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Do Remittances to Emerging Countries Improve their Economic Development?

Understanding the Contingent Role of Culture

Abstract

We contribute to extant research that has largely focused on foreign direct investment by examining how an under-studied type of financial inflow (remittances) influences the economic development of recipient Emerging Market Countries (EMCs). We do so by explaining how variations in the cultural context of recipient EMCs influence the value-generating effects of remittances. Our study helps us understand why certain nations can use remittances to improve their economic development (whereas others fail to do so) and the role that cultural contingencies play in determining such outcomes. The empirical analysis of 28 EMCs reveals an interesting pattern, showing that masculinity and power distance increase the economic effects of remittances, whereas uncertainty avoidance and individualism decrease such effects.

Keywords: Remittances; culture; economic development, performance

1. Introduction

The consequences of inward foreign direct investment (FDI) for economic development is a fundamental topic in the international business (IB) and management literatures. Inward FDI (the investments made in the country by multinational enterprises (MNEs) and other foreign entities) affects the economy of recipient countries, and in particular Emerging Market Countries (EMCs), through the transfer of knowledge and skills, the creation of new jobs and the development of more competitive markets (Dunning and Lundan, 2008; Li and Liu, 2005; Ozturk, 2007). However, because FDI represents only one type of international capital flow, we have a partial understanding of how and the extent to which other types of financial inflows shape the global economy. Important among these is the movement of people and their capital (Kotabe et al., 2013). We address this gap by examining how migrant remittances — an important, yet understudied, financial inflow — influence the economic development of recipient EMCs (Barajas et al., 2009; Giuliano and Ruiz-Arranz, 2009; Vaaler, 2013).

Remittances are defined as the transfer of funds by migrant workers to their home countries. Gaining a better understanding of the economic consequences of remittances is important for two reasons. First, there is a considerable increase in immigrants and remittances. The number of people living outside their home EMCs more than tripled from 70 million in 2000 to over 230 million in 2012, while the value of remittances over the same period quadrupled from $100 billion to over $400 billion (MoneyGram, 2014; Vaaler, 2013). This trend makes remittances the second largest financial inflow in many EMCs, which in some cases exceeds 10 percent of their GDP (MPI, 2016).

Second, IB theory has largely been developed for and focused on FDI — which is by definition investment. Remittances differ in various ways from FDI. They are driven by individuals (rather than MNEs) and, unlike FDI, they are not always motivated by rent generation. Remittances may assist in the creation of small businesses, foster education, fuel entrepreneurial activity and therefore improve economic development (Giuliano and Ruiz-Arranz, 2009; Hanson and Woodruff, 2003; King and Levine, 1993; Lucas and Stark, 1985; Martinez et al., 2015; Ratha, 2003; Vaaler, 2011; 2018). However, remittances also target people in need and may therefore be used for

consumption and the purchase of imported products. In such cases, their effect on the economic development of recipient EMCs may be insignificant or even negative.

Despite the importance and volume of remittances (Vaaler, 2013), we have a rather limited knowledge of the conditions under which the economic effects of remittances may be positive or negative (Barajas et al., 2009; Giuliano and Ruiz-Arranz, 2009). We contribute to the IB and management literatures by explaining how country-specific contingencies influence the ways in which remittances affect the economic development of recipient EMCs. Our overarching argument is that cross-country variations in the economic effects of remittances depend on the *willingness* of individuals in recipient EMCs to invest remittances in value-generating activities rather than just consume these funds. Building on research on culture (Brouthers, 2002; Hofstede, 1983; Tung and Verbeke, 2010), we propose that the way in which remittances are used depends on cultural attributes. Accordingly, we develop hypotheses that explain the mechanisms through which cultural variations across EMCs influence the economic effects of remittances.

Our analysis indicates that remittances in EMCs do not merely help with subsistence needs but also have profound effects on the economy of recipient nations. It also explains why not all EMCs benefit from remittances, suggesting that the same financial inflow may generate different value in different EMCs. To this end, we enhance prior research by specifying the explanatory power and relative importance of cultural attributes in influencing these effects. Overall, our study complements IB and management scholarship that has been monopolized by the role of MNEs and FDI. It may also help us construct middle-level theories on financial inflows (Buckley and Lessard, 2005; Kafouros et al., 2018) and open up a set of new questions that remain significantly understudied (Buckley, 2002).

2. Theoretical framework and hypotheses

2.1. Economic effects of foreign direct investment (FDI) and remittances

International business theory underscores the advantages of inward FDI and postulates that the entire economy of the recipient EMC can benefit from the presence of foreign firms (Caves, 1974; Dunning and Lundan, 2008). To overcome liability of foreignness, deal with institutional voids and

compete with firms in foreign EMCs, MNEs transfer to recipient EMCs a variety of tangible and intangible assets as well as managerial knowledge. The transfer of such assets gives rise to externalities (spillovers), diffusion of knowledge and technological upgrade (Kafouros et al., 2018) that contribute to the development and performance of the recipient economy.

International business research has also specified the channels through which inward FDI influences the economic development and performance of recipient EMCs (Yi et al., 2015; Kafouros et al., 2015; Riddle et al., 2010; Wang et al., 2012). First, inward FDI and the establishment of MNEs in the recipient EMC have a direct positive effect on employment and subsequently on an EMC's output. A second key mechanism involves the so-called "demonstration effects", whereby indigenous firms become more efficient and competitive by observing and imitating the operations, processes and technologies of MNEs (Blomström and Kokko, 1999). Third, although the presence of MNEs may drive indigenous firms out of business with negative consequences for the economy, higher competitive pressure encourages indigenous firms to cut organisational slack and become more productive and innovative (Eden, 2009). The above effects become stronger when indigenous firms establish linkages with MNEs and when the employees of MNEs leave their jobs to work for indigenous firms (Blomström and Kokko, 1998), increasing the skill-set and capabilities of the EMC.

Nevertheless, the developmental and economic effects of remittances and how these effects manifest themselves differ significantly from those of FDI. Whereas firms invest abroad for economic and strategic purposes, remittances are driven by a set of different considerations and motivations. Although remittances in some cases are simply driven by altruism (Aggarwal and Horowitz, 2002; Lucas and Stark, 1985), the decision to remit also depends on other motives such as investment and entrepreneurship (Lucas and Stark, 1985; Taylor, 1999; Vaaler, 2011; 2018). As immigrants go abroad to accumulate capital, knowledge and experience, remittances may finance small firms in various EMCs (Martinez et al., 2015) and increase the rate of new business creation (Vaaler, 2011; 2018), particularly when the availability of venture capital is low. Migrant remittances also increase disposable income, consumption and demand (Jongwanich, 2007; King and Levine, 1993; Ratha, 2003). They are less volatile than direct and portfolio capital flows and may increase during economic

slowdowns (Gammeltoft, 2002; Ratha, 2003), hence functioning in a useful countercyclical fashion.

Although theory suggests that remittances should accelerate economic development of recipient EMCs, past empirical findings are mixed and do not always confirm this prediction (Barajas et al., 2009). Many studies show that remittances have a positive impact on recipient EMCs. For example, Leon-Ledesma and Piracha (2004) find that remittances in 11 transition economies improve productivity and employment, and Giuliano and Ruiz-Arranz (2009) show that on average remittances accelerate GDP per capita. Additionally, unlike FDI, remittances do not lead to corruption as they flow to individuals rather than organizations (Rajan and Subramanian, 2005). By contrast, other studies suggest that remittances have a negligible or even negative impact on an EMC's economy (Chami et al., 2005; Glytsos, 2002) because they are not always driven by entrepreneurship and rent generation. Hence, in situations in which remittances are used as compensatory transfers that help individuals overcome hardship (Chami et al., 2005), they rarely serve as capital for economic development and value creation.

Although prior studies have evaluated the direct performance effects of remittances, our understanding of why remittances boost the performance of some EMCs but not of others remains limited. We propose that the reason for the previously conflicting findings is an incomplete understanding of the contingencies that influence the relationship between remittances and economic development. We argue that this relationship depends on whether remittances are used for implementing value-generating initiatives and for investing in (new) businesses, rather than merely for consumption. Accordingly, we develop a conceptual framework and hypotheses that explain how the remittances-performance relationship is moderated by cultural attributes that shape the willingness of individuals to invest.

2.2. Cultural variations across countries

Culture varies significantly across EMCs (Vaara et al., 2012). Culture refers to "customary beliefs and values that ethnic, religious and social groups transmit fairly unchanged from generation to generation" (Guiso et al., 2006: 23). Although culture differs from institutions, attributes such as

corruption are both institutionally- and culturally-determined (Husted, 1999). Although the remittances literature has not paid attention to the moderating role of culture, its direct effects and importance are well documented in IB and management research (Berry et al., 2010; Thomas and Mueller, 2000; Thomas and Grosse, 2001). Cross-country cultural differences in terms of uncertainty avoidance, gender egalitarianism, power distance and individualism can provide a more nuanced appreciation of economic behaviour and performance (Hofstede, 1983, 2018; House et al., 2004). The literature on political economy has long recognized the causality between culture, economic relations and performance, both when culture influences economic relations and when culture is a by-product of economic relations.

