FOREIGN DIRECT INVESTMENT FROM EMERGING MARKETS TO AFRICA-THE HRM CONTEXT

Abstract

In this paper, we explore what determines the decisions of emerging market multinationals (MNCs) to invest in Africa and whether this is any different to their counterparts from mature markets, focusing specifically on the HRM context. More specifically, we explore the effect of potential host country wages, local capabilities and the relative rights of owners versus workers on FDI decisions, as well as other relevant factors such as mineral resources and corruption. We found that emerging market MNCs were not deterred by relatively weak property owner rights (as indeed, was also the case for their counterparts from mature markets); hence, any weakening of countervailing worker rights is unlikely to unlock significant new FDI. However, emerging market MNCs were more likely to invest in low wage economies, and did not appear to be concerned by local skills gaps; the latter would reflect the relative de facto ease with which even partially skilled expatriate labor can be imported into many African countries. At the same time, a reliance on low wage, unskilled labor, coupled with the extensive usage of expatriates brings with it a wide range of challenges for the HR manager, which a firm committed to cost-cutting may lack the capabilities to resolve.

Keywords: FDI, emerging market, Africa, HRM context
A key debate within HRM has been the relative impact of context on HR practice and organizational competitiveness (Beardwell & Clark, 2007; Edwards & Rees, 2006; Ferner & Quintanilla, 1998; Maurice et al., 1986; Pfeffer & Salancik, 1978; Trompenaars, 1985). Early literature on international HRM suggested that when moving into new markets MNCs simply deploy predetermined approaches to people management, often assumed to be around a particular best practices model. However, there has been a growing recognition that national differences in HRM remain persistently different, and that MNCs have, in many cases, to fit in with local realities (Brewster & Mayrhofer, 2012). There has been growing interest in the HRM literature in the rise of outward FDI by emerging market MNCs, and its implications for people management (Khavul et al., 2010; Zhu et al., 2008). Key questions that emerge include not only the transferability of country of origin HR models, but also the extent to which such firms cope in moving into environment with different – and, in some cases, stronger - regulation of labor in their country of origin (Khavul et al., 2010; Zhu et al., 2008). An influential body of theoretical and applied literature suggests that strong rights for employees may deter FDI (Cooney et al., 2010). This paper compares FDI into tropical Africa from emerging markets with that from mature ones. It explores the relative impact of human capabilities and owner rights (vs. the relative countervailing power of employees and other stakeholders) on FDI choices. After presenting our findings, we will draw out the conclusions for policy and HR practice.

On the one hand, Africa has been widely condemned both in sections of the popular media and the academic literature as a particularly poor environment to do business, reflecting not only political instability, but also inappropriate regulation and weak skills bases (Eifert et al., 2005; Ikejiaju, 2010). On the other hand, after decades of poor economic performance, many African economies have enjoyed a return to robust growth. Cotermious with this has been an increased interest by MNCs investing in the continent. Of particularly significance has been the rise of foreign direct investment (FDI) into tropical Africa by MNCs from emerging markets, most notably China, Brazil, India and South Africa. Recent statistics suggest that China (US$107 billion), India (US$32 billion) and Brazil (US$ 20 billion) are amongst the top trading partners with the African continent (Ncube et al., 2011). The latest figures indicate that China has become the biggest investor in Africa with a total investment of US$9.33 billion in less than a decade (UNCTAD, 2010). Table I shows that FDI from emerging countries to Africa have been also growing at much faster pace than the Western counterparts (see also Frynas & Paulo, 2006). FDI may be defined as the acquisition by a foreign firm of “a lasting interest in, or effective management control over, an enterprise in another country and is distinguished from portfolio flows which consist of equity flows and bond issues purchased by foreign investors” (Addison et

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1 Unfortunately we had to exclude South Africa from our empirical analysis due to lack of information on the FDI inflows to South African from the UNCTAD World Investment Directory. The FDI data is only available for year 1994 when the first democratic election was held.
It is one of the two dimensions of MNC investment, the other being the transfer of resources between two already owned sections of the firm, with the former having assumed particular importance in recent years (Blonigen, 2005). A limitation of this research is that it focuses on the extent to which the features of the broader people management context (wages, labor legislation, and education), and other factors (e.g., mineral resources) may impact on FDI choices. As such it neglects the impact of informal conventions on HR practice, and the extent to which informal embedded ways of doing things may encourage or discourage FDI.

**FDI Flows, Context and People**

But, what determines the choice of MNCs as to whether to invest in Africa, and indeed, where to invest in the continent? And, are emerging market MNCs any different from their counterparts from the developed world? Do the former take a different view to the relative importance of local education and skills capabilities, and the inherent rights employees enjoying in different contexts? And, what is the role of the HRM context – and more specifically, employee rights under the law, wages rates, and education – in determining FDI? Do people really matter in determining investment decisions? And, what are the implications of this for people management?

**Property and Employee Rights**

A dominant view within the neo-liberal policy community and the economics literature suggests that the institutional basis of prosperity rests on private property rights, and that anything that erodes it - such as greater countervailing power by workers - is inimical to firms (La Porta et al., 2008; North, 1990). Should property rights be strong, rational actors will make optimal investment decisions, resulting in growth. Countries with strong property rights – and, necessarily, weak countervailing rights by employees – are likely to enjoy particularly strong
growth, and represent optimal FDI destinations (Botero et al., 2004; Javorcik & Spatareanu, 2005). La Porta et al. (2008) assert that the foundation of property rights is legal tradition. Common law countries are likely to be associated with better protection of private property than civil law countries. In later work, they argue that owner rights and employee rights under the law in practice represent a zero-sum game: any increase in the latter will be to the detriment of the former (Botero et al., 2004; Goergen et al., 2009). This viewpoint is founded on the assumption that the paramount institutional feature is property rights, and other regulatory features may dilute or strengthen this (La Porta et al., 2008; North, 1990). In other words, this approach is a hierarchical one: what really matters is property rights, a crucial test of regulatory feature being whether or not they are strengthened or weakened (Goergen et al., 2009; La Porta et al., 2008). Worker rights will necessarily weaken the profit maximization task of management to the detriment of shareholders (Botero et al., 2004; Goergen et al., 2009). However, they also argue that worker rights will ultimately be to their own detriment, as firms are less likely to invest, and economic growth will be poorer, resulting in reduced employment and opportunities for individual advance. This approach has informed the policy prescriptions of both the IMF and the World Bank. In the case of the latter, the Doing Business indices draw directly on La Porta et al.’s work on the relationship between legal origin, owner and worker rights: with stronger worker and weaker owner rights are condemned as poor environments in which to do business (Cooney et al., 2011). In turn, the former has increasingly incorporated demands for labor market deregulation as the price for accessing loans, making direct reference to the Doing Business Reports and the theoretical assumptions underlying them (Cooney et al., 2011). This is despite the fact that whilst, of course, it is possible to change legislation, legal tradition is not easily changed, with the relative strength of owners remaining intrinsically stronger in common law systems (La Porta et al., 2008).
Employee Rights, FDI and HR Practice: Current International HRM Perspectives

