

*An extended dual economy model:  
implications for emerging economies and  
their multinational firms*

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**An extended dual economy model: implications for emerging economies and their multinational firms**

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## An extended dual economy model: implications for emerging economies and their multinational firms

**Purpose of this paper** I introduce a new theoretical framework called the ‘extended dual economy model’ Based on the seminal work of Lewis (2014), I use it to explain the sectoral specialisation of home countries and their firms and MNEs.

**Findings** Emerging economies exhibit a ‘duality’ in their economic structure that reflects itself in two largely different set of location (L) characteristics. They are simultaneously home to both ‘traditional’ sectors, which are resource- and labour-intensive, as well as ‘modern’ sectors, which are knowledge- and capital-intensive, each of which can be analysed as having two sub-economies. These different sets of location advantages shape the FSAs of EMNEs and their FDI.

**Research implications** This analysis helps to underline what shapes the ability of home countries to ‘emerge’, and the ability of their firms to grow and their MNEs to become internationally competitive. Few EMNEs can thrive in international markets without concurrent growth in their domestic markets.

Maintaining the appropriate location assets to optimally support both types of sectors is costly. Each type of sub-economy requires different kinds of support sectors, infrastructure, and policies, with little overlap. Weaknesses in its home country L advantages hinder the long-term competitiveness of their EMNEs.

**Practical implications** The extension of the Lewisian dual economy model allows a number of interesting new insights because it allows us to consider firms, non-firms, informality, and the bottlenecks associated with promoting knowledge-intensive sectors in a globalised world. It emphasises structural change, and the need to manage pathways and effectively channel growth.

**Keywords:** Dual economy, emerging market MNEs, internationalization, location advantages, FSAs

### INTRODUCTION

The term ‘emerging’ as a prefix to describe a country is not just an adjective to be used to emphasise the optimism a society might have of its future. As a meaningful adjective it is arguably tautological. Putting aside the opinions of economists, policymakers and consultants, by definition, *all* countries that have not ‘emerged’ are ‘emerging’ (unless they are sliding backwards). But backwards *to what?* What are they emerging *from?* And what are they emerging *to?* The unwritten meaning of ‘emerging’ implies (in a non-judgemental sense)

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3 that a country is in a transitional state between being a developed country and a developing  
4 country.  
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7 We know that least developed countries are subsistence-based, with low (or no) engagement  
8 in 'modern' activities such as manufacturing or services, and rely on natural-resource  
9 intensive activities (such as agriculture). In other words, they have negligible L advantages,  
10 save for a comparative advantage in natural resources and unskilled labour. From the IB  
11 perspective, they have little by way of domestic formal economic actors like firms, and such  
12 economic activity (such as trade) as there might be depends on foreign actors. Developed  
13 countries, by contrast, have highly developed L advantages, firms with significant FSAs in  
14 knowledge intensive and capital intensive sectors, and a vigorous engagement in the world  
15 economy, through trade and FDI. If we accept that 'emerging' is a transitional state between  
16 being a country dependent on its natural resource-intensive sectors (typical of a developing  
17 country), and one that is dependent on more knowledge-intensive activities (typical of a  
18 developed country), this requires us to acknowledge what the structure and distribution of  
19 economic activity within an emerging country have characteristics of both. From an  
20 international business (IB) perspective, this must mean that it has both types of location-  
21 specific (L) advantages.  
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32 To put it simply, emerging countries have a 'split personality': Everywhere from Kenya to  
33 India there are high-tech start-ups in urban areas, even as the majority of the population in the  
34 countryside is engaged in farming or mining. Such an insight is not new: one of the seminal  
35 concepts in development economics is that developing countries are often 'dual economies'  
36 (Lewis 1954). The key features are a large (and often informal) economy that reflects a high  
37 labour-intensity and a strong dependence on natural resources and agriculture, resting  
38 alongside a 'modern' (and often urban) economy which is engaged in knowledge-intensive,  
39 skills-dependent activities.  
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46 Development economics is not especially interested in evolution of firms, but we do know  
47 that L advantages constrain and define the activities (and existence) of private actors such as  
48 firms, because they shape their firm specific advantages (FSAs), which in turn determine the  
49 competitiveness of a country's MNEs (Narula, 2012). I build upon the duality concept to  
50 propose an 'extended dual economy model', arguing that the duality of countries is reflected  
51 in the specialisation of the L assets of developing countries, as well as the O assets of their  
52 firms, and by extension, their MNE activity. Dualism is a fact of *all* economies. Even the  
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3 most advanced economies retain some characteristics of multiple, parallel economies.  
4 However, the key issue for emerging economies is whether they possess the capacity to shift  
5 the emphasis of the economy from being dominated by (and locked-in to) its natural  
6 resource-intensive sectors, especially those that are largely informally organised and  
7 populated by 'traditional' economic actors.  
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11 A more accurate modelling of the underlying economy by the use of this extended Lewis  
12 model is not only an intellectual exercise. It helps to underline the bottlenecks that constrain  
13 the growth of firms in emerging economies, what prevents the ability of their home countries  
14 to 'emerge', and the ability of their firms and MNEs to become internationally competitive.  
15 This 'capacity to emerge' of both countries and their firms is crucial in understanding  
16 whether EMNEs are able to sustain their internationalisation. Countries like India and China  
17 have explicitly promoted outward FDI by their MNEs, because there is a belief that  
18 successful EMNEs will help promote growth and structural upgrading of their home countries  
19 through reverse knowledge transfer. But will this happen? The Extended Dual Economy  
20 Model provides the conceptual basis to make realistic judgements about outward MNE-  
21 assisted development.  
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30 The paper is structured as follows. First, we discuss the classic dual economy model and  
31 argument for its application to international business and, especially, emerging market  
32 environments. Then, a more thorough discussion of the 'extended' dual economy model is  
33 provided. This is followed by an examination of L advantages as well as the characteristics  
34 and FSAs of firms in both sectors, which lead to different internationalization activities of  
35 MNEs. I conclude the paper by discussing the implications of applying this model for both  
36 EMNEs and policymakers.  
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## 45 **UNDERSTANDING DUALITY AND ECONOMIC STRUCTURE**

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47 A key insight of the Nobel Laureate Arthur Lewis (1954) was that developing countries tend  
48 to have a dual structure: a 'traditional' sector, which is informal, and resource- and labour-  
49 intensive; and a 'modern' sector, which is formal, and knowledge- and capital-intensive. The  
50 degree to which an economy shifts from the former to the latter determines its ability to  
51 catch-up. Lewis pointed to the movement of labour between the two traditional to the modern  
52 as being the key to development. Each part of this duality is associated with sectors and  
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3 spatial locations, as there are different endowments of resources, reflecting a divide common  
4 in the post-industrial revolution era between the land economy (associated with rural areas  
5 and commodities) and the capital economy (associated with cities and human, technological  
6 and financial capital). This literature has developed our understanding of the mechanisms that  
7 impede or advance the transition process of countries, and a cornerstone of classical political  
8 economy.  
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13 The spirit of the Lewisian concept underlies the structuralist approach to development  
14 (developed most fully by Chenery and associates<sup>1</sup>). The structuralist approach views  
15 economies at different stages of development as having certain similarities in the structure  
16 and significance of various sectors, and that there are consistent patterns of structural changes  
17 within the economy as development occurs. As such, it is not the size *per se* that determines  
18 economic development, but the changing shares within the aggregate economy. It is not  
19 simply about the size (in terms of aggregate GDP), but also of the shares *within* that  
20 economy. A country's GDP may remain stagnant, but shifts between sectors (i.e., structural  
21 change) can have important development effects.  
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28 These broad characteristics indicate that as countries develop, the primary sector declines in  
29 importance as a source of employment and value added, with a gradual rise in the share of  
30 GDP from manufacturing and services. Within both manufacturing and services, firms within  
31 that country move from less sophisticated, labour-intensive activity, towards more  
32 sophisticated (and knowledge-intensive) products and processes with development. This  
33 reflects both comparative advantage as well as consumption patterns, and not coincidentally,  
34 trade and investment patterns (Narula and Dunning 2000, 2010).  
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39 There are fundamental 'exogenous' constraints to structure, and these create heterogeneity  
40 between countries. These exogenous constraints include natural resources (including arable  
41 land), the availability of (basic) human capital, and climate. These provide bounds not only  
42 upon the kinds of sectors, but also their rate of change. For instance, in resource-rich  
43 countries the shift of resources away from primary sector lags behind that in other countries  
44 at similar income levels.  
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49 The dual economy model is not about a two-sector model – simply that there are two broadly  
50 different and 'separate' economies within the same geographical space, and serves to draw  
51 attention to the need to see each through different lenses. The dual economy model also did  
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55 <sup>1</sup> See Chenery (1960), Chenery and Taylor (1968), Chenery, Robinson and Syrquin (1986), Syrquin and  
56 Chenery (1989).  
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not focus on the growth of firms or indeed how they might evolve as MNEs. However, economic activity in two different sectors also implies a dualism in industrial specialisation of its firms, and therefore of its MNEs (Narula, 2015) The duality of MNEs is further reflected in contrasting internationalisation patterns, both in terms of destination as well as intensity, and reflects the bipolar nature of the home country's national competitiveness. MNEs that operate in knowledge-intensive sectors choose to invest in advanced economies, and those that thrive in labour-intensive and natural resource-intensive sectors focus on host countries with similar conditions.

