and decreasing transaction costs (Ouchi, 1981) associated with the transnational transfer of money and ideas, particularly into countries where formal protections in law and public policy are under-developed or non-existent institutional voids (Khanna, & Palepu, 1997). Such advantages are akin to transaction cost-reducing and social knowledge-increasing costs associated with the transfer of money and ideas within other transnational organizations such as MNCs (Teece, 1986; Kogut, & Zander, 2003). Such advantages help us to understand how and why migrants may be more willing to engage in venture investment in developing countries compared to more conventional venture investors.

Within their dyad network migrants can also instigate deeper institutional change in the home country. Individual remittances of money and ideas create at least two parties—host-country migrant and home-country collaborating recipient—with interests in developing additional
formal assurances of timely transfer and intended remittance use. Pressure to develop additional assurances in the home country follow both from the capital at stake—the remittances—and with the quality of assurance experienced by the migrant abroad. Where both are higher, social remittances promoting change in home country business norms is more likely (Cummings, Vaaler, & Barnett, 2012; Levitt, 1998; Cummings, Vaaler, & Barnett, 2012).

We document evidence consistent with these two basic research propositions about diasporas and remittances in broad-sample statistical analyses of migrant remittances and business norms in more than 50 developing countries observed in the 2000s. We find that migrant remittances significantly and positively enhance both general capital and more specific venture capital access in developing countries. We also find that important diaspora characteristics moderate this positive relationship. Higher concentration of the diaspora in fewer countries abroad magnifies and average diaspora skill and education diminishes the positive impact of remittances on home-country capital access.

We also document evidence consistent with the proposition that remittances from the “right” host countries of the diaspora have a significant and positive impact on business norms in the home country. More specifically, we find that one business norm, how well management cooperates with labor in the workplace, increases in developing countries with more remittances from migrants living in host countries with higher rates of labor cooperation. Basic results connecting diaspora remittances to enhanced venture investment and underlying business norms in developing countries prove robust to reasonable changes in sampling, model specification and estimation strategies, including estimation strategies dealing with possible omitted variable and reverse causation issues.
Our paper promises several contributions to organizational research, practice and public-policy issues related to diasporas and their impact on venture investment in developing countries. First, we contribute novel theoretical frameworks for explaining the relationship between diaspora remittances and venture investment in developing countries grounded in organizational theories including network, transaction cost and social theories. Second, we contribute broad-sample evidence extending previous findings about the venture investment impact of remittances (Vaaler, 2011, 2013), and providing entirely new empirical evidence about the deeper impact of remittances on underlying business norms in developing countries.

Our theory and results also contribute practical insights for prospective new business investors and entrepreneurs in diaspora communities. A third contribution guides prospective investors and entrepreneurs seek out prospective transnational collaborators from their home country and to rely on small-world network connections based on common national heritage and clan membership. Such collaborators are more likely to observe the initial terms of transfer even where formal assurances such as contract and property rights enforcement are scarce. They are also a potential lobby for change in home-country business norms promising additional formal assurances.

Our theory and results also contribute insights for public policy. A fourth contribution concerns home-country governments that are increasingly interested in developing so-called “engagement” strategies to increase remittances and otherwise harness diasporas to promote economic development (Gamlen, 2008; Leblang, 2010). Our analysis suggests which types of home-country engagement policies might be more effective in that promotion and which might be ineffective or perhaps even undermine the policy goal. In these ways, our study promises theoretical and empirical methodological rigor for scholars as well as practical and policy-
oriented relevance for business executives and policy-makers interested in diasporas as an organizational form enhancing the venture investment environment of developing countries.

2. Foundational Concepts and Theories

2.1. Foundational Concepts

Our analysis starts with presentation of foundational concepts and theories explaining when and how migrant diasporas matter as transnational “organizations” of interest to business scholars. Five concepts feature prominently in that development. *Migrants* are individuals located in countries other than their country of birth or citizenship (Docquier, & Marfouk, 2006; Parsons, Skeldon, Walmsley, & Winters, 2007). As venture investors in a host country, any new business creation proposal faces a triple threat from liabilities due to the smallness and newness of the business (Wholey, & Brittain, 1986; Hannan, & Freeman, 1989) as well as business owner foreignness (Oviatt, & McDougall, 1994; Zaheer, 1995). On the other hand, migrant status may mitigate at least some liabilities related to foreignness when the prospective venture investment is in the migrant’s country of birth or earlier citizenship.

*Remittances* are the prospective capital funding for such new ventures. Rather than flows from foreign to domestic state as with official development aid (“ODA”), flows from foreign investors to domestic firms constituting foreign direct investment (“FDI”), or flows from foreign investors to domestic share markets with portfolio investment, remittances constitute flows from foreign individuals to domestic individuals or households. Individual money transfers are typically much smaller than ODA, FDI or portfolio transfer values, often involving less than $500. Yet, their prospective commercial uses often involve less capital-intensive, private, often family-run micro-enterprises. Remittances are, thus, better positioned to fund such ventures,
particularly if they are located in capital-poor developing countries (Levitt, 1998; World Bank, 2006).