An emerging body of recent literature on international HRM takes an opposing view (see Brewster and Mayrhofer, 2012). It has been argued that formal private property rights may have very limited impact on the actual regulation of labor, reflecting the fact that many countries do not have homogenous legal systems and variations in enforcement capabilities (see Cooney et al., 2011; Wood & Brewster, 2007). Whilst firms may be challenged in coping with differing or changing legal norms, they may retain the autonomy to adjust practices in other areas not so closely regulated (Zhu et al., 2008). Indeed, it could be argued that firms may compensate for labor regulation through the usage of compensatory HR practices (see also Boselie et al., 2012; Brewster & Mayrhofer, 2012). Hence, this would challenge the assumption of the property rights orientated literature that labor regulation is detrimental to owners/shareholders: it is possible for both workers and owners to benefit from specific regulatory regimes through the adoption of higher value added HR policies. Again, it can be argued that MNCs may adjust policies to cope with, compensate for, and gain complementarities from, different regulatory and institutional regimes (Brewster & Mayrhofer, 2012).

Khavul et al. (2010) argue that internationalization by firms from emerging markets may provide an opportunity to learn about and adopt new HR practices. In other words, entering new markets is not only about constraining and enabling institutional features, but also opportunities. Hence, rather than simply imposing costs in terms of coping with unfamiliar regulations and norms, internationalization may give firms new learning opportunities for people management (Khavul et al., 2010). It also could be argued that FDI is more likely to be encouraged by an educated workforce reducing the training and development burden on firms (Dibben et al., 2011). Again, an environment that encourages investment in people may encourage firms to move away from low cost to higher value added production paradigms (Dibben et al., 2011; Parcon, 2008).
Deregulation of markets and a strengthening of owner rights may have little or converse effects, as this may encourage excessive short-termism, unleash cut-throat competition and discourage investment in people and physical infrastructure, ultimately making countries less competitive, rather than more (Klerck, 2007; Wood & Brewster, 2007). The rise of MNCs from emerging markets has added a new dimension to this debate (see Zhu et al., 2008). It has been argued that they may be less concerned with questions of regulation abroad and variations in human capabilities and more concerned with the acquisition of strategic assets (see De Cieri et al., 2007; Luo & Tung, 2007), more specifically mineral and agricultural resources. This would suggest that HR contextual issues may be immaterial to FDI choices, or that the benefits in terms of accessing resources may outweigh any of the costs of adjusting people management policies to fit new locales.

**The Determinants of FDI in Africa**

Country level studies suggest that issues impacting on HR practice, such as labor costs and industrial relations regulations (Cooke, 1997; Cooke & Noble, 1998; Cooke, 2001; Onyeiwu & Shrestha, 2004), infrastructure (Addison et al., 2006; Onyeiwu & Shestha, 2004) and natural resources (Onyeiwu & Shrestha, 2004), may play a significant role in the FDI decisions. FDI trends commonly indicate that MNCs often invest in a particular country or region virtually en bloc, notwithstanding idiosyncratic variations in individual investment decisions (Sethi et al., 2003). Hoskisson et al. (2000) argue that, given the statist policy directions which characterized many African countries following on independence, the institutional foundations of property rights are of particular importance. Harvey (2002) argues that arbitrary governance and poor property rights in Africa has deterred MNC investment (see also Brigaldino, 1996). Citing the results of a survey of MNCs with interests in Africa, Addison et al. (2006) argue that weak and
inappropriate legal frameworks are indeed major deterrents of FDI. Proponents of liberalization have also argued that adherence to World Trade Organization rules is likely to encourage FDI (Helleiner, 2002). It has further been argued that poorly-designed (and overly burdensome) tax regimes may have deterred FDI in Africa (Addison et al., 2006), although there is considerable empirical evidence to suggest that any effects are very limited (Hartman, 1984, 1985). Asiedu (2009) argues that MNCs tend to avoid or under-invest in African countries with weak private property rights (see also Onyeiwu & Shrestha, 2004).

Whilst much of the literature on FDI treats MNCs as a monolithic bloc, there is a growing body of literature that suggests that MNCs from emerging markets have adopted a fundamentally different approach in Africa (see McCormick, 2008). More specifically, as noted above, there has been very much less concern with institutions and political processes and with access to markets and, especially, potential resource availabilities (Luo & Tung, 2007). However, as Asiedu (2006) notes, there has been relatively little work on the determinants of FDI flows to Africa. Yet, Brambila-Macias and Massa (2010) report a significant rise in FDI to Africa in the 2000s. They argue that this increase reflects not only increased demand for raw material by fast growing emerging markets, but also better regulation founded on firmer property rights.

**FDI and Corruption**

Several studies argue that MNCs from developing countries enjoy some competitive advantages over the Western counterparts in the African markets. These advantages are mainly related to the institutional environment in both the home and the host countries. Habib and Zurawicki (2002) show that great absolute differences in corruption have a negative impact on bilateral FDI. Their results suggest that corruption tends to create difficulties for and pressure on Western MNCs to withdraw from countries with weak institutions (Desai et al., 2004). It has also been argued that as MNCs from developing countries have survived similar bureaucratic disadvantages in their
home countries, they are more capable of dealing with corruption and opaque political constraints (Khanna & Palepu, 2006)\(^2\). However, it can be argued that this is a false dichotomy. There have been many recorded instances of Western MNCs operating in highly corrupt contexts, and indeed in openly engaging in corrupt practices, whilst predatory local elites can make operating difficult for foreign investors regardless of country of origin. And, corruption is a two-edged sword: whilst imparting greater unpredictability to exchange relations, corruption may allow firms to buy their way out of employment regulations, and, in extreme cases, make use of agents of the state to discipline recalcitrant workers.

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**Wages, Markets, Infrastructure and Human Capabilities**

On the one hand, it has been argued that excessively high wage rates may make countries uncompetitive (Parrinello, 2008). On the other hand, low average wages mean that local consumer markets remain underdeveloped, resulting in persistent crises of domestic demand. Hence, MNCs may be deterred from investing in countries not so much by high wages, but when wages are so low that local demand is likely to be weak. Indeed, Onyeiwu and Shrestha (2004) concede that the relative development of local markets is likely to be a significant determinant of FDI (see also Asiedu, 2006). It could be argued that, given greater access to relatively low labor cost at home, emerging market MNCs are more likely to base their investment decisions on relative market size, compared to mature market MNCs who may be more sensitive to wage costs (Farrell et al., 2006).

