



How do country regulations and business environment impact foreign direct investment (FDI) inflows?

Farok J. Contractor^{a,*}, Ramesh Dangol^b, N. Nuruzzaman^a, S. Raghunath^c

^a Management and Global Business Department, Rutgers Business School, Rutgers University, 1 Washington Park, Newark, NJ 07102, USA

^b Williamson College of Business, Youngstown State University, One University Plaza, Youngstown, OH 44555, USA

^c Indian Institute of Management – Bangalore, Bannerghatta Road, Bangalore, 560076, India

ARTICLE INFO

Keywords:

Selecting countries
Foreign direct investment (FDI)
FDI regulations
Business environment
Ease of doing business
Entry and exit barriers
Government policy reform
Tradeoffs between institutional variables.

ABSTRACT

How do multinationals choose which countries to invest in? This study addresses the essential question of the impact of regulatory variables in attracting or deterring foreign direct investment (FDI). We separate regulatory variables based on different stages of a firm's life-cycle. Using World Bank data for 189 economies, we examine which host country regulatory factors influence inward FDI. We find that countries with stronger contract enforcement and more efficient international trade regulations attract more FDI. The interaction terms suggest that multinational companies are willing to trade-off a country's poorer institutional variable in return for another where the institutional variable is stronger. For example, multinationals are willing to invest in countries with less efficient entry and exit regulations in exchange for stronger contract enforcement. These results also have important implications for government policy reform.

1. Introduction

A crucial question in international business scholarship is “Why do some countries receive more Foreign Direct Investment, or FDI, than others?” Past studies in the subfield of FDI determinants mainly used macro-economic variables (e.g., Asiedu, 2006; Billington, 1999; Boateng, Hua, Nisar, & Wu, 2015; Caves, 1971; Chakrabarti, 2001; Dunning, 1988; Vernon, 1979) to explain variations across countries in how much FDI inflows they receive. But regulatory changes should also matter. As a general trend, both UNCTAD (2016) and the World Bank (2016) data indicate that the number of changes in FDI regulations that liberalize or favored incoming FDI have exceeded changes that are restrictive. Contractor (1990) traces the beginnings of this trend back three decades around the collapse of former communist ideologies. But this general trend is still a ‘work-in-progress’ and the extent of deregulation varies across nations. Especially since the turn of the millennium, some countries have far more rapidly changed policies, making them friendly to business in general and towards multinational enterprises (MNEs), than other nations. This study traces the variation in FDI inflows, as well as institutional and regulatory changes across all 189 nations, over 15 years.

Hence, two related research questions, one for government policy and the other for MNE entry choices:

- 1) “Can variations in the quality of regulations, and the business environment explain the differences in the amount of FDI inflows received by countries?”
- 2) “How are MNE selections, of which country to enter, influenced by regulatory and institutional factors?”

Institutional theory provides a partial answer to these questions (Alfaro, Kalemli-Ozcan, & Volosovych, 2008; Bailey, 2018; Lu, Liu, Wright, & Filatotchev, 2014; Pajunen, 2008). Dunning's OLI “Ownership-Location-Internalization” paradigm in its ‘location’ leg also emphasizes the role of host nation characteristics in explaining the FDI decisions of MNEs. In particular, Dunning & Lundan's (2008) restatement of the OLI paradigm recognizes the dynamic nature of the host country's institutional environment, and the changeable ranking of each nation against other countries – suggesting that MNEs are increasingly prone to very carefully examine where they choose to invest. Alfaro et al. (2008) using institutional theory calculate that a country receives \$79.00 more FDI per capita compared to an average country in the world when the nation improves its position in the quality of institutional rankings from the 25th percentile to the 75th percentile. Similarly, Asiedu (2006) and Ang (2008) show that market size and the expected growth of market size influence FDI inflows. Although institutional and macroeconomic theories explain why some countries

* Corresponding Author.

E-mail addresses: farok@andromeda.rutgers.edu (F.J. Contractor), rdangol@ysu.edu (R. Dangol), nf228@scarletmail.rutgers.edu (N. Nuruzzaman), snath@iimb.ernet.in (S. Raghunath).

<https://doi.org/10.1016/j.ibusrev.2019.101640>

Received 19 August 2018; Received in revised form 24 September 2019; Accepted 23 October 2019

Available online 10 December 2019

0969-5931/ © 2019 Published by Elsevier Ltd.

receive more FDI than others, it is important to note they only provide partial answers because past studies have typically focused only on one or few out of many institutional and macroeconomic factors. Hence the need to use additional theoretical lenses to augment our understanding of multiple factors that cause variations FDI inflows.

This paper's principal focus, in explaining FDI patterns, is on institutional and regulatory factors, more than on macroeconomic factors. Empirical studies, thus far, have been more anecdotal or region-specific, than global¹. For instance, Grosse and Trevino (2005) find that a reduction in government regulations on FDI in Central and Eastern Europe increased foreign firms' willingness to invest in that region. Several countries liberalized FDI by privatizing state owned enterprises (SOEs), reforming tax policies and enacting new bilateral investment treaties (Bevan & Estrin, 2004; Dunning, 2004; Grosse & Trevino, 2005; Trevino, Thomas, & Cullen, 2008). Nevertheless, significant variation still remains across nations. Trevino et al. (2008) shows that the degree of privatization of SOEs carried out across Latin American countries, and their signing of bilateral investment treaties, varied significantly – partially explaining why some countries in the region received more FDI inflows compared to neighboring countries. Bevan et al. (2004) makes the same conclusion for Eastern Europe. These studies suggest that changes in the regulatory climate across countries, significantly influence FDI inflows.

The theory of economic regulations (Becker, 1983; Peltzman, 1976; Posner, 1974; Stigler, 1971) also implicitly suggests that variations in economic regulations on entry, exit, product, price, quantity or market structure in general, can affect investment decisions (Viscusi, Harrington, & Vernon, 2005). A country's regulations can impede or facilitate FDI entry and exit, while market regulations such as pricing can impact MNEs' profitability. Similarly, a country's contract enforcement and rule-of-law also impact the MNEs' conduct and profitability in the marketplace, as well as the decision to enter the country in the first place.

Past theoretical works on the relationship between institutions and FDI often focus on a single aspect of formal institutions (e.g., Ahlquist & Prakash, 2010 on contract enforcement; Corcoran & Gillanders, 2015 on trade regulations; Jandhyala, 2013; Khoury & Peng, 2011 and Seyoum, 1996 on intellectual property rights; Choi, Lee & Shoham, 2016 on minority investment protection). In this paper, we acknowledge the multidimensionality of formal institutions, and hypothesize that companies take a wholistic view of institutional factors before making a decision to invest in a host country. To advance our understanding on this area, we need to develop a typology of institutions, with regard to its effect on FDI decisions, something that this paper proposes.

We argue that multinational companies take a wholistic view of host country institutions *ex-ante* and consider all regulatory dimensions that potentially influence their business in each stage of the life-cycle of a foreign investment – from entry to exit of its affiliate from a foreign nation. Second, we contribute to the theoretical discussion by tracing potential tradeoffs among different institutional dimensions. We posit that multinational companies are willing to take risk by investing in a country with a lower institutional quality at one stage of the investment's life-cycle in exchange for a more developed institutions, or easier regulations, at another stage of the life cycle. For example, a MNE could be willing to accept a higher cost of their subsidiary's initial entry into a foreign country – at the beginning stage – in exchange for more friendly regulations that can help them appropriate larger profits in a later stage of the affiliate or subsidiary's life-cycle.

Besides contributing to multinational enterprise (MNE) strategy, this paper also identifies aspects of government policy vis-à-vis incoming FDI. Since the early 1990s, most of the world's nations have seen a sea change in government policies from strict government

controls and restrictions, to deregulation or liberalization – instead of viewing MNEs as threatening foreign agents, to welcoming FDI (Contractor, 2013; UNCTAD, 2016). This change in attitudes is seen particularly in emerging nations that were formerly inward-looking or protectionist. The UNCTAD's Investment Policy Monitor database² shows that liberalizing and welcoming regulatory changes far outnumbered instances where new restrictions on FDI were introduced – by a four to one ratio in the 1990s and approaching ten to one by the year 2000. Such net liberalization has continued in the new millennium with the World Bank now formally rating 189 countries in terms of their "Ease of Doing Business" (World Bank, 2016).

Nevertheless, despite the widespread adoption of deregulation and liberalization, the regulatory landscape is still very uneven across countries. Institutional and other barriers remain in place today, and the pace of reform over the past decades has not been equal across nations. Hence the central question addressed by this paper: *"To what extent are FDI flows, across nations, motivated by regulatory and business climate differences today?"*

Our research shows how a combination of market structure and multiple regulations influence MNEs' foreign locations choices, whereas prior research on this topic has often examined the effects of a single regulatory variable on FDI inflows (Khoury & Peng, 2011). In this paper we seek to enrich our understanding of how a confluence of regulations influences FDI inflows.

We review the literature on the subject, highlighting how this study can augment institutional theory and the location choices of MNEs. Next, we develop and test hypotheses, finally concluding our paper with policy implications and suggestions for further research.

2. Literature Review

2.1. Institutional theory and location choice of MNE

Regulations and norms are human constructed constraints, as well as conduits of opportunity, that shape company behaviors, or limit their best-choice options. Institutional theory classifies them into three categories: informal societal knowledge (cognitive), informal social norms (normative) and formal government regulations (regulative) (Mudambi & Navarra, 2002; North, 1990; Scott, 1995). The first two categories are culturally embedded or informal, compared with formal regulations which are expressed in codified rules, procedures and requirements imposed on business. These three constitute a nation's overall business climate (Ostrom, 2009) whose growing importance as a determinant of strategy and FDI decisions is seen in papers such as Meyer, Mudambi, and Narula (2011); Acemoglu, Johnson, and Robinson (2005) or Kang and Jiang (2012) who posit that institutional variations across host countries may account for more variations in firms' FDI location decisions compared to firm-specific resources, or host nation economic factors, such as GDP per capita and bilateral trade agreements. Regulations may restrict certain business activities or investments, while in other countries may facilitate the same business activity. For example, in Nepal, foreign firms are prohibited from investing in either sole proprietorships or partnerships, while in India, firms originating in some countries are allowed to invest in both forms of businesses. Cuervo-Cazurra (2008) finds that firms based in the United States (US) reduced their investments in countries with lax ethical and legal standards after the US and OECD countries passed anti-bribery laws in 1977.