_Diasporas_ are migrant communities with discernible collective characteristics defined by dual nationality, ethnicity and or religion, a connection to their home country, and capabilities of collective action akin to other networked organizations (Beine, Docquier, & Özden, 2011; Granovetter, 1973). These dimensions matter for research explaining venture investment activity. Zaheer and colleagues, (2009) explain the location of many US service off-shoring facilities in India based on links between the dominant ethnic group in the Indian locations and the shared ethnic background of executives in US firms making the off-shoring decision. Sonderegger and Täube (2010) highlight the importance of diaspora links in “exploratory” and then “exploitive” phases of IT industry growth around Bangalore, India. A large group with the same passport issuer, ethnic background and proximate residency in a host country implies shared culture, language, vision and values connecting migrants abroad to each other as well as the collective diaspora to their homeland.

_Transnationality_ describes dyadic host-to-home country network connections permitting individual migrants and their organizations to project social influence from abroad (Burt, 1995; Portes, & Sensenbrenner, 1993; Portes, Haller, & Guarnizo, 2002). Transnational venture investment in a small world network implies the existence of host-country migrant nodes used to transfer money and ideas to home-country collaborator nodes with shorter (easier, lower-cost) average path lengths (Watts, & Strogatz, 1998) compared to lengths faced by other conventional venture investors. The transnational nature of financial and social transfers typically raises prospective transaction costs, including those related to oversight of home-country collaborators who might opportunistically re-negotiate terms of their participation, particularly in developing
countries where formal assurances provided by local contract and property rights regimes are
less-well developed, if at all.

2.2. Theoretical Framework and Hypotheses

Three theories connect these concepts to propositions about how remittances of money and
ideas from migrants individually and migrant diasporas collectively can change important
business venturing trends and underlying business norms in their home countries: network theory
(Burt, 1995; Portes, & Sensenbrenner, 1993) including network theoretical components
concerned with small worlds (Watts, & Strogatz, 1998); transaction costs economics (“TCE”)
theory (Coase, 1937; 1960; Williamson, 1975; 1985), and institutional (change) theory
(Hargrave, & Van de Ven, 2006; Van de Ven, & Hargrave, 2004).

As noted in our introduction, network theory generally (Burt, 1995; Granovetter, 1973;
Portes, & Sensenbrenner, 1993) and small-world network perspectives more specifically (Watts,
& Strogatz, 1998) provide important initial grounding for theoretical framework development.
We treat migrant diasporas as loosely-coupled transnational organizations composed of a set of
dyadic host-to-home country network ties affording migrant members cost advantages in
conveying money and ideas over more conventional but non-member individuals such as foreign
investing individuals and firms. Membership within the migrant diaspora network implies
access to latent, trustful connections with valuable social capital (Levin, Walter, & Murnighan,
2011), diminishing the cost of discovering and exploiting investment opportunities back home
relative to those outside the network (Täube, 2007). Articulation as a dyadic network advantage
means that investing advantages do not apply to other countries, even immediately surrounding
countries in the same region.
TCE theory (Coase, 1937, 1960; Williamson, 1975, 1985) and related organizational research (Ouchi, 1981) grounds our understanding of whether and how migrants enjoy advantages as transnational investors within a dyadic pairing of host and home countries. Within the network, their cost advantages related to investment discovery and exploitation increase with home-country economic under-development and informality. In brief, migrant diasporic cost advantages relative to other non-members increase where the home-country lacks formal institutional assurances to other conventional foreign investors such as well-developed contract and property rights, and better capability to observe, record and regulate transnational investment. Migrants have access to alternative informal assurances related to transnational extended family and community (“clan”) relationships (Ouchi, 1981). These transnational clan-based relationships assure against opportunistic hold-up by home-country collaborators.

Thus, remittances from migrant diasporas will increase capital access back home in developing countries (Hypothesis 1). The direct effect of remittances on home-country capital access is magnified (diminished) with: increasing (decreasing) host-country migrant diasporic concentration (Hypothesis 2); decreasing host-country migrant individual human capital (Hypothesis 3); and the venture (non-venture) nature of the transnational investment (Hypothesis 4). We summarize relevant TCE literature and reasoning underlying these four hypotheses in Figure 2.

-- Insert Figure 2 Approximately Here --

Institutional change theory (Cummings, Vaaler, & Barnett, 2012; Hargrave & Van de Ven, 2006; Van de Ven & Hargrave, 2004) grounds our understanding of whether and how migrants also enjoy advantages as transnational agents of institutional change within a dyadic pairing of host and home countries. Within the network, their remittances of money and ideas for commercial use create at least two parties – the host-country venture investor and her home-
country recipient—with interests in assuring satisfactory returns. Informal clan relationships provide that assurance in the first instance, but also create demand for supplementary assurances in the form of business norms conducive to expanding investment scale and scope. In addition to micro modes, there are macro modes at work. Migrant diasporas generate expatriate social and political groups demanding additional assurances from their home- and host-country governments. These micro and macro trends mean that remittances from migrant diasporas constitute channels for transferring not only business capital enhancing home-country capital access, but also underlying business norms from host to home country. The weight of remittances alone prompts enhancement of underlying business norms back home (Hypothesis 5). The direct effect of remittances on underlying business norms is magnified with better underlying business norms in host-countries where migrant diasporas are located (Hypothesis 6). Again, network structure influences this weight, with a high (low) clustering coefficient of the diaspora in advanced economies increasing (decreasing) the effects. We summarize relevant institutional change literature and reasoning underlying these two hypotheses in Figure 3.