Furthermore, other studies have introduced cultural capital as another form of capital. Cultural capital can be found in three forms: in an embodied, objectified or institutionalised state with the former being the most significant one (Bourdieu, 1986). Generally, "most of the properties of cultural capital can be deduced from the fact that, in its fundamental state, it is linked to the body and presupposes embodiment" (Bourdieu, 1986: 244). This definition is very similar to that of human capital in neoclassical economics (Robbins, 1991), emphasizing the importance of culture in economic relationships and its significance in affecting or being affected by economic structures. Hence, remittances are affected by the culture of individuals (e.g. the degree of altruism) and by the different social structures that need to be accounted in our analysis.

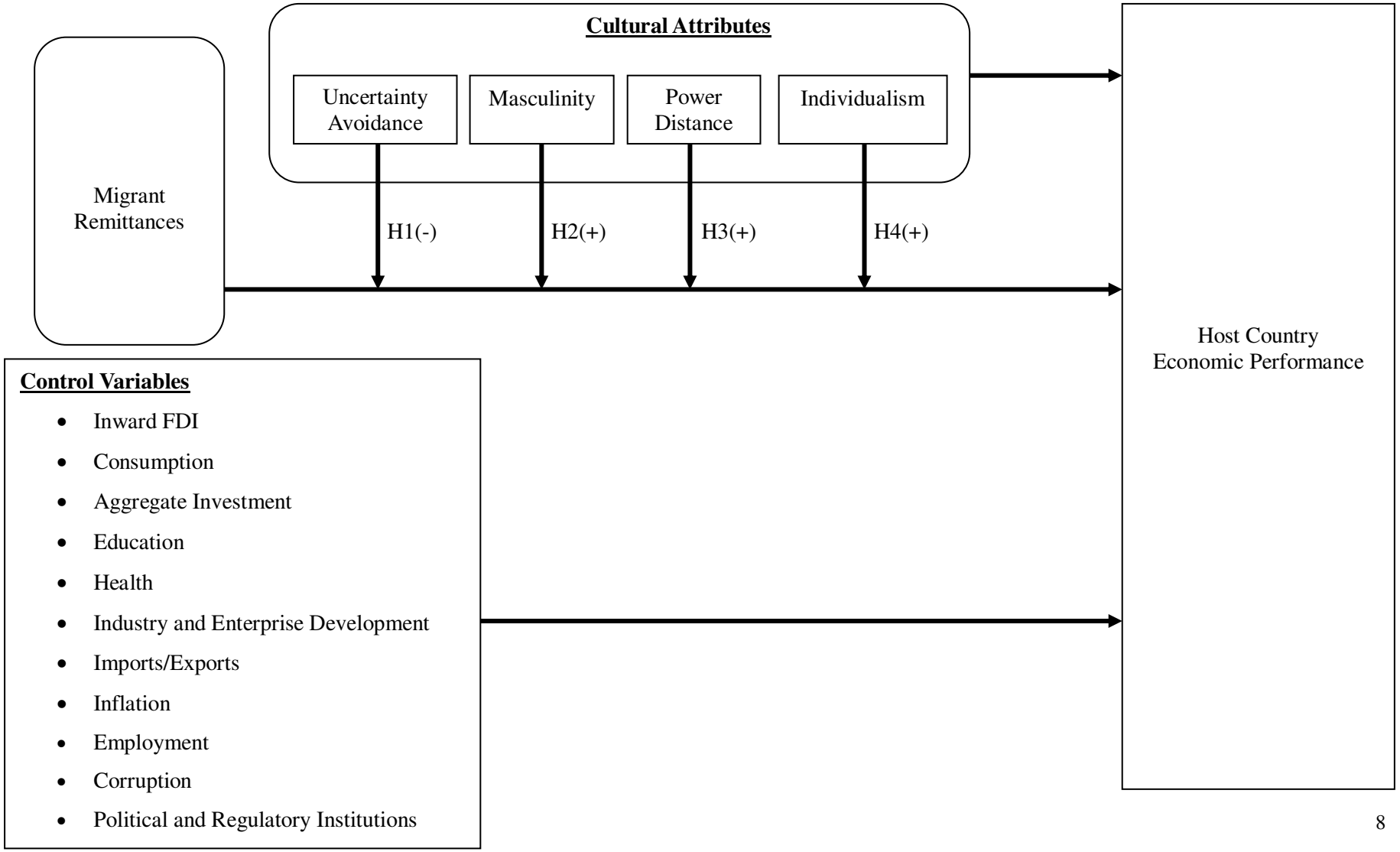
Overall, despite the aforementioned literature about the relationship between culture and economic structures, there has been little attempt to understand how culture influences the effects of remittances on the economic development of nations. In the next section, we confront these unresolved issues and conceptualise how certain cultural attributes change the economic impacts of remittances.

3. Hypotheses

Figure 1 summarises the conceptual framework and hypotheses of the study. We hypothesize that the effects of remittances on an EMC's economic development are strengthened or attenuated by certain cultural attributes (namely, uncertainty avoidance, masculinity, power distance and

individualism). The reasoning behind the hypothesised effects is that culture influences the *willingness* of recipients to invest remittances in value-adding initiatives and entrepreneurial activities that may enhance the economic development of EMCs.

Figure 1. Conceptual Framework and Hypothesized Relationships



3.1. The role of cross-country cultural variations

Our framework consists of four hypotheses about the way in which the four cultural attributes (uncertainty avoidance, masculinity, power distance and individualism) affect how remittances are used (e.g., for conspicuous consumption or investment purposes) and, in turn, their impact on economic development.

First, uncertainty avoidance represents the degree to which individuals try to minimize unpredictability and avoid uncertainty. When Individuals in EMCs exhibit higher levels of uncertainty avoidance, they rely on established norms and procedures and do not favour unorthodox practices, behavior and ideas (Hofstede, 1983, 2018; House et al., 2004). Such individuals take moderate risks and show strong resistance to change (House et al., 2004). Hence, the higher uncertainty avoidance is, the less likely it is that remittances will be channelled to investment and entrepreneurial activities that require risk-taking behaviour. This is consistent with the notion that risk-averse individuals become workers while risk-accepting individuals become entrepreneurs (Knight, 1921). It is also in line with studies that suggest that risk and uncertainty influence individuals' investment decisions (Kogut and Singh, 1988), but also the level of corruption in a country (Husted, 1999).

In contrast, societies in EMCs with lower levels of uncertainty avoidance foster nonconformist action and the belief that practice counts more than principle (Hofstede, 1980). Therefore, they are more inclined to engage in new initiatives and invest remittances in business opportunities. This logic is reinforced by empirical research that shows that certain cultural traits make some societies more innovative and inventive. For instance, Shane (1995) examined the way in which variations in uncertainty avoidance in 68 countries influence the preferences of individuals for innovation-championing roles. Evidence from this study shows that societies with lower levels of uncertainty avoidance are more innovative than those with higher levels of uncertainty avoidance because the greater legitimacy of innovation roles encourages individuals to pursue such initiatives (Shane, 1995). In such situations, we expect that remittances will be used in more innovative and value-adding initiatives, thus increasing their economic effects.

In summary, we expect the performance-enhancing effects of remittances to be attenuated

when the levels of uncertainty avoidance are higher. Hence:

Hypothesis 1. The effects of remittances on economic development are lower in EMCs with higher levels of uncertainty avoidance than in EMCs with lower levels of uncertainty avoidance.

A second cultural trait that may influence the value-generating role of remittances concerns the role of gender. While some EMCs are more masculine, other EMCs have a more gender-egalitarian culture and exhibit lower gender role differences (Hofstede, 1983; House et al., 2004). We expect the performance effects of remittances to be higher in masculine societies than societies that place emphasis on gender egalitarianism for several reasons. First, according to prior research, masculine societies tend to be more competitive and have a preference for entrepreneurial success and achievement (Hofstede, 1980). By contrast, EMCs that place more emphasis on gender egalitarianism are not particularly focused on qualities such as leadership and entrepreneurship. Hence, individuals in more masculine EMCs are more likely to use remittances to engage in entrepreneurial initiatives or invest remittances in activities that may help them become more successful. Such activities in turn will contribute to the economic development of an EMC.

The above reasoning and predictions are supported by evidence that shows that entrepreneurs have a highly masculine orientation. For instance, McGrath, MacMillan and Scheinberg (1992) found consistent differences between entrepreneurs and non-entrepreneurs in eight countries. This argument is also consistent with prior research that shows that a characteristic of masculinity is a belief in the importance of training (Hofstede, 1983). Furthermore, this reasoning is supported by studies that suggest that more masculine societies tend to be more innovative than societies that are less masculine (Shane, 1993). Societies that place emphasis on gender egalitarianism are often motivated by altruism. As such, individuals in these societies are likely to spend remittances on aspects that improve the quality of life, rather than on value-creating activities.

In summary, we expect the performance-enhancing effects of remittances to be stronger in societies that are characterized by masculinity. Hence:

Hypothesis 2. The effects of remittances on economic development are greater in EMCs with higher levels of masculinity than in EMCs that place emphasis on gender egalitarianism.

The third cultural attribute that can influence the economic effects of remittances is power distance. Power distance refers to the extent to which members of a society expect and accept that power is unequally distributed (House et al., 2004). People in societies exhibiting a higher degree of power distance accept a hierarchical order in which everybody has a place and that needs no further justification (Hofstede, 1983). According to prior research (Shane, 1993), less hierarchical societies that exhibit lower power distance stimulate inventive activity by enhancing communication and information exchange (Shane, 1993). Although this view suggests that power distance does not increase the economic effects of remittances, a number of other arguments and empirical evidence suggest the opposite.