\(^2\) In terms of human development, China and India are ranked, 85 and 127, respectively, well below the industrialized countries (UNDP, 2005).
Citing survey evidence, Addison et al. (2006) argue that human capital is likely to be an important draw card for MNCs. Conversely, low levels of education and basic skills are likely to deter FDI. Kinda (2010) argues that the lack of workers with basic skills may be a particular severe handicap for outward orientated firms, seeking to engage with global markets. This is a potentially serious issue, given that structural adjustment programs (SAPs) have often led to serious cutbacks in basic education (Carnoy, 1995). A related issue may be limitations in physical infrastructure (Kinda, 2010). Interestingly, proponents of liberalization have been quick to point out the shortcomings of many African countries in this regard, whilst at the same time calling for cutbacks in public spending. In practice, the evidence is somewhat mixed (Addison et al., 2006; Onyeiwu & Shestha, 2004).

**FDI, Natural Resources and Real Exchange Rates**

Indeed, much of the increase in FDI in Africa has been concentrated on the oil and gas industry, and towards West African petrostates (Addison et al., 2006; Onyeiwu & Shrestha, 2004). In other words, much MNC investments in Africa could be about securing access to primary commodities, with human resource endowments or labor legislation being largely irrelevant. Resource curse theory suggests that countries with rich mineral endowments may suffer from the “Resource Curse” or “Dutch Disease” effect. More specifically, the boom in commodity prices enhances the national wealth and boosts domestic demand for both traded and non-traded goods. Since the prices of traded goods are determined internationally, the enhanced domestic consumption spending increases the prices of non-traded goods relative to those of traded ones, causing a real appreciation in the domestic currency. A stronger domestic currency undermines the competitiveness of the traded goods sector (Corden, 1994; Kutan & Wyzan, 2005; Lartey, 2007). Thus, the presence of the “Dutch Disease” may have a negative impact on Africa’s
external competitiveness and its ability to broaden the domestic base of knowledge and skills (Ross, 1999).

**Emerging Market Multinationals and Africa**

Since the last few years the trade and FDI flow from developing countries to the continent of Africa has emerged as a new phenomenon in the international economy. Frynas and Paulo (2006) suggest that FDI from emerging countries to Africa have been growing at much faster pace than that of the Western counterparts (see also Table I). Whilst political and social factors may play some role in determining the FDI flow from developing countries to Africa, many argue that the main reason for China, India and Brazil to increase their FDI to Africa is to secure access to primary commodities in order to support their fast growing economies (Klare & Volman, 2006; Mawdsley & McCann, 2010; Singh, 2007; Taylor, 2006). This argument is supported by the heavy presence of MNCs investments in Africa in the extraction sectors (i.e., oil, gas and mining) and infrastructures, which are usually tied to the investments made in the extraction sectors.

Despite some similarities in their institutional environment, MNCs from developing countries have adopted different FDI outflow policies and strategies. Gelb (2009) argues that one of the main concerns with China’s role has been its focus on seeking export markets. One of the structural problems of facing many economies in both the developing and developed world is great imbalances in trade. Chinese authorities appear to value domestic stability more than problems in the global economy (Gelb, 2009). In 2009, 32% of GDP was invested in plant and machinery, which has to be recouped through exports (Gelb, 2009); this has led to cutthroat competition, with competitors in other parts of the world battling to compete, no matter how cheap their labor or how effectively it is utilized. In addition, there have been growing concerns with the conspicuous flouting of local regulations by many Chinese firms; this has encompassed and even, in some instances, murder of recalcitrant local workers, complete disregard for labor
and health and safety legislation, and sub-standard infrastructural projects which only gain approval through bribery (Economist, 2011). Although the Chinese government has protested that it cannot micro-manage all Chinese firms, the lack of attention to these concerns may jeopardize Chinese business in the continent. Chinese Africa deals tend to centre on opaque counter-trade and barter arrangements (Smith, 2010). This has led to an increasing political backlash, ranging from protests by civil society groupings through to national political debates, above all centering on issues of labor standards, and the import of Chinese labor. Zambian president Sata was elected largely on the basis of his attacks on the usage of Chinese expatriate workers and the poor treatment of African workers by Chinese; this was despite Chinese threats to severe diplomatic ties should he win the election (Africa Confidential, 2010). However, once in office, he soon reversed his stance, reflecting the continued capability of China to co-opt local elites, regardless of progress on labor standards and working conditions (Tumfweko, 2011).

Indian outward FDI has been led mainly by market-seeking privately owned MNCs (Gelb, 2005; McCann, 2010). Indian MNCs have tended to adopt a lower profile than their Chinese counterparts in Africa, making greater usage of local labor for unskilled work. Hence, they have managed to escape much of the controversy surrounding the HR policies of their Chinese counterparts. In addition, a significant proportion of Indian FDI has centered on small businesses, often linked to the Indian diaspora. Meanwhile, Brazil has used its historical links with lusophone Africa to promote its FDI in the continent. The African continent is currently Brazil’s second (after South America) most important partners in the South-South relations sphere. At the same time, much Brazilian FDI has been concentrated on Angola; both Brazil and Angola are Creole societies, with Brazilian expatriates being closely integrated into Angolan culture and society (Ferreira, 2009). Again, this has made the activities of Brazilian firms
somewhat less controversial than the Chinese, as there is no evidence that Brazilian firms in Angola adopt HR practices that are significantly different to their local counterparts.

**Statement of Hypotheses**

How important are HR issues and the HR environment in determining FDI choices? It can be argued that the primary determinant of FDI is the relative strength of private property rights and, by implication, relative weakness of the rights of employees under the law (Berger & Danninger, 2005; Javorcik & Spatareanu, 2005; Lehmann & Muravyev, 2009). La Porta et al. (2008) suggest that this, in turn, is determined by legal origin. As firms have a freer hand to deploy labor - and, if need be, dispose of labor, in common law countries, this would make them a more attractive target for FDI.

*Hypothesis 1: Regardless of country of origin, MNCs will be more likely to invest in common than civil law countries in Africa, owing to stronger owner and weaker worker rights in the former.*

Alternatively, it could be argued that MNCs from emerging markets are less likely to be troubled by the rights of workers against owners under the law (see Asiedu, 2009), and more with a relative ability to access mineral resources (see McCormick, 2008).

*Hypothesis 1a: FDI from emerging markets is likely to be insensitive to differences in worker rights versus owner rights, as defined by legal origin.*

Home and host country corruption may also affect the FDI flows (Habib & Zurawicki, 2002). While corruption and dysfunctional institutions tend to create difficulties and pressure for Western MNCs (Desai et al., 2004), MNCs from developing countries, which have survived similar bureaucratic disadvantages in their home countries, might be more capable of dealing with corruption and opaque political constraints, and may use the opportunity corruption affords
to opt out of employment and other regulations perceived to be burdensome (Khanna & Palepu, 2006).

*Hypothesis 2: High levels of corruption may deter FDI by MNCs from mature markets, and encourage it by MNCs from emerging markets.*

As noted above, the relative costs of labor may be both a deterrent and a draw card. It has often been argued that a major draw card of foreign firms investing in the developing world is access to cheap labor supplies, rather than access to specific skill sets: it enables firms to cut costs through adopting low wage low investment approaches to people management (see Cooke, 2001). However, given the availability of cheap labor at home, it could be argued that access to cheap labor is not likely to be a factor governing the FDI decisions of emerging market MNCs (see Parrinello, 2008).