Empirical works on the impact of country regulations and norms are growing, but they are geographically scattered – tackling just emerging markets (e.g., Khanna & Palepu, 2013), or particular regions (e.g., Latin America – Trevino et al., 2008; or East Europe – (Botrić & Škuflić, 2006)

¹ This paper, on the other hand, covers 189 nations comprehensively.

² UNCTAD, Investment Policy Monitor database: <http://investmentpolicyhub.unctad.org/Views/Public/IndexIPM.aspx>

or individual countries (e.g., China – Kang and Jiang, 2012; India – Stucchi et al., 2015). In this research note we use data on regulations and business climate from all 189 nations to test whether there is a worldwide pattern.

A MNE's capacity to gain legitimacy in a host country is a crucial consideration when deciding to invest, or not (Kostova & Zaheer, 1999). A firm may be more willing to invest in a given country when the firm knows that it can easily gain legitimacy there and the cultural distance between them is small. Kang and Jiang (2012) finds that Chinese firms are more likely to invest in countries with cultures similar to that of China. India and Nepal's business elites share a similar culture and religion, which explains the historically greater FDI inflow from India, compared to Nepal's FDI inflow from its larger neighbor China. This supports the hypothesis that a host country's culture and norms can influence its pattern of FDI inflows.

Informal societal and cultural norms do affect FDI inflows. However, there is little that a government can do to influence or alter its culture or societal norms – in the short or medium run. Governments can far more quickly, and sometimes drastically, change their laws and regulations to facilitate, or impede, incoming FDI. Over the 15-year data we use in this study, culture and societal norms changed very slowly, or hardly at all. Formal rules and regulations affecting MNEs can and have been changed rapidly. Hence, the emphasis of this research is on formal rules, regulations and laws (1994, North, 1990; Scott, 1987) and their impact on FDI location choices (Henisz & Zelner, 2004), although our other explanatory and control variables will also include other aspects of a country's business climate. Hitt (2016) also concludes that formal regulatory factors may be “*even more important*” for international strategies than cultural and cognitive variables in the host nation. In any case, laws and formal regulations already incorporate and express, to some extent, the society's underlying norms, preferences, history, and culture.

The rule of law, or the actual enforcement of stated regulations, is another variable that influences FDI decisions, we hypothesize, although the evidence remains scattered. Examples include environmental regulations (Cole & Elliott, 2005; Hoffmann, Lee, Ramasamy, & Yeung, 2005; Wagner & Timmins, 2009), and intellectual property enforcement (Coeurderoy & Murray, 2008; Ivus, 2015; Khoury & Peng, 2011; Seyoum, 1996). Khoury and Peng (2011) find that Latin American countries received more FDI when those nations strengthened their intellectual property (IP) regulations by adopting the Paris Convention on Intellectual Property Rights. Coeurderoy and Murray (2008) also find that new entrepreneurial firms are more likely to enter countries that offer better protection for their intellectual property. Conversely, countries with weak IP regulations and low levels of transparency receive less FDI.

The speed and efficacy of resolving private contractual disputes is also positively related to FDI inflows (Gastanaga, Nugent, & Pashamova, 1998; North, 1990; Scott, 1995; Williamson, 1985b; Buchanan, Le, & Rishi, 2012; Daude & Stein, 2007; Glaeser, La Porta, Lopez-de-Silanes, & Shleifer, 2004; and Gastanaga et al., 1998). However, the evidence is still tenuous or region-specific as in Staats & Biglaiser (2012) for Latin America, Mengistu & Adhikary (2011) for 15 Asian countries, or Campos & Kinoshita (2003) for transition economies only.

In sum, researchers have examined the effects of variations across countries on investment decisions and FDI inflows. But they have mostly focused on one region at a time or treated only one or few regulatory variables at a time. Moreover, as noted earlier, little effort has been made to examine how variations in regulations affect all three stages of the business life-cycle:

- (i) **Initial Foreign Market Entry** affected by business start-up regulations.
- (ii) **Later Operating Stage of the FDI Affiliate** where profit appropriation is affected by host nation regulations.

- (iii) **Exit, divestment or withdrawal** from the nation affected by the country's insolvency and bankruptcy regulations.

This paper will take this life-cycle approach for all 189 nations that receive FDI.

Another regulatory cum infrastructural variable is the ease of trade across each nation's borders. FDI and trade are intimately intertwined. Hence the ability to efficiently move cargo through ports and airports – while a trade consideration – affects FDI decisions, we posit. According to UNCTAD (2013) in over 75 % of world trade a multinational company or its affiliate acts as either an exporter or importer. More remarkably, over 40 % of trade is intrafirm (where the very same multinational is both exporter and importer). Supply chains cover multiple countries in most nations and the ease of moving components and finished goods across a nation's borders is a consideration that should influence FDI investment decisions, we hypothesize. Trevisani (2019) describes how Brazil wishes to encourage trade-related FDI by reducing tariffs and bureaucratic obstacles at ports, such as getting permissions from as many as six different agencies. Regulatory impediments such as bureaucracy at ports and airports, or infrastructural limitations that slow or block movement of goods across borders is therefore a crucial consideration for many firms deciding whether or not to invest in a nation (Lanz & Miroudot, 2011).

Global supply chains thrive on and demand, flexibility, ease of entry and exit and the ability to freely reconfigure their operations from one nation to another – unhampered by local-value-added mandates. But many nations' hamper this freedom. To illustrate: Apple Inc. has eyed India for years as a potential location for electronics assembly, since nominally at least, Indian labor costs are around a quarter those in Chinese assembly operations. But as an illustration of the ongoing, and often slow, process of liberalization of FDI regimes, India only recently relaxed its regulation mandating at least 30% sourcing of manufacturing materials from local vendors by giving a three year grace period for new incoming FDI (Roy & Purnell, 2016; TOI, 2016). It was only in mid-2018 that Apple Inc. took its first tentative and limited steps, through its Taiwanese surrogate Wistron, to invest in India (TOI, 2016). Apple itself does not do any manufacturing, but rather is only a designer and orchestrator of a global supply chain for components spread over at least fourteen countries, with final assembly currently done in China. To alter or transplant to India a complicated supply chain is not only a tortuous undertaking, but also hazards new obstacles at Indian ports, labor laws and unions in India, as well as enforceability of contracts with Indian vendors.

Finally, if things do not work out in a nation, the speed and cost of winding up an operation is also an important consideration. In India liquidation proceedings in the past averaged six years, and, it averaged 1420 days to enforce a contract, while a firm could enforce a similar contract in the US in 74 days, according to the World Bank.

According to transaction cost economics (TCE), MNE investments have even higher “asset specificity” than domestic investments – because physical and human investments are not easily redeployed across nations (Williamson & Masten, 1995). Hence, high exit costs of extricating from a nation can be a significant issue. The Apple Inc. case clearly shows that MNEs take a wholistic view in assessing countries as FDI locations (Dunning & Lundan, 2008). That is to say, they simultaneously consider (i) the ease or difficulty of entry, (ii) profit capture, which in turn depends on the rule-of-law and contract enforcement in the nation, (iii) the quality of transport and infrastructure across the nation's borders, since much of FDI these days is inextricably intertwined with trade in components or finished products, and (iv) the ease or difficulty of exit, in case the FDI does not work out to the satisfaction of the MNE. Following Ostrom (2009) we need to understand how the interactions of the above diverse institutional sub-dimensions influence a multinational enterprise's locational choices and, consequently – from a host nation's perspective – how much FDI inflow it receives compared with other nations.

3. Hypotheses Development

We separate a country's formal rules and regulations into four sub-dimensions that MNEs simultaneously consider when choosing a country as an FDI destination: (1) Initial entry-focused regulations, (2) Once in operation, regulations that impact profit capture or appropriation for its subsidiary or affiliate, (3) impediments to trade across borders and (4) exit-focused regulations. Entry-focused regulations refer to laws imposed by government pertaining to entering new market or starting a business (Djankov, La Porta, Lopez-de-Silanes, Shleifer, 2002). Entry-focused regulations impact the cost and time taken to start a new business. Following entry into a nation, regulations affecting profit appropriation relate to laws on dispute resolution, protection of property rights, and in general, laws that regulate or enforce private contracts (Djankov, La Porta, Lopez-de-Silanes, Shleifer, 2003). Weak contract enforcement limits the ability of firms or multinational companies in appropriating profits from their assets or intellectual properties, by increasing transaction and legal costs. Trade regulations refer to laws or procedure that influence the cost and time for exports and imports to move through the nation's ports (Djankov, Freund & Pham, 2010). Exit-focused regulations refer to the ease or difficulty of a firm's insolvency (Djankov, Hart, McLiesh, & Shleifer, 2008) which determine the cost and time in exiting the market or closing the business.

Entry and exit-related regulations deter or motivate FDI inflows, based on hypotheses in existing literature such as Competitive Dynamics theory (Robinson & Chiang, 2002; Shapiro, 1989; Smith, Grimm, Wally, & Young, 1997). The Theory of Economic Regulation (Becker, 1983; Stigler, 1971) is about how lobbying by companies influences and shapes regulations, and not about how a country's institutional setup affects FDI inflows, which is the focus of this paper's analysis. However, the very fact that companies lobby to alter FDI policies in terms of entry, exit, profit capture as we see in Apple's negotiations with the Indian government, is evidence that MNEs are taking a wholistic life-cycle view before deciding to invest in a country.

3.1. Entry-focused regulations and FDI

An entrepreneur is one who ventures into the unknown, in two respects: a new product and a new market. MNEs usually confront the unknown in one dimension – a new country market – if their product/s are already developed in their home country. Indeed, this is the assumption of classic theory on international business, such as Dunning (1988) where the 'Ownership' dimension is already achieved through internalization of proprietary assets³. However, a MNE encounters uncertainty when it decides to diversify into foreign countries; and it also has to choose between 189 nations as potential territories.

Although we have witnessed an average net liberalization in the investment regimes of almost all nations in the last 25 years (Contractor, 1990; UNCTAD, 2016), the ease with which foreign firms can start new businesses across countries remains very unequal. For example, according to the World Bank data, it took roughly 52 days to start a business in India, while it took only 5.6 days to start a similar business in the US. In addition, a country may also have conditional entry-focused regulations, such as China's explicit or implicit requirement to take on a local partner, or requirements that an MNE source materials from local vendors, as in India's case. Entry-focused regulations such as this can significantly increase the cost of entry because a firm will have to reconfigure global supply chains, transfer manufacturing knowledge to local vendors to maintain quality of inputs, and make costly local adaptations to products and production processes.