### THE ORIGINAL DUAL ECONOMY MODEL

The dual sector model as sketched out in Lewis (1954) and others (see Gollin 2014 for a review<sup>2</sup>) has to do with economic development, and is largely unconnected to international business, or the competitiveness of firms and countries. This paper uses the *concept* of a bipolar economic structure to understand the evolution, structure and nature of outward FDI (and trade) from these countries.

In the Lewisian conceptualisation, the first of the two sectors is a 'traditional' sector, associated with pre-industrial, pre-capitalistic agrarian (or extractive) economic activity that predates the industrial revolution (or colonialization), and around which the entire domestic economy was built prior to the advent of industrial development. In short, the economy is driven by the ownership and exploitation of natural resources. This sector is atomistic with many small actors engaged at subsistence level, such as farmers that grow for their own needs, petty traders, and unskilled workers that provide basic services. Cottage industries exist that are labour intensive and within a socio-economic system of formally and informally organised actors. Demand and supply are primarily domestically oriented. The traditional sector is synonymous with the rural sector.

The second part of the dual economy is the 'modern' sector, where the actors are larger, formal firms that have access to capital (both financial and knowledge). These activities require significant infrastructure and resources, such as skilled workers, banks, universities,

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<sup>2</sup> According to Itagaki (1960) the concept of dualism was first introduced in the PhD thesis of J. H. Boeke titled *Tropisch-Koloniale Staathuishoudhunde. Het Probleem*, (Amsterdam, 1910). See also Boeke (1942). Boeke's work points out that two parts of the economy (one that is dominated by colonial actors, the other by traditional practices and actors) can remain separate and parallel, failing to connect to (and learn from) each other.



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3 electricity, which are most commonly associated with cities. The modern economy is driven  
4 by knowledge-intensive and capital-intensive inputs, which mostly are not indigenously  
5 developed, or owned in developing countries.  
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8 Lewis' work was concerned with how a positive shift of resources from one to another might  
9 drive development, under the right conditions (see Gollin 2014). How dynamics affect the  
10 shift between one type of economy to another, and its implications for economic development  
11 as well as inequality is not sanguine here. Instead, we ask how this dualism explains two sets  
12 of contrasting L advantages, and consequently different sets of FSAs of firms, leading to  
13 vastly differing types of MNEs and strategies. This focus requires extending the dual  
14 economy model to take into account a variety of international business concepts.  
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### 23 **FIRMS WITHIN THE EXTENDED DUAL ECONOMY MODEL**

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25 In this section we offer an expanded (and more contemporary) interpretation of the dual  
26 economy model that provides us with the basis of understanding the evolution of firms and  
27 the creation of FSAs. This model requires us to expand each of the two classic dual sectors  
28 into a further two sub-sectors (see Figure 1). Note that the 4 sectors in Figure 1 are not drawn  
29 to scale. It should be fairly obvious that for a developed country, the two lower quadrants are  
30 much less significant; for less developed countries, the opposite is true.  
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38 \*\*\*Figure 1 about here\*\*\*  
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### 43 **The Traditional Sector**

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45 The Lewisian reading of the traditional sector has much to do with subsistence activity by  
46 predominantly small, informal actors performing labour-intensive activities that use very low  
47 levels of knowledge and financial capital. That is to say, these are actors where organizational  
48 skills, technological or managerial expertise play a limited role. They do not have access to  
49 financial capital that allows them to expand their activities, nor expertise or equipment  
50 themselves (depending on access to financial resources) allowing them to grow.  
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3 It is useful to make the connection with the terms natural assets and created assets. Natural  
4 assets may be defined as fruits of the earth and include the stock of untrained labour and  
5 resource endowments. Created assets are those that derive from the upgrading of these natural  
6 assets. They may be tangible, for example, the stock of physical and financial assets, or  
7 intangible, for example, technological knowhow, goodwill, managerial and entrepreneurial  
8 skills, and interpersonal relationships, forged by individuals or the culture and organizational  
9 structure of institutions.  
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15 Traditional sectors exist along a continuum, at one extreme of which they rely almost  
16 completely on natural assets, which we label 'basic-traditional', and depend almost  
17 completely upon natural assets. They are high labour-intensive, low-wage, low-skill, low  
18 value-added activities that rely on basic factors of production. In the case of primary  
19 activities, they are natural resource-dependent, such as farming or mining. Basic  
20 manufactures, such as baked goods, cured meats and fish, soaps, hand-made textiles, iron-  
21 mongering and the like, depend upon traditional inputs, while service sector actors include  
22 those that supply support activities (moneylenders, seed suppliers, middlemen, etc). Such  
23 activities are natural-asset based, or at least natural-asset-dependent, with different degrees of  
24 created-asset content. In developing countries, these are the actors that Lewis describes as  
25 being in the subsistence sector, but are insignificant in developed countries. Both financial  
26 capital and knowledge inputs are required to improve the FSAs of such actors. They may not  
27 be locked-out of growth opportunities by the lack of financial capital (landowners can be  
28 wealthy), but they do not have the knowledge assets to leverage the capital available to them.  
29 Indeed, a key point of Lewis (1954) is that more financial capital without knowledge capital  
30 has limited benefits to subsistence actors, no matter if they are based in a rural or an urban  
31 setting. A mom-and-pop/corner store can sell more if they have larger premises and bigger  
32 stocks, but without investing in logistics and computerization of their stocks, there are  
33 diminishing returns on increases in financial capital, i.e. they cannot compete with  
34 supermarket chains. Likewise, a small agricultural holding has limited growth potential  
35 without machinery, or a better knowledge of fertilizers, seeds, prices, and access to markets.  
36 In other words, they are *non-scalable* without the injection of specialised knowledge. It is  
37 also possible to process the outputs of agriculture and extractive industries further up the  
38 value chain, but this requires both financial capital and knowledge inputs (thereby moving  
39 from Traditional-Basic to Traditional-Advanced, see figure 1).  
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3 The Traditional-Basic sector covers activities where natural assets are a core and central  
4 input, but includes rudimentary processing for transportation and sale. For instance, coffee  
5 farming is a primary activity, but the beans need to be dried before they can be sold. This is  
6 *direct* extension of the primary activity. Further processing requires knowledge and capital  
7 inputs, and is part of the Traditional advanced sector. Fishing is another primary activity  
8 defined as Traditional-Basic, but further upgrading within the same value chain might happen  
9 by adding value through processing, canning and distributing fish products, and would be  
10 classified as Traditional-Advanced.  
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16 The division between Traditional-Basic and Traditional-Advanced lies in the proportion of  
17 complementary knowledge-based inputs, which reflects the shift of natural assets into created  
18 assets. Thus, soap made by villagers through artisanal means may be labelled and sold in  
19 health food stores at home and abroad to higher end consumers. Farmers provided with credit  
20 and technology through government schemes can grow flowers on an industrial scale for  
21 export, with modern agricultural techniques. The local seed distributor may act as an agent  
22 for multinational biotechnology firms, but it is important to note that the division between  
23 Traditional-Basic and Traditional-Advanced also implies a shift of actors from the informal  
24 to the formal sector.  
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32 This shift from Basic to Advanced is not straightforward. It requires an upgrading of FSAs  
33 and depends upon the availability of capital sources (both financial and knowledge based) in  
34 addition to L advantages, which have historically tended to be in short supply in rural  
35 locations (Narula 2018). Basic infrastructure such as roads, electricity and education are often  
36 poor. Where these assets are available, the traditional-advanced sector can expand quite  
37 rapidly. Of course, traditional sectors are no longer always 'rural' in their location, with an  
38 expansion of urban areas over the last few decades (UN, 2013). Moreover, where  
39 transportation costs are low or distances are short (e.g., in small countries), the processing of  
40 natural assets can also be done elsewhere, and the difference between Traditional-Advanced  
41 and Modern-Advanced can often be nominal.  
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49 Access to higher-order L advantages are the basis of the development of the Traditional-  
50 Advanced sector (figure 1). Farms become larger with access to formal capital, technology  
51 and management (more advanced seeds, processing facilities, tractors, fertilisers, etc), and  
52 firms can diversify further along the value chain. Some of these firms may move horizontally  
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3 to other sectors, perhaps developing their own expertise in new industries, and in some cases,  
4 diversify away completely from their natural-resource intensive roots.  
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### 6 **The Modern Sector**