---Insert Figure 3 Approximately Here---

3. Empirical Methodology for Testing Hypotheses

We investigate empirical evidence related to these six hypotheses in broad-sample statistical analyses of data on migrant diasporas, remittances, home-country capital access and underlying home- and host-country business norms for migrants from 53 developing countries observed from 2002-2010. To evaluate support for Hypotheses 1-4 linking remittances from migrant diasporas to home-country capital access, we estimate a statistical model with the following general form:
Variable definitions, measures and sources are listed in Table 1. We highlight four aspects of Model (1). First, Model (1) incorporates alternative measures of home-country $i$, region $j$ in year $t$ capital availability: 1) general capital availability; and 2) more narrowly defined venture capital availability related to starting and growing new businesses. Second, Model (1) uses a measure of remittances from migrant diasporas remittances for resident in (and not merely transient through) host countries. Third, Model (1) includes a lagged dependent variable to account for unspecified past factors affecting current-year capital availability. Fourth, Model (1) are organized as a country (within geographic region) and year panel thus permitting the use of dynamic general method of moments (“GMM”) (Arellano & Bover, 1995, Blundell & Bond, 1998) estimators. Test of our first hypothesis about the direct of remittances from migrant diasporas on home-country capital access reduces to: $\beta_1 > 0$ (Hypothesis 1). Tests of our other three hypotheses about moderating effects on the home-country capital access effects of remittances reduce to: $\beta_5 > 0$ (Hypotheses 2, 4); and $\beta_6 > 0$ (Hypotheses 3-4) evaluated with the two capital access measures as dependent variables.

To evaluate support for Hypotheses 5-6 linking remittances from migrant diasporas to home-country underlying business norms, in this case underlying norms of cooperation between labor and management, we estimate a statistical model with the following general form:
\[ Y(\text{Home Country BNorm})_{ij} = \alpha + Y(\text{Home Country BNorm})_{ij-1} + \sum_{t=1}^{T} \text{General Controls}_{ij-1} \]
\[ + \beta_{1}\text{MDTR}_{ij-1} + \beta_{2}\text{MDSkill}_{ij} + \beta_{3}\text{MDSIZE}_{ij} + \beta_{4}\text{MDCONCENTRATION}_{ij} \]
\[ + \beta_{5}\text{Host} - \text{Home Country Dist}_{ij} + \beta_{6}\text{Host} - \text{Home Language Similarity}_{ij} \]
\[ + \beta_{7}\text{MDTR}^{*} \text{Host} - \text{Country Labor Cooperation(BNorm)}_{ij-1} \]
\[ + \beta_{8}\text{MDTR}^{*} \text{Host} - \text{Country Labor Cooperation}_{ij-1} \]
\[ + \delta \sum_{j=1}^{J} \text{Geographic Regions} + Z \sum_{t=2002}^{2009} \text{Years}_{i} + \epsilon_{ij} \]

The same highlights in Model (1) apply to Model (2), except that here we include per capita total remittances, including remittances from residents abroad as well as transient migrants remitting through other channels. Test of our fifth hypothesis about the direct of remittances from migrant diasporas on home-country underlying business norms reduces to: \( \beta_{7} > 0 \) (Hypothesis 5). Test of moderating effects on the home-country business norms reduces to: \( \beta_{8} > 0 \) (Hypothesis 6).

We sample from 53 countries \( (N = 332) \) observed from 2002-2010 where general capital availability is the dependent variable. Our sample drops to 50 countries but with fewer missing data points per country \( (N = 353) \) observed over the same time period where venture capital availability is the dependent variable. Other information regarding data and sampling is given in Table 1.

4. Results from Analyses

Initial results related to Hypothesis one are illustrated in Figure 4, which presents locally-weighted scatter plot smoothed correlations between workers remittances from migrant diasporas (“MDWR”) and general capital access in migrant home countries. The clear upward slope in Figure 1 indicates support for Hypothesis 1 and the capital access enhancing affects of remittances from migrant diasporas.

--Insert Figure 4 Approximately Here--
Table 2 reports results from multiple regression of partial and fully-specified versions of Model (1). Initial ordinary least squares regression results in column 2 indicate that 11 general controls along with region and year dummies explain more than 71% of the variation in home-country general capital access. Subsequent re-estimation with panel feasible least squares (columns 3, 5-8) and dynamic panel GMM (column 4) yield positive coefficients on the MDWR term ($\beta_1$) consistent with Hypothesis 1. Remittances from migrant diasporas increase general capital availability in home countries. Consistent with Hypothesis 3, we observe in columns 7-8 negative coefficients on the $MDWR*MDSkill$ interaction term ($\beta_6$). Home-country general capital access effects of remittances decrease with more diasporas comprised of more skilled (educated) migrants. We do not observe a significant coefficient in columns 6 or 8 on the $MDWR*MDConcentration$ interaction term ($\beta_5$), and thus no support for Hypothesis 2 when the dependent variable is general capital access.