*Hypothesis 3: Low wage rates in target markets, may encourage FDI by MNCs from mature markets; however, it is unlikely to impact on the FDI choices of emerging market MNCs.*

It can be argued that human capabilities and, more specifically, basic levels of education and skills may mould FDI choices. In the case of mature market MNCs, low levels of basic education and skills may make it difficult to adopt basic HR practices broadly compatible with existing organizational approaches (see Whitley, 2010). Given their greater focus on primary commodities (and, in the case of Chinese MNCs, demonstrated capability in importing labor), MNCs from emerging markets will, however, be less sensitive to poor educational rates.

*Hypothesis 4: FDI by mature market MNCs will be lower in countries with less educated workforces. However, there will be little effect in the case of emerging market MNCs.*

**Data and Summary Statistics**

Our analysis focuses on the FDI flows from mature and developing markets to Africa. To achieve a common sample with available FDI inflows, we require data to be available for the period of
The analysis in the study covers 30 African countries, presented in Table II by legal origins. We present the variables used in this study and sources of data in Table III. The measure for FDI is presented, followed by the variables that have been hypothesized to be determinants of FDI. FDI is the inflows of Foreign Direct Investment, expressed in millions US$. GNI per capita is gross national income divided by midyear population, at constant 2000 US$. Ores, metals and fuel exports are expressed as a percentage of merchandise exports. The cost of labor is captured by wages and salaries which consist of all annual payments in cash before taxes and employees contributions to social security and pension funds. Data are shown for central government only, but are used as a proxy for country’s overall wage level.\(^4\) \(^5\) Manufacturing value added is the net output of the manufacturing industry after adding up all outputs and subtracting intermediate inputs, expressed in current US$. Total tax rate as a percentage of commercial profits measures the amount of taxes and mandatory contributions payable by businesses after accounting for allowable deductions and exemptions as a share of commercial profits. Internet users are people with access to the worldwide network, used as a proxy for education level. Control of corruption index captures the perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, ranging from -2.5 to 2.5, with higher values corresponding to better governance. The official exchange rate is an annual average based on monthly averages (local currency units relative to U.S. dollars). To control for the “Dutch Disease” effect, we calculate the real exchange rate, defined as the nominal exchange rate

\(^3\) Note that complete data on FDI and its determinants is only available for the period 2003-2005. Using a panel data analysis overcomes the sampling issues associated with the short study horizon.

\(^4\) Unfortunately wage data from other sources, including UNCTAD World Investment Directory Africa 2008 and Laborsta, is only available for a few countries in our sample.

\(^5\) We are aware of the limitations of using data for central government as a proxy given that governments often use wage policy as a means of promoting best practice, signalling government commitment to particular policy agendas and/or encouraging/rewarding client groupings. Nonetheless, in most national contexts, this is unlikely to be completely divorced from social reality and general economic conditions (e.g., Bennell, 1982; Aminu, 2011; Mazumdar & Mazaheri, 2000).
multiply by the ratio between US consumer price index and the local consumer price index. Information on FDI flows is obtained from UNCTAD World Investment Dictionary Africa 2008, data on control of corruption index is downloaded from World Wide Governance Indicators, and the remaining data is extracted from World Development Indicators.

Table IV provides brief summary statistics of the dependent and the explanatory variables used in our empirical analysis. The average (median) FDI inflows from the world, mature markets, emerging markets and China to Africa is US$ 364.92 (74.43) million, US$ 311.76 (46.38) million, US$ 66.41 (6.45) million and US$ 7.26 (1.38) million, respectively. The average (median) GNI per capita associated with the 30 African countries, included in our sample, is US$ 1343.47 (415.93). On average, ores, metals and fuel exports forms 32.24 percent of the overall merchandise exports of the African countries (the median is 12.33 percent). The aggregate annual salaries paid by our sample of African countries over the 2003-2005 averages to US$ 469,501.67 million (the median is 62,500). The average (median) value of the manufacturing-value added is US$ 1632.98 (453.29) million. The mean (median) values of taxes, Internet use, corruption levels and real exchange rate is 66.61 (6.45) percent, 31.37 (10.58) per 1000 people, -0.67 (-0.8) and 457.6 (72.49), respectively.

Methodology

Our estimation strategy is to estimate a panel regression of the form

\[ FDI_{it} = \alpha + \beta_0 Com_{it} + \beta_1 Nat_{it} + \beta_2 W_{it} + \beta_3 MVA_{it} + \beta_4 Tax_{it} + \beta_5 Int_{it} + \beta_6 Cor_{it} + \beta_7 RE_{it} + \epsilon_{it} \] (1)

Panel data approach is more powerful than the traditional cross-sectional analysis as it incorporates the temporal dimension of both dependent and explanatory variables and increases the statistical power of the tests by increasing the number of observations (Baltagi, 2005). In our case, the panel approach increases the number of observations from 30 to up to 90 (i.e., 30 cross-sectional observation multiplied by 3 years).
where \( FDI_{it} \) is the FDI flow to a country \( i \) in year \( t \) divided by country \( i \)’s gross national income per capita in year \( t \) \((GNI_{it})\); \( Com_{it} \) is a dummy variable with a value of unity for countries with common law legal origin and zero otherwise; \( Nat_{it} \) refers to country \( i \)’s ores, metals and fuel exports as a percentage of manufacturing exporting in year \( t \); \( W_{it} \) is the natural logarithm of wage level in a country \( i \) in year \( t \); \( MVA_{it} \) is the manufacturing value added, measured as the net output of the manufacturing sector after adding all output and subtracting all intermediate input, of a country \( i \) in year \( t \); \( Tax_{it} \) is the total tax rate as a percentage of commercial profits of country \( i \) in year \( t \); \( Int_{it} \) is a proxy for education and measured as the country \( i \)’s Internet users in 1,000 people in year \( i \); \( Cor_{it} \) is the control of corruption index capturing the yearly perceptions of the extent to which public power is exercised for private gain in a country \( i \); \( RE_{it} \) is country \( i \)’s real exchange rate; and \( \varepsilon_{it} \) is the error term. To test all the hypotheses, we estimate Model (1) using FDI from the world, FDI from mature markets, FDI from emerging markets and FDI from China as the dependent variable, respectively.