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9 The Modern-Basic sector has many of the features of the Traditional-Basic sector but is not  
10 reliant on primary resource inputs (figure 1). Actors rely on created assets to generate income  
11 based on basic technological, entrepreneurial, or organizational skills, which may be  
12 artisanal, or what are known as ‘cottage industries’. Small-scale manufacturing is often  
13 rampant of a cottage-industry nature such as assembling bicycle pedals at home, stamping  
14 washers and soldering fuses. Indeed, in developing countries, small parts and subassemblies  
15 may be manufactured piecemeal by individuals. For example, India’s manufacturing sector is  
16 dominated by micro firms, of which a majority are informally organised (Narula and Kodiyat  
17 2016). Service sector equivalents include selling and making food products, selling mobile  
18 phone accessories, or repairing household goods. Like the Traditional-Basic-sector, with  
19 which it overlaps greatly, these actors have few FSAs and none that are exploitable outside  
20 their specific location, and a good proportion remain outside formal firms.  
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29 The ‘Modern-Advanced’ sector on the other hand, is more knowledge- and capital-intensive,  
30 and relies on created assets to perform skills-dependent activities. Its constituent actors are  
31 overwhelmingly in the formal sector. Actors’ outputs rely on created assets, and natural  
32 assets, such as unskilled labour, play a minor role. FSAs of firms rely on knowledge assets in  
33 capital- and knowledge-intensive activities. That is to say, these are actors where  
34 organizational skills, technological or managerial expertise play a greater role. They have  
35 access to financial capital (dependent upon formality) that allows them to expand activities  
36 and expertise or equipment (depending on access to financial resources) that allows them to  
37 grow.  
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45 The Modern-Advanced sector requires access to a strong knowledge infrastructure as a basis  
46 for generating FSAs, which, again, tends to be located in urban agglomerations. Such L  
47 advantages tend to be concentrated in and around cities, which is why the modern sector is  
48 considered to be a synonym for ‘urban sector’. This urban agglomeration reflects the  
49 historical tendency for cities to have a higher density of infrastructure, including roads,  
50 railways, potable water and electricity, as well as schools and universities, thereby giving  
51 access to skilled and semi-skilled workers, in addition to banking and finance infrastructure,  
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not to mention markets for ‘modern’ products and services, as the rural/urban divide also reflects a considerable income differential.

### LOCATION ADVANTAGES AND THE PERSISTENCE OF DUALITY

Duality is not a ‘problem’, because all economies (above a certain threshold size) exhibit a duality. It is a question of the *degree* of duality and the persistence of a duality with a bias towards subsistence activity, as each sector offers different potential to generate employment and income. The traditional sector never disappears, but moves away from low productivity, informality and un-scalability (advanced economies in the EU, Japan and North America continue to have a substantial role for primary goods). Where subsistence activity remains dominant, the traditional sector ‘sheds’ unproductive resources (‘surplus labour’), which are used more efficiently by the modern economy (Lewis, 1954; Itagaki, 1968) *provided there is a growing modern sector* that is able to absorb this surplus. In the absence of this there may be little redeployment between sectors, as well as when the modern sector functions as an enclave where systemic rigidities prevent ‘centrifugal spread effects’ (Myrdal, 1957) of innovation from one sector to the other. The classical studies on duality do not consider the possibility that the traditional sector can also absorb knowledge and financial capital and upgrades its way out of low productivity, low wage, and low value-added activity, thereby acting as an engine of growth (i.e., a shift from Traditional-Basic to Traditional-Advanced). Duality can therefore persist as is the case with countries such as Norway and Australia. In this regard, the extended dual economy model helps answer how these countries have managed to shift ‘upwards’ and away from the low valued added sectors, not by shifting diagonally (figure 1), as the classical model would suggest.

Duality also persists for several other reasons. The various parts of the economy require different sets of L advantages, because the types of sectors have different needs. Irrigation, grain storage facilities, agricultural (or mining) research centres, veterinary hospitals, central purchasing and credit financing for machinery are necessary for traditional sectors. Especially important in the absence of transportation infrastructure is proximity to the location-bound natural assets at the heart of activities.

The Modern-Advanced sector depends upon universities, IT infrastructure, logistics, and transportation. The key for firms in these industries is proximity to such infrastructures. Innovation activities in knowledge-intensive sectors are associated with specific location-bound assets, which are often associated with the knowledge infrastructure of that location