³ Startups or "born global" firms (an increasing share of international business) may not have achieved the "Ownership" advantages of larger MNEs (Knight & Cavusgil, 2004) and their country location choices are even more sensitive to host nation institutional factors (Coeurderoy & Murray, 2004)

Damanpour and Gopalakrishnan (2001) shows that changes in production processes can force changes in a firm's product design. To conform to Indian requirements, as an example, Apple is modifying the design of its iPhone for the Indian market, to facilitate local sourcing of components (Lovejoy, 2018). Since entry-focused barriers can vary significantly across countries and given the incremental cost of complying with such entry regulations, we can conclude an MNE is more likely to invest in a country where meeting entry-focused regulations can be done at a lower cost. This explains the protracted and ongoing negotiations between Apple Inc. and the Government of India.

By contrast, Ireland eagerly solicits FDI entry. Hitt (2016) and Bruton, Ahlstrom and Li (2010) mention how Irish government staff facilitate applications, and supply detailed information to MNEs on land purchases, tax benefits, and other inducements. In emerging countries, the cost of setting up a new business tends to be significantly higher as compared to developed countries such as the US and Ireland because of institutional voids, lack of explicit information and rules, and bureaucratic delays (Santangelo & Meyer, 2011). With an increasing choice between nations and the greater variability in the entry-focused dimension, we propose the hypothesis below.

H1. *FDI flows to a nation will be positively associated with the easiness of entry regulations.*

A summary description of the variables and hypotheses may be found in Table 1

3.2. Regulations on profit appropriation and FDI

To continue with our life-cycle approach, in assessing a nation as an FDI destination, the MNE next estimates how much profit it can capture or appropriate, during its presence in the nation, by gaining access to resources and consumers (Nachum & Zaheer, 2005), as well as the costs the MNE will incur in defending its market position and business. Hall and Jones (1999) argue that firms diminish their ROI (return on investment) when they have to erect costly additional safeguards and measures to protect their affiliates' profits in a nation. The amount of the net realized profit an MNE appropriates, while present in the nation, is reduced by additional costs in a country in order to protect against intellectual property losses (Ginarte & Park, 1997; Jandhyala, 2013; Khoury & Peng, 2011); lax ethics (Habib & Zurawicki, 2002; Wei, 2000) and enforcing contracts. In general, when contract enforcement is more difficult or protracted and costly this reduces prospective profits and deters FDI inflows (Ahlquist & Prakash, 2010; Gastanaga et al., 1998; Nunn, 2007).

Countries with weak profit capture or appropriability can also diminish MNE profits in other ways. First, in such nations, there are higher costs to transfer proprietary knowledge and technology to local suppliers that make inputs for its products. Difficulty in transferring proprietary knowledge is the reason why Apple Inc. in 2018 did not choose a local Indian assembler for its phones, but wanted to bring in its Taiwanese partner, Wistron, to do the assembly in India. Secondly, with weak contract enforcement or rule-of-law, a local supplier could supply inputs or information to an MNE's rivals, despite contractual sole-use or non-compete clauses. An MNE's ability to capture market value and profits diminishes sharply, when rivals imitate a specific product (Gilbert & Newbery, 1982; Lieberman & Montgomery, 1988). Third, failure to deliver key inputs or components on time could seriously impact the assembly lines and market deliveries of the firm, internationally.

All of the above are contingencies covered by contracts. However, the speed and effectiveness of enforcement of contracts, and implementation of remedies and damages, is something that varies significantly from country to country. During the MNE's operations in the country, the appropriation of profits from its proprietary knowledge diminishes when it has to devote time and money to legal enforcement (Barney, 1991; Peteraf, 1993; Wernerfelt, 1984).

Table 1
Description of Variables and Hypotheses.

Dependent Variable: Natural log of Net FDI Inflows (\$ Billions)		
Institutional and Regulatory Independent Variables	Description	Hypothesized Result
H1: Starting a Business	Ease of Starting a Business (Country Score in World Bank data)	Significant positive sign of coefficient
H2: Enforcement of Contracts	Efficiency of Country Judicial System/Rule-of-law (Country Score in World Bank data)	Significant positive sign of coefficient
H3: Exit/Insolvency	Ease of Exiting a Business (Country Score in World Bank data)	Significant positive sign of coefficient
H4: Starting Business x Contract Enforcement	Interaction Term	Significant negative sign between interaction terms suggesting tradeoffs across the life-cycle stages.
H5: Resolving insolvency x Contract Enforcement	Interaction Term	Significant negative sign between interaction terms suggesting tradeoffs across the life-cycle stages.
H6: Trade Across Borders	Ease of Moving Imports/Exports Across the Nation's Border (Country Score in World Bank data)	Significant positive sign of coefficient
Control Variables		
Human Dev. Index	(United Nations Data)	
Registration of Property	(World Bank Data)	
Obtaining Credit	(World Bank Data)	
Annual GDP Growth	(World Development Indicators)	
GDP Per Capita	(World Development Indicators)	

For example, according to the World Bank data on ease of doing business, it took an average of 471 days to enforce a contract in India, while a similar contract could be enforced in the US within 42 days. Given the variations in cost of enforcing contracts across countries, we can logically conclude that – other things being equal – an MNE is more likely invest in a county with strong profit appropriation-focused regulations. Therefore, we present the following hypothesis:

H2. FDI flows to a nation will be positively associated with the strength of contract enforcement regulations.

3.3. Exit-focused regulations and FDI

Following our business life cycle approach, we next examine the role played by exit regulations in determining FDI flows across countries. Exit-focused regulations refer to laws that enforce, facilitate or delay a firm's insolvency (Djankov *et al.*, 2008). In some countries, the delays and cost of liquidation tends to very high because those countries' bankruptcy rules and regulations require large settlements for labor and other stakeholders, leaving little residual value for shareholders. It may appear strange to argue that an investment decision (or business entry) is influenced by the initially remote prospect of termination or bankruptcy. But industrial organization and other literature supports the hypothesis that entry and exit are dynamically linked “mobility barriers⁴” and affect investment strategies (e.g., Shapiro & Khemani, 1987; Dasgupta & Stiglitz, 1981). Lee, Peng and Barney (2007) and Sauviant (2016) theorize that individuals and startups are more likely to start their own businesses when they are not subject to cumbersome and taxing bankruptcy laws. Similarly, large MNEs assess risks, including the risk of being embroiled in a country from which it is difficult to disengage. The net present value (NPV) of an MNE's foreign direct investment includes calculating – before the initial entry decision – the residual value of its business in the event of bankruptcy. Hence a country's rules and regulations governing liquidation of businesses can significantly influence the initial calculation of NPV. Comparing countries cross-sectionally for firm formation, Klapper, Amit and Guillén (2010) highlight the importance of both sound entry and exit regulations.

For example, Indian bankruptcy rules and regulations made it

extremely difficult for firms with over 100 employees to exit the market.⁵ Until recently, so-called sick and ghost enterprises languished for years because firms had to pay their employees even when they ceased their operations. Citing statistics from India's Board for Industrial and Financial Reconstruction (BIFR), Kang and Nayar (2004) indicated that, other than cases involving accounting manipulation, the time taken to resolve bankruptcies ranged from 6.5 to 11 years. Similar considerations occur in France and other EU nations where strong unions and labor laws make business exit difficult, or where stringent layoff compensation rules make firms reluctant to hire, as well as afraid to invest in the first place. In 2016 the French government appointed a new “entrepreneurship czar” who was quoted by Ahmari (2016) as stating

“The labor law is a 10,000-page document. It tells you every imaginable detail. If you want to dismiss somebody because you have no more business, there is almost always a legal case, and the employees win 70 % or 80 % of cases. Before they can recruit new talent, businesses must think six or seven years down the road.”

Global supply chains or value chains (UNCTAD, 2013) are frequently based on the expectation of flexible FDI where companies invest abroad with the idea that they can quickly wind up an operation, once global demand or host country conditions change (e.g., Koh, Demirbag, Bayraktar, Tatoglu, & Zaim, 2007). Increasingly, multinational enterprises (MNEs) value modularity, flexibility and quick entry and exit. TCE theory emphasizes ‘asset specificity’ or the costs and consequences of winding up and trying to redeploy operations in other locations. If Apple modifies the design of its iPhones for the Indian market, in order to meet government mandates for local sourcing of components (Lovejoy, 2018) it has also to assess how easy or difficult it may be to disentangle from its local supplier if it terminates the alliance.

It is not just in France or India. There is recently growing realization, among many governments, of the significance of efficient termination or bankruptcy. For example, United Nations Commission on International Trade Law (UNCITRAL) and Sauviant (2016) propose a “model law” for cross-border insolvency. The World Bank has been urging governments to address reforming their bankruptcy laws (Cirmizi, Klapper, & Uttamchandani, 2012) to make their countries

⁴ We thank an anonymous referee for pointing us to the Industrial Organization literature.

⁵ The Indian government is belatedly beginning to amend its liquidation rules, but the new measures will only be gradually phased in (Mundy, 2016)

more attractive to FDI. Therefore, we hypothesize that the shadow or prospect of a difficult and/or costly business exit will deter inward FDI in a nation.

H3. *FDI flows to a nation will be positively associated with the easiness of exit regulations.*

In addition to investigating the direct effects of three business life-cycle considerations (i) entry, (ii) operational profit capture, and (iii) ease of exit, we also examine how they interact with each other to influence FDI inflows. In the following section, we examine whether a country's entry and exit-focused dimensions moderate the dimension of profit appropriation while operating in the nation, and, subsequently, influence FDI inflows.

3.4. The interaction between entry-focused regulations and contract enforcement

An MNE wishing to establish a business in a foreign country not only faces direct costs of complying with a country's entry barriers, but while operating in the nation it bears contract enforcement costs which, in turn reduces profit capture because of the increased funds the firm will have to devote to erecting safeguards to protect its valuable and rare resources. For example, the Chinese or Indian requirements that a foreign MNE accept a local partner, or source locally, can compel the MNE to transfer proprietary resources and capabilities (e.g. manufacturing capabilities) to a local partner. This increases the likelihood of unintended technology leakage, even if the local partner commits not to do so (Contractor, 2019). A MNE will have to hire lawyers and other legal specialists to monitor the local operation and to reduce the possibility of misuse of the transferred resources and capabilities, or resort to backward integration to avoid opportunistic behaviors of suppliers (1986, Teece, 1977; Williamson & Masten, 1995; Williamson, 1985a). In contrast, when regulations do not require MNEs to share knowledge with local vendors, or when the rule-of-law is better in the host nation, an MNE will spend a lesser amount to safeguard its valuable and rare resources, thus increasing its profit capture, *ceteris paribus*.