**Findings**

We begin our analysis by examining the determinants of the FDI flows to 30 African countries using FDI data from around the word. The results from the panel regression analysis are reported in Table V. The significantly negative coefficients on wages and taxes indicate that foreign MNCs, at least partially, invest in Africa to save costs (i.e., access to cheap labor matters). The significantly positive association between FDI flows and manufacturing value added also implies that foreign MNCs prefer to invest in countries with better developed domestic markets. Whitley (2010) argues that, in such cases, firms are more likely to put up with contextual features that

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7 Whilst several studies (e.g., Fuchs & Woessman, 2004; Jackson et al., 2006; OECD, 2001;), find a positive association between Internet use and education levels in several countries, including the US and the UK, there is no guarantee that these results remain valid in the context of African countries. To overcome this problem, we also use literacy rates and the mean years of schooling as alternative education measures. However, since data on literacy and schooling is only available for the year 2005, these variables are used merely for robustness purposes (see the next section for more details).
impose particular ways of managing people different from those encountered in the country of origin. More specifically, this finding suggests that foreign MNCs are likely to base their investment decisions on the level of support expected from local firms and the quality of the local infrastructure, such as the presence of appropriate distribution channels and exports facilities. The focus on the manufacturing value added in the FDI decisions may also indicate that foreign MNCs are not only targeting the local markets, but they may also be interested in exporting their African products to other markets. Interestingly, the coefficient on Internet users is negative and significant at 1 percent level suggesting that foreign MNCs are more likely to be located in countries with low levels of education. To check the robustness of our findings, we repeat our analysis using literacy rate and mean years of school as alternative education measures. Consistent with the view that MNCs target countries with low basic education skills, the coefficients on both variables are negative and statistically significant\(^8\). On the one hand, firms in such context, can, of course, overcome educational shortcomings through sustained investment in people. On the other hand, as FDI choices are wage sensitive, this would suggest that many firms may be reluctant to make such an investment. This result may also imply that FDI in Africa is labor- rather than technology-intensive. Again, this would suggest that relative autonomy over the utilization of labor as a draw card. The coefficient on natural resources exports is also not significantly different from zero, suggesting that natural resources is not the main attraction of foreign MNCs to Africa. The statistically insignificant coefficient on the real foreign exchange rate also implies that the “Dutch Disease” effect is not strong enough to deter MNCs from investing in Africa. The absence of statistical significant on Control of Corruption index also implies that corruption is not a determinant of the FDI flow to Africa. Overall, the results indicate

\(^8\) Note that data on literacy rates and mean years of schooling is available only for the year 2005. More details on the regressions involving alternative education measures are available upon request.
access to cheap labor, and local industry and infrastructure support and savings from taxes as more important than education, corruption and property right protection in determining the FDI flow to Africa. In other words, in HR terms, firms appear attracted by cheap labor, and appear to be relatively unconcerned as to local education levels: this would suggest that any HR paradigm diffused by such firms is unlikely to be high value added.

[Insert Table V about here]

To test for the validity of the different hypotheses, we analyze the FDI flows from mature and emerging markets separately. The results are reported in Table VI. Panel A of Table VI presents the panel regression results for mature markets. It shows that manufacturing value added and taxes are the main determinants of the FDI flows from mature markets to Africa. A significantly negative coefficient on Taxes indicates that developed MNCs are attracted to countries with low tax regime. A positive association between FDI flows and manufacturing value added implies that support from local industry and local infrastructure is an important determinant of mature market MNCs’ investments in Africa. In other words, mature market MNCs are more likely to invest in markets that contribute to their local and international competitiveness, and as suggested by Whitley (2010), where they can build compatibilities with production regimes encountered in country of origin. The significant negative coefficient on Internet users suggests that mature market target countries with low education levels. These results are robust to alternative education measures, such as literacy rate and mean years of schooling. Given the limited ability of this type of workforce to acquire advanced skills, the presence of the mature market MNCs may make only a limited contribution to developing local human capital. Finally, the panel regression results suggest that the common law dummy, natural

9 Note that the objective of this study is to investigate the impact country level factors, rather than individual MNC’s strategic objectives, on the FDI flow.
10 Details are available upon request.
resources exports, corruption, wages and real exchange rate, do not affect the FDI decision of mature market MNCs. In other words, mature market MNCs are not deterred by relative owner vis-a-vis worker rights and wage rates. The latter may reflect the fact that across Africa wages are likely to be much lower than in the country of origin, but also that such firms are not necessarily attracted to Africa on account of the greater opportunities for labor repression.

Panel B of Table VI reports the results on the determinants of the FDI flow from emerging market MNCs to Africa. Whilst corruption and protection of private property rights do not seem to deter developed MNCs from investing in Africa, the significant negative coefficients for Common law suggest that developing MNCs compete better in civil law countries. Hypothesis 1 is hence not supported; rather, as suggested by Hypothesis 1a, relatively weak owner - and, hence, stronger worker rights - do not appear to deter FDI choices; the converse appears to be the case. In part, this might reflect the similarity of legal institutions in many cases: China and Brazil are of civil law legal origin, although most (but not all) of India operates under common law. However, the apparent lack of concern with the relative power of workers vis-a-vis owners under the law could also reflect experiences of operating in the country of origin. In Brazil, India and China, the enforcement of worker rights under the law is variable, and, at times, de facto property rights matter more than de jure ones.

Interestingly, there is a significant negative coefficient in terms of the control of corruption index, perhaps reflecting weaker mechanisms to hold them to account in their country of origin. Notably, this could represent weaker civil society in countries such as China, meaning that MNCs operating abroad are less likely to be subject to scrutiny; corruption may afford opportunities to buy one’s way out of awkward regulations. This may particularly be the case in areas such as the widespread usage of expatriate labor and any strictures on working time, the
specific utilization of vulnerable categories of labor, health and safety, and other labor regulations (see Smith, 2010; Economist, 2011). Since high levels of corruption in the host country if anything attracts FDI from emerging market MNCs, but do not deter FDI from mature market MNCs Hypothesis 2 is not supported. In the whole, corruption does not appear to be a major deterrent of FDI. Indeed, the counter-finding for emerging market MNCs suggest that the ability to buy one’s may out of awkward strictures (potentially encompassing labor standards) may be a draw card.

In line with their developed counterparts, the significantly negative coefficient on wages (as well as taxes) suggests that emerging market MNCs are sensitive to staffing costs. Hence, Hypothesis 3 is not supported. The absence of the statistical significance on the manufacturing value added suggests that developing MNCs target less competitive markets to gain local market share and they are less likely to use Africa as an export base. In turn, this might indicate a lesser interest in the potential of existing human and material resources to secure a competitive advantage, and a greater one in overcoming tariff barriers. It is evident that whatever the rationales of FDI in other parts of the world, in Africa, MNCs have little interest in any competitive advantage flowing from local production regimes. The coefficients on Internet users is also negative and significant, implying that emerging market MNCs invest in countries with low level of basic education skills and/or infrastructural shortfalls. These results are again robust to alternative education measures, namely literacy rates and mean years of schooling. Thus, the finding that both emerging and developed market MNCs target countries with low levels of education is not consistent with the prediction of Hypothesis 4. The finding that natural resources exports variable is not significantly different from zero is not consistent with the view that as a

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11 More details on the regressions involving literacy rates and mean years of schooling as education measures are available upon request.
whole, emerging market MNCs are particularly attracted by the continent’s mineral resources, with labor issues being secondary. Finally, the absence of statistical significance on the real exchange rate variable is consistent with the prediction that countries with rich mineral endowments are likely to suffer from the “Resource Curse”/”Dutch Disease” effect.