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3 and tend to be spatially concentrated (Asheim and Gertler, 2005; Iammarino and McCann,  
4 2006, Narula 2018). These advantages are based on the educational level of the population  
5 and the ability to capitalize on a functioning knowledge infrastructure.  
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8 Duality also persists because there is a certain degree of path-dependence and inertia in the  
9 development of infrastructure, and the plant and equipment of associated firms. Capital  
10 projects and large scale investments, once established, determine to a significant degree the  
11 location of sequential investments, reinforcing patterns of specialisation and agglomeration  
12 (and the growth of urban areas), which consequently affect future investments and L  
13 advantages. The density of roads, canals and railways still determine the concentration of  
14 mining and agriculture within many developing countries even a century after they were  
15 built. Reinforcing mechanisms can be either a virtuous or a vicious cycle; underinvestment in  
16 location assets can also have negative consequences in terms of future private and public  
17 investment.  
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25 The persistence of duality in developing countries also reflects limited resources. Limited  
26 resources means that governments make choices. Thus, resources and state investment in L  
27 advantages are distributed unequally, as specific governments respond to different political  
28 and economic interest groups. The amount of governmental spending and support of the  
29 agriculture sector is often much higher in emerging economies and LDCs than in developed  
30 countries. In many cases, emerging economies spend more on agriculture-related science and  
31 technology activities than on industrial R&D (Narula and Kodiyat 2016), but in many  
32 countries the focus is on shorter-term priorities such as price-support mechanisms and  
33 subsidised irrigation, fertilizers and finance, rather than trying to reposition traditional actors  
34 to be more productive through knowledge upgrading. Established economic actors with  
35 political clout can bias government policies towards particular outcomes, and prevent  
36 structural adjustment.  
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45 That there is a considerable overlap between the rural/urban divide and the traditional/modern  
46 dichotomy is not a coincidence. The rural/urban divide remains a fact of economic geography  
47 since the industrial revolution. Cities were host to 'new' created asset economic activity  
48 associated with manufacturing, while the rural regions remained focused on natural asset  
49 activity. Such a rural/urban dichotomy replicated itself across the developing world in the  
50 wake of colonialization and emigration. For obvious reasons, different sets of state priorities  
51 have enhanced the strengths and weaknesses of each. Almost all developing states sought to  
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3 encourage capital formation by the provision of capital and technology. Upgrading the  
4 extraction of value from natural asset-based activity requires either assistance through the  
5 provision of public goods (e.g., training, transportation, irrigation), subsidised loans and  
6 central buying schemes, or direct ownership where domestic capital have been in short  
7 supply, i.e. state-owned enterprises (SOEs), given the huge capital costs associated with some  
8 of these activities (e.g., steel foundries, mines, plantations, or grain storage), or they need  
9 support from other state-support organisations (e.g., grain storage silos, export-import banks,  
10 or agricultural institutes). The shift from the traditional to the modern sector is often  
11 prevented by an insufficiently developed knowledge infrastructure, which is essential to  
12 provide L assets needed by firms to gain competitiveness in the modern sector.  
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### 22 **Inward FDI as a source of FSAs and L advantage**

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24 Governments in developing countries have tended to underinvest in the modern sector (our  
25 focus in this sector is on the Modern-Advanced industries). This emphasis on primary  
26 resources is in part a legacy of the colonial era, and the appropriate infrastructure was built to  
27 support this. The emphasis was later reinforced by national governments in part due to path  
28 dependence, but also because political actors recognised that the majority of their constituents  
29 were based rurally. Thus this selection bias has reflected an inheritance of policy. Colonies  
30 specialized in the export of unprocessed natural resources for export, with manufacturing  
31 undertaken in other (developed) countries (Narula 2018). Limited modern sector activities  
32 existed in the colonies prior to independence, except where processing of raw materials  
33 served an important function, for instance, in the case of perishable goods. The sugar cane  
34 plantations in the West Indian colonies prompted the growth of sugar processing, because it  
35 was cheaper and more efficient to do such processing locally, and export raw sugar (which is  
36 much less bulky). Foreign investment dominated the processing the secondary and services  
37 investment, since MNEs (and other foreign actors) possessed the necessary FSAs to set up  
38 both Traditional-Advanced and Modern-Advanced sector activities, with a handful domestic  
39 actors at later stages, often with technical and capital support from developed countries. By  
40 and large, developing countries relied on imports and foreign investments to dominate local  
41 demand for modern-advanced sector goods and services until the import-substitution era.  
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53 The import-substitution era saw a rapid decline in manufactured imports, a nationalization of  
54 foreign-owned enterprises, and a growth in the infrastructure and state-support for the  
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3 modern sector (Bruton, 1998). The FSAs of domestic firms were in the absence of  
4 competition, and were of a location-bound type. As such, Modern-Advanced sector exports  
5 from emerging economies remained small, and Traditional-Advanced and Traditional-Basic  
6 exports were still significant. After the post-1990 liberalization, such firms benefitted from  
7 the growth of imports and inward FDI, as greater competition spurred some of these firms to  
8 upgrade. As Stal and Cuervo-Cazurra (2010) note, pro-market reforms acted as an important  
9 push factor for the upgrading of FSAs. Liberalization caused a crowding-out of domestic  
10 firms that had weak FSAs, and acted as a catalyst for the stronger domestic firms to upgrade  
11 their capabilities. In several instances, however, firms in the modern sector continued to  
12 benefit from industrial policy that provided various incentives (including low-cost capital),  
13 allowing some to internationalise.  
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21 Moreover, many developing countries suffer from the vicious cycle of poverty, which inhibits  
22 the availability of domestic capital sources to promote firm upgrading (Narula, 2014).  
23 Domestic firms – whether in the formal or informal sector, or in the traditional or modern  
24 sector – are constrained by the limited availability of financial capital. In general, most  
25 developing countries had – prior to the WTO agreements – severely restricted the flow of  
26 inward FDI in traditional industries on the grounds of national and food security. This  
27 restriction meant that new production methods, processes, and organizational skills necessary  
28 to become internationally competitive in the traditional sector, have been unavailable for  
29 nascent firms. Although it is possible to acquire such skills from foreign actors through  
30 licensing and other arms-length arrangements, this is a much more complex alternative, and  
31 while it was a viable option for Korea and Japan, this has rarely been an option in a  
32 liberalised economy (Lall, 1996). Besides, it requires a high level of absorptive capacity  
33 (Criscuolo and Narula, 2008)  
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42 Inward FDI in the modern sector during the import-substitution era was limited to target  
43 sectors with ownership and control restrictions, in addition to weak IPRs of their assets. This  
44 had the effect of limiting opportunities for knowledge transfer from spillovers and linkages  
45 through inward FDI (Iguchi, 2008). Nonetheless, the presence of inward FDI is an important  
46 L advantage in itself; FDI represents a key source of knowledge and financial capital,  
47 especially given that domestic sources of either are in short supply. The presence of ‘foreign  
48 capital’ was also key in Lewis’s conceptualisation of how the urban economy might grow.  
49 MNEs represent an important source of knowledge capital through vertical and horizontal  
50 linkages, in addition to demonstration effects. Domestic firms are known to cluster around  
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3 inward investors, which are located near important sources of inputs (in the case of the  
4 traditional sectors), or key aspects of the knowledge infrastructure. Saxenian and Hsu (2001)  
5 document the role of advanced economy MNEs in the establishment and growth of the  
6 Hsinchu cluster in Taiwan, as do Patibandla and Peterson (2002) in the case of Bangalore.  
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10 In the post-WTO era, restrictions on inward FDI have greatly eased. Governments and  
11 inward FDI have significantly assisted in increasing the productivity of the resource-  
12 intensive, traditional sector through the introduction of new capital-intensive machinery, as  
13 well as the introduction of the latest managerial and organizational practices. New  
14 Traditional-Advanced sectors have also arisen in response to greater global demand, creating  
15 new export sectors, partly in response to the growth of global value chains (Guiliani,  
16 Pietrobelli and Rabellotti, 2005, Shapiro et al 2018). Such sectors reflect the home countries'  
17 comparative advantage, and are often (or were in the past) significant important export  
18 strength. The strong sustained prioritization over several decades in specialised infrastructure  
19 in certain aspects of traditional sectors has helped build up strong domestic capabilities in the  
20 Traditional-Advanced sector in a number of countries, both developing and developed  
21 (Narula, 2002). Rasiah (2006) highlights how government policy has helped build up and  
22 promote exports in the palm oil industry over several decades.  
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### 34 **DUALISM AND INTERNATIONALIZATION OF EMNES**

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36 It has been suggested by several authors (e.g. Ramamurti, 2009; Gammeltoft and Hobdari  
37 2017) that the 'new' EMNE activity since the late 1990s represented a different kind of  
38 internationalization than the previous generation of EMNE activity (see contributions to Lall,  
39 1983; Kumar and McLeod, 1981; Khan, 1986; among others). Gammeltoft et al. (2010)  
40 argued that EMNE activity represents two distinct 'waves', since they have different types of  
41 FSAs as well as different geographical and spatial preferences. EMNEs indeed have distinct  
42 characteristics: 'new' EMNEs derive from the modern-advanced sector, while 'old' EMNEs  
43 reflect a different set of L advantages associated with strengths in the traditional-advanced  
44 sector. As Table 1 explains, these two sets of EMNEs exist concurrently, with relatively little  
45 overlap, except due to common ownership because of the conglomerate nature of the parent  
46 firm.  
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\*\*\*Insert Table 1 about here\*\*\*

It is worth emphasising that there is a difference between ‘emerging MNEs’ and ‘emerging country MNEs’. The latter simply indicates that the home country of the MNE is a developing one, with the structure of its actors and L advantages reflecting a dual economy as described above. This does not mean that all EMNEs are new firms or firms with limited internationalization experience and weak FSAs.

