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The Emergence of China and India in the Global Market

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ABSTRACT

Over the past 20 years, China and India have emerged as the fastest growing economies in the world. In this context, the authors review, examine, and list the factors that have contributed to the emergence of China and India (referred to as Chindia). The authors compare the antecedents, characteristics, and consequences of their emergence in the global market. This article provides insights for the researchers and multinational enterprises from rest of the world to carry out studies on country analysis as well as foreign market entry modes. Besides, we posit theoretical and testable propositions for future research.

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KEYWORDS

Chindia; export; foreign direct investment; global outsourcing; internationalization

Introduction

Developed countries traditionally account for the lion's share of outward foreign direct investment (FDI) and multinational corporations (MNCs). However, in the recent years, emerging countries have emerged as a significant source of outward FDI and globally successful firms (Kim and Park 2014). Their substantial economic transformation has made emerging markets as the fastest growing economies in the world (Beena 2009). For example, during the past 20 years, China and India have emerged as the two fastest growing economies in the world. Although these countries have long been recognized as the strongest economies in the Asian continent, they now have become rising world powers, receiving keen attention from the international community as forces with which to be reckoned. 1 Both countries have benefited from globalization, exhibiting high and stable economic growth rates for over two decades. Because China and India's journeys are mirror images of each other, each can be better understood when juxtaposed against each other (Khanna 2009a). Replacement of old political system, with the market economy mechanism requires implementation of wide array of institutional reforms (Dikova and Van Witteloostuijn 2007). The political environments under which reforms were initiated and implemented in these two countries were quite different. For example, China focused on FDI and manufacturing



of durable goods, whereas India has focused on providing outsourced services. China also opened up to the global market much sooner than India did.

The Indian economy, which until recently could be described as a "traditional, mixed economy" (Ahluwalia 2002) with a large private sector, is now transitioning into a capitalist economy. To ease this transition, as in other capitalist market economies the Indian state must establish macroeconomic policies to stimulate demand (Ahluwalia 2002). By contrast, China has primarily been a command economy with a minuscule private sector, until the Chinese government recently acknowledged the importance of fostering home-grown capitalists just a few years ago (Yao 2006). Unlike in conventional capitalist economies, in China the government exerted state control over macroeconomic processes throughout the period of liberalization and thereafter. This proves to hold back the success of the newly privatized firms, as it cannot completely benefit from said privatization, as it would if the government were to release full control to private investors (Chen, Firth, and Rui 2006). Until recently, public enterprises accounted for more than half of China's GDP and more than two-fifth of exports (Greenaway, Mahabir, and Milner 2008).

This article describes the new business environment in China and India during the last two decades that facilitated these counties' rise, as upcoming world powers. There have been few studies comparing the antecedents and characteristics of the globalization in those gigantic economies in premier journals. Therefore, we intend to fill the gap in the literature. The second objective of this article is to highlight some of the similarities and differences between the two countries in terms of economy, market systems. Third, we aim to provide insights and information to carry out country analysis, which will help the multinational firms from other countries to decide upon the appropriate business strategies and decide the best possible entry modes. Besides, we examine the strength of China and India in critical industries, exports, global outsourcing and education sectors. We also explore whether governments and firms in other emerging countries can learn some insights by looking at the factors contributing to the emergence of China and India. Last, we develop theoretical and testable propositions for future research.

This paper is divided into seven sections. The following section compares and analyzes the business environment in China and India, highlighting the differences and trade synergies between their economies. This comparative analysis serves as a basis upon which to draw conclusions about the common factors that have driven economic growth in these countries. Section 3 deals with the synergies in China and India in the context of new business environment. Thereafter, we deal with the factors contributing toward the emergence of those countries and posit testable theoretical propositions. Subsequently, we discuss the findings in section 5. Limitations of this study and directions for future research are given in section 6. The conclusions are reported in section 7.

United States

Table II Iteal GD	. 0.011	marc	(/ 0 / / 1 -	,,,							
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Brazil	4.8	5.9	4.2	2.2	3.4	0.0	0.3	4.3	1.3	2.7	1.1
China	14.0	13.1	10.9	10.0	9.3	7.8	7.6	8.4	8.3	9.1	10.0
India	5.0	7.5	7.6	7.4	4.5	6.0	7.1	4.0	5.2	3.8	8.4
Russian Federation	(8.7)	(12.7)	(4.1)	(3.6)	1.4	(5.3)	6.4	10.0	5.1	4.7	7.3
United States	2.8	4.0	2.7	3.8	4.5	4.5	4.8	4.1	1.0	1.8	2.8
	2004	2005	2006	2007	' 20	08 20	009	2010	2011	2012	2013
Brazil	5.7	3.2	4.0	6.1	5.	2 (0).3)	7.5	2.7	0.9	2.4
China	10.1	11.3	12.7	14.2	9.	6 9	9.2	10.4	9.3	7.7	7.6
India	8.3	9.3	9.3	9.8	3.	9 8	3.5	10.5	6.3	3.2	4.9
Russian Federation	7.2	6.4	8.2	8.5	5.	2 (7	7.8)	4.5	4.3	3.4	1.5

Table 1. Real GDP Growth Rate (%), 1993–2013.