We recognize that this general picture may mask important variations, and that a lack of a general relationship does not mean that all investor countries are characterized by similar behavior. Given the importance of Chinese investment in Africa, we examine the determinants of Chinese FDI flows to Africa separately. The results are reported in Panel C of Table VI. The significantly positive coefficient on natural resources exports is consistent with the literature that Chinese MNCs invest in Africa to secure access to primary commodities in order to support their fast growing economies, contradicting the view that, as a general phenomenon, the agenda of emerging market MNCs is more diverse (see, for example, Klare & Volman, 2006; Singh, 2007; Mawdsley & McCann, 2010; Taylor, 2006). Given their focus on the natural resources, it is not supervising that manufacturing value added is not one of the determinants of the Chinese FDI decisions in Africa. Similar to the case of developing MNCs, the significant negative coefficient on the corruption variable implies that Chinese MNCs are better able to compete in markets with high levels of corruption. The significantly negative coefficient on the wages also indicates that Chinese FDI is concentrated in African countries with cheap labor, with skills gaps being readily plugged by labor imports from China. In other words, there is a focus on the substitution of labor from, rather than the development of labor in the country of domicile. Other variables in the panel regression of the Chinese FDI flows to Africa, namely taxes, common law - and hence, type of formal regulation of property and worker rights - and real exchange rate, are not statistically significant.
Overall, our results suggest that the determinants of the FDI flows to Africa depend largely on the home country characteristics of the foreign MNCs. Cost savings is also one of the main drivers of FDI flows from emerging markets to Africa. Emerging market MNCs also seem to be more interested in the local rather than global market share. In other words, entering a particular market is more to do with overcoming tariff barriers, than gaining access to specific human and infrastructural resources as a basis for international competitiveness. This view is supported by the fact that emerging market MNCs concentrate in less competitive markets with high levels of corruption. In addition to cost savings and corruption levels, our results indicate that acquiring primary commodities is one of the main drivers of the Chinese FDI in Africa. This is matched by an approach to human resources that centers on the substitutability rather than the development of workers. The ability to resource and deploy even unskilled labor from the country of origin into many African countries, and to circumnavigate any legal strictures in this regard with apparent impunity, represents a departure from previous practices by MNCs in the continent, which have focused on the usage of expatriates primarily into highly skilled and managerial positions. Finally, the heavy presence of foreign MNCs in countries with low levels of education may reflect the South-South relations between emerging market MNCs and Africa. In other words, the negative association between FDI flows and levels of education would imply that emerging market MNCs are more comfortable with people management approaches centering on the usage of unskilled labor, the abovementioned point about labor substitutability in the case of Chinese MNCs notwithstanding. The socioeconomic approach to investments adopted by the Brazilian MNCs is presumably one of the best examples of the FDI contribution to the education programs and infrastructure development in Africa. Brazil is formally committed to technology transfer, more specifically in port terminals, electricity, food processing, and, above all, agribusiness (Ogier, 2009).
Theoretical and Applied Implications

The study has highlighted that legal origin, and hence, the relative rights of property owners - and conversely, formal countervailing worker rights - does not deter FDI flows into Africa from emerging markets. It could be argued that this reflects the extent to which much of the rational-choice/neo-liberal economic literature tends to make general assumptions that do not take account the variations in investor agendas, and the extent to which firms may, in certain contexts, be able to evade formal regulations with impunity (and, indeed, in others, forge complementary partnerships with workers that result in win-win situations). Hence, strengthening owner rights – and weakening the countervailing rights of other stakeholders, such as workers – does not make countries more competitive in this key area. Indeed, the weakening of worker rights under the law may bring with it costs in terms of commitment and productivity (Harcourt & Wood, 2007), without a hope for gains in national economic development. Indeed, emerging market MNCs appear attracted to countries with civil law legal systems; in part, this may, in many cases, reflect institutional compatibility and familiarity with institutions in country of origin. Any move towards infusing aspects of a common law model may erode this relative advantage. There are two other possible reasons for the weak explanatory power of legal origin. The first is that given the weakness of enforcement capabilities in many African countries, formal law matters less than informal conventions. The second is that the legal origin literature presents a false dichotomy between common and civil law, when many countries have mixed legal systems, either in terms of underlying features, or on a geographic basis (Deakin et al., 2007). Not only South Africa, but also Botswana, Namibia, Zimbabwe, Swaziland and Lesotho, have legal systems akin to Scotland, which, in turn, represents a hybrid of civil and common law. This hybridity is reflected in the nature and scope of labor law in all these countries. Again, Cameroon’s Anglophone
regions are subject to common law, although the majority Francophone regions fall under civil law.

However, wages do appear to impact on FDI flows. This is perhaps predictable in the case of MNCs from mature markets (owing to higher wage differentials with Africa), but is also the case for those from emerging markets. In part, the latter could reflect the relative ease with which emerging market - and more specifically Chinese - MNCs can import skilled labor from their country of origin into many African countries, in contrast to the increasing barriers on the movement of labor into the advanced societies. In short, emerging market MNCs can externally resource their way out of any problems associated with very low wages; the latter would include low productivity, high turnover, and reluctance by workers to develop their firm-specific human capital (Harcourt & Wood, 2007). The international HR literature on the usage of expatriates has tended to focus on those in highly skilled or managerial positions (see Hebert et al., 2005). The widespread usage of unskilled or semi-skilled expatriates represents a very different HR model, which, as yet, has only been partially investigated (see McCormick, 2008; Power, 2008; Sautmann and Hairong, 2008).

Natural resource endowments appear to have a mixed effect on FDI flows. In many cases, a stronger draw card appears to be low costs and the possibilities of accessing local markets. However, in the case of Chinese MNCs, the ability to access natural resources represents an important draw card, at least in part a reflection of limited resources of key minerals, and hydrocarbons, in that country and its manufacturing boom. This highlights the extent to which there is much variation according to country of origin; emerging market MNCs cannot be treated as a monolithic phenomenon, either in their investment choices or attitudes towards contextual human resource factors. The particularly close interest of China in minerals, and its unique ability to substitute labor from abroad, means that Chinese MNCs are likely to be very much less
concerned with domestic labor market and skills issues than many of their counterparts from other emerging markets.