### **Internationalization by traditional sector EMNEs**

The earlier EMNE activity noted in the literature (see Table 1 and Dunning et al., 1998 for a summary) pointed to certain characteristics of EMNEs that suggest that they derived from the Traditional-Advanced sector. Much of the empirical work indicated a strong and marked trend for traditional first-generation EMNEs to focus their investments in countries which were at a similar or an earlier stage of development. This preference was a direct result of their lack of international experience and the locations offered resource endowments, which were broadly similar to those of their home countries, but offered access to lower input costs or similar markets. Lall (1983) proposed that their FSAs were in relatively mature technologies, with limited organisational abilities. Their tendency to be ‘regional’ reflected ‘ethnic’ advantages, due to similar cultures and institutions, as well as an ability to leverage their experience of operating in countries with similar institutional voids.

Such FSAs were enhanced by the prevalence of import-substituting, inward-looking policy regimes (Lall, 1992; Narula and Dunning, 2000, 2010). These policies encouraged small scale production. The FSAs of these firms were primarily location-bound, determined in part by the market distortions introduced by the home country policies, and only sustainable at home while these distortions were in place, and were only really useful in foreign markets where similar distortions existed (and privileged access was granted).

These early EMNEs continue to invest abroad, having continued to expand abroad to seek cheaper inputs (whether raw materials or labour). For example, Indian firms seek to relocate textile manufacturing to Bangladesh, while Thai firms seek to exploit resource low cost labour inputs from Laos, Myanmar and Cambodia. Chinese firms have sought to secure alternative sources of natural assets abroad in Latin America and Africa.

The big change in the last two decades has been the growth of market-seeking FDI from traditional sectors, although this is still modest, lacking as they are in ‘soft’ FSAs associated

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3 with brand names, advertising, and the ability to benefit from economies of common  
4 governance (compared with mature MNEs from developed countries). Such MNEs from the  
5 traditional sector generally behave consistently with the predictions of the Uppsala model  
6 (Johansson and Vahlne, 1977; 2009), and locate where cultural, political, and social  
7 conditions are most similar to their home countries and where competitors with superior  
8 FSAs are unlikely to venture. For traditional sector EMNEs, this has meant other emerging  
9 economies (Panand and Zaithaml, 1998). Del Sol and Kogan (2007) point to the FSAs that  
10 Chilean MNEs have in 'liberalization know-how'. Chile underwent liberalization much  
11 earlier than other Latin American countries, and firms were able to leverage this knowledge  
12 in other regional markets.  
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20 Other MNEs have also been successful in developing FSAs in managing large international  
21 operations globally, particularly in lower-technology intensive sectors. In general, these firms  
22 have chosen to pursue the upgrading of their technological FSAs alongside their transaction-  
23 type FSAs, building up their capacity to manage complex cross-border hierarchies (Panand  
24 2007). The dependency on the traditional sector and the very late internationalization of the  
25 firm reflect traditional sector MNE characteristics.  
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30 Overcoming failures and imperfections in markets for capital and technology typical of  
31 developing countries, a number of countries built up national champions in order to  
32 industrialise and increase domestic capacity during the import-substituting era. Energy  
33 security led to a number of petroleum sector investments, such as Petrobras, Petronas,  
34 PetroChina or ONGC, which have expanded abroad to secure inputs. Likewise, such attempts  
35 to guarantee raw material access, has been done by Chinese state-owned mining companies  
36 especially in Africa and Latin America (Shapiro et al 2018), while private Indian firms with  
37 strong political links have also done so (see Hindalco or Vedanta). For obvious reasons, such  
38 investments have primarily been South-South.  
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45 At the same time, some of these early EMNEs have also sought to upgrade their competences  
46 and FSAs, and have also moved towards newer, knowledge intensive Modern-Advanced  
47 sectors. This reflects a conscious refocusing of their home country operations, and the  
48 opportunities of cross-subsidising (within the conglomerate structure favoured by most  
49 EMNE parent firms) this structural shift.  
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#### 54 **Internationalization by modern sector EMNEs**

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3 On the whole, FSAs of emerging country firms in the modern sector benefitted from the  
4 process of liberalization, but only where parallel and contemporaneous investments were  
5 made in improving L advantages associated with the knowledge infrastructure. Inward FDI  
6 has proven to be a significant determinant in improving FSAs of these firms through the  
7 inflow of knowledge and financial capital, predominantly via (in the case of China especially)  
8 knowledge transfers in joint ventures with foreign firms. In other cases, inward FDI has  
9 promoted knowledge transfer through linkages created within MNE-associated supplier  
10 networks within value chains, as in the case of the automotive sectors in Thailand, Brazil and  
11 Malaysia. These have acted as 'seed investments' of strong clusters in innovation-intensive  
12 sectors.  
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20 However, inward FDI does not always lead to improvements in domestic FSAs. Due to the  
21 low intellectual property protection regime, many foreign firms did not consider investments  
22 or R&D collaborations in India till 2005, ten years after India had signed the TRIPS  
23 agreement and enforced IP protection to TRIPS standards in the industry (Brandl and  
24 Mudambi, 2014). The weakness in the L assets of India has meant that Indian pharmaceutical  
25 firms remain concentrated in generics and OTC drugs, which are relatively low R&D  
26 intensive. One of the most competitive Indian pharmaceutical firms, Dr. Reddy's  
27 Laboratories, had an R&D intensity of 6.2%, less than a third of the average R&D intensity  
28 of its international counterparts.  
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35 Complementary L advantages that have improved the technological and absorptive capacity  
36 of domestic firms have been crucial in this regard. In several cases, state-owned or subsidised  
37 organisations and universities have undertaken a considerable amount of R&D, both  
38 independently, and on behalf of private firms. Moreover, a commensurate increase in  
39 government expenditures on R&D and the production of PhDs by tertiary institutions is  
40 evident in the modern sector. The growth of FSAs of domestic firms depends also on  
41 incentives from the state to encourage firms to upgrade, both in terms of size, formality and  
42 assets. However, this requires considerable institutional restructuring.  
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49 Many EMNEs have undertaken accelerated internationalisation (rather than the more gradual  
50 approach), utilising M&A's especially in developed countries, as these are the most  
51 significant markets for such products. In theory, M&A's provide access to FSAs such as  
52 brands, as well as location-specific expertise in distribution, logistics and marketing. It is  
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another matter that these firms have not always had the capacity to absorb these acquired assets efficiently (see Narula, 2012; 2015 for a discussion).

Nonetheless, many of these new MNEs still depend to a great degree on home-country-specific L assets, and their internationalisation tends to be shallow. That is, some of their internationalisation relies on the use of key assets that remain embedded in the home country. For example, although Indian MNEs such as Infosys and Tata Consultancy Services (TCS) have come to dominate the information technology outsourcing and call centre business worldwide, much of this work is undertaken in India, taking advantage of the large supply of low-cost, skilled workers and favourable governmental policies. Much of their employment in developed countries tends to be sales representatives or onsite contact persons for clients that are responsible for relationship management not the actual service provision. The continuing growth of the service sector in India, the low-cost labour and governmental support have allowed TCS to develop location-bound FSAs that are difficult to access elsewhere.