--Insert Table 2 Approximately Here--

This same term becomes positive and significant consistent with Hypothesis 2 when the dependent variable changes to more narrowly-defined venture capital access in columns 10 and 12 of Table 1. We again observe support for Hypothesis 1 with the positive and significant coefficient sign on $MDWR$ ($\beta_1$) in columns 9 and 11 and Hypothesis 3 with the significant and negative coefficient on the $MDWR*MDSkill$ interaction term ($\beta_6$) in columns 11 and 12. Indeed, this negative interaction sign is significantly larger than the same coefficient estimates with general capital access as the dependent variable. Thus results in Table 1 largely support our four hypotheses, including Hypothesis 4 predicting stronger interaction effects where venture capital access is at issue. Even a comparison of the coefficients for MDWR (in columns 9 and 11) provide support for this claim regarding the relative strength of the effects for venture capital—
although they appear to be smaller in magnitude, they represent larger relative changes in the dependent variable, because of the different scales and distributions of the general and venture capital availability measures.

---Insert Table 3 Approximately Here---

Table 3 reports results from multiple regression of partial and fully-specified versions of Model (2). Figures 5a and 5b show the relationship between labor cooperativeness where migrants reside and labor cooperativeness in migrants’ home countries. Figure 5b shows a similar relationship for remittances and home-country labor cooperativeness. Initial ordinary least squares regression results in column 2 indicate that 13 general controls along with region and year dummies explain more than 87% of the variation in home-country underlying business norms. Subsequent re-estimation with fixed effects and panel GMM estimation (columns 3-7) yield signs and significance on general controls largely in line with intuition. Dynamic panel GMM estimation in column 5 yields a positive and significant coefficient on MDTR ($\beta_7$) consistent Hypothesis 5. Initial estimation suggests that remittances from migrant diasporas in host countries alone can enhance the quality of home-country business norms.

But this initial interpretation is undercut in column 7 where we the coefficient on $MDTR$ ($\beta_7$) is negative (not positive) and significant, while the coefficient on the interaction term, $MDTR*Host-Country Labor Cooperation$ ($\beta_8$) is positive and significant consistent with Hypothesis 6. Home-country business norms are enhanced by remittances from migrant diasporas, but only when they come from diasporas located in countries with better business norms. The dollar amount and geographic location of remittances matter significantly for understanding how migrant diasporas enhance business norms back home.

5. Discussion and Conclusion
These findings suggest preliminary support for our six hypotheses and the theoretical frameworks from which they are derived. Remittances from migrant diasporas matter significantly for understanding home-country capital access for business venturing as well as the underlying business norms that support that venturing in developing countries. Their impact on business venturing and norms is moderated by organizational and structural network characteristics of migrant diasporas, including (but probably not limited to) diaspora skill and concentration across the host countries where diaspora members reside in and/or temporarily transit as well as path lengths back to the country of origin akin to small world networks. These direct and indirect moderator effects on home-country capital access and underlying business norms are consistent with theories of migrant diaspora structure and behavior related to networks, TCE and institutional change.

These initial findings suggest promise for organizational researchers interested seeking new and increasingly important organizational forms to study as agents of transnational investment and institutional change in developing countries where migrants, though living abroad, nonetheless play important roles in creating and propelling business-led economic growth. Our study prompts other questions organizational theorists are well-positioned to address. They include but are not limited to: 1) how the mix of resident versus non-resident migrants affects financial (money) and social (ideas) remittances to home countries; 2) how the age of migrant diasporas affects these same remittance trends; and 3) how home-country diaspora “engagement” policies such as whether and how home countries permit easier travel between and return investment in home countries by their migrant nationals moderate the impact of remittances and other transnational financial flows.

--Insert Figure 6a-b Approximately Here--
In exploratory analysis (not shown) related to this last question, we examine 43 developing countries from 2001-2010 and find evidence (in both regression and nonparametric results) that remittances have a stronger impact on venture capital availability for countries that permit dual citizenship and countries that have formal diaspora institutions, indicating that these home country governmental policies are effective in harnessing the diaspora for productive purposes. Figure 6a shows the bivariate relationship between remittances and venture capital access for countries that formally recognize dual citizenship (upper line) and countries that do not (lower line). These and other questions should prompt greater research attention on these increasingly important organizations with the promise of new and novel insights for theory and practice in an increasingly transnational business environment.