**Implications for HR Practice**

For practitioners of HRM, it is vital to understand what determines the decisions of countries to invest in certain locales. Above all, it sheds light on what really is expected of HR managers in specific settings, what challenges they are likely to experience, and where their interventions are likely to make a difference. In the case of emerging market MNCs in Africa, lower education levels do not appear to be a disincentive for investment. It may reflect the extent to which other features – such as very low wages or particular resource endowments, and/or the desire to access large (if under-developed) markets – may compensate for the costs imposed limitations in human capabilities within specific contexts. This highlights the need to take great account of national specificity, a dimension which is beyond the scope of a general continent-wide review. As noted above, this could, also at least in part, reflect the relative ease with which even partially skilled country of origin staff can be imported into many African countries. However, the widespread usage of expatriates for all but the most menial tasks brings with it other challenges for the HR manager. This includes the need for at least some formal or informal training on local cultural, political and social realities, and the management of the logistics of both the expatriation and repatriation processes (see Dowling et al., 2004). Moreover, whilst the widespread usage of even unskilled expatriates may make for better communication and lesser cultural misunderstanding, it is likely to widen the gap between senior management and any local rank and file employees, and indeed the community at large. The very limited existing literature would suggest that this may enable firms to rapidly overcome country of domicile skills shortfalls, bypass expectation gaps by local workers, and reduce the need for engaging with the local employment system at large; at the same time, it brings with it issues of sustainability, and the
possibility of xenophobic, and, indeed, party-political backlashes (McCormick, 2008; Power, 2008; Tumfweko, 2011). Not only may this make for inefficiency and mistrust, but also a profound ignorance of local conditions and knowledge and capabilities. Firms with limited access to the local knowledge may use indigenous employees to bring to the table, ranging from insights into local cultural dynamics, a more nuanced understanding as to local market conditions, consumer expectations, ways of overcoming infrastructural and bureaucratic constraints, and, indeed, the nature of political dynamics and risks. Many African countries have had a history of political instability and locals may have both richer understandings of ethnic and regional rivalries, and indeed, knowledge as to appropriate coping mechanisms during times of civil disorder. The conspicuous employment of expatriates, even in relatively menial roles, in contexts of very high unemployment brings with it political risks of its own, as evidenced by the rise of anti-Chinese xenophobia in southern African countries such as Zambia. However, expatriates from other countries often deliberately isolate themselves from local culture and society, making communication breakdowns more likely, and a lack of understanding as to the challenges indigenous employees face in their everyday lives. A notable exception is the case of Brazilian expatriates in Lusophone Africa, where there are strong cultural affinities.

As noted above, an organization’s reliance on low wage rates is likely to deter workers from investing in developing their firm-specific human capital. Moreover, if a central concern of the firm is resourcing the cheapest possible labor, central management will be likely to be hostile to any initiatives by HR to upgrade human capabilities if this would result in increased wage demands, and/or make workers more competitive on the external labor market. From the point of view of employees, a lower (or even a lack of a) wage premium in working for an MNC is likely to reduce organizational commitment, particularly if it has seemingly impermeable glass ceilings imposed by the widespread usage of expatriates (Wood et al., 2008). Indeed, in countries with
weak domestic skills bases, local workers with scarce skills may find themselves in a strong bargaining position, enabling them to readily swap jobs in order to gain better wages and career advancement, even if overall unemployment is high.

Emerging market MNCs appear more concerned by the possibilities of accessing local markets than accessing local skills and capabilities. By implication, this would suggest that any possible gains from the effective management of people – other than in enforcing discipline and curtailing costs – would be of little strategic interest to the firm. Indeed, it could be argued that if firms are not drawn by the competitive advantages of local production regimes, then their agenda will remain firmly cost-cutting orientated (Whitley, 2010). And, as noted above, there are strong barriers to the development of industrial clusters in many African countries.

Finally, emerging market MNCs appear not to be deterred by – and in some cases appear to be attracted by – corruption in host countries. This may bring with it immediate benefits, for example, in facilitating the evasion of immigration regulations, in gaining mineral concessions, securing preferential access to government contracts, etc. However, it brings with it costs in terms of day to day management. HR managers may have to contend with the debilitating effects of demands imposed by rent seeking officials on the firm and individual staff members. This may not only encompass petty bribery and extortion, but also include pressures to employ poorly qualified staff connected to local elites, and make it difficult to reign in shirking by those with local elite connections.

Conclusions
Emerging market MNCs have become increasingly prominent in Africa. Whilst choices in HR policies and practices are at least partially molded by context, any innovations in HR practice by MNCs is also likely to impact back on wider practice in the country in which they operate. In the case of emerging market MNCs, there often appears to be little interest in securing access to local
skills and capabilities, and more in securing very cheap labor. In other words, HR contextual features do not appear to mould FDI decisions, other than wage rates. The latter would, at least, in part, reflect upward wage pressure in all the BRICS countries (see Hering & Ponset, 2010). On the one hand, it is encouraging that emerging market MNCs are not deterred by stronger stakeholder vis-a-vis property owner rights. This evidence provides a valuable anecdote to neo-liberal inspired calls for the further weakening of worker and the strengthening of property owner rights in both the developed and developing world (see Cooney et al., 2011). On the other hand, there appears to be something of a preference for more corrupt environments. Such an approach may have immediate benefits in accessing resources, government contracts and concessions, but is likely to impose ongoing costs in resourcing and managing people, even if it allows firms to buy their way out of disliked aspects of labor law. In the case of Chinese MNCs, mineral resources appear an important draw card. Whilst such FDI may bring in welcome infusions of capital and expertise, an over-reliance on the mineral sector is likely to be associated with an under-investment in other areas, and a crowding out of non-mineral based secondary and tertiary economic activity (Ross, 1999). Again, Chinese MNCs have pioneered the wholesale substitution of semi- and unskilled labor with expatriates, a development that not only has far reaching implications for people management in the firms concerned, but also has wider political, social, and even demographic implications. Here, it should be acknowledged that this research only looks at formal contextual features (wages, labor rights, education) likely to impact on HR practice, and the extent to which they are likely to deter or encourage FDI. Informal deeply embedded societal conventions may have a similar or greater effect on HR practice. Such conventions, and the relative ability of different MNCs to substitute labor across national boundaries, are likely to have a significant impact on FDI choices.
If the capabilities of people matter little, and their costs matter a great deal, where does this leave the HR manager? In such contexts, the role of the HR department is likely to be primarily administrative and disciplinary. The widespread usage of expatriates to secure skills that are either absent or unacceptably expensive locally may bring with it immediate advantages in a range of areas from communicative ease (at least in the middle and senior levels of the organization) to the management of expectations. However, it will also bring with it costs, ranging from the effect of glass ceilings on local morale, to a lack of understanding of the needs and real capabilities of local labor. Indeed, strategies based on low wages, low skills, low investment in people, the widespread usage of expatriates, and a desire to access markets and resources irrespective of the corruption of local elites may bring with it unforeseen political risks, that may ultimately outweigh any immediate benefits.