More specifically, various studies support the view that entrepreneurs exhibit higher power distance scores compared to workers. McGrath, MacMillan and Scheinberg (1992) argue that entrepreneurs do not want lower power positions while others have authority. Because they cannot accept authority, negative work experience in environments with higher levels of power distance triggers their decision to invest in their own business. Hence, because EMCs with higher levels of power distance exhibit greater differences in wealth, they further increase the desire of individuals to use remittances to start new businesses. This is a response that helps individuals overcome dissatisfaction. This research stream also suggests that higher power distance may create additional incentives for investment and entrepreneurial activity by blocking other methods for achieving success (McGrath et al., 1992).

Hence, remittances in EMCs with high power distance are more likely to be used for financing new initiatives and starting new businesses. In such situations, their contribution to economic development is expected to be higher:

Hypothesis 3. The effects of remittances on economic development are greater in EMCs with higher levels of power distance than in EMCs with lower levels of power distance.

Furthermore, we expect the relationship between remittances and economic development to be moderated by the degree to which each society places emphasis on individualism versus collectivism. Individuals in EMCs with higher levels of collectivism rely on collective action and are expected to be loyal to and look after their families and groups. By contrast, more individualistic societies tend to place more emphasis on rationality and personal needs and exhibit a faster pace of life (Hofstede, 1980; House et al., 2004). Individualistic societies also emphasize the importance of freedom that in turn enables individuals, including recipients of remittances, to be more innovative (Shane, 1993).

Another characteristic of individualistic societies that may encourage individuals to invest remittances in new initiatives is extroversion, which increases the likelihood of entrepreneurial activity (Morris et al., 1994). By contrast, societies with higher levels of collectivism place less emphasis on individual initiative (McGrath et al., 1992). In such societies, it is therefore more likely that remittances will be used to satisfy family or other collective needs, rather than being used for rent-generating initiatives. Hence, the higher the level of individualism is, the more likely it is that remittances will be used for new initiatives that can in turn result in higher economic development. By contrast, we expect collectivism to have the opposite effect. Base on this reasoning, we introduce the following hypothesis:

> **Hypothesis 4.** The effects of remittances on economic development are greater in EMCs with higher levels of individualism than in EMCs that place emphasis on collectivism.

4. Empirical investigation

4.1. Sample and data

We collected data for a sample of 28 EMCs in total, for the 1995-2009 period. This dataset includes information on several variables, which we sourced primarily from UNCTAD and the World Bank. For our institutional variables, we used the Worldwide Governance Indicators from the World Bank and the Corruption Perception Index from Transparency International. We collected data on

culture from the GLOBE Project and the World Values Survey (WVS), which have been used extensively in prior research.

4.2. Dependent variable

We operationalized the recipient EMCs' economic development using GDP per capita. This measure, which captures GDP per employed and non-employed person, is accepted in the literature as a good measure of aggregate productivity and economic development (Krugman, 1994; Porter, 1990). We used UNCTAD's data, which are based on the UN DESA Statistics Division. GDP per capita is defined as GDP (the sum of the gross value added by all resident producers in the economy, plus any product taxes and minus any subsidies not included in the value of the products) divided by the midyear population. These are expressed in current U.S. dollars.

4.3. Independent variables

Remittances: To capture remittances, we collected data on total amount of the remittances transferred to each recipient country every year. This measure includes workers' remittances, compensation of employees and migrants' transfers. We collected these data from UNCTAD that includes sources such as the IMF - Balance of Payments Statistics, World Bank - Migration and Remittances, Economist Intelligence Unit - Country Data and national sources. The data are in current U.S. dollars.

Cultural Attributes: To operationalise different aspects of culture, we used the GLOBE Project and the World Values Survey (WVS). We collected information on the four aforementioned cultural attributes (uncertainty avoidance, masculinity versus gender egalitarianism, power distance and individualism versus collectivism). GLOBE is a multi-year multi-phase global programme that aims at examining perceived culture and leadership around the world. The GLOBE measures have been widely used in several studies (House et al., 2004). Their benefits and limitations have also been extensively discussed in the literature (Javidan et al., 2006; Taras et al., 2009; Tung and Verbeke, 2010). Because the way in which the questions are formulated in the GLOBE questionnaire captures

the cultural attributes of gender egalitarianism and collectivism, we reversed the scale of these two measures (i.e. a higher level of the recoded measures represents societies that place less emphasis on gender egalitarianism and collectivism). Our sample includes data on 28 EMCs.

We also collected data on 20 EMCs using the World Values Survey. To ensure that the data are reliable, we collected data on Waves 3 (1995-1999), 4 (2000-2004) and 5 (2005-2009). WVS is a global study that examines the different values and beliefs that are prominent in various economies. Its aim is to capture cross-country cultural variations, as well as cultural changes within a particular economy over time i.e. due to changes in political economy. In addition, we used the WVS to collect data for two additional cultural dimensions; namely, saving behaviour and trust. These WVS measures have been established in the literature (Inglehart and Baker, 2000; Tang and Koveos, 2008). Due to the multiple questions and waves employed, in this case we did not reverse the scale of collectivism (i.e. a higher level of the recoded measure represents societies that place higher emphasis on collectivism).

4.4. **Control variables**

We further control for a number of country-specific factors that may affect an EMC's economic development. We employ a very comprehensive set of control variables drawing on extant literature (Begg et al., 2014; Lucas, 1988; Mankiw et al., 1992; Ozturk, 2007; Thomas and Grosse, 2001).

First, aggregate *consumption* is an important constituent of demand that may influence economic development (Barro, 1991; Keynes, 1936). To capture the impact of consumption on economic development, we used a measure of the recipient EMCs' consumption expenditures from the World Bank and the OECD. Second, aggregate *investment* is widely viewed in macroeconomic theory as one of the most important determinants of economic development (Barro, 1991; Singh, 1997). We measured investment by employing data on the widely used measure of gross capital formation from the World Bank and the OECD. Gross capital formation comprises outlays on additions to the fixed assets of the economy and net changes in the level of inventories and net acquisitions.

Third, prior research has established that investment in *education* may accelerate an EMC's economic development (Alcaraz et al., 2012; Hanson and Woodruff, 2003; Yang, 2011). We control for such effects using data on the current operating expenditures in education, including wages and salaries but excluding capital investments in buildings and equipment (World Bank, 2018). The data were sourced from the UN and UNESCO. Fourth, we control for investment in *health* using each EMC's total (i.e., public and private) health expenditure given that health may affect economic outcomes through the impact of remittances (Amuedo-Dorantes and Pozo, 2011). These data, which are sourced from the World Bank and the World Health Organization, cover the provision of health services, family planning activities, nutrition activities and emergency aid.

Furthermore, human capital can determine the degree of the absorptive capacity of an economy, and foster or restrict the adoption of new technologies (Benhabib and Spiegel, 1994; Nelson and Phelps, 1966). In this context, it has been suggested that human capital can stimulate economic development by affecting productivity (Romer, 1994). Hence, education and health can be crucial factors for the realisation of the impact of remittances on economic development.

Another factor that may influence an EMC's economic development is *industry and enterprise development* (Kay, 1993). To capture such variations, we used industry value added (World Bank and OECD). Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. The origin of value added is determined by the International Standard Industrial Classification (ISIC). Value added is accepted as a good measure of variations in the economic development for corporations and industrial sectors, and it is better than alternatives such as revenue or employment (Kay, 1993).

Furthermore, we control for inward *foreign direct investment* (FDI), which, according to the literature, may influence economic outcomes directly and indirectly (Borensztein et al., 1998; Caves, 1974). FDI and remittances can be linked in various ways. FDI is itself a proxy for the business environment and provides opportunities for related and supporting entrepreneurial activities in recipient EMCs, where remittances can be invested. FDI also provides incentives to consume remittances in products and services offered by MNEs and to invest in small businesses that may

complement or support MNE activities. We gathered data from UNCTAD and incorporated a measure of FDI inflows for each EMC in the model.

Sixth, *imports* and *exports* represent the international openness of an EMC and may also directly impact the performance of EMCs and have been employed in the remittances literature (Le, 2009). We control for the imports and exports of goods and services using data from the World Bank's World Development Indicators. These measures are expressed as the ratio of imports or exports to GDP. Seventh, *employment* is another determinant of economic development (Keynes, 1936). The higher employment is, the higher GDP per capita is likely to be. We employ data on employment from UNCTAD by dividing the total labour force of a given EMC by its total population. We have also controlled for *inflation* that can affect not only investment and productivity (Fischer, 1993) but also the volume of remittances and their impact (Stiglitz et al., 2009). To control for inflation, we employed data from UNCTADstat on the Consumer Price Index (CPI). Changes in CPI reflect price changes associated with the cost of living.

Lastly, we control for institutional factors that as prior studies suggest can influence economic outcomes (Kafouros and Aliyev, 2016; North, 1989, 1990). Specifically, we control for *corruption* using the Corruption Perception Index (CPI) provided by Transparency International. This measure is employed widely in the literature (Catrinescu et al., 2009). The CPI uses multiple criteria to rank countries based on how corrupt their public sectors are perceived to be. In our model, the measure is reversed and ranges from 0 to 10 (corrupt).