1 Full results available from the authors upon request. We also note with some interest that more formal institutions (full diaspora ministries, executive cabinet positions) may not be more effective at harnessing the diaspora than more informal loosely-administered institutions such as quasi-non governmental organizations. For a graphical representation of this interesting finding, see Figure 6b, which partitions the remittance effect by formality of the institution. The upper line represents the bivariate relationship between remittances and venture capital access for countries with less formal institutions, while the lower line represents the same relationship for countries with more formal diaspora institutions.
Bibliographic References


Figure 1: Remittances and other resource flows to developing countries

Sources: World Development Indicators and World Bank DECPG estimates
Figure 2: Theoretical framework and hypotheses for remittances from migrant diasporas and home-country capital access

**MODERATOR EFFECT**

**Migrant Diaspora Characteristics**

- Comer (1960, 1962) TCE Perspective
- Location in Concentrated Diaspora Creates Agglomeration Economies Decreasing Migrant Costs of Creating and Maintaining Public Goods Facilitating Transnational Investment Opportunity Discovery and Exploitation
- Less Skilled Migrants Motivated More to Discover and Exploit Transnational Investment Opportunities
- Migrants Interested in Transnational Venture (New Business) Investment Motivated More to Discover and Exploit Transnational Investment Opportunities

**DIRECT EFFECT**

**Migrant Diaspora Remittances**

- Williams (1975, 1987) TCE Perspective
- Absence of Formal Institutions Protecting Migrant Investor in Diaspora from Opportunity Race Competition of Initial Investment Terms by Local (Home-Country) Counterparties
- Informal Relationships Based on Dyadic Host-to-Host (Community) Membership Give Migrants More Trustworthy (Less Opportunistic) Local (Home-Country) Counterparties Maintaining Initial Investment Terms

**OUTCOME**

**Developing Country Capital Access**

- General Capital Access Increases With More Workers' Remittances from Diaspora Residents (H1)
- Positive Effects of Remittances Are Magnified When Received from Concentrated Diaspora (H2)
- Positive Effects of Remittances Are Magnified When Received from Less Skilled Migrants (H3)
- Positive Effects of Remittances Are Magnified When Received for Venture (New Business) Investment Opportunities (H4)
Figure 3: Theoretical framework and hypotheses for remittances from migrant diasporas and home-country underlying business norms

**MODERATOR EFFECT**

**Migrant Diaspora Characteristics**
- Cummings *et al.* (2012) Institutional Perspective
- Transnational Investment Transactions Convey Underlying Business Norms of Host Country
- Better Home-Country Business Norms Follow from Transnational Investment Coming from Host Countries With Better Underlying Business Norms

**DIRECT EFFECT**

**Migrant Diaspora Remittances**
- Individual Transnational Investment Creates Host- and Home-Country Agents Seeking Additional Assurance That Initial Investment Terms Will Be Maintained (Micro Trends)
- Collective Host- and Home-Country Social and Political Groups Seek Additional Assurance That Initial Investment Terms Will Be Maintained (Macro Trends)

**OUTCOME**

**Developing Country Underlying Business Norms**
- Underlying Business Norms Improve With Increasing Total Remittances from Migrant Diasporas (H5)(+)
- Positive Effects of Total Remittances Are Magnified When Received from Migrant Diasporas Living in Host Countries with Better Underlying Business Norms (H6)(+)

(+) → (−)
Figures 4a and 4b: Locally weighted scatter-plot smoothed (Lowess) results for two forms of capital access, 2002-2010
Figures 5a, 5b, & 5c: Locally weighted scatter-plot smoothed (Lowess) results for labor cooperativeness, 2006-2010
Figure 6a: Locally weighted scatter-plot smoothed (Lowess) results for remittances and dual citizenship policies, 2001-2010