Acknowledgement

We would like to thank the anonymous reviewers and the Associate Editor Prof. James Hayton for their invaluable comments and feedback.
References


TABLE I  Distribution of Estimated Inward FDI Flows and Stock in Africa, by Home Region

<table>
<thead>
<tr>
<th>Home region</th>
<th>Share in world total (%)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total world</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Developed countries</td>
<td>79.0</td>
<td>72.1</td>
<td>89</td>
<td>91.6</td>
</tr>
<tr>
<td>Developing economies</td>
<td>17.7</td>
<td>20.8</td>
<td>6.9</td>
<td>7.4</td>
</tr>
<tr>
<td>Africa</td>
<td>5.1</td>
<td>4.9</td>
<td>2.3</td>
<td>2.9</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>5.5</td>
<td>0.7</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Asia</td>
<td>6.7</td>
<td>15.2</td>
<td>3.1</td>
<td>3.2</td>
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<tr>
<td>South-East Europe and the CIS</td>
<td>0.3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: Compiled on the basis of Africa as the reporting host countries. Unspecified regions are included in the total.
<table>
<thead>
<tr>
<th>Legal origins</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common</td>
<td>Botswana, Ghana, Kenya, Liberia, Seychelles, Sierra Leone, Sudan, Uganda</td>
</tr>
<tr>
<td>Civil</td>
<td>Algeria, Angola, Benin, Cameroon, Chad, Congo, Democratic Republic of Congo, Côte d'Ivoire, Egypt, Equatorial Guinea, Ethiopia, Gabon, Guinea, Libyan Arab Jamahiriya, Madagascar, Mauritania, Mauritius, Morocco, Mozambique, Niger, Togo, Tunisia</td>
</tr>
<tr>
<td>Variables</td>
<td>Descriptions</td>
</tr>
<tr>
<td>----------------------------</td>
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</tr>
<tr>
<td>FDI</td>
<td>Inflows of foreign direct investment</td>
</tr>
<tr>
<td>GNI per capita</td>
<td>Gross national income divided by midyear population(constant 2000 US$)</td>
</tr>
<tr>
<td>Ores, metals and fuel exports</td>
<td>Percentage of merchandise exports</td>
</tr>
<tr>
<td>Wage and salary</td>
<td>Wages and salaries before taxes and employees contributions to social security and pension funds, for central government only.</td>
</tr>
<tr>
<td>Manufacturing value-added</td>
<td>Manufacturing, value added (constant 2000 US$)</td>
</tr>
<tr>
<td>Tax</td>
<td>Total tax rate (percentage of commercial profits)</td>
</tr>
<tr>
<td>Internet users</td>
<td>Per 1,000 people</td>
</tr>
<tr>
<td>Control of corruption index</td>
<td>Index ranges from -2.5 to 2.5, with -2.5 and 2.5 indicating the most and least corrupted government</td>
</tr>
<tr>
<td>Official exchange rate</td>
<td>Local currency unit per US$, period average</td>
</tr>
<tr>
<td>Description</td>
<td>Mean</td>
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<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>FDI world (million US$)</td>
<td>364.92</td>
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<tr>
<td>FDI mature markets (million US$)</td>
<td>311.76</td>
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<tr>
<td>FDI emerging markets (million US$)</td>
<td>66.41</td>
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<td>FDI China (million US$)</td>
<td>7.26</td>
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<tr>
<td>GNI per capita</td>
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<tr>
<td>Ores, metals and fuel exports as percentage of merchandise exports</td>
<td>32.24</td>
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<tr>
<td>Wages and salaries (million US$ )</td>
<td>469,501.67</td>
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<tr>
<td>Manufacturing value-added (million US$ )</td>
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<tr>
<td>Total tax rate as a percentage of commercial profits</td>
<td>66.91</td>
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<td>Internet users per 1,000 people</td>
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<td>Control of corruption index</td>
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<tr>
<td>Official exchange rate</td>
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<tr>
<td>Real exchange rate</td>
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<tr>
<td></td>
<td>Coefficient</td>
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<tr>
<td>------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>Common law</strong></td>
<td>-0.649*</td>
</tr>
<tr>
<td>Natural resources exports</td>
<td>-0.003</td>
</tr>
<tr>
<td>(percentage of merchandise exports)</td>
<td></td>
</tr>
<tr>
<td>Natural logarithm of wages</td>
<td>-0.152**</td>
</tr>
<tr>
<td>Manufacturing value-added</td>
<td>0.021***</td>
</tr>
<tr>
<td>Taxes</td>
<td>-0.023**</td>
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<tr>
<td>Internet users/1000 people</td>
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<tr>
<td>Control of corruption index</td>
<td>-0.375</td>
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<td>Real exchange rate(^1)</td>
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<tr>
<td>Constant</td>
<td>6.330***</td>
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<tr>
<td>Wald-(\chi^2)</td>
<td>38.510***</td>
</tr>
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</table>

Number of observations 57

\(^1\) Note: the real exchange rate is divided by 1,000. Standard errors are in parentheses.

*p < 0.1, ** p < 0.05, *** p < 0.01
<table>
<thead>
<tr>
<th></th>
<th>Panel A: mature markets</th>
<th>Panel B: emerging markets</th>
<th>Panel C: China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common law</td>
<td>-0.291</td>
<td>-0.343*</td>
<td>0.041</td>
</tr>
<tr>
<td></td>
<td>(0.218)</td>
<td>(0.192)</td>
<td>(0.032)</td>
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<tr>
<td>Natural resources exports</td>
<td>-0.003</td>
<td>0.0004</td>
<td>0.001*</td>
</tr>
<tr>
<td>(percentage of merchandise exports)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Natural logarithm of wages</td>
<td>-0.066</td>
<td>-0.080**</td>
<td>-0.024***</td>
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<tr>
<td></td>
<td>(0.044)</td>
<td>(0.035)</td>
<td>(0.007)</td>
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<tr>
<td>Manufacturing value-added</td>
<td>0.017***</td>
<td>0.003</td>
<td>0.0003</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Taxes</td>
<td>-0.010*</td>
<td>-0.013***</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.004)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Internet users/1000 people</td>
<td>-0.176**</td>
<td>-0.141***</td>
<td>-0.021*</td>
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<tr>
<td></td>
<td>(0.081)</td>
<td>(0.050)</td>
<td>(0.011)</td>
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<tr>
<td>Control of corruption index</td>
<td>-0.178</td>
<td>-0.221*</td>
<td>-0.039*</td>
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<tr>
<td></td>
<td>(0.171)</td>
<td>(0.119)</td>
<td>(0.020)</td>
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<tr>
<td>Real exchange rate(^1)</td>
<td>-0.074</td>
<td>-0.086</td>
<td>0.004</td>
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<tr>
<td></td>
<td>(0.142)</td>
<td>(0.094)</td>
<td>(0.016)</td>
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<tr>
<td>Constant</td>
<td>2.738**</td>
<td>3.134***</td>
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<td></td>
<td>(1.210)</td>
<td>(1.210)</td>
<td>(0.218)</td>
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<tr>
<td>Wald-(\chi^2)</td>
<td>52.060***</td>
<td>19.950**</td>
<td>25.240***</td>
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<td></td>
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<td>(0.011)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Number of observations</td>
<td>56</td>
<td>56</td>
<td>56</td>
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</tbody>
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\(^1\)Note: the real exchange rate is divided by 1,000. Standard errors are in parentheses.

*p < 0.1, ** p < 0.05, *** p < 0.01