Drilling down into the institutional theory literature, we find Nobelist Elinor Ostrom's work (Ostrom, 2009 & 2010) implies that firms take an overall, wholistic view of a country's institutional setup and may be willing to trade-off one higher institutional barrier for another lower institutional barrier. A country's regulatory setup, business climate or attractiveness, is ultimately speaking, the sum total of all its policies. According to Hamlin and Stemplowska (2012), policy makers, facing pressures from various domestic constituents also trade-off one regulation for another, in terms of specific FDI dimensions, with the result that each nation's overall mix of policies will be different. Countries with higher entry barriers may even be more attractive to MNEs if the entry barriers reduce the intensity of competition in the marketplace, thus trading off higher entry costs in return for greater subsequent profit capture. We hypothesize that MNEs are willing to accept higher entry barriers in return for better contract enforcement or better rule-of-law, so that they can appropriate profits more easily in their foreign subsidiaries. To test this tradeoff, we hypothesize.

H4. *The strength of contract enforcement negatively moderates the relationship between entry regulations and FDI inflows suggesting that MNEs are willing to accept tradeoffs such as less easy entry regulations or higher entry costs in countries with better contract enforcement.*

3.5. The interaction between exit-focused regulations and contract enforcement

Increasingly, MNEs foresee and foreshadow exiting from a given foreign country as a potential real option when deciding to start a new business in a given country (Sauvant, 2016). When MNEs wish to divest or disengage from a nation, the focus is on the residual value of assets.

Residual value is reduced, or even becomes negative, if liquidation proceedings are protracted, if unions demand that labor be paid even if the MNE is not producing anything, or delays increase the legal costs of extricating from a nation. The initial capital budgeting or strategic planning of a prospective investment almost always involves a net present value (NPV) calculation, and a low or negative value in the termination years, however discounted, negatively affects the overall NPV.

Following the multi-dimensional view of policy making (Hamlin & Stemplowska, 2012) and Institutional Theory in Ostrom (2009, 2010), we hypothesize a tradeoff between two institutional sub-dimensions, profit capture by the MNE while its affiliate operates in the country, and the costs of termination. Let us say an MNE has a target NPV it wishes to earn from a subsidiary or affiliate, and projects cash flows for ten years in the future. Low or negative net cash flow in Year 10, if offset or counterbalanced by higher profits and net cash flows in Years 2–7, can yield the same overall NPV.⁶ If contract enforceability, rule-of-law and profit appropriation in a nation is better, an MNE looking into the future will be less concerned with exit difficulties, and will be more willing to trade-off, or overlook, more stringent exit conditions in return for higher profit capture resulting from lower costs of protecting its valuable and rare resources. Hence, we propose the following hypothesis:

H5. *The strength of contract enforcement negatively moderates the relationship between exit regulations and FDI inflows suggesting that MNEs are willing to accept trade-offs such as more difficult and costly termination regulations, in return for higher profit capture due to better contract enforcement.*

3.6. Trade across borders regulations and FDI

To a remarkable degree, trade across borders (approximately \$20 Trillion in 2016 in goods and services) is intimately intertwined with FDI. A MNE is involved (as either exporter or importer) in at least three-quarters of world trade (UNCTAD, 2013). Moreover, the same MNE is both exporter and importer (intrafirm trade) in over 40 % of world trade (Lanz & Miroudot, 2011). The ease or difficulty of moving products across borders has to do with capacity and congestion in ports, the time or delays in moving cargo through a country's ports, the number of forms and procedures required to be fulfilled, as well as the quality of internal transport infrastructure between the factory and ports. For example, Prasad, Sathish and Singh (2014) compared productivity indices in container handling in Thailand, Sri Lanka and India. The "throughput per ship per day" exceeded 1300 containers in Thailand and Sri Lanka, but in India it was only 800 in Mumbai and 310 in Chennai. The number of forms, procedures, delays and tariffs are also lower in Sri Lanka and Thailand.

The efficiencies in ports and infrastructure, or ease or difficulty of conducting trade across borders we hypothesize are a critical factor in choosing a nation for FDI, under *both* strategies below:

- a Resource-seeking FDI: where the investment is motivated not so much for the local country market but to use the nation as a resource for cheap labor or materials to be assembled and exported out again. Here the ease of cross-border trade is fundamental to this FDI decision.
- b Market-Seeking FDI: The majority of FDI is still explained by this strategic motivation – to sell the MNE's products in the local market for revenue and profits. But even in this category, multinationals

⁶ Intemporal trade-offs are implicit in all Capital Budgeting or project planning exercises and emanate from strategic or managerial decisions, such as accepting a lower net cash flow in Year 10 in return for a higher cash flow say in Year 5 of a project (Chevalier-Roignant & Trigeorgis, 2011).

depend on imported inputs and components (because their R&D, designs, and therefore components, are often evolved outside the host nation).

According to UNCTAD (2013), "...some 28 per cent of gross exports consist of value added that is first imported by countries only to be incorporated into products or services that are then exported again. Thus, some \$5 trillion out of the \$19 trillion of recorded global gross exports in 2010 was actually double-counted."⁷ But this very double-counting highlights the intertwined role of FDI and trade, and illustrates the importance, to MNEs, of efficient ports and infrastructure, and quick movement of cargo, in and out of a nation.

Relatively few studies have addressed this question and most who have, have focused their empirical work regionally. The ease of trade across borders, or openness to international trade as a determinant of FDI decisions has been examined for Southeast Europe by Botrić and Škuflić (2006); for APEC by Canare, Ang and Mendoza (2014); and for BRICs by Jadhav (2012). Only Corcoran and Gillanders (2015) take a global approach and their results suggest that the ease of trade across borders is an important FDI determinant for middle income countries but not so for the OECD or least developed nations. With new data made available from the World Bank, our empirical analysis encompasses 189 nations (almost all nations on the planet) for whom we hypothesize that,

H6. *FDI flows to a nation will be positively associated with the country's trade across borders regulations.*

4. Methods

4.1. Data sources and sample

The World Bank has assembled a unique database measuring regulatory and infrastructural variables across 189 nations, using a standardized methodology. The World Bank's Ease of Doing Business (EDB) database (World Bank, 2016) includes variables relating to ease of starting a business, ease of enforcing contracts and ease of resolving insolvencies. An important strength of the EDB dataset is that it compares the cost of starting similar businesses across countries. It also provides data on the cost of enforcing similar contracts across nations and the variations in the cost and time for resolving bankruptcies. The data are not just opinions about the 'business climate' or Likert Scale types of subjective judgments. Rather, in each country, the data include objective measures such as the numbers of forms an exporter has to submit, or the average length of insolvency proceedings or the time taken for commercial litigation, from the best authoritative sources in each nation.

4.2. Variables

Our dependent variable is the natural log of net FDI inflows (billions of US dollars)⁸. Independent variables are drawn from the World Bank's Ease of Doing Business (EDB) indicators and macroeconomic data for control variables. (See Table 1 for a summary). The ease of doing business score reflects the gap between a particular economy's performance and the best scoring nation at any point in time, as well as the absolute

⁷ The quote is taken from a press announcement accompanying the release of UNCTAD (2013). See <http://unctad.org/en/pages/PressRelease.aspx?OriginalVersionID=113>

⁸ Some scholars question the accuracy of FDI data compared across nations, especially those from emerging nations, or countries where FDI flows are biased by tax considerations. Such caveats are appropriate for scholars to recognize and the Appendix details some major concerns for interested readers. Nevertheless, FDI data from the World Bank or UNCTAD are robust enough for a comparative, cross-sectional analysis such as in this paper.

change in the economy's regulatory environment over time. An economy's ease of doing business score is reflected on a scale from 0 to 100 for each regulatory variable, where 0 represents the lowest and 100 represents the best performance. For example, the score for resolving insolvency in the United States is 90.12, indicating that the United States is 9.88 percentage points away from the best regulatory performance across all economies. India, on the other hand, receives 32.6 for the resolving insolvency score, meaning that India is 67.4 percentage points away from the best regulatory performance in resolving insolvency.

For the interest of our research, there are four regulatory dimensions under Ease of Doing Business that we use as main independent variables to test our hypotheses. First is the score for ease of starting business. This score reflects the cost and time associated with regulatory barriers when an average firm starts a new business in a particular economy. In our context, this score can be used as proxy to foreign market entry-focused regulations. The second independent variable of interest is the score for contract enforcement, which measures the efficiency of the legal system in resolving commercial disputes, the time and costs to enforce contracts as well as the quality of the nation's judicial process. We use this as a proxy for regulations on profit appropriation. The underlying logic is that a well-developed contract enforcement in a country results in lower costs of protection and hence higher profit appropriation.

The third ease of doing business indicator for our independent variable is the resolving insolvency score. The resolving insolvency score measures the effectiveness or efficiency of insolvency or bankruptcy laws and the brevity or length of administrative procedures when a firm undergoes an insolvency process. The resolving insolvency score is a proxy for exit-focused regulations. The fourth main independent variable is the trade across border score. This score measures ease or difficulty of trade across the country's border. The components of this score are the number of documents, procedures, time and cost to export, as well as time and costs to import goods from foreign countries.

Control variables include Annual growth of GDP, GDP per capita, Human Development Index (HDI Index), scores for registering property and getting credit, which are macro variables used in past studies of FDI determinants.

4.3. Analytical methods

Since the EDB and country level indicators such as GDP per capita, FDI inflows, Human Development Index (HDI) and annual growth rates contain multiple observations per countries, the potential confounding influence of unobserved heterogeneity due to country level effects is a concern. We use the fixed effects regression method to alleviate this concern. The fixed effects method is preferred to the random effects method when a dataset contains most of the entire population rather than a random sample (Wooldridge, 2010). A Hausman test indicates the presence of systematic difference in the coefficients from the random effects models versus the fixed effects models (p -value < 0.01), thereby suggesting that the fixed effects regression method is more appropriate for this study. We did not consider the first difference (FD) regression method because Wooldridge (2010) points out that FD regression is inappropriate when independent variables do not vary radically over time.

It is possible that our model suffers from serially correlated error terms, which is a result of serially correlated unobserved factors. We correct this problem by using the *xtregar* Stata command to account for first-order serial correlations.

5. Results

We present descriptive statistics in Tables 1a and 1b. Table 1a provides the mean, standard deviation and minimum and maximum values for each variable. Table 1b displays the correlation matrix which does not show unusually high correlation among most variables; hence the regression models would be not subject to problems resulting of

Table 1a
Descriptive Statistics: Variable Mean, Std. Dev., Max and Mean.