Figure 6b: Locally weighted scatter-plot smoothed (Lowess) results for remittances and formal diaspora engagement institutions, 2001-2010
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Variable Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Capital Access</td>
<td>1-10 measure of the general ease of access to capital in country i, region j in year t-1.</td>
<td>Milken Institute: (Apinand et al., 2001-2009)</td>
</tr>
<tr>
<td>Venture Capital Access</td>
<td>1-7 measure of the ease of access to capital for innovative but risky projects in country i, region j in year t-1.</td>
<td>World Economic Forum (2011)</td>
</tr>
<tr>
<td>Labor Cooperation</td>
<td>1-7 measure of the cooperativeness of labor-employer relations in country i, region j in year t-1.</td>
<td>World Economic Forum (2011)</td>
</tr>
<tr>
<td>Ethnic Fractionalization</td>
<td>Herfindahl, Hirschman Index of ethnic groups for country i, region j (fixed over all years t)</td>
<td>Alesina et al. (2003)</td>
</tr>
<tr>
<td>Language Fractionalization</td>
<td>Herfindahl, Hirschman Index of language groups for country i, region j (fixed over all years t)</td>
<td>Alesina et al. (2003)</td>
</tr>
<tr>
<td>Rule of Law</td>
<td>-2.5 to +2.5 measure of the extent of quality of contract enforcement, property rights, the police, and the courts, crime and violence for country i in region j in year t-1; -2.5=weak rule of law; 2.5=strong rule of law</td>
<td>Kauffman et al. (2012)</td>
</tr>
<tr>
<td>Foreign Direct Investment</td>
<td>Natural log of foreign direct investment in US dollars for country i, region j in year t-1</td>
<td>World Bank, World Development Indicators (WDI) (World Bank, 2010)</td>
</tr>
<tr>
<td>Foreign Aid</td>
<td>Natural log of foreign aid in US dollars for country i, region j in year t-1</td>
<td>World Bank, WDI (World Bank, 2010)</td>
</tr>
<tr>
<td>Wealth</td>
<td>Per-capita GDP (in thousands of dollars) for country i, region j, in year t-1</td>
<td>World Bank, WDI (World Bank, 2010)</td>
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<tr>
<td>Govt Share of Econ</td>
<td>Percentage of GDP accounted for by government and state-owned enterprises for country i, region j in year t-1</td>
<td>World Bank, WDI (World Bank, 2010)</td>
</tr>
<tr>
<td>Size of Econ</td>
<td>Natural log of GDP in US dollars for country i region j in year t-1</td>
<td>World Bank, WDI (World Bank, 2010)</td>
</tr>
<tr>
<td>WTO Membership</td>
<td>0-1 dummy, where 1=WTO membership for country i, region j in year t-1</td>
<td>World Trade Organization</td>
</tr>
<tr>
<td>IMF Conditionality</td>
<td>0-1 dummy, where 1=IMF conditionality for country i, region j in year t-1</td>
<td>IMF Monitoring of Fund Arrangements Database (IMF 2011)</td>
</tr>
<tr>
<td>Econ Growth</td>
<td>Real annual percentage growth in GDP for country i, region j in year t-1</td>
<td>World Bank, WDI (World Bank, 2010)</td>
</tr>
<tr>
<td>MDCOncentration</td>
<td>Herfindahl, Hirschman Index indicating concentration of migrants from country i, region j in host countries in 2000 (fixed over all years t)</td>
<td>Docquier &amp; Marfouk (2006)</td>
</tr>
<tr>
<td>MDSkill</td>
<td>Percent of migrants from country i, region j with tertiary education (fixed over all years t)</td>
<td>Docquier &amp; Marfouk (2006)</td>
</tr>
<tr>
<td>MD Size</td>
<td>Number of migrants from country i, region j as a percentage of home country population (fixed over all years t)</td>
<td>Docquier &amp; Marfouk (2006)</td>
</tr>
<tr>
<td>MDTR</td>
<td>Sum of workers’ remittances, compensation of employees, and migrant transfers in US dollars divided by the population of country i, region j in year t-1 in thousands</td>
<td>World Bank, Development Prospects Data (World Bank, 2010)</td>
</tr>
<tr>
<td>MDWR</td>
<td>Sum of workers’ remittances in US dollars divided by the population of country i, region j in year t-1 in thousands</td>
<td>World Bank, Development Prospects Data (World Bank, 2010)</td>
</tr>
<tr>
<td>Host-Country Labor Cooperation</td>
<td>Average labor cooperation score in host countries where migrants from country i, region j in year t-1 reside, weighted by the percentage of remittances to same country i</td>
<td>World Economic Forum (2010), Ratha and Shaw (2007)</td>
</tr>
<tr>
<td>Host-Home Country Linguistic Similarity</td>
<td>Average linguistic similarity between country i, region j in year t-1 and top ten host countries of migrants from country i, weighted by the percentage of remittances to same country i</td>
<td>Mayer &amp; Zignago (2011), Ratha and Shaw (2007)</td>
</tr>
<tr>
<td>Host-Home Country Distance</td>
<td>Average distance (in thousands of miles) between country i, region j in year t-1 and top ten host countries of migrants from country i, weighted by the percentage of remittances to same country i</td>
<td>Mayer &amp; Zignago (2011), Ratha and Shaw (2007)</td>
</tr>
<tr>
<td>VARIABLES</td>
<td>(1) MEAN (SD)</td>
<td>(2) OLS</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------</td>
<td>--------</td>
</tr>
<tr>
<td>Lagged Capital Availability</td>
<td>4.041 (0.831)</td>
<td>0.781**</td>
</tr>
<tr>
<td>GDP_i</td>
<td>0.189 (0.082)</td>
<td>0.501**</td>
</tr>
<tr>
<td>Econ Growth</td>
<td>3.692 (0.075)</td>
<td>0.024**</td>
</tr>
<tr>
<td>Wealth</td>
<td>2.69 (0.006)</td>
<td>0.091**</td>
</tr>
<tr>
<td>Inflation</td>
<td>8.158 (0.003)</td>
<td>-0.007**</td>
</tr>
<tr>
<td>FDI</td>
<td>108.937 (0.004)</td>
<td>0.000</td>
</tr>
<tr>
<td>Foreign Aid</td>
<td>42.211 (0.001)</td>
<td>-0.001</td>
</tr>
<tr>
<td>Govt Share of Econ</td>
<td>13.312 (0.001)</td>
<td>0.021**</td>
</tr>
<tr>
<td>Ecn Openness</td>
<td>73.646 (0.001)</td>
<td>-0.000</td>
</tr>
<tr>
<td>Common Law</td>
<td>0.145 (0.001)</td>
<td>0.283**</td>
</tr>
<tr>
<td>Rule of Law</td>
<td>-0.476 (0.095)</td>
<td>0.542**</td>
</tr>
<tr>
<td>Pol Rights(Lack of)</td>
<td>3.319 (0.079)</td>
<td>-0.040**</td>
</tr>
<tr>
<td>MDWR</td>
<td>0.104 (0.001)</td>
<td>0.445**</td>
</tr>
<tr>
<td>MDSkill</td>
<td>0.38 (0.031)</td>
<td>-0.002</td>
</tr>
<tr>
<td>MDSize</td>
<td>19.584 (0.055)</td>
<td>-0.005</td>
</tr>
<tr>
<td>MDConcentration</td>
<td>4.016 (0.099)</td>
<td>-0.070</td>
</tr>
<tr>
<td>MDWR*MD</td>
<td>0.052 (0.093)</td>
<td>-0.865</td>
</tr>
<tr>
<td>Concentration</td>
<td>0.032 (0.101)</td>
<td>-1.103*</td>
</tr>
<tr>
<td>MDWR*MDSkill</td>
<td>0.032 (0.101)</td>
<td>-1.103*</td>
</tr>
<tr>
<td>Constant</td>
<td>4.041 (0.213)</td>
<td>0.439</td>
</tr>
<tr>
<td>Region and Year Dummies</td>
<td>332 (53)</td>
<td>332 (53)</td>
</tr>
<tr>
<td>N(Countries)</td>
<td>332 (53)</td>
<td>332 (53)</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.714</td>
<td></td>
</tr>
</tbody>
</table>