It is a notable feature of most EMNE activity that there are relatively few new entrants. Much outward FDI from emerging economies is dominated by 'national champions', be they SOEs, or family-owned conglomerates (often synonymous with rich landlords and 'old-money' families). Firms that enjoy state-support, whether due to state ownership or influence tend to benefit from lower cost of capital and state guarantees, and are considered to be 'too big to fail' (Buckley et al, 2007). They are therefore able to sustain poorly performing foreign operations for a longer period, unlike most privately owned firms, and also benefit from a range of supportive government policies to promote their internationalisation (Fortanier and Tulder, 2009; Kumar and Chadha, 2009). Similar claims are also made for family business groups, which do not have to justify underperforming investments to shareholders. Large conglomerates (or state-ownership) allow cross-subsidisation of activities, and investments in acquisitions and R&D (Narula, 2015). These EMNEs behave much like their advanced economy counterparts, since – especially in the case of family-owned conglomerates – they tend to have considerable experience in international activities, and, in this regard, are not 'new'.

Of course, some of the internationalisation reflects general 'push' factors that affect firms from all sectors, especially those associated with 'escape' investments. Political and institutional instability encourages outward FDI to locations with more stable institutions.

Home country stock markets may be insufficiently exploited to support foreign expansion, or firms may be politically ‘on the wrong side’. For firms that do not have strong home country political connections, outward FDI may also be a means to exit institutional constraints at home (Witt and Lewin, 2007). Capital controls may limit using inter-company flows to finance operations, and domestic banks have limited capital to lend, charging high interest rates. In this regard, it is important to identify ‘escape’ investments that are essentially capital flight, from long-term investors (Morck, Yeun, and Zhao, 2008). Witt and Lewin (2007) suggest outward FDI may also be a means to exit institutional constraints at home. Lastly, cash-rich firms from emerging economies have a propensity to acquire companies that provide some prestige can best be described as ‘trophy FDI’ for which the objective is largely non-commercial (Globerman and Shapiro, 2009). Child and Rodrigues (2005) argue that a considerable share of Chinese outward FDI is driven by the government’s mandate to enhance China’s economic and political power in the world and expand China’s international trade relations, rather than the goal of economic returns.

## CONCLUSIONS AND IMPLICATIONS FOR COUNTRIES AND EMNES

The extended Lewisian dual economy model allows a number of interesting insights. Emerging economies, by virtue of being ‘in-between’ have multiple ‘sets’ of L advantages, and consequently, different kinds of firms and FSAs from these multiple (and parallel) economies. These parallel economies and parallel areas of competitiveness lead to parallel sets of MNEs – one set emanating from ‘traditional’ sectors and another from the ‘modern’ ones. I discuss here the implications for both countries and EMNEs.

### Implications for policy

Acknowledging this multi-polarity helps to answer a long-standing paradox about emerging country MNEs; can we expect technology-intensive EMNEs to increasingly dominate, expanding rapidly in developed countries? Are resource-intensive EMNEs that engage in ‘classic’ incremental expansion to markets and suppliers at a similar or lower level of development, a relic of the past? It is clear that both kinds of activity simultaneously exist and thrive, because it is in the nature of the emerging economy to be a dual economy. These patterns of internationalisation also show consequent differences, depending upon a variety of factors. The strength and weaknesses of the domestic milieu can act as a ‘push’ or a ‘pull’ to

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3 internationalise, while also reflecting supply and demand of that industry. Duality need not  
4 be permanent, nor is it necessarily an affliction, especially if governments recognise this, and  
5 act presciently. Failing to transition towards a primarily knowledge-intensive economy and  
6 wind-down dependence on natural resources is at the core of the problem known as the  
7 'middle income trap'. Countries – especially developing countries – have limited resources.  
8 Maintaining the appropriate location assets to optimally support both types of sectors is  
9 costly. Each requires different kinds of support sectors, infrastructure and policies, with little  
10 overlap. There is nothing 'wrong' about a duality of types of firms and EMNEs. However,  
11 there is a consistent techno-elitism in policy-making: that development is about the  
12 promotion of the modern-advanced sectors, and that 'successful' development is about  
13 expanding the prominence of sectors like ICTs, biotech and robotics is the only sure way to  
14 grow (along with the concurrent shrinking of traditional sectors, and a move away from  
15 agriculture, mining or artisanal activity).

### 24 **Implications for the growth of EMNEs**

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27 It is fairly well-known that most EMNEs depend considerably upon their home economies  
28 for their initial FSAs (Narula 2012, Hobdari et al 2017). Where the economy is dominated by  
29 the primary sector, EMNEs initially grow out of their competence in acting as an exporter of  
30 raw materials (from the traditional sector). Growth depends upon the capacity to move to  
31 higher value-adding activities, integrating forwards. However, this not only depends upon  
32 the EMNE's capacity to develop FSAs, but also the ability to shape a network of formal  
33 actors around them in the role of capital equipment suppliers, insurance and finance, and  
34 other affiliated inputs. It is rare for an EMNE to be able to internationalise without an  
35 appropriate cluster of such actors. Given that a large part of the economy tends to be in  
36 Traditional-Basic activities, this is not as straightforward, especially where the economy is  
37 characterised by a high degree of informality, and institutional hurdles that make it hard for  
38 firms to transition from the informal to the formal sector. The mining sector has seen  
39 EMNEs from South Africa, Brazil, Chile and Peru have been able to become internationally  
40 competitive, not just as flagship firms, but also as suppliers of specialist services and  
41 equipment. This requires the capacity to engage in innovation through active R&D, and this  
42 in turn requires a fairly robust innovation system to support this (Morris et al 2012,  
43 Figueiredo and Piana 2016, Kaplan 2012, Narula 2018).