No	Variables	Mean	Std. Dev.	Max	Min
(1)	FDI inflows	2.65e + 10	1.52e + 11	3.07e + 12	− 2.97e + 10
(2)	HDI index	0.672	0.162	1.061	.284
(3)	Registering property	61.464	18.911	99.87	0
(4)	Getting credit score	48.472	23.743	100	0
(5)	Trade across border regulations	64.363	22.759	96.84	0
(6)	Annual GDP growth	3.977	5.121	63.380	− 62.076
(7)	GDP per capita	13004.51	20777.69	193648.1	106.017
(8)	Starting business regulations	72.067	19.045	99.960	11.550
(9)	Contract enforcement	56.500	14.460	93.360	2.080
(10)	Resolving insolvency regulations	37.744	25.974	100	0

multicollinearity. However, since GDP per capita, trade across border regulations, resolving insolvency regulations, and getting credit score variables are strongly correlated (0.60 or above), we tested for the presence of multicollinearity in each of our panel regression models presented in Table 2.

Table 1b
Descriptive Statistics: Pairwise correlations.

No	Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1)	FDI inflows	1									
(2)	HDI index	0.562*	1								
(3)	Registering property	0.373*	0.472*	1							
(4)	Getting credit score	0.498*	0.606*	0.405*	1						
(5)	Trade across border regulations	0.348*	0.658*	0.244*	0.472*	1					
(6)	Annual GDP growth	0.032	− 0.189*	− 0.038	− 0.209*	− 0.311*	1				
(7)	GDP per capita	0.506*	0.693*	0.347*	0.407*	0.511*	− 0.152*	1			
(8)	Starting business regulations	0.318*	0.637*	0.422*	0.547*	0.443*	− 0.198*	0.420*	1		
(9)	Contract enforcement	0.399*	0.563*	0.513*	0.435*	0.269*	− 0.121*	0.474*	0.455*	1	
(10)	Resolving insolvency regulations	0.532*	0.669*	0.409*	0.566*	0.526*	− 0.207*	0.676*	0.526*	0.495*	1

Table 2
Panel Regression - Independent variables regressed against log of FDI Inflows Standard errors shown below each coefficient.

Models	1	2	3	4	5
HDI index	− 0.583 2.486	− 0.18 2.393	0.927 2.308	0.888 2.359	1.313 2.303
Registering property	0.0208*** 0.00559	0.00980* 0.0055	0.0106** 0.0053	0.0102* 0.00541	0.0106** 0.00528
Getting credit score	− 0.0035 0.00388	− 0.0035 0.00372	− 0.00348 0.00359	− 0.00354 0.00366	− 0.0035 0.00357
Trade across border reg.	0.0574*** 0.00791	0.0318*** 0.00824	0.0258*** 0.00797	0.0284*** 0.00812	0.0249*** 0.00794
Annual GDP growth	0.0369*** 0.00661	0.0392*** 0.00627	0.0407*** 0.00606	0.0414*** 0.00617	0.0416*** 0.00605
GDP per capita	5.42e-05*** 1.09E-05	3.46e-05*** 1.06E-05	3.29e-05*** 1.02E-05	3.37e-05*** 1.04E-05	3.27e-05*** 1.02E-05
Starting business reg.		− 0.00201 0.00464	0.0965*** 0.0126	− 0.004 0.00457	0.0803*** 0.0137
Contract enforcement		0.126*** 0.0127	0.203*** 0.0153	0.161*** 0.0138	0.209*** 0.0154
Resolving insolvency regulations		0.0139 0.0087	0.00939 0.00841	0.151*** 0.0245	0.0813*** 0.0262
Starting business x contract enforcement			− 0.00197*** 0.000235		− 0.00167*** 0.000257
Resolving insol. x contract enforcement				− 0.00234*** 0.000392	− 0.00122*** 0.00042
Constant	15.31*** 0.343	10.26*** 0.459	7.639*** 0.495	8.866*** 0.477	7.321*** 0.499
Observations	1,135	1,135	1,135	1,135	1,135
No. of Countries	175	175	175	175	175
Overall R-Square	0.2488	0.2873	0.3016	0.253	0.263

In Model 1 (Table 2), for all 189 nations, we first introduce our control variables, including macroeconomic variables used in past FDI studies which hypothesize a positive relationship between foreign market size and FDI inflows (Asiedu, 2006; Billington, 1999; Boateng et al., 2015), as well as institutional/regulatory variables that can influence MNEs' foreign investment decisions. We find that regulations relating to trading across borders and registering properties positively impact FDI inflows, while the effects of regulations relating to obtaining credit (Getting credit score) from local banks does not impact FDI inflows. A unit increase in Trade across border regulations and Registering property causes 0.0574 and 0.0208 units increase, respectively, in log of FDI inflows. Model 1 confirms that an MNE is likely to favor a nation where it can acquire and register properties easily, and where there are fewer infrastructural or regulatory impediments to moving products across its borders.

Model 2 introduces variables for all countries' ease of starting business, rule-of-law or contract enforceability (as proxy for profit appropriability while the MNE does business in the nation) and exit or insolvency – using a business life cycle perspective. Model 3 adds the interaction term between the ease of starting businesses and contract enforceability, while Model 4 adds an interaction of ease of exit and contract enforceability. Finally, in Model 5, all variables are included.

Table 3
Summary of hypotheses and test results.

Short Description	Hypotheses	Statistical Significance	Results of Hypotheses
Starting a Business	Hypothesis 1	> 0.10, not significant	Supported in two of four models
Enforcement of Contracts	Hypothesis 2	< 0.05, significant	Supported in all four models
Exit/Insolvency	Hypothesis 3	> 0.10, not significant	Supported in two of four models
Starting Business x Contract Enforcement	Hypothesis 4	< 0.05, significant	Supported
Resolving insolvency x Contract Enforcement	Hypothesis 5	< 0.05, significant	Supported
Trade Across Borders	Hypothesis 6	< 0.01, significant	Supported in all four models
Human Dev. Index	Control Variable	> 0.10, not significant	
Registration of Property	Control Variable	< 0.05, significant	
Obtaining Credit	Control Variable	> 0.10, not significant	
Annual GDP Growth	Control Variable	< 0.05, significant	
GDP Per Capita	Control Variable	< 0.05, significant	

The reason for this stepwise approach is to assess the incremental statistical consequences of adding each set of variables. Table 3 gives an overview of the results and which hypotheses found support.

We include starting business regulations, contract enforcement and resolving insolvency regulations in Model 2 (Table 2) to examine the effects of these three independent variables on FDI inflows. The direct association between FDI inflows and starting business regulations is statistically insignificant ($\beta = -0.002$, $p\text{-value} > .10$ which does not appear to support Hypothesis 1⁹. While Hypothesis 1 does not find direct support here, in Models 3 and 5, the direct relationship between FDI inflows and starting business regulations is, in fact, strongly significant with a positive sign. Hence, we conclude that there is partial support for Hypothesis 1. (This is elaborated upon later).

For Hypothesis 2 the results in Model 2 (Table 2) show that association between contract enforcement and FDI inflows variables is positive and statistically significant ($\beta = 0.126$, $p\text{-value} < 0.010$). A unit change in contract enforcement variable leads to a 0.126 unit change in our dependent variable FDI inflows. MNEs are more likely to invest in countries where profits can be higher by reducing the risk and costs of enforcing contracts, that is to say, where the rule-of-law is better.

Hypothesis 3 which proposes a direct positive relationship between FDI inflows and resolving insolvency regulations shows no significance in Model 2. However, once again, when the interaction term between resolving insolvency regulations and contract enforcement is included in Models 4 and 5, there is a statistically significant direct positive relationship between the two variables, thus partially supporting Hypothesis 3.

In Models 3, 4 and 5 we include the interaction terms separately to derive a thorough understanding of how each term influences FDI inflows. Model 5 contains all variables together. The interaction term for ease of entry and contract enforceability in Models 3 and 5 is negative, and statistically significant ($\beta = -0.002$, $p\text{-value} < 0.010$). This confirms Hypothesis 4¹⁰.

⁹ We conducted a VIF test to examine the presence of multicollinearity and a low VIF of 2.08 suggests that we do not have any issues resulting from multicollinearity.

¹⁰ Since the coefficient of starting business regulations changed from -0.002 to a positive number in Models 3 and 5, we conducted a multicollinearity test. Mean VIF of for Model 3 is 10.74, which is very close to 10. A maximum VIF of 10 or less is taken as an indicator that econometric models are not unduly influenced by multicollinearity Kutner, Nachtsheim, & Neter, 2004. *Applied linear regression models* (4th ed.). Boston ; New York: McGraw-Hill/Irwin.. Between Models 3 and 5, the direction of relationship between our interaction variable and dependent variable did not change. Even though Model 5 has VIF higher than 10, the presence of multicollinearity did not unduly alter or influence our results. In addition, one of the recommendations for multicollinearity Wooldridge, 2000. *Introductory econometrics : a modern approach*. Cincinnati, OH: South-Western College. is to not transform our independent variables because doing so could make interpretation of coefficients difficult.

According to results from Model 5, *ceteris paribus*, a country which is situated in the 25 percentile of the Contract enforcement variable receives \$5.8 billion in log FDI ($= \beta * \text{Contract enforcement at 25 percentile} = 0.126 * 46.35$). Now let us consider FDI inflows in the presence of starting business regulations variable. While holding everything else constant, the same country receives an additional \$1.00 billion in FDI inflows or a total of \$6.8 billion. Let us consider another situation, where the value of contract enforcement variable is 65.75 (in the 75th percentile). According to Model 2, a country receives \$8.28 billion in log FDI. By contrast, in the presence of starting business regulations variable, a country receives \$260 million less in log FDI inflows (see Fig. 1). In Fig. 1, y-axis estimated log of FDI inflows while x-axis represent different levels Contract enforcement variable. According to Fig. 1, a country receives more log of FDI in the presence of high levels of Starting business regulations variables and low levels of contract enforcement variable (dashed lines) than when we consider only direct effects of contract enforcement variable (solid line). By contrast, a country receives less log of FDI inflows at high levels of starting business regulations variable and high levels of contract enforcement.