We also control for *political* and *regulatory institutions* using data from the World Bank's Worldwide Governance Indicators (WGI). These data capture six dimensions of governance: control of corruption, government effectiveness, political stability and absence of violence/terrorism, regulatory quality, rule of law and voice and accountability. "Governance" in this context consists of the institutions in which their authority in a country is exercised. Governance includes the process by which governments are selected and monitored; the government's ability to formulate and implement policies; and the respect of citizens and the state of the institutions that govern the economic and social interactions among them (Kaufmann et al., 2010). For our analysis, we created two different constructs

to capture political and regulatory institutions. Political institutions are operationalized using the weighted average of indices for government effectiveness, political stability, control of corruption and absence of violence and terrorism. Regulatory institutions are captured using the weighting average of regulatory quality, rule of law, and voice and accountability (Kaufmann et al., 2010). The models also include time dummies for each year.

5. Results

Table 1 reports descriptive statistics and pairwise correlations. Table 2 reports the results derived using panel OLS and FGLS estimators and data on culture from the GLOBE project. Although the time-invariant nature of some of the data limits our choices with respect to using dynamic estimation techniques, prior studies on remittances found qualitatively similar results when they employed OLS and techniques such as FE (Giuliano and Ruiz-Arranz, 2009). Panel FGLS helps us account for possible heteroscedasticity or autocorrelation. Model 1 reports the direct effects of the twelve control variables using panel FGLS estimation. These yield the expected signs and statistical significance levels.

Specifically, Model 2 includes migrant remittances in the FGLS estimation. Model 3 includes the direct effects of cultural attributes and Models 4 and 5 report the interactions between remittances and culture using panel FGLS and OLS respectively. Although the direct effect of migrant remittances on economic development is negative in the initial models, it becomes positive once the role of cultural attributes in the models with interaction effects is considered. The positive direct effect is in line with our expectation that remittances do not merely help with subsistence needs but may also stimulate economic development. The direct effect of inward FDI on the economic development of EMCs is negative. This result is in line with the findings of prior empirical studies (Liu et al., 2010). It can be explained by the fact that inward FDI is accompanied by increasing competition that may drive domestic firms in EMCs out of business. In such situations, the overall negative effect might be negative. Overall, the above results together emphasise the need to account for the moderating effect

of culture on the benefits of remittances and the importance of considering alternative (to FDI) financial inflows in EMCs.

Table 1

Mean, standard deviations, and correlation coefficients.

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Econ. Performance	5333.54	6325.29																		
2. Remittances (m.)	3726.65	7113.56	-0.17																	
3. Uncert. Avoidance	4.99	0.36	-0.41	0.06																
4. Masculinity	2.69	0.38	-0.13	0.09	0.36															
5. Power Distance	2.69	0.31	0.05	0.05	0.37	0.46														
6. Individualism	1.35	0.34	0.21	0.21	-0.08	0.4	0.4													
7. Consumption (m.)	223000	301000	0.05	0.73	0.07	0.08	-0.01	0.28												
8. Ag. Investment (m.)	86400	211000	0.01	0.71	0.13	0.19	0.08	0.34	0.92											
9. Education (m.)	9690	13800	0.18	0.61	0.02	-0.09	0.01	0.33	0.95	0.75										
10. Health (m.)	16232	26906	0.22	0.6	0.03	-0.04	0.03	0.38	0.98	0.87	0.95									
11. Ind. & Ent. Devel. (m.)	107000	228000	0.06	0.67	0.14	0.19	0.08	0.34	0.93	0.99	0.77	0.89								
12. Inward FDI (m.)	7900.19	14690.69	0.23	0.54	0.06	0.10	0.16	0.38	0.8	0.79	0.71	0.86	0.81							
13. Imports (%)	37.99	29.25	0.56	-0.14	-0.16	0.23	0.25	0.13	-0.21	-0.14	-0.22	-0.32	-0.17	0.14						
14. Exports (%)	37.19	31.63	0.57	-0.14	-0.15	0.24	0.16	0.14	-0.15	-0.08	-0.15	-0.19	-0.09	0.2	0.96					
15. Employment (%)	42	7	0.3	0.14	0.09	0.04	-0.02	0.28	0.46	0.47	0.47	0.53	0.51	0.57	0.22	0.29				
16. Inflation	123.98	65.83	0.02	0.03	-0.07	-0.1	-0.17	-0.08	0.14	0.04	0.11	0.12	0.05	0.06	-0.11	-0.08	0.001			
17. Corruption	6.26	1.47	-0.78	0.18	0.42	0.02	-0.27	-0.14	0.1	0.05	-0.005	-0.03	0.04	-0.13	-0.64	-0.61	-0.1	0.19		
18. Polit. Institutions	44.54	19.12	0.63	-0.16	-0.28	0.05	0.23	0.1	-0.04	-0.005	0.11	0.11	0.002	0.15	0.58	0.55	0.2	-0.16	-0.86	
19. Regul. Institutions	48.36	17.12	0.67	-0.13	-0.41	-0.1	0.12	0.08	-0.11	-0.11	0.08	0.02	-0.12	0.006	0.48	0.44	0.12	-0.23	-0.85	0.91

Table 2

Results from core regression analysis of migrant remittances, culture and related terms on GDP per capita, 1995-2009 (GLOBE Project).

Eq. 1 Specifications →estimators → variables ↓	(1) Controls only panel FGLS	(2) Controls, remit panel FGLS	(3) Controls, remit, culture panel FGLS	(4) Controls, remit, culture, all interaction panel FGLS	(5) Controls, remit, culture, all interaction panel OLS	(6) Lagged Dependent, controls, remit, culture all interaction panel FGLS
Lagged GDP per capita						0.86*** (0.02)
Remittances		-0.23*** (0.03)	-0.22*** (0.03)	2.87*** (0.63)	2.87*** (0.68)	1.11*** (0.29)
Uncertainty Avoidance			113.15 (666.83)	1483.17* (688.66)	1483.17* (746.68)	355.17 (312.23)
Masculinity			1117.25* (566.40)	-244.42 (662.70)	-244.42 (718.54)	14.18 (298.50)
Power Distance			-3166.09*** (674.22)	-5390.24*** (662.95)	-5390.24*** (718.81)	-627.30† (336.21)
Individualism			-496.48 (876.11)	1441.06 (914.17)	1441.06 (991.20)	-122.27 (414.73)
H1: Remittances X Uncertainty Avoidance				-1.35*** (0.18)	-1.35*** (0.20)	-0.34*** (0.09)
H2: Remittances X Masculinity				0.17 (0.11)	0.17 (0.12)	0.01 (0.05)
H3: Remittances X Power Distance				1.70*** (0.24)	1.70*** (0.26)	0.31** (0.11)
H4: Remittances X Individualism				-1.00*** (0.13)	-1.00*** (0.14)	-0.24*** (0.06)
Consumption	-7.03e-09* (3.13e-09)	3.63e-10 (3.07e-09)	-5.70e-09 (3.56e-09)	-8.44e-09* (3.95e-09)	-8.44e-09* (4.28e-09)	-2.73e-09 (1.79e-09)
Aggregate Investment	-1.93e-08*** (4.14e-09)	-6.33e-09 (4.18e-09)	-7.62e-09* (3.86e-09)	-7.72e-09† (4.70e-09)	-7.72e-09 (5.09e-09)	1.19e-09 (2.13e-09)
Education	9.27e-08* (4.46e-08)	1.59e-07*** (4.19e-08)	2.18e-07*** (4.01e-08)	2.29e-07*** (3.73e-08)	2.29e-07*** (4.05e-08)	7.34e-08*** (1.76e-08)

Health	0.25*** (0.03)	0.15*** (0.03)	0.17*** (0.03)	0.12*** (0.03)	0.12** (0.04)	-0.006 (0.01)
Industry and Enterprise Development	2.97e-09 (4.54e-09)	-4.84e-09 (4.28e-09)	-3.07e-09 (3.93e-09)	1.09e-08† (6.31e-09)	1.09e-08 (6.84e-09)	5.00e-09† (2.85e-09)
Inward FDI	-0.12*** (0.02)	-0.10*** (0.02)	-0.06*** (0.02)	-0.07*** (0.01)	-0.07*** (0.02)	0.00 (0.008)
Imports	7.80 (19.88)	13.20 (18.75)	66.56*** (18.63)	63.58*** (18.08)	63.58*** (19.60)	18.41* (8.27)
Exports	-11.27 (16.78)	-2.90 (15.90)	-58.14*** (17.24)	--58.22*** (16.61)	-58.22*** (18.01)	-16.76* (7.59)
Employment	14895.8*** (2537.63)	5254.03† (2699.42)	4152.89 (3319.33)	4902.16 (3312.99)	4902.16 (3592.13)	-1678.57 (1506.95)
Inflation	8.32** (2.92)	-0.32 (2.95)	-1.64 (2.80)	0.70 (2.54)	0.70 (2.76)	1.00 (1.14)
Corruption	-1112.01*** (288.44)	-533.63† (285.93)	-906.32*** (272.33)	-1134.72*** (253.82)	-1134.72*** (275.20)	72.43 (120.82)
Political Institutions	14.38 (22.47)	-11.92 (21.17)	-15.28 (21.70)	-17.40 (21.95)	-17.40 (23.79)	-4.83 (9.89)
Regulatory Institutions	21.99 (24.85)	53.24* (23.15)	42.67† (22.91)	53.81* (24.82)	53.81* (26.91)	21.62† (11.22)
Constant	336.71 (2399.87)	1879.36 (2251.05)	11278.84*** (3050.55)	11902.07*** (3190.69)	11902.07*** (3459.52)	-985.74 (1496.39)
Wald χ^2 (R^2)	599.22	757.01	1019.66	1373.31	0.86	7721.64
Number of observations	246	241	241	241	241	241

Notes: standard errors are in parentheses, *p≤0.05; **p≤0.01; ***p≤0.001.