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3 EMNEs from the Modern-Advanced sectors have an advantage that their existence in the first  
4 instance implies a fairly well-developed set of L advantages (albeit in a few enclaves  
5 associated with urban areas). However, these L advantages (in the form of knowledge  
6 infrastructure) may only be a source of location-bound FSAs, because these L advantages are  
7 not at a world-class level. From a managerial perspective, MNEs have to overcome  
8 weaknesses in the knowledge infrastructure by investing in private goods and this requires  
9 considerable internal resources (Cuervo-Cazurra, Meyer, and Ramamurti, 2015). Substituting  
10 private goods for public goods can represent a significant constraint to firm performance.  
11 This may lead EMNEs to seek to 'exit' their home country. High costs of building aspects of  
12 the knowledge infrastructure as a private good will ultimately make them uncompetitive in  
13 global markets. The absence of appropriate home country advantages can, at the extreme,  
14 result in 'hollowing-out' of the knowledge-intensive sector, as MNEs from these sectors will  
15 seek to locate their higher value adding activities in host countries, making 'escape'  
16 investments. However, such 'escape' investments requires a high degree of absorptive  
17 capacity and the organisational skills to efficiently manage knowledge flows within the  
18 MNE, itself a skill acquired through experience and learning (Narula 2017).  
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30 Ultimately, emerging countries with large Traditional-Basic and Modern-Basic sectors where  
31 activity is informally organised can only be a temporary competitive advantage for EMNEs,  
32 because this only provides low cost labour (and the estimate runs to well over two-thirds of  
33 the population of most emerging economies remains in these kinds of activities). A country  
34 where the rural population have greater political sway will likely make fewer decisions that  
35 shift the focus of the economy from traditional sectors, because interest groups prefer to  
36 maintain the *status quo*. Dependence on EMNEs that rely on home country low cost labour  
37 are likely to remain as tier 3 suppliers in GVCs, and such a status in a GVC provides few  
38 opportunities for upgrading. In the absence of upgrading opportunities, such EMNEs are  
39 unlikely to thrive.  
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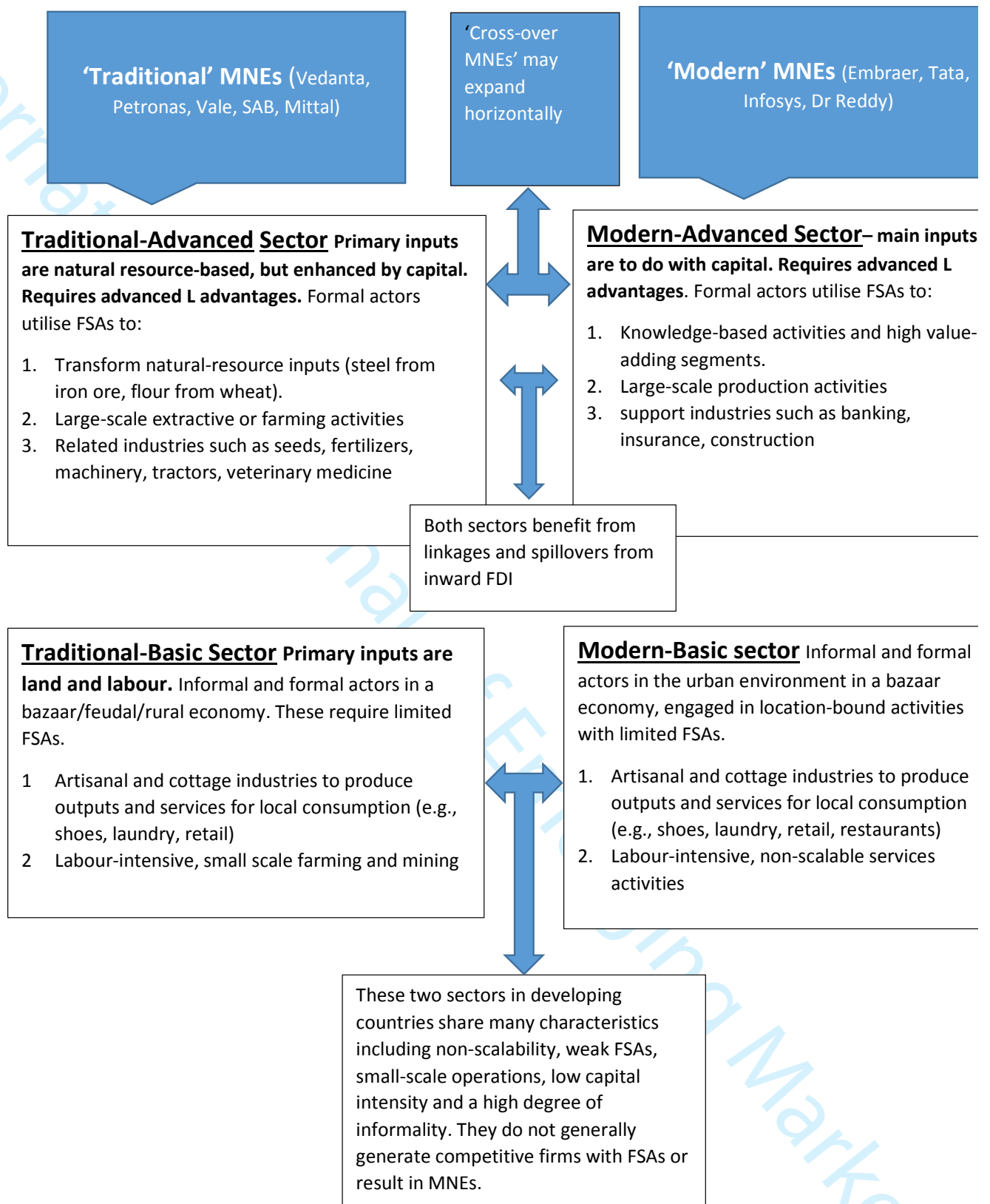
- 1  
2  
3 Asheim, B. T., & Gertler, M. S. 2005. The geography of innovation: Regional innovation  
4 systems. In J. Fagerberg, D. C. Mowery & R. Nelson Eds. *The oxford handbook of*  
5 *innovation*. Oxford, UK: Oxford University Press.  
6  
7  
8 Brandl, K., & Mudambi, R. 2014. Emncs and catch-up processes: The case of four indian  
9 industries. In A. Cuervo-Cazurra & R. Ramamurti Eds., *Understanding multinationals*  
10 *from emerging markets*. Cambridge, UK: Cambridge University Press  
11  
12  
13  
14 Boeke, Julius Herman. 1942. Economics and economic policy of dual societies as  
15 exemplified by Indonesia. Harlem, Tjeenk Willnik.  
16  
17  
18 Bruton, H. 1998. A Reconsideration of Import Substitution. *Journal of Economic Literature*,  
19 36: 903-936.  
20  
21  
22 Buckley, P. J., Clegg, L. J., Cross, A. R., Liu, X., Voss, H., & Zheng, P. 2007. The  
23 determinants of Chinese outward foreign direct investment. *Journal of Intentional*  
24 *Business Studies*, 384: 499-518.  
25  
26  
27  
28 Chenery, H.B. and Taylor, L. (1968) 'Development patterns among countries and over time',  
29 *Review of Economics and Statistics*, 50:391-416.  
30  
31  
32 Chenery, H.B., Robinson, S. and Syrquin, M. (1986) *Industrialization and growth: A*  
33 *comparative study*. New York: Oxford University Press.  
34  
35  
36 Cuervo-Cazurra, A., Meyer, K., & Ramamurti, R. 2015. Explaining the internationalization  
37 of emerging-economy multinationals: the relative resource specialization of firm and  
38 environment. In Demirbag, EM. And Yaprak, A. Eds. *Handbook of Emerging Market*  
39 *Multinational Corporations*, Cheltenham, UK: Edward Elgar Publishing Ltd.  
40  
41  
42  
43 Del Sol, P., & Kogan, J. 2007. Regional competitive advantage based on pioneering  
44 economic reforms: The case of Chilean FDI. *Journal of International Business Studies*,  
45 386: 901-927.  
46  
47  
48  
49 Dunning, J.H., Van Hoesel, R. & Narula, R. 1998. Third world multinationals revisited: New  
50 developments and theoretical implications, in Dunning, J.H. Eds. *Globalisation, trade*  
51 *and Foreign Direct Investment*, Oxford, UK: Elsevier.  
52  
53  
54  
55  
56  
57  
58  
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- 1  
2  
3 Figueiredo, P.N., Piana, J., (2016) When “one thing (almost) leads to another”: A micro-level  
4 exploration of learning linkages in Brazil's mining industry. *Resources Policy*, 49, 405-  
5 414  
6  
7  
8 Fortanier, F., & Tulder, R. V. 2009. Internationalization trajectories—a cross-country  
9 comparison: Are large Chinese and Indian companies different? *Industrial and  
10 Corporate Change*, 182, 223-247.  
11  
12  
13 Gammeltoft, P., Pradhan, J. P., & Goldstein, A. 2010. Emerging multinationals: Home and  
14 host country determinants and outcomes. *International Journal of Emerging Markets*,  
15 53/4, 254-265.  
16  
17  
18 Gammeltoft, P., & Hobdari, B. (2017). Emerging market multinationals, international  
19 knowledge flows and innovation. *International Journal of Technology Management*,  
20 74(1-4), 1-22.  
21  
22  
23 Giroud, A., Mirza, H., & Wee, W. 2009. FDI from developing to developing countries: Key  
24 role of institutions and future prospects. Paper presented at the 36th AIB-UKI  
25 Conference, Glasgow, UK.  
26  
27  
28 Giuliani, E, Pietrobelli, C & Rabellotti, R. 2005. Upgrading in global value chains: Lessons  
29 from Latin American clusters, *World Development*, 33, pp. 549-573.  
30  
31  
32 Globerman, S., & Shapiro, D. 2009. Economic and strategic considerations surrounding  
33 Chinese FDI in the United States. *Asia Pacific Journal of Management*, 261, 163-183.  
34  
35  
36 Gollin, D. 2014. The Lewis model: A 60-year retrospective. *The Journal of Economic  
37 Perspectives*, 283, 71-88.  
38  
39  
40 Hobdari, B., Gammeltoft, P., Li, J., & Meyer, K. (2017). The home country of the MNE: The  
41 case of emerging economy firms. *Asia Pacific Journal of Management*, 1-17.  
42  
43  
44 Iammarino, S., & McCann, P. 2006. The structure and evolution of industrial clusters:  
45 Transactions, technology and knowledge spillovers. *Research Policy*, 357: 1018-1036.  
46  
47  
48 Iguchi, C. 2008 Determinants of backward linkages: The case of TNC subsidiaries in  
49 Malaysia. *Asian Business & Management*, 7, pp. 53–73.  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 Johanson, J., & Vahlne, J. E. 1977. The internationalization process of the firm-a model of  
4 knowledge development and increasing foreign market commitments. *Journal of*  
5 *International Business Studies*, 23-32.  
6  
7  
8 Johanson, J., & Vahlne, J. E. 2009. The Uppsala internationalization process model revisited:  
9 From liability of foreignness to liability of outsidership. *Journal of International*  
10 *Business Studies*, 409, 1411-1431.  
11  
12  
13  
14 Kaplan, D. (2012). South African mining equipment and specialist services: Technological  
15 capacity, export performance and policy. *Resources Policy*, 37(4), 425-433.  
16  
17 Khan, K.M. 1986. *Multinationals of the South: New Actors in the International Economy*.  
18 London, UK: Frances Printer Publishers.  
19  
20  
21 Kumar, K., & McLeod. G. 1981. *Multinationals from Developing Countries*. New York, US:  
22 Free Press.  
23  
24  
25 Lall, S. 1983. *Third World Multinationals*. Chichester, UK: John Wiley.  
26  
27  
28 Lall, S. 1992. Technological capabilities and industrialization. *World Development*, 202: 165-  
29 186.  
30  
31  
32 Lall, S. 1996. *Learning from the Asian tigers*. London: Macmillan.  
33  
34  
35 Lewis, W. A. 1954. Economic development with unlimited supplies of labour. *The*  
36 *Manchester School*, 222, 139-191.  
37  
38  
39 Madhok, A., & Keyhani, M. 2012. Acquisitions as entrepreneurship: asymmetries,  
40 opportunities, and the internationalization of multinationals from emerging economies.  
41 *Global Strategy Journal*, 21, 26-40.  
42  
43  
44 Morris, M., Kaplinsky, R., Kaplan, D., 2012. One thing leads to another – Commodities,  
45 linkages and industrial development. *Resources Policy* 37 (4), 408–416.  
46  
47  
48 Myrdal, G. 1957. *Economic theory and under-developed regions*. London: Gerald Duckworth  
49 & Co.  
50  
51  
52 Narula, R. 2012. Do we need different frameworks to explain infant MNEs from developing  
53 countries? *Global Strategy Journal*, 23, 188-204.  
54  
55  
56  
57  
58  
59  
60