Column 1 reports means and standard deviations. Columns 2-11 report regression coefficients and robust standard errors. GMM refers to generalized method of moments estimation, executed via Stata’s xtabond2 command. Post-estimation assessment of instrument exogeneity is based on a Hansen test not rejecting the null hypothesis of second-order autocorrelation. Panel GLS refers to generalized least squares regression. Regression results for region and year dummies, as well as results from Sargan and Arellano-Bond tests available upon request. ** p<0.01, * p<0.05, + p<0.1.

Countries in columns 2-8 estimations: Argentina, Armenia, Bangladesh, Bolivia, Botswana, Brazil, Cambodia, Cameroon, China, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Ethiopia, Ghana, Guatemala, Haiti, Honduras, India, Indonesia, Jamaica, Jordan, Kenya, Latvia, Lithuania, Macedonia FYR, Madagascar, Mali, Mexico, Moldova, Mongolia, Morocco, Mozambique, Namibia, Nicaragua, Pakistan, Panama, Paraguay, Peru, Philippines, Romania, Russian Federation, Senegal, Sri Lanka, Syrian Arab Republic, Tanzania, Togo, Tunisia, Turkey, Uganda, Ukraine, Venezuela, RB. Columns 9-11 drop Cameroon, Madagascar and Mali.
Table 3: Regression analyses of remittances from migrant diasporas and home-country business norms (labor cooperation), 2006-2010