The analysis also shows that most interaction effects that test the hypotheses are statistically significant, suggesting that the benefits of remittances vary across EMCs. Specifically, the interaction term between remittances and uncertainty avoidance is negative, thus corroborating Hypothesis 1. These findings suggest that the economic impact of remittances is lower in EMCs with higher levels of uncertainty avoidance. The results also indicate that the level of masculinity in EMCs positively moderates the economic impact of remittances but although the interaction effect is positive, it is statistically insignificant. This finding therefore does not provide strong support to Hypothesis 2.

The analysis corroborates Hypothesis 3 regarding the role of power distance. The moderating role of power distance in influencing the relationship between remittances and economic development is positive. This finding suggests that the benefits of remittances are greater in EMCs with higher levels of power distance. However, the findings do not support the hypothesized effects for individualism versus collectivism (Hypothesis 4). In contrast to the theoretical prediction that the economic benefits of remittances are stronger in EMCs with higher levels of individualism, the findings support the opposite view. It appears that individualism makes the effects of remittances weaker. An explanation may be that in EMCs that tend to be more collective societies, the social and family safety net, alongside investments in education, is strong enough to outweigh the hypothesized stronger role of individualism.

In all the interaction models, the direct effect of remittances is higher than the interaction effects with cultural attributes. Hence, the fact that the interaction effects are negative suggests that migrant remittances are still beneficial, but not as much as in other cases. The results also provide insights about the relative importance of different cultural attributes, suggesting the economic benefits of remittances are stronger in EMCs that exhibit higher power distance and weaker in EMCs with higher levels of uncertainty avoidance. We also test the hypotheses after including a lagged dependent variable in the model in order to capture dynamic effects. Model 6 reports results that are similar to the results of Models 4 and 5, further substantiating the hypotheses.

Furthermore, to examine the robustness of the results to the use of alternative data, we tested the hypotheses using data on culture from the WVS. We incorporated three cultural waves in the dataset to

capture the 1995-2009 period that we initially examined (Waves 3, 4 & 5), and we also re-run the results for the 2000-2009 period separately (Waves 4 & 5) to account for any cultural changes that may affect the impact of migrant remittances on economic outcomes over time. We run the same set of regressions for consistency purposes. The results are depicted in Tables 3 and 4 respectively. These are mostly consistent with the results reported in Table 2. Specifically, uncertainty avoidance negatively influences the impact of remittances on economic outcomes in all models considered at the 0.1% level of significance. In addition, power distance positively moderates the impact of remittances at the 0.1%, with the exception of Models 5 and 6 in Waves 4 and 5 where it becomes negative.

Furthermore, while individualism negatively moderates the impact of remittances in the initial analysis, when we run the estimations using WVS data we find collectivism to have a negative impact (or a positive impact when we reversed the measure to represent individualism). Hence, the results are inconclusive. Concerning masculinity, the results support Hypothesis 2 as masculinity is found to positively influence the impact of remittances in EMCs at the 0.1% level of significance in all waves considered. The empirical evidence indicates that higher levels of masculinity in EMCs increase the economic effects of remittances. This finding supports Hypothesis 2 and suggests that, on average, EMCs that exhibit orientation towards success and achievement benefit more from remittances than EMCs that favour gender balance.

One reason for these changes can be the difference in the nature of the data between the two culture studies, as well as variations in the questions employed in the WVS dataset. In addition, we report some differentiations regarding institutions. Specifically, corruption was initially found to have a negative effect in Table 2, whereas in the new results they become either insignificant or less statistically significant (Tables 3 and 4). Lastly, we observe a significant increase in the positive impact of regulatory institutions. Despite these differences, the analysis using WVS data largely supports the hypotheses.

Table 3

Results from core regression analysis of migrant remittances, culture and related terms on GDP per capita, 1995-2009 (WVS waves 3, 4 & 5).

Eq. 1 Specifications →estimators → variables ↓	(1) Controls only panel FGLS	(2) Controls, remit panel FGLS	(3) Controls, remit, culture panel FGLS	(4) Controls, remit, culture all interaction panel FGLS	(5) Controls, remit, culture all interaction panel OLS	(6) Lagged Dependent, controls, remit, culture all interaction panel FGLS
Lagged GDP per capita						0.78*** (0.03)
Remittances		-0.24*** (0.03)	-0.15*** (0.02)	4.17*** (0.73)	4.17*** (0.81)	0.72 (0.44)
Uncertainty Avoidance			114.86*** (16.35)	158.58*** (16.06)	158.58*** (17.72)	35.97*** (10.65)
Masculinity			-104.56*** (14.14)	-160.13*** (16.12)	-160.13*** (17.78)	-39.95*** (10.62)
Power Distance			20.41 (14.76)	4.75 (14.44)	4.75 (15.93)	9.10 (8.10)
Collectivism			181.67*** (40.47)	455.13*** (55.93)	455.13*** (61.70)	85.77* (35.74)
H1: Remittances X Uncertainty Avoidance				-0.01*** (0.003)	-0.01*** (0.003)	-0.004* (0.002)
H2: Remittances X Masculinity				0.02*** (0.003)	0.02*** (0.003)	0.006** (0.001)
H3: Remittances X Power Distance				0.01*** (0.004)	0.01*** (0.004)	0.004† (0.002)
H4: Remittances X Collectivism				-0.06*** (0.009)	-0.06*** (0.01)	-0.01* (0.005)
Saving Behaviour			52.11*** (11.25)	53.11*** (9.96)	53.11*** (10.98)	14.15* (5.87)
Trust			-98.49*** (19.65)	-48.90** (18.72)	-48.90* (20.65)	-15.24* (10.61)
Consumption	-1.20e-08*** (3.41e-09)	-3.15e-09 (3.27e-09)	-9.15e-09** (3.23e-09)	-9.22e-09** (3.21e-09)	-9.22e-09** (3.54e-09)	-2.29e-09 (1.83e-09)

Aggregate Investment	-1.50e-08*** (4.40e-09)	-1.29e-09 (4.27e-09)	-4.80e-09 (3.63e-09)	-5.65e-09 (4.05e-09)	-5.65e-09 (4.47e-09)	2.29e-09 (2.30e-09)
Education	1.23e-07** (4.57e-08)	2.31e-07*** (4.28e-08)	2.50e-07*** (3.74e-08)	1.76e-07*** (3.75e-08)	1.76e-07*** (4.13e-08)	7.55e-08*** (2.15e-08)
Health	0.28*** (0.03)	0.09* (0.04)	0.14*** (0.03)	0.18*** (0.03)	0.18*** (0.03)	0.006 (0.02)
Industry and Enterprise Development	-1.01e-09 (5.23e-09)	-4.23e-09 (4.66e-09)	-4.55e-09 (3.96e-09)	-2.17e-09 (5.03e-09)	-2.17e-09 (5.55e-09)	-5.66e-10 (2.82e-09)
Inward FDI	-0.10*** (0.02)	-0.09*** (0.02)	-0.03 (0.01)	-0.07*** (0.01)	-0.07*** (0.02)	-0.006 (0.01)
Imports	-9.80 (20.07)	5.76 (18.05)	16.03 (17.10)	-6.36 (16.03)	-6.36 (17.69)	5.25 (9.01)
Exports	18.48 (22.50)	19.90 (20.09)	-16.72 (18.19)	-6.18 (17.05)	-6.18 (18.81)	-15.41 (9.57)
Employment	26027.98*** (3499.78)	15106.47*** (3430.91)	31945.73*** (3297.47)	33961.58*** (3027.27)	33961.58*** (3339.82)	6915.50*** (2111.09)
Inflation	12.65*** (2.70)	5.95* (2.58)	3.31 (2.32)	0.94 (2.07)	0.94 (2.29)	0.95 (1.16)
Corruption	-129.05 (243.66)	52.55 (230.97)	139.62 (194.26)	371.35* (182.07)	371.35† (200.87)	150.95 (102.60)
Political Institutions	-15.36 (30.30)	-19.45 (27.40)	11.47 (24.75)	17.28 (22.99)	17.28 (25.37)	1.30 (12.91)
Regulatory Institutions	116.33*** (32.84)	112.44*** (29.65)	101.46*** (24.87)	135.58*** (22.25)	135.58*** (24.55)	43.34*** (13.19)
Constant	-15252.73*** (2770.56)	-8958.52*** (2665.68)	-35894.56*** (4920.86)	-62043.39*** (6265.88)	-62043.39*** (6912.79)	-14116.41*** (4158.26)
Wald χ^2 (R^2)	652.28	877.98	1521.24	2057.69	0.90	7008.52
Number of observations	220	213	213	213	213	213

Notes: standard errors are in parentheses, *p≤0.05; **p≤0.01; ***p≤0.001.

Table 4

Results from core regression analysis of migrant remittances, culture and related terms on GDP per capita, 2000-2009 (WVS waves 4 & 5).