This shows that effects of starting business regulations variable on the relationship between contract enforcement and FDI inflows variables is contextual. The starting business regulations variable positively moderates the relationship between contract enforcement and FDI inflows at low levels of contract enforcement variable (approximately below 30). By contrast, the starting business regulations variable negatively moderates the same relationship at high levels of contract enforcement variable. We interpret our finding to mean that MNEs are willing to tradeoff one regulatory or institutional variable for another – for example, tolerating more difficult entry barriers in return for stronger profit capture from stronger contract enforceability. This suggests that MNEs are taking a wholistic or overall view of a country's institutional setup (Ostrom, 2009, 2010; Hamlin & Stemplowska, 2012).

The results for Models 4 and 5 show that the interaction between resolving insolvency and contract enforcement variable is negative, thus supporting Hypothesis 5¹¹. As noted in the preceding section, a country situated in the 25th percentile of contract enforcement variable receives 8.28 billion in log FDI. In contrast, the same country will receive approximately 24.8 million more in log of FDI if it also has a very liberal exit-focused regulation (resolving insolvency regulations > 75th percentile). By contrast, the same country receives less log of FDI if a country has strong profit appropriation-focused regulations and very liberal exit-focused regulation (see Fig. 2). In Fig. 2, the y-axis represents estimated log of FDI inflows, while the x-axis represents profit appropriation-focused regulations (contract enforcement). As we can

¹¹ We again tested for multicollinearity in Model 4 and VIF for the model is 8.51, which being below the 10.0 threshold, the results are not unduly influenced by multicollinearity.

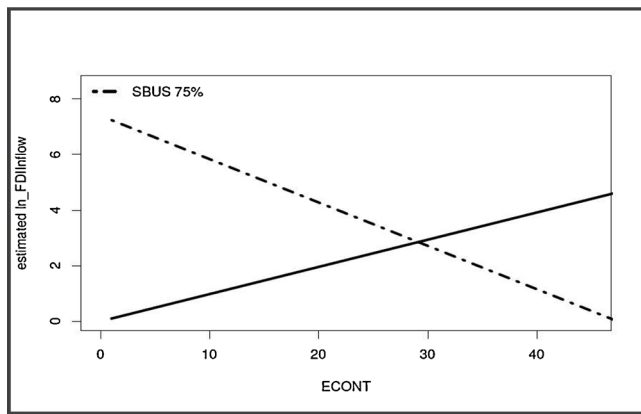


Fig. 1. Effects of starting business regulations on the relationship between contract enforcement regulations and FDI inflows.

The solid line in the graph represents the main effect: an improved country score for contract enforcement regulations and increases in FDI inflows. The dashed line represents the moderating or interaction effects of starting business regulations on contract enforcement regulations, suggesting a willingness to trade-off between the two variables.

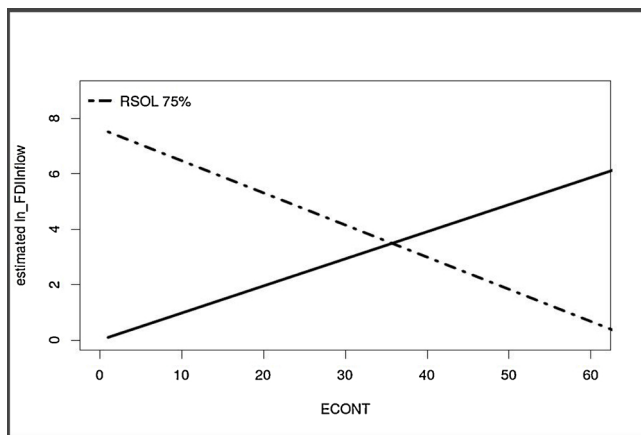


Fig. 2. Effects of Resolving insolvency regulations on the relationship between contract enforcement regulations and FDI inflows.

The solid line in the graph represents the positive effect of a country's higher score for contract enforcement regulations on FDI inflows, while the dashed line represents the moderating or interaction effects between resolving insolvency regulations and contract enforcement regulations suggesting a willingness to trade-off between the two variables.

see, our interaction effect plot (dashed line) has a negative slope, while direct effect plot (solid line) intersect when values of contract enforcement variable is around 40. A country's liberal *exit-focused* regulations positively moderates the relationship between contract enforcement and FDI inflow variables in countries where MNEs would have difficulty appropriating profits during their tenure in the nation. By contrast, *exit-focused* regulations negatively influence the relationship in countries where MNEs can appropriate profits at a low cost.

This again supports the idea that MNEs take a wholistic view of a country's institutions and variables and are willing to tradeoff a worse score on one regulatory or policy variable for a better score on another (Hamlin & Stemplowska, 2012). For example, an MNE may be willing to tradeoff or accept higher mobility barriers (i.e., entry and exit barriers) if it judges that profit appropriation in the country is superior due to a lower level of market competition. (This is elaborated upon in the next section).

The Trade Across Borders variable shows strong and consistent results across all models, confirming H6, and reinforcing the idea that, to the mind of the global strategist, or MNE investor, FDI and trade are

inextricably intertwined, or are two sides of the same coin for business operations.

6. Discussion and conclusion

MNE investment decisions are taken from a long-term perspective that covers initial entry, subsequent operations and profit capture in a foreign country, and the possibility of exit from the country – a wholistic life-cycle view. First, we found that the strength of a country's contract enforcement, and ease of trade across the nation's borders to be unequivocally strong considerations for MNEs (given the uniform, strong positive sign for these two variables across all five models).

Second, we found that ease of entry and exit do not *directly* influence FDI inflows, although indirectly they do so when profit appropriation (proxied by rule-of-law or contract enforceability) comes into consideration as an interaction variable.

Dunning and Lundan's (2008) article, focusing on the "location" aspect of the OLI Paradigm, probes further into the characteristics of a host nation's institutions and how that would affect the likelihood of FDI inflows into that country. Together with Ostrom (2009, 2010), we proposed Hypotheses 4 and 5 about the interactions of the multiple institutional sub-dimensions influencing a multinational enterprise's locational choices and, consequently – from a host nation's perspective – how much FDI inflow it receives compared with other nations. Our findings lend support for the idea that a MNE executive, contemplating entering a country, not only compares it with other potential FDI destinations (the 189 nations in our sample) but also considers, for each country, tradeoffs between the country's regulations.

There is another interesting *ex post* interpretation of these findings, as to why starting business and resolving insolvency regulations are non-significant by themselves, but become strongly significant, with the hypothesized positive sign, when the interaction terms with contract enforcement are included as explanatory variables. The competitive dynamics perspective (Ketchen, Snow & Hoover, 2004) may explain this finding, as this perspective suggests that the difficulties with entry and exit may well be a factor actually attracting FDI precisely if, *post entry*, it improves profit appropriability during the period of operation in the country¹². Since entry and exit barriers in a nation also apply as mobility barriers – to rival competing MNEs – these barriers may deter some other MNEs wishing to make a FDI entry, and thus serve to reduce competition in the nation's marketplace which, in turn improves profit appropriation for the MNEs that have overcome the barriers and operate inside the nation. In assessing such a country a MNE may, grudgingly but consciously, accept higher entry and exit barriers in return for anticipated lower competition and higher profits for its affiliate in the focal country.

Although this is not the focus of our empirical analysis, the very fact that MNEs try to negotiate better terms with governments¹³, indicates that they take this multi-dimensional or wholistic perspective. According to the theory of economic regulation, MNEs facing high regulatory barriers to entry and exit, try to secure financial subsidies from regulators (McGuire, Lindeque, & Suder, 2012), which can offset higher entry and exit costs.

MNEs' ability to garner favors from governments that reduce operational costs and increase profit capture, offsets otherwise high entry and exit barriers, giving the firm a competitive edge. For example, foreign cell phone makers in India (such as Samsung) lobbied Indian regulators to reject Apple Inc.'s request to reduce entry barriers. In

¹² We are grateful to an anonymous referee for this insightful suggestion.

¹³ Reuters (August 4, 2017) reports that, the US states have granted \$17 billion in tax breaks, job training funds, infrastructure development and other incentives to attract investments from domestic and foreign automakers since 1976. According to the article, Mississippi and Tennessee provided \$1.6 billion and \$1.3 billion, respectively, in subsidies to Toyota, Nissan and Volkswagen.

addition, India's decision to reform entry regulations has not done much to induce Apple Inc. to invest in India, despite the huge potential of the Indian market (Lovejoy, 2018), presumably because Apple is also considering the other regulatory variables.

According to the competitive dynamics theory, a firm in a competitive business environment faces significant levels of uncertainty because its competitive moves can be countered by its competitor's reactive moves, or vice versa (Robinson & Chiang, 2002; Shapiro, 1989; Smith et al., 1997). According to the theory, under high levels of uncertainty firms are less likely to make irreversible investments (or 'asset-specific' investment as per TCE theory) right away and always keep exit from the market as an option, and preferring reversible investments such as retail stores or distribution centers in countries where it is difficult to appropriate profits because of the high cost of contract enforcement. We define reversible investments as those where an MNE can exit and move from one country to another at a lower cost – a mirror image consideration to TCE's 'asset specificity' concept.

6.1. Conclusion and further research

This paper touches upon one of the most fundamental changes in world economic history over the past four decades, namely the liberalization of FDI and trade regimes around the world (UNCTAD, 2016). As far back as the 1980s, even before the collapse of socialist or protectionist ideologies, the number of liberalizing changes around the world, and particularly in inward-looking or protectionist emerging nations, far outnumbered instances where new restrictions on FDI were introduced – first by factors of four to one in the 1990s and rising to ten to one by the turn of the millennium (Contractor, 2013 & 1990; UNCTAD, Investment Policy Monitor database¹⁴). Restrictions on international business, whether on FDI flows or trade were being dismantled in favor of new policies of promotion and attraction. Nevertheless, institutional and other barriers remain in place today, and the pace of reform over the past decades has been uneven across nations. Hence the central question addressed by this paper: *“To what extent are FDI flows, across nations, motivated by regulatory and business climate differences today?”*

Despite general deregulation and liberalization of regimes, the regulatory landscape is still very uneven. The country rankings on the various indices, on a 0 to 100 scale in the World Bank data, still range from lows of around 30 for nations such as Eritrea or Afghanistan, to above 80 for top-ranking countries such as Singapore. The results in this study support the conclusion that in selecting countries in which to invest, MNE decision-makers do take a business life-cycle strategic view, with entry and exit (insolvency) barriers as a consideration, although two other variables appear to be more dominant, namely rule of law (contract enforceability) and ease of trading across a host country's borders. The rule of law variable encapsulates a sentiment universally voiced these days by companies, that *“...judicial strength and rule of law...”* directly impacts profit capture or profit appropriation, and determines to which nations FDI is directed. The above quote is from Staats and Biglaiser (2012) although their study only covered Latin American countries receiving FDI. Canare, Ang and Mendoza (2014) come to the same conclusion for the Asia-Pacific region. Here, we find this to be true for the entire global sample of 189 nations. In general, when MNEs have to spend considerable sums on protection of patents, and legal enforcement of contracts is costly or protracted, so that prospective profits are reduced, FDI in such nations is less likely.