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>OLS, FE LABOR</td>
<td>OLS, FE LABOR</td>
<td>GMM LABOR</td>
<td>GMM LABOR</td>
<td>GMM LABOR</td>
<td>GMM LABOR</td>
</tr>
<tr>
<td>Lagged Labor Cooperation</td>
<td>4.34</td>
<td>0.349**</td>
<td>0.830**</td>
<td>0.835***</td>
<td>0.802***</td>
<td>0.794***</td>
<td></td>
</tr>
<tr>
<td>GDP</td>
<td>23.99</td>
<td>-0.126</td>
<td>-2.621</td>
<td>-0.006</td>
<td>-0.099</td>
<td>-0.06</td>
<td></td>
</tr>
<tr>
<td>Econ Growth</td>
<td>0.06</td>
<td>1.399**</td>
<td>0.665</td>
<td>-0.073</td>
<td>-0.104</td>
<td>-0.160</td>
<td>-0.169</td>
</tr>
<tr>
<td>Wealth</td>
<td>2.94</td>
<td>-0.050</td>
<td>-0.033</td>
<td>-0.036**</td>
<td>-0.034***</td>
<td>-0.041***</td>
<td>-0.042***</td>
</tr>
<tr>
<td>Inflation</td>
<td>0.08</td>
<td>0.206</td>
<td>0.192</td>
<td>-0.186</td>
<td>-0.057</td>
<td>-0.159</td>
<td>-0.085</td>
</tr>
<tr>
<td>Econ Openness</td>
<td>76.51</td>
<td>-0.002</td>
<td>-0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.000</td>
<td>0.001</td>
</tr>
<tr>
<td>FDI</td>
<td>20.58</td>
<td>-0.011</td>
<td>0.001</td>
<td>0.019</td>
<td>0.024</td>
<td>0.014</td>
<td>0.019</td>
</tr>
<tr>
<td>Govt Share of Econ</td>
<td>13.67</td>
<td>-0.008</td>
<td>-0.004</td>
<td>-0.008**</td>
<td>-0.006***</td>
<td>-0.004*</td>
<td>-0.004*</td>
</tr>
<tr>
<td>WTO Membership</td>
<td>0.47</td>
<td>-0.821</td>
<td>-0.843+</td>
<td>0.021</td>
<td>0.024</td>
<td>0.030</td>
<td>0.015</td>
</tr>
<tr>
<td>IMF Conditionality</td>
<td>0.31</td>
<td>-0.187**</td>
<td>-0.154**</td>
<td>-0.036</td>
<td>-0.071**</td>
<td>-0.067**</td>
<td>-0.079***</td>
</tr>
<tr>
<td>Rule of Law</td>
<td>-0.46</td>
<td>-0.067</td>
<td>-0.017</td>
<td>0.134**</td>
<td>0.185***</td>
<td>0.180**</td>
<td>0.193***</td>
</tr>
<tr>
<td>Pol Rights (Lack of)</td>
<td>3.50</td>
<td>0.041</td>
<td>-0.000</td>
<td>-0.015</td>
<td>0.002</td>
<td>-0.011</td>
<td>-0.004</td>
</tr>
<tr>
<td>Ethnic Fractionalization</td>
<td>0.46</td>
<td>-9.227</td>
<td>-12.664*</td>
<td>0.113</td>
<td>0.106</td>
<td>0.097</td>
<td>0.097</td>
</tr>
<tr>
<td>Language Fractionalization</td>
<td>0.40</td>
<td>5.730</td>
<td>7.749*</td>
<td>-0.005</td>
<td>0.184**</td>
<td>0.109</td>
<td>0.131</td>
</tr>
<tr>
<td>MDSkill</td>
<td>0.21</td>
<td>1.387</td>
<td>1.835+</td>
<td>-0.105*</td>
<td>-0.123**</td>
<td>-0.134**</td>
<td>-0.100**</td>
</tr>
<tr>
<td>MDSice</td>
<td>0.06</td>
<td>-0.054++</td>
<td>-0.041*</td>
<td>-0.000</td>
<td>-0.002</td>
<td>0.002</td>
<td>0.006</td>
</tr>
<tr>
<td>MD Concentration</td>
<td>0.38</td>
<td>-21.031</td>
<td>-28.863+</td>
<td>0.187*</td>
<td>0.116*</td>
<td>0.163**</td>
<td>0.059</td>
</tr>
<tr>
<td>Host-Home Country Distance</td>
<td>4.17</td>
<td>-1.012</td>
<td>-1.277*</td>
<td>-0.004</td>
<td>-0.006</td>
<td>-0.009</td>
<td>-0.011</td>
</tr>
<tr>
<td>Host-Home Country Linguistic Similarity</td>
<td>-0.599</td>
<td>-1.308+</td>
<td>-0.030</td>
<td>-0.064</td>
<td>-0.019</td>
<td>-0.076</td>
<td></td>
</tr>
<tr>
<td>MDTR</td>
<td>0.15</td>
<td>0.185*</td>
<td>0.097</td>
<td>0.048</td>
<td>0.047**</td>
<td>0.032</td>
<td>0.032</td>
</tr>
<tr>
<td>Host-Country Labor Cooperation</td>
<td>4.00</td>
<td>0.047*</td>
<td>0.027</td>
<td>0.032</td>
<td>0.242**</td>
<td>0.095</td>
<td>0.095</td>
</tr>
<tr>
<td>MDTRs*Host Country Labor Cooperation</td>
<td>0.62</td>
<td>0.543</td>
<td>0.549</td>
<td>0.770</td>
<td>0.511</td>
<td>0.611</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>22.004</td>
<td>27.620*</td>
<td>(13.882)</td>
<td>(12.514)</td>
<td>(0.539)</td>
<td>(0.601)</td>
<td>(0.522)</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.878</td>
<td>0.897</td>
<td>0.897</td>
<td>0.897</td>
<td>0.897</td>
<td>0.897</td>
<td>0.897</td>
</tr>
</tbody>
</table>

Column 1 reports means and standard deviations. Columns 2-7 report regression coefficients and robust standard errors. GMM refers to generalized method of moments estimation, executed via Stata’s xtabond2 command. Post-estimation assessment of instrument exogeneity as a group. Post-estimation test for order of autocorrelation is based on the Arellano–Bond (AB) test not rejecting the null hypothesis of third-order autocorrelation. FE refers to country fixed-effect estimation. Regression results for region and year dummies, as well as results from Sargan and Arellano-Bond tests available upon request. ** p<0.01, * p<0.05, + p<0.1

Countries in columns 2-7 estimations: Albania, Algeria, Argentina, Armenia, Azerbaijan, Bangladesh, Benin, Bolivia, Botswana, Brazil, Burkina Faso, Cambodia, Cameroon, China, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Ethiopia, The Gambia, Georgia, Guatemala, Honduras, India, Indonesia, Iran, Iraq, Israel, Kazakhstan, Lesotho, Luxembourg, Macedonia FYR, Mali, Mexico, Mongolia, Mozambique, Namibia, Pakistan, Panama, Paraguay, Philippines, Senegal, Sri Lanka, Tajikistan, Tanzania, Tunisia, Turkey, Uruguay.