Eq. 1 Specifications →estimators → variables ↓	(1) Controls only panel FGLS	(2) Controls, remit panel FGLS	(3) Controls, remit, culture panel FGLS	(4) Controls, remit, culture all interaction panel FGLS	(5) Controls, remit, culture all interaction panel OLS	(6) Lagged Dependent, controls, remit, culture all interaction panel FGLS
Lagged GDP per capita						0.65*** (0.05)
Remittances		-0.22*** (0.03)	-0.14*** (0.02)	5.86*** (1.08)	5.86*** (1.22)	2.42** (0.79)
Uncertainty Avoidance			145.29*** (16.08)	162.94*** (18.71)	162.94*** (21.15)	45.19** (15.94)
Masculinity			-101.27*** (12.18)	-118.01*** (14.15)	-118.01*** (16.00)	-52.41*** (11.09)
Power Distance			19.47 (14.27)	132.84*** (33.37)	132.84*** (37.71)	103.88*** (23.29)
Collectivism			471.73*** (44.10)	647.65*** (54.96)	647.65*** (62.11)	247.47*** (49.41)
H1: Remittances X Uncertainty Avoidance				-0.01*** (0.003)	-0.01*** (0.004)	-0.004 (0.002)
H2: Remittances X Masculinity				0.02*** (0.004)	0.02*** (0.005)	0.01*** (0.003)
H3: Remittances X Power Distance				-0.01*** (0.004)	-0.01** (0.005)	-0.01*** (0.003)
H4: Remittances X Collectivism				-0.05*** (0.009)	-0.05*** (0.01)	-0.01* (0.007)
Saving Behaviour			56.78*** (9.80)	25.88* (10.39)	25.88* (11.75)	7.54 (7.36)
Trust			-107.22*** (16.73)	-61.08** (19.79)	-61.08** (22.36)	-19.51 (14.13)
Consumption	-1.09e-08** (3.88e-09)	2.08e-10 (3.74e-09)	-1.17e-08*** (2.78e-09)	-1.29e-08*** (2.74e-09)	-1.29e-08*** (3.09e-09)	-6.46e-09*** (1.97e-09)

Aggregate Investment	-1.71e-08*** (4.35e-09)	-3.71e-09 (4.26e-09)	-3.09e-09 (2.93e-09)	-4.01e-09 (3.43e-09)	-4.01e-09 (3.88e-09)	3.79e-09 (2.46e-09)
Education	1.18e-07* (4.84e-08)	2.51e-07*** (4.64e-08)	3.52e-07*** (3.37e-08)	3.63e-07*** (3.21e-08)	3.63e-07*** (3.62e-08)	1.79e-07*** (2.66e-08)
Health	0.29*** (0.04)	0.04 (0.05)	0.10** (0.03)	0.12*** (0.03)	0.12** (0.03)	-0.002 (0.02)
Industry and Enterprise Development	-7.33e-10 (5.15e-09)	-9.48e-10 (4.49e-09)	-5.24e-09† (3.08e-09)	-8.53e-09* (4.00e-09)	-8.53e-09† (4.53e-09)	-1.66e-09 (2.83e-09)
Inward FDI	-0.12*** (0.02)	-0.12*** (0.02)	-0.02 (0.01)	-0.03* (0.01)	-0.03* (0.01)	0.004 (0.01)
Imports	8.03 (20.83)	17.83 (18.22)	19.84 (14.26)	-26.76 (16.81)	-26.76 (18.99)	-25.24* (11.68)
Exports	17.88 (24.75)	31.55 (21.66)	-38.48* (16.51)	-15.33 (16.67)	-15.33 (18.85)	-14.61 (11.58)
Employment	27998.81*** (4016.31)	16351.91*** (3883.94)	48461.43*** (3443.39)	51420.43*** (3683.72)	51420.43*** (4163.28)	18185.32*** (3651.44)
Inflation	13.12*** (2.74)	6.91** (2.55)	4.83* (2.04)	5.49** (1.78)	5.49** (2.02)	5.22*** (1.24)
Corruption	-656.85* (308.69)	-412.72 (271.41)	-322.12† (187.04)	-131.45 (187.66)	-131.45 (212.09)	25.75 (130.97)
Political Institutions	-54.91 (35.77)	-12.54 (31.78)	27.99 (23.43)	40.54† (22.33)	40.54 (25.24)	26.50† (15.55)
Regulatory Institutions	114.12** (38.93)	66.73† (34.62)	81.16*** (24.57)	113.26*** (22.63)	113.26*** (25.58)	51.21** (16.46)
Constant	-11940.27*** (3608.84)	-5641.94† (3274.79)	-65254.75*** (5728.75)	-92532.65*** (7562.15)	-92532.65*** (8546.60)	-39432.57*** (6702.19)
Wald χ^2 (R^2)	654.35	909.01	2615.47	3207.06	0.95	6806.19
Number of observations	152	152	152	152	152	152

Notes: standard errors are in parentheses, *p≤0.05; **p≤0.01; ***p≤0.001.

5.1. Robustness checks and additional analyses

First, we examined the sensitivity of our results using constant prices alongside the inflation rate as a control variable. This alternative approach once again confirmed our hypothesized relationships, adding confidence to the reliability of our initial findings. Furthermore, we ran two separate groups of regressions. The first group included the data in current terms, whereas in the second group, we normalized the deflated data (i.e., the data are in constant terms). We found no major differences in the results of the two groups and all the results that rely on normalized data are in line with the results of the main model. We also interacted remittances with inward FDI, which enabled us to identify whether the two inflows are complementary. Their interaction term was positive and statistically significant, indicating that they indeed have a complementary role in enhancing economic development. As it was noted earlier, one explanation may be that FDI provides opportunities to invest remittances in activities that support the operations of MNEs (e.g., as suppliers).

Second, one of our arguments in the study is that the effects of remittances depend on the way in which individuals consume (or save) money and on the extent to which there is trust in a society. To ensure that these factors do not bias the results using data from GLOBE (Table 2), we collected additional data from the WVS and incorporated these in the WVS-based empirical investigation reported in Tables 3 and 4. Specifically, we controlled for saving behaviour and trust in Models 3, 4 and 5 in both sets of empirical analyses. The new results remained the same for all the hypothesised effects. The only exception was the effect of corruption, which became statistically insignificant when considering all waves and less significant when considering Waves 4 and 5. This change however is not surprising given that trust and corruption are correlated.

Third, our modelling relies on the assumption that remittances impact economic development within the year. However, if remittances are invested in small businesses and other value-adding activities, their positive economic impact might take some time (i.e. it might not be contemporaneous). To examine this, we created lagged measures (one and two years) for both the direct and interaction effects of remittances and re-estimated the results. Once again, these remained similar and confirmed the

hypothesized effects. The direct effects of remittances (as well as most of interaction terms) were slightly stronger but this difference was not significant. Although remittances might take some time to affect economic development, the finding that time lags do not alter significantly the effects is justified by the fact that in our longitudinal data there is a stream of financial inflows year after year (i.e., remittances do not merely involve a one-off payment) and therefore, the effects are expected to be spread over time. Lastly, we have also treated the model for outliers. We first used logs for economic development and re-run the model. The results about the hypotheses were confirmed. Secondly, instead of using logs, we removed very high and very low values and re-run the model. Once again, the key results were confirmed.

6. Discussion and conclusion

6.1. Theoretical contributions and practical implications

Research on international business and management has advanced our knowledge about the economic effects of one type of international capital flow (namely, FDI) (Meyer and Sinani, 2009). However, despite the importance of migrant remittances as the second largest financial inflow in many EMCs and their role in an era of high levels of migration, knowledge of the way in which remittances influence the economic development and development of recipient EMCs is rather limited. For reasons that are not fully understood, prior empirical evidence on the economic effects of remittances is mixed, ranging from positive to negative effects (Chami et al., 2005; Taylor, 1999). We contribute to these literatures by explaining why such differences in economic outcomes exist and by identifying how certain cultural attributes drive cross-country variations in the economic effects of remittances. Our analysis helps us understand the role that remittances play in the global economy and may assist practitioners in improving the benefits of remittances.

First, our analysis contributes to IB and economic development research by providing empirical support for the premise that remittances do not merely help with subsistence needs, but they also stimulate economic development in the recipient EMC (Vaaler, 2011; 2018). These findings do not imply that all EMCs benefit equally from remittances. Certain cultural attributes enhance the positive

performance effects of remittances, whereas other cultural attributes decrease the corresponding effects. Although IB research has advanced theories on MNEs, what remains under-theorized is the way in which other financial flows, such as remittances, help individuals to engage in value-adding activities and increase the economic development of the recipient EMCs. Ignoring the role of remittances may significantly limit scholarly understanding of the nature and scope of the consequences of this important international financial inflow. In this sense, research on remittances complements typical IB explanations that focus on FDI. It also provides new avenues for economic development researchers to clarify at the micro level how EMCs and regions can strengthen their development.

Our analysis enables us to compare the effects of remittances and inward FDI. From this analysis, we can conclude that the economic impact of remittances in EMCs is particularly important, even when compared with that of inward FDI. The economic effects of inward FDI turn out to be negative for the EMCs of our sample. These findings should be interpreted with care as they represent the average country-level impact. They do not necessarily suggest that inward FDI does not help the economic development of EMCs. Inward FDI may still have a positive effect in some EMCs and under certain conditions.

Second, despite the importance and volume of remittances (Vaaler, 2013), we have a limited understanding of the conditions under which remittances have a positive or negative impact on the economic development of recipient EMCs. Although remittances have the potential to inject capital into an EMC and be used for the creation of small businesses and entrepreneurial initiatives (King and Levine, 1993; Ratha, 2003), in other situations they may deter people from entering labour markets or be used for consumption and in less productive ways. Our framework explains how cultural attributes influence the way in which individuals use remittances and in turn their economic effects. Our reasoning relies on the overarching argument that such cultural attributes influence the relationship between remittances and economic development by affecting the willingness of recipients to invest remittances in (new) businesses and value-adding activities. In clarifying why such cross-country variations exist and how they are influenced by culture, our analysis partly explains why prior findings are mixed.