- 1  
2  
3 Narula, R. 2014. Foreign direct investment as a driver of industrial development: why is there  
4 so little evidence? *International Business and Sustainable Development Progress in*  
5 *International Business Research*, Volume 8 Emerald Group Publishing Limited, 8, 45-67.  
6  
7  
8 Narula, R. 2015. The viability of sustained growth by India's MNEs: India's dual economy  
9 and constraints from location assets. *Management International Review*.  
10  
11  
12 Narula, R. (2017). Emerging market MNEs as meta-integrators: the importance of internal  
13 networks. *International Journal of Technology Management*, 74(1-4), 214-220.  
14  
15  
16 Narula, R. (2018). Multinational firms and the extractive sectors in the 21st century: can they  
17 drive development? *Journal of World Business* (forthcoming)  
18  
19  
20 Narula, R., & Dunning, J. H. 2000. Industrial development, globalization and multinational  
21 enterprises: new realities for developing countries. *Oxford Development Studies*, 28(2):  
22 141-167.  
23  
24  
25  
26 Narula, R., & Dunning, J. H. 2010. Multinational enterprises, development and globalization:  
27 some clarifications and a research agenda. *Oxford Development Studies*, 38(3): 263-  
28 287.  
29  
30  
31  
32 Narula, R., R., and Kodiyat, T.P., 2016. How weaknesses in home country location  
33 advantages can constrain EMNE growth: The example of India. *Multinational Business*  
34 *Review*, 24(3), pp.249-278.  
35  
36  
37  
38 Pananond, P. 2007. The changing dynamics of Thai multinationals after the Asian economic  
39 crisis. *Journal of International Management*, 133, 356-375.  
40  
41  
42 Pananond, P., & Zeithaml, C. P. 1998. The international expansion process of MNEs from  
43 developing countries: a case study of Thailand's CP Group. *Asia Pacific Journal of*  
44 *Management*, 152: 163-184.  
45  
46  
47 Patibandla, M., & Petersen, B. 2002. Role of transnational corporations in the evolution of a  
48 high-tech industry: the case of India's software industry. *World Development*, 30(9):  
49 1561-1577.  
50  
51  
52  
53 Ramamurti, R. 2009. What have we learned about emerging-market MNEs? In R. Ramamurti  
54 & J. V. Singh Eds., *Emerging multinationals in emerging markets*. Cambridge, U.K:  
55 Cambridge University Press.  
56  
57  
58  
59  
60

- 1  
2  
3 Ramamurti, R. 2012. What is really different about emerging market multinationals? *Global*  
4 *Strategy Journal*, 21: 41-47.  
5  
6  
7 Rasiah, R. 2006 Explaining Malaysia's export expansion in palm oil and related products. In  
8 Chandra V. Eds, *The How and the Why of Technology Development in Developing*  
9 *Economies* Washington D.C., US: World Bank.  
10  
11  
12 Saxenian, A., & Hsu, J. Y. 2001. The Silicon Valley – Hsinchu connection: technical  
13 communities and industrial upgrading. *Industrial and Corporate Change*, 10(4): 893-  
14 920.  
15  
16  
17  
18 Shapiro, D, Hobdari, B. and Oh, C-H (2018) Natural Resources, Multinational Enterprises  
19 and Sustainable Development, *Journal of World Business* (forthcoming)  
20  
21 Stal, E., & Cuervo-Cazurra, A. 2011. The investment development path and FDI from  
22 developing countries: the role of pro-market reforms and institutional voids. *Latin*  
23 *American Business Review*, 12(3), 209-231.  
24  
25  
26  
27 Syrquin, M., & Chenery, H. B. (1989). *Patterns of Development, 1950 to 1983*. Washington,  
28 DC: World Bank.  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
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**Figure 1** The extended dual economy model and the growth of EMNEs

**Table 1: Characteristics of emerging market MNEs**

<b>MNEs</b>	<b>Traditional sector EMNEs</b>	<b>Modern sector EMNEs</b>
<b>EMNE literature</b>	'Infant' MNEs (Ramamurti, 2009) 'First wave' (Gammeltoft et al., 2010)	'Adolescent' MNEs (Ramamurti, 2009) 'Second wave' (Gammeltoft et al., 2010)
<b>Internationalization theory</b>	Follows Uppsala model	Accelerated internationalization
<b>Geographic footprint</b>	Regional FDI: neighbouring countries and other developing countries as knowledgeable to operate in similar institutional environments (able to overcome institutional voids)	Global FDI: Majority still regional, but expanding to a global basis -> exploitative learning.
<b>Type of outward FDI</b>	Globally: resource-seeking (natural assets) In developing countries: market-seeking	In developing countries: resource- and market-seeking In developed countries: market-seeking and asset augmenting