The other finding in this study is how consistently important ease of trading across borders is to FDI decisions. This confirms our *a priori* hunch – that to most 21st century MNEs, trade and FDI are inextricably intertwined because of two related trends. The first general strategic

shift is the shrinkage of in-house value added in most companies – “disinternalization” identified in Dunning and Lundan (2008) as a re-consideration of Dunning's OLI paradigm – or a shrinkage of the company's core. Secondly, this reduction in in-house operations is accompanied or facilitated by an expanded use of external partners/suppliers in other nations who contribute value previously added in-house (Contractor, Kumar, Kundu, & Pedersen, 2010). The increased substitution of external allies or partners for what was previously done internally in the MNE is seen across the value-chain, ranging from R&D to supply of components, assembly or auxiliary services (UNCTAD 2013), to after-sales customer services. The huge geographical spread of supply chains inevitably means that FDI affiliates have, in the last 15 years, become highly dependent on the unimpeded and efficient flows of goods and services across country borders, under global orchestration from the MNEs headquarters. Few FDI decisions are made, these days, without thinking of the ease or difficulty of moving exports and imports through the target nations' ports.

In brief, MNEs are beginning to demand from host countries flexibility and fluidity in business decisions – be it in cross-border movement of goods and services (trade), or business entry, or handling contractual disputes, or termination of unwanted business activities (exit). And to a surprising degree, the World Bank data and this study indicate that more and more governments are beginning to comply and cater to these pressures, despite the fact that local (national) objectives are not always congruent with the global optimization objectives of MNEs. Not only are country leaders such as India's Modi, or Russia's Putin setting goals to improve their rankings in the World Bank's indicators, but even provincial ministers are beginning to espouse the same objectives (Besley, 2015). In the last few years, successive World Bank reports have indicated and highlighted governments whose nations have improved their business climate towards incoming FDI (e.g., World Bank, 2016).

This study has made a contribution in comprehensively analyzing data for all 189 nations in the World Bank's database – as opposed to the bulk of past literature on FDI determinants which was focused only on certain nations or regions. It supports the hypotheses in Walsh and Yu (2010) and Buchanan et al. (2012), that regulatory and business environmental factors are as important for FDI inflows these days, as are macro-economic country variables such as the country's market size. It has identified two factors that appear to be most crucial for FDI location decisions, namely rule of law and ease of trade across borders.

Our research, nevertheless, is not without limitations. The theory of economic regulations, for example, has pointed out that regulatory reforms may be initiated as a response to the demand from constituents. In our context, this theory may imply that multinational companies may not be the passive recipient of regulatory changes, but they could actively shape regulations. Future research, therefore, needs to investigate the process of regulatory changes, and identify the roles multinational companies play in the process of regulatory reforms. Additionally, future research is needed to identify which country regulatory and business environment factors matter more in certain sectors, or regions, as well as the interplay, or interactions between the variables, since our findings also suggest that MNEs are willing to trade-off one regulatory or institutional dimension for another, and take a wholistic view of a country's business environment (Ostrom, 2009, 2010; Hamlin & Stemplowska, 2012).

Appendix A. Problems with Foreign Direct Investment (FDI) Data

This appendix details the difficulties in compiling comparable data on FDI inflows across 189 countries. Some of the concerns deal with the measurement of the FDI inflow into a nation from the rest of the world put together. Other concerns relate to the identification of the source countries from which FDI capital emanates. (The latter category does not affect our analysis, but is nevertheless covered in this appendix). Despite the caveats mentioned below, the World Bank's and UNCTAD's

¹⁴ UNCTAD, Investment Policy Monitor database: <http://investmentpolicyhub.unctad.org/Views/Public/IndexIPM.aspx>

data are robust enough to allow for a cross-sectional statistical analysis on FDI determinants.

Summarized below are some of the problems in reporting. These vary from country to country. Official FDI annual flow numbers are supposed to include three components: Officially, FDI Flow = New Equity + Retained Earnings + Net intra-corporate loans. However, later year changes, subsequent to the initial investment are not always reported. Hence, changes to historical cost basis less adjustments for retained earnings and intra-corporate loans vary by nation. And, needless to say, the current market value of an investment can diverge dramatically from its initial investment value. In the case of countries like China, the data are especially elusive because of the routing of Chinese FDI through Hong Kong to/from the rest of the world. Similarly, a fraction of FDI inflows into India used to be routed through Mauritius because of a tax treaty. The US is also no exemplar of transparency either, since “Delaware Corporations” need not divulge the identity of the ultimate beneficial owners, and the country of origin of such US FDI subsidiaries often is unknown. The press and even some governments do not properly report the distinctions between gross and net flows. Various governments cut off the tail of the distribution differently: For the US Commerce Department, any FDI under \$2.5 million need not be reported to the database. (This omits thousands of small American foreign subsidiaries). Other nations use a \$ 1 million cut-off. Finally, the analyst needs to distinguish between fully owned subsidiaries and partial acquisitions, or joint ventures with local investors, and also between “greenfield” investments and acquisitions of existing foreign firms. Regrettably, such data are simply unavailable for many of the smaller nations.

Nevertheless, despite these limitations, FDI data are more than adequate for a comparative analysis seeking statistical associations.

References

- Acemoglu, D., Johnson, S., & Robinson, J. A. (2005). Institutions as a fundamental cause of long-run growth. *Handbook of Economic Growth*, 1, 385–472.
- Ahlquist, J. S., & Prakash, A. (2010). FDI and the costs of contract enforcement in developing countries. *Policy Sciences*, 43(2), 181–200.
- Ahmari, S. (2016). The bedouin billionaire for muslim integration. *Wall Street Journal*, 2016(June (17))<http://www.wsj.com/articles/the-bedouin-billionaire-for-muslim-integration-1466201886>.
- Alfaro, L., Kalemli-Ozcan, S., & Volosovych, V. (2008). Why doesn't capital flow from rich to poor countries? An empirical investigation. *The Review of Economics and Statistics*, 90(2), 347–368.
- Ang, J. B. (2008). A survey of recent developments in the literature of finance and growth. *Journal of Economic Surveys*, 22(3), 536–576.
- Asiedu, E. (2006). Foreign direct investment in Africa: The role of natural resources, market size, government policy, institutions and political instability. *The World Economy*, 29(1), 63–77.
- Bailey, N. (2018). Exploring the relationship between institutional factors and FDI attractiveness: A meta-analytic review. *International Business Review*, 27(1), 139–148.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Becker, G. S. (1983). A theory of competition among pressure groups for political influence. *The Quarterly Journal of Economics*, 98(3), 371–400.
- Besley, T. (2015). Law, regulation and the business climate: The nature and influence of the world bank doing business project. *The Journal of Economic Perspectives*, 29(3), 99–120.
- Bevan, A. A., & Estrin, S. (2004). The determinants of foreign direct investment into European transition economies. *Journal of Comparative Economics*, 32(4), 775–787.
- Billington, N. (1999). The location of foreign direct investment: An empirical analysis. *Applied Economics*, 31(1), 65–76.
- Boateng, A., Hua, X., Nisar, S., & Wu, J. (2015). Examining the determinants of inward FDI: Evidence from Norway. *Economic Modelling*, 47, 118–127.
- Botrić, V., & Škuflić, L. (2006). Main determinants of foreign direct investment in the southeast European countries. *Transition Studies Review*, 13(2), 359–377.
- Bruton, G. D., Ahlstrom, D., & Li, H. L. (2010). Institutional theory and entrepreneurship: where are we now and where do we need to move in the future? *Entrepreneurship Theory and Practice*, 34(3), 421–440.
- Buchanan, B. G., Le, Q. V., & Rishi, M. (2012). Foreign direct investment and institutional quality: Some empirical evidence. *International Review of Financial Analysis*, 21, 81–89.
- Caves, R. E. (1971). International corporations: The industrial economics of foreign investment. *Economica*, 38(149), 1–27.
- Chakrabarti, A. (2001). The determinants of foreign direct investments: Sensitivity analyses of cross-country regressions. *Kyklos*, 54(1), 89–114.
- Chevalier-Roignant, B., & Trigeorgis, L. (2011). *Competitive strategy: Options and games*. MIT press.
- Cirmizi, E., Klapper, L., & Uttamchandani, M. (2012). The Challenges of Bankruptcy Reform. *World Bank Research Observer*, 27(2), 185–203.
- Coeurderoy, R., & Murray, G. (2008). Regulatory environments and the location decision: Evidence from the early foreign market entries of new-technology-based firms. *Journal of International Business Studies*, 39(4), 670–687.
- Cole, M. A., & Elliott, R. J. (2005). FDI and the capital intensity of “dirty” sectors: A missing piece of the pollution haven puzzle. *Review of Development Economics*, 9(4), 530–548.
- Contractor, F. J. (2013). Punching above their weight” the sources of competitive advantage for emerging market multinationals. *International Journal of Emerging Markets*, 8(4), 304–328.
- Contractor, F. J., Kumar, V., Kundu, S. K., & Pedersen, T. (2010). Reconceptualizing the firm in a world of outsourcing and offshoring: The organizational and geographical relocation of high-value company functions. *Journal of Management Studies*, 47(8), 1417–1433.
- Contractor, F. J. (1990). Ownership patterns of US joint ventures abroad and the liberalization of foreign government regulations in the 1980s: Evidence from the benchmark surveys. *Journal of International Business Studies*, 21(1), 55–73.
- Corcoran, A., & Gillanders, R. (2015). Foreign direct investment and the ease of doing business. *Review of World Economics*, 151(1), 103–126.
- Cuervo-Cazurra, A. (2008). The effectiveness of laws against bribery abroad. *Journal of International Business Studies*, 39(4), 634–651.
- Damanpour, F., & Gopalakrishnan, S. (2001). The dynamics of the adoption of product and process innovations in organizations. *Journal of management studies*, 38(1), 45–65.
- Dasgupta, P., & Stiglitz, J. (1981). Entry, innovation, exit: Towards a dynamic theory of oligopolistic industrial structure. *European Economic Review*, 15(2), 137–158.
- Daude, C., & Stein, E. (2007). The quality of institutions and foreign direct investment. *Economics & Politics*, 19(3), 317–344.
- Djankov, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2002). The regulation of entry. *The Quarterly Journal of Economics*, 117(1), 1–37.
- Dunning, J. H. (1988). The eclectic paradigm of international production: A restatement and some possible extensions. *Journal of International Business Studies*, 19(1), 1–31.
- Dunning, J. H. (2004). Institutional reform, FDI and European transition economies. *Economics and Management Discussion Papers*, 2004-14.
- Dunning, J. H., & Lundan, S. M. (2008). *Multinational enterprises and the global economy*. Edward Elgar Publishing.
- Gastanaga, V. M., Nugent, J. B., & Pashamova, B. (1998). Host country reforms and FDI inflows: How much difference do they make? *World Development*, 26(7), 1299–1314.
- Gilbert, R. J., & Newbery, D. M. (1982). Preemptive patenting and the persistence of monopoly. *The American Economic Review*, 72(3), 514–526.
- Ginarte, J. C., & Park, W. G. (1997). Determinants of patent rights: A cross-national study. *Research Policy*, 26(3), 283–301.
- Glaeser, E. L., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2004). *Do institutions cause growth?* Cambridge, MA: NBER Working Paper No. 10568.
- Grosse, R., & Trevino, L. J. (2005). New institutional economics and FDI location in Central and Eastern Europe. *MIR: Management International Review*, 45(2), 123–145.
- Habib, M., & Zurawicki, L. (2002). Corruption and foreign direct investment. *Journal of International Business Studies*, 33(2), 291–307.
- Hamlin, A., & Stemplowska, Z. (2012). Theory, ideal theory and the theory of ideals. *Political Studies Review*, 10(1), 48–62.
- Henisz, W. J., & Zelner, B. A. (2004). Explicating political hazards and safeguards: A transaction cost politics approach. *Industrial and Corporate Change*, 13(6), 901–915.
- Hitt, M. A. (2016). International strategy and institutional environments. *Cross Cultural & Strategic Management*, 23(2), 206–215.
- Hoffmann, R., Lee, C. G., Ramasamy, B., & Yeung, M. (2005). FDI and pollution: A granger causality test using panel data. *Journal of International Development*, 17(3), 311–317.
- Ivus, O. (2015). Does stronger patent protection increase export variety? Evidence from US product-level data. *Journal of International Business Studies*, 46(6), 724–731.
- Jandhyala, S. (2013). Property rights and international investment in information technology services. *Strategic Management Journal*, 34(7), 877–889.
- Khanna, T., & Palepu, K. (2013). *Winning in emerging markets: A road map for strategy and execution*. Harvard Business Press.
- Khoury, T. A., & Peng, M. W. (2011). Does institutional reform of intellectual property rights lead to more inbound FDI? Evidence from Latin America and the Caribbean. *Journal of World Business*, 46(3), 337–345.
- Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, 35(2), 124–141.
- Koh, L., Demirbag, M., Bayraktar, E., Tatoglu, E., & Zaim, S. (2007). The impact of supply chain management practices on performance of SMEs. *Industrial Management & Data Systems*, 107(1), 103–124.
- Kostova, T., & Zaheer, S. (1999). Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. *The Academy of Management Review*, 24(1), 64–81.
- Kutner, M. H., Nachtsheim, C., & Neter, J. (2004). *Applied linear regression models* (4th ed.). Boston : New York: McGraw-Hill/Irwin.
- Lanz, R., & Miroudot, S. (2011). *Intra-firm trade: Patterns, determinants and policy implications*. OECD trade policy working papers, No. 114. OECD Publishing<https://doi.org/10.1787/5kg9p39lrwnn-en>.
- Lee, S. H., Peng, M. W., & Barney, J. B. (2007). Bankruptcy law and entrepreneurship development: A real options perspective. *Academy of Management Review*, 32(1), 257–272.
- Lieberman, M. B., & Montgomery, D. B. (1988). First-mover advantages. *Strategic*