Third, the empirical evidence shows that cultural idiosyncrasies have a profound role in determining how much EMCs benefit from remittances. In other words, even if two EMCs receive the same level of remittances, the usefulness of remittances in stimulating economic development will differ when the two EMCs exhibit different cultural contexts. For instance, given that uncertainty avoidance is lower in Colombia than in Turkey, Colombia is likely to benefit more from a given level of remittances. Similarly, given that individualism is lower in Mexico than in Philippines, Mexico may find remittances more beneficial. These findings highlight how different the nature of remittances is, compared with FDI. They also emphasise how important the context is not only for MNEs and FDI, but also at the individual and country levels.

This analysis therefore contributes to research that focused on the role of culture (Brouthers, 2002; Tung and Verbeke, 2010) but did not examine how recipient EMC cultural contexts influence the economic consequences of financial inflows like remittances. Our contribution lies in clarifying the moderating role of various cultural attributes and in documenting the mechanisms through which the value-generating potential of remittances is influenced (differently) by the recipient EMC's cultural contexts. The findings for the moderating effects of culture reveal an interesting pattern about the complicated relationship between remittances and economic development. Masculinity and power distance are more likely to increase the effects of remittances, while uncertainty avoidance and individualism decrease such effects. By showing that the benefits of remittances do not apply equally to all EMCs, our analysis explains why some EMCs exhibit better performance, whereas others grow slower.

These asymmetric moderating effects have implications not only for IB theory and research about economic development but also for practice, implying that attracting remittances does not always lead to similar performance outcomes. When considering practical implications given the volume of remittances in many EMCs, our analysis emphasizes the need to consider this type of financial inflow that coexists with FDI more carefully and develop policies that specifically aim to maximize the impacts of remittances. From the point of view of policies that aim at stimulating economic development, it would

be useful to highlight that although policy makers largely focus on the role of FDI, certain socio-economic contexts and certain aspects of economic development might require other types of foreign involvement and inflows such as those associated with remittances.

Another practical implication of the analysis is that governments can strengthen the economic impact of remittances by improving the institutional framework, promoting entrepreneurship and limiting corruption. Given the benefits of remittances, EMC governments should incentivize the transfer of remittances and create the financial infrastructure to facilitate such transfers through more formal channels. Policy makers should also prioritize financial deficiencies, dual exchange practices and lack of official transfer agencies. Additionally, although it is difficult to change a country's culture, targeted policies that consider the culture of a society are likely to be more effective in changing the way in which individuals use remittances. For instance, the development of government intermediaries may help individuals overcome challenges that arise because of certain cultural norms and behaviours.

6.2. Limitations and future research

Our analysis focused on EMCs but the importance of remittances may not be limited to such countries. Neo-migration from developed countries (e.g. from Southern Europe) as a result of economic crises may increase their importance in the future. Although the relative volume of remittances is higher in EMCs, many of the theoretical predictions of our framework may hold in developed countries too, with important implications for the economic development of these countries. Second, limited cross-year variation in some of the measures we employed did not allow us to use dynamic panel estimators. Similarly, the nature and volume of remittances and the fact that they cannot be monitored when transferred through informal channels constitute challenges in measuring remittances. Nevertheless, given that the available data underestimate the volume of remittances, the actual economic consequences of remittances are likely to be more profound.

Overall, the increasing volume and significance of migrant remittances renders the analysis and integration of the subject in IB theory essential. To better understand various IB phenomena, theory and

empirical studies on FDI and capital flows should be complemented by the analysis of other sizable financial inflows that result from the international mobility of labour. In a similar vein, the focus of IB research on MNEs should be complemented by considering the role of individuals who stimulate the creation of new business and economic development, particularly in EMCs. Although our contribution starts this debate by building on few business and management studies that considered the role of remittances (e.g. Vaaler, 2011; 2018), this line of inquiry may open up a new agenda that remains significantly understudied in IB research.

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References

Aggarwal, R. and A. W. Horowitz (2002). Are international remittances altruism or insurance? Evidence from Guyana using multiple-migrant households. *World Development,* 30(11), pp. 2033-2044.

Alcaraz, C., Chiquiar, D. and A. Salcedo (2012). Remittances, schooling, and child labour in Mexico. *Journal of Development Economics*, 97(1), pp. 156-165.

Amuedo-Dorantes, C. and S. Pozo (2011). New evidence on the role of remittances on healthcare expenditures by Mexican households. *Review of Economics of the Household*, 9(1), 69-98.

Barajas, A., Chami, R., Fullenkamp, C., Gapen, M. and P. J. Montiel (2009). Do workers' remittances promote economic growth?. *IMF Working Papers*, pp. 1-22.

Barro, R. J. (1991). Economic growth in a cross section of countries. *The quarterly journal of economics*, 106(2), 407-443.

Begg, D., Vernasca, G., Fischer, S. and R. Dornbusch (2014). *Economics*. 11th Edition, UK: McGraw-Hill Higher Education.

Benhabib, J. and M. M. Spiegel (1994). The role of human capital in economic development evidence from aggregate cross-country data. *Journal of Monetary economics*, 34(2), pp. 143-173.

Berry, H., Guillén, M. F. and N. Zhou (2010). An institutional approach to cross-national distance. *Journal of International Business Studies*, 41(9), pp. 1460-1480.

Blomström, M. and A. Kokko (1998). Foreign investment as a vehicle for international technology transfer. In: Navaretti G.B., Dasgupta P., Mäler KG., Siniscalco D. (eds) Creation and Transfer of Knowledge (pp. 279-311). Springer, Berlin, Heidelberg.

Blomström, M. and A. Kokko (1999). *How foreign investment affects host countries*. The World Bank.

Borensztein, E., De Gregorio, J. and J. W. Lee (1998). How does foreign direct investment affect

economic growth?. *Journal of international Economics*, 45(1), pp. 115-135.

Bourdet, Y. and H. Falck (2006). Emigrants' Remittances and Dutch Disease in Cape Verde. *International Economic Journal*, 20(3), pp. 267-284.

Bourdieu, P. (1986). The forms of capital. In: Richardson, J. G. Handbook of theory and research for the sociology of education, New York: Greenwood Press, pp. 241-258.

Brouthers, K. D. (2002). Institutional, cultural and transaction cost influences on entry mode choice and performance. *Journal of International Business Studies*, 33(2), pp. 203-221.

Buckley, P. J. (2002). Is the international business research agenda running out of steam?. *Journal of International Business Studies*, 33(2), pp. 365-373.

Buckley, P. J. and D. R. Lessard (2005). Regaining the edge for international business research. *Journal of International Business Studies*, 36(6), pp. 595-599.

Catrinescu, N., Leon-Ledesma, M., Piracha, M. and B. Quillin (2009). Remittances, Institutions, and Economic Growth. *World Development*, 37(1), pp. 81-92.

Caves, R. E. (1974). Multinational firms, competition, and productivity in host-country markets. *Economica*, 41(162), pp. 176-193.

Chami, R., Fullenkamp, C. and S. Jahjah (2005). Are Immigrant Remittance Flows a Source of Capital for Development?. IMF Staff Papers, 52(1), pp. 55-81.

Dunning, J. and S. M. Lundan (2008). *Multinational Enterprises and the Global Economy*. Cheltenham, UK: Edward Elgar Publishing. 2nd edition.

Eden, L. (2009). Letter from the editor-in-chief: FDI spillovers and linkages. *Journal of International Business Studies*, 40(7), pp. 1065-1069.

Fischer, S. (1993). The role of macroeconomic factors in growth. *Journal of Monetary Economics*, 32(3), pp. 485-512.

Gammeltoft, P. (2002). Remittances and Other Financial Flows to Developing Countries. *International Migration,* Special Issue 2, 40(5), pp. 181-212.

Giuliano, P. and M. Ruiz-Arranz (2009). Remittances, financial development, and growth. *Journal of*

Development Economics, 90(1), pp. 144-152.

Glytsos, N. (2002). The role of migrant remittances in development: Evidence from Mediterranean countries. *International Migration*, 40(1), pp. 1-25.

Guiso, L., Sapienza, P. and L. Zingales (2006). Does culture affect economic outcomes?. *Journal of Economic Perspectives*, 20(2), pp. 23-48.

Hanson, G. H. and C. Woodruff (2003). Emigration and Educational Attainment in Mexico. University of California: San Diego.

Hofstede, G. (1980). Culture's consequences: International differences in work-related values. Beverly Hills, CA: Sage Publications.

Hofstede, G. (1983). The cultural relativity of organizational practices and theories. *Journal of International Business Studies*, 14(2), pp. 75-89.

Hofstede Centre, (2018). Dimensions of *National Culture*. http://geert-hofstede.com/national-culture.html. Accessed June 2018.

House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W. and V. Gupta (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Thousand Oaks, CA: Sage Publications.

Husted, B. W. (1999). Wealth, culture, and corruption. *Journal of International Business Studies*, 30(2), pp. 339-359.

IMF, (1993). *Balance of Payments Manual*. Fifth Edition (BPM5), International Monetary Fund: Washington, DC.

Inglehart, R. and W. E. Baker (2000). Modernization, cultural change, and the persistence of traditional values. *American Sociological Review*, 65(1), pp. 19-51.

Javidan, M., House, R. J., Dorfman, P. W., Hanges, P. J. and M. S. De Luque (2006). Conceptualizing and measuring cultures and their consequences: a comparative review of GLOBE's and Hofstede's approaches. *Journal of International Business Studies*, 37(6), pp. 897-914.

Jongwanich, J. (2007). Workers' Remittances, Economic Growth and Poverty in Developing Asia and the Pacific Countries. UNESCAP Working Paper, United Nations Economic and Social Commission

for Asia and the Pacific, WP/07/01.

Kafouros, M., Wang, C., Piperopoulos, P. and M. Zhang (2015). Academic collaborations and firm innovation performance in China: The role of region-specific institutions. *Research Policy*, 44(3), 803-817.

Kafouros, M. and M. Aliyev (2016). Institutions and foreign subsidiary growth in transition economies: The role of intangible assets and capabilities. *Journal of Management Studies*, 53(4), pp. 580-607.

Kafouros, M., Wang, C., Mavroudi, E., Hong, J. and C. S. Katsikeas (2018). Geographic dispersion and co-location in global R&D portfolios: Consequences for firm performance. *Research Policy*, 47(7), 1243-1255.

Kaufmann, D., Kraay, A. and M. Mastruzzi (2010). The worldwide governance indicators: methodology and analytical issues. World Bank Policy Research Working Paper Series 5430.

Kay, J. (1993). *Foundations of corporate success: how business strategies add value*. Oxford University Press.

Keynes, J. M. (1936). *The General Theory of Employment, Interest and Money.* London: Macmillan.

King, R. and R. Levine (1993). Finance and Growth: Schumpeter Might be Right. *Quarterly Journal of Economics*, 108, pp. 717-737.

Knight, F. H. (1921). Risk, uncertainty and profit. Boston, MA: Hart, Schaffner & Marx; Houghton Mifflin Co.

Kogut, B. and H. Singh (1988). The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, 19(3), pp. 411-432.

Kotabe, M., Riddle, L., Sonderegger, P. and F. Taübe (2013). Diaspora investment and entrepreneurship: the role of people, their movements, and capital in the international economy. *Journal of International Management*, 19, pp. 3-5.

Krugman, P. R. (1994). Competitiveness: a dangerous obsession. *Foreign Affairs*, 73, pp. 28-44.

Le, T. (2009). Trade, remittances, institutions, and economic growth. *International Economic Journal*, 23(3), 391-408.

Leon-Ledesma, M. and M. Piracha (2004). International Migration and the Role of remittances in Eastern Europe. *International Migration*, 42(4), pp. 65-83.

Li, X. and X. Liu (2005). Foreign direct investment and economic growth: An increasing endogenous relationship. *World Development*, 33(3), pp. 393-407.

Liu, X., Lu, J., Filatotchev, I., Buck, T. and M. Wright (2010). Returnee entrepreneurs, knowledge spillovers and innovation in high-tech firms in emerging economies. *Journal of International Business Studies*, 41(7), pp. 1183-1197.

Lucas, R. (1988). On the Mechanics of Economic Development. *Journal of Monetary Economics*, 22, pp. 3-42.Lucas, R. and O. Stark (1985). Motivations to Remit: Evidence from Botswana. *Journal of Political Economy*, 93, pp. 901-918.

Mankiw, N. G., Romer, D. and D. N. Weil (1992), "A contribution to the empirics of economic growth", *The Quarterly Journal of Economics*, Vol. 107(2), pp. 407-437.

Martinez, C., Cummings, M. E. and P. M. Vaaler (2015). Economic informality and the venture funding impact of migrant remittances to developing countries. *Journal of Business Venturing*, 30(4), pp. 526-545.

McGrath, R. G., MacMillan, I. C. and S. Scheinberg (1992). Elitists, risk-takers, and rugged individualists? An exploratory analysis of cultural differences between entrepreneurs and non-entrepreneurs. *Journal of Business Venturing*, 7(2), pp. 115-135.

Meyer, K. E. and E. Sinani (2009). When and where does foreign direct investment generate positive spillovers? A meta-analysis. *Journal of International Business Studies*, 40(7), pp. 1075-1094.

Migration Policy Institute (MPI), (2016). Global Remittances Guide. Migration Policy Institute, http://www.migrationpolicy.org/programs/data-hub/global-remittances-guide. Accessed January 2016.

MoneyGram, (2014). MoneyGram International Presentation Materials and Statistics 2014. http://corporate.moneygram.com, Accessed August 2015.

Morris, M. H., Davis, D. L. and J. W. Allen (1994). Fostering corporate entrepreneurship: Cross-cultural

comparisons of the importance of individualism versus collectivism. *Journal of International Business Studies*, 25(1), pp. 65-89.

Nelson, R. R. and E. S. Phelps (1966). Investment in humans, technological diffusion, and economic growth. *The American Economic Review*, 56(1/2), pp. 69-75.

North, D. C. (1989). Institutions and economic growth: An historical introduction. *World development*, 17(9), 1319-1332.

North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.

Ozturk, I. (2007). Foreign Direct Investment - Growth Nexus: A Review of the Recent Literature. *International Journal of Applied Econometrics and Quantitative Studies*, 4(2), pp. 79-98.

Porter, M. E. (1990). *The Competitive Advantage of Nations*. New York: Free Press.

Rajan, R. and A. Subramanian (2005). What Undermines Aid's Impact on Growth?. IMF Working Paper 05/126.

Ratha, D. (2003). Workers' remittances: An important and stable source of external development finance. *World Bank Development Finance Report 2003*, World Bank: Washington, DC.

Riddle, L., Hrivnak, G. A. and T. M. Nielsen (2010). Transnational diaspora entrepreneurship in emerging markets: Bridging institutional divides. *Journal of International Management*, 16(4), 398-411.

Robbins, D. (1991). *The Work of Pierre Bourdieu: Recognizing Society*. Open University Press, Milton Keynes.

Romer, P. (1994). The Origins of Endogenous Growth. *Journal of Economic Perspectives*, 8(1), pp. 3-22.

Shane, S. (1993). Cultural influences on national rates of innovation. *Journal of Business Venturing*, 8(1), pp. 59-73.

Shane, S. (1995). Uncertainty avoidance and the preference for innovation championing roles. *Journal of International Business Studies*, 26(1), pp. 47-68.

Singh, A. (1997). Financial liberalisation, stockmarkets and economic development. *The Economic Journal*, 107(442), 771-782.

Stiglitz, J., Sen, A. and J. P. Fitoussi (2009). The measurement of economic performance and social progress revisited. Reflections and overview. Commission on the Measurement of Economic Performance and Social Progress, Paris. OFCE, No. 2009-33.

Tang, L. and P. E. Koveos (2008). A framework to update Hofstede's cultural value indices: economic dynamics and institutional stability. *Journal of International Business Studies*, 39(6), 1045-1063.

Taras, V., Rowney, J. and P. Steel (2009). Half a century of measuring culture: Review of approaches, challenges, and limitations based on the analysis of 121 instruments for quantifying culture. *Journal of International Management*, 15(4), 357-373.

Taylor, J. E. (1999). The New Economics of Labour Migration and the Role of Remittances in the Migration Process. *International Migration*, 37(1), pp. 63-88.

Thomas, D. E. and R. Grosse (2001). Country-of-origin determinants of foreign direct investment in an emerging market: the case of Mexico. *Journal of International Management*, 7(1), 59-79.

Thomas, A. S. and S. L. Mueller (2000). A case for comparative entrepreneurship: Assessing the relevance of culture. *Journal of International Business Studies*, 31(2), pp. 287-301.

Tung, R. L. and A. Verbeke (2010). Beyond Hofstede and GLOBE: Improving the quality of cross-cultural research. *Journal of International Business Studies*, 41(8), pp. 1259-1274.

Vaaler, P. M. (2011). Immigrant remittances and the venture investment environment of developing countries. *Journal of International Business Studies*, 42(9), pp. 1121-1149.

Vaaler, P. M. (2013). Diaspora concentration and the venture investment impact of remittances. *Journal of International Management*, 19(1), pp. 26-46.

Vaaler, P. M. (2018). Immigrant Remittances and the Venture Investment Environment of Developing Countries. *International Entrepreneurship: The Pursuit of Opportunities across National Borders*, 317-380.

Vaara, E., Sarala, R., Stahl, G. K. and I. Björkman (2012). The impact of organizational and national cultural differences on social conflict and knowledge transfer in international acquisitions. *Journal of Management Studies*, 49(1), pp. 1-27.

Wang, C., Deng, Z., Kafouros, M. I. and Y. Chen (2012). Reconceptualizing the spillover effects of foreign direct investment: A process-dependent approach. *International Business Review*, 21(3), 452-464.

World Bank, (2006). Global Economic Prospects: Economic Implications of Remittances and Migration. Washington, DC.

World Bank, (2018). The World Bank Data Catalog. https://datacatalog.worldbank.org/. Accessed: July 2018.

Yang, D. (2011). Migrant remittances. *Journal of Economic Perspectives*, *25*(3), pp. 129-152.

Yi, J., Chen, Y., Wang, C. and M. Kafouros (2015). Spillover effects of foreign direct investment: how do region-specific institutions matter?. *Management International Review*, 55(4), 539-561.