- Management Journal, 9(S1), 41–58.
- Lu, J., Liu, X., Wright, M., & Filatotchev, I. (2014). International experience and FDI location choices of Chinese firms: The moderating effects of home country government support and host country institutions. *Journal of International Business Studies*, 45(4), 428–449.
- McGuire, S., Lindeque, J., & Suder, G. (2012). Learning and lobbying: Emerging market firms and corporate political activity in Europe. *European Journal of International Management*, 6(3), 342–362.
- Mengistu, A. A., & Adhikary, B. K. (2011). Does good governance matter for FDI inflows? Evidence from Asian economies. *Asia Pacific Business Review*, 17(3), 281–299.
- Meyer, K. E., Mudambi, R., & Narula, R. (2011). Multinational enterprises and local contexts: The opportunities and challenges of multiple embeddedness. *Journal of Management Studies*, 48(2), 235–252.
- Mudambi, R., & Navarra, P. (2002). Institutions and international business: A theoretical overview. *International Business Review*, 11(6), 635–646.
- Nachum, L., & Zaheer, S. (2005). The persistence of distance? The impact of technology on MNE motivations for foreign investment. *Strategic Management Journal*, 26(8), 747–767.
- North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge university press.
- North, D. C. (1994). Economic performance through time. *The American Economic Review*, 84(3), 359–368.
- Nunn, N. (2007). Relationship-specificity, incomplete contracts, and the pattern of trade. *The Quarterly Journal of Economics*, 122(2), 569–600.
- Ostrom, E. (2009). *Understanding institutional diversity*. Princeton university press.
- Ostrom, E. (2010). Beyond markets and states: polycentric governance of complex economic systems. *American Economic Review*, 100(3), 641–672.
- Pajunen, K. (2008). Institutions and inflows of foreign direct investment: A fuzzy-set analysis. *Journal of International Business Studies*, 39(4), 652–669.
- Peltzman, S. (1976). Toward a more general theory of regulation. *The Journal of Law & Economics*, 19(2), 211–240.
- Peteraf, M. A. (1993). The cornerstones of competitive advantage - a resource-based view. *Strategic Management Journal*, 14(3), 179–191.
- Posner, R. A. (1974). Theories of economic regulation. *The Bell Journal of Economics and Management Science*, 335–358.
- Prasad, H., Sathish, R., & Singh, S. (2014). *India's Merchandise Exports: Some Important Issues and Policy Suggestions*. India: Working Paper No. 3/2014-DEA Department of Economic Affairs, Ministry of Finance.
- Robinson, W. T., & Chiang, J. (2002). Product development strategies for established market pioneers, early followers, and late entrants. *Strategic Management Journal*, 23(9), 855–866.
- Roy, R., & Purnell, N. (2016). India relaxes foreign direct investment rules. *The Wall Street Journal*.
- Sauvant, K. (2016). The Next Step in Governance: The Need for Global Micro-Regulatory Frameworks in the Context of Expanding International Production. In Tina C. Ambros (Ed.), *Research in Global Strategic Management, vol. 17: Perspectives on Headquarters-Subsidiary Relationships in the Contemporary MNC* Bingley, UK: Emerald (chapter 15).
- Scott, W. R. (1987). The adolescence of institutional theory. *Administrative Science Quarterly*, 32(4), 493–511.
- Scott, W. R. (1995). *Institutions and organizations*. Thousand Oaks, CA: Sage.
- Seyoum, B. (1996). The impact of intellectual property rights on foreign direct investment. *The Columbia Journal of World Business*, 31(1), 50–59.
- Shapiro, D., & Khemani, R. S. (1987). The determinants of entry and exit reconsidered. *International Journal of Industrial Organization*, 5(1), 15–26.
- Shapiro, C. (1989). The theory of business strategy. *The Rand Journal of Economics*, 20(1), 125–137.
- Smith, K. G., Grimm, C. M., Wally, S., & Young, G. (1997). Strategic groups and rivalrous firm behavior: Towards a reconciliation. *Strategic Management Journal*, 18(2), 149–157.
- Staats, J. L., & Biglaiser, G. (2012). Foreign direct investment in Latin America: The importance of judicial strength and rule of law. *International Studies Quarterly*, 56(1), 193–202.
- Stigler, G. J. (1971). The theory of economic regulation. *The Bell Journal of Economics and Management Science*, 2(1), 3–21.
- Teece, D. J. (1977). Technology transfer by multinational firms: The resource cost of transferring technological know-how. *The Economic Journal*, 87(346), 242–261.
- Teece, D. J. (1986). Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy. *Research Policy*, 15(6), 285–305.
- TOI (2016). *Apple to be the biggest beneficiary of new FDI rules*. The Times of India.
- Trevino, L. J., Thomas, D. E., & Cullen, J. (2008). The three pillars of institutional theory and FDI in Latin America: An institutionalization process. *International Business Review*, 17(1), 118–133.
- Trevisani, P. (2019). Brazil opens up an economy long shielded from competition. *Wall Street Journal*, 2019(September (24)).
- UNCTAD (2016). *World Investment Report – Investor Nationality: Policy Challenges* Geneva: UNCTAD.
- Vernon, R. (1979). The product cycle hypothesis in a new international environment. *Oxford Bulletin of Economics and Statistics*, 41(4), 255–267.
- Viscusi, W. K., Harrington, J. E., Jr, & Vernon, J. M. (2005). *Economics of regulation and antitrust*. MIT press.
- Wagner, U. J., & Timmins, C. D. (2009). Agglomeration effects in foreign direct investment and the pollution haven hypothesis. *Environmental & Resource Economics*, 43(2), 231–256.
- Walsh, J. P., & Yu, J. (2010). Determinants of foreign direct investment: a sectoral and institutional approach. *IMF Working Papers*, 10(187), 1–27.
- Wei, S.-J. (2000). How taxing is corruption on international investors? *The Review of Economics and Statistics*, 82(1), 1–11.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180.
- Williamson, O. E. (1985a). *The economic institutions of capitalism: Firms, markets, relational contracting*. New York..
- Williamson, O. E. (1985b). *The economic institutions of capitalism*. Simon and Schuster.
- Williamson, O. E., & Masten, S. E. (1995). *Transaction cost economics*. Aldershot, Hants, England: Brookfield, Vt.: Edward Elgar.
- Wooldridge, J. M. (2000). *Introductory econometrics: A modern approach*. Cincinnati, OH: South-Western College.
- Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data* (2nd ed.). Cambridge, Mass: MIT Press.
- World Bank (2016). *Doing Business 2016: Measuring Regulatory Quality and Efficiency*. Washington, D.C: World Bank Publications.