3.8

3.3

2.6

Comparative analysis of business environment in China and India

1.8

(0.3)

(2.8)

2.5

1.8

2.8

1.9

China and India are emerging as economic forces and the former is expected to surpass the United States as the single largest economy by the year 2050.² While China has dominated global manufacturing and exports, India has become a global leader in service provision. Table 1 and Figure 1 show the economic growth rate of these countries in terms of GDP and compares them to those of other emerging economies, as well as to the United States, over the past 20 years. The large liberalizing economies of Asia (China and India) have performed much better than the transition economies in Central and Eastern Europe during the last decade (Iyer and Masters 2000). Although both China and India are considered as powerhouse economies in Asia, the Chinese economy is more developed than that of India (Paul 2007). A possible reason for China's advantage in economic development over India is the fact the latter was under Britain's colonial rule for nearly 100 years, which might have been instrumental in draining the country's resources on a large scale (Kapur and Kim 2006). In contrast, China has never been colonized, enjoying a planned

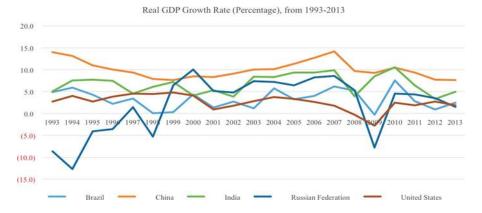


Figure 1. Real GDP growth rate (%), 1993–2013. Based on data from http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx.



economic model since its inception. The other reasons that made the Indian economy lag behind are the massive population growth during the last fifty years and the vast diversity of languages and cultures within the country, which have sparked great political pressure on its government.

Over the past 20 years, the economies of China and India have witnessed unmatchable development, enjoying an average annual growth of 10 and 6.7%, respectively (both figures calculated based on data detailed in Table 1). Together, these economies represent about 40% of the world's population, 19% of the world's GDP in terms of purchasing power parity, and 32% of global GDP growth (calculated using UNCTAD Statistics, from UNCTAD Statistics 2013). These economies also account for approximately 25% of the annual graduation of scientists and engineers worldwide, and both are still making strides in business across the globe (Khanna 2009a). As impressive as these growth stories are and as promising as their respective futures seem, these two countries must overcome the challenges ahead.

Experts disagree as to the reasons for China's dominance over India in the global market. Some experts argue that China's high investment rate is due to the country's ability to attract so much FDI, currently being the largest FDI recipient in the world. In terms of economic diversification and structural change, China has followed a classic industrialization pattern, moving from agriculture to manufacturing activities over the past 20 years.3 The country's manufacturing sector has doubled its share of workforce and tripled its share of output; which, given the size of the Chinese economy and population, has increasingly made China "the workshop of the world" (Khanna 2009a; Paul 2013). But at the same time, foreign investment has played a significant role in China's economic growth, following the reform and opening-up policy instituted since the late 1970s. Even today, China's further economic growth depends to a large extent on continuous FDI and policy-making to facilitate inward investment (Zhang and Song 2002; Wei and Liu 2006). China has achieved remarkable export growth even before joining the World Trade Organization, proving that China is beyond the World Trade Organization (Paul 2015). China is typically considered to be an export-led economy par excellence (Bowles 2012). Similarly, China has emerged as a major player in critical technologies such as nanotechnology (Zhou and Leydesdorff 2006). They show how the Chinese government has effectively used the public-sector research potential to boost the knowledge-based economy of the country. Heilmann (2007) examined the role of policy experimentation in China's economic rise within the context of distinctive tools, processes, and effects of policy related programs of China's economic reform and found that China's experience attests to the potency of experimentation in bringing about transformative change, even in a rigid authoritarian, bureaucratic environment.

By contrast, India's industrialization pattern has been from a mainly agricultural economy to a frontrunner in the service provision sector, exhibiting no substantial increase in manufacturing or restructuring in employment. India's dominance in the service provision sector is due to the global outsourcing of services from developed countries in recent decades (Kapur and Ramamurti 2001; Kedia and Lahiri 2007). Kapur and Ramamurti (2001) further note that overseas nationals have played a critical role in technology transfer, capital supply, information as well as in reputation building. They further note that while overseas Indians have helped boost exports of knowledge-based services, overseas Chinese have done so in labor-intensive manufactured products. Similarly, experts note that in the fastest growing Asian economies like India and China, there is an urgency to train larger number of leaders because the demand for talent have outstripped available indigenous human capital resources for several years, (Shyamsunder et al. 2011; Van Velsor et al. 2013).

The following subsection describes China and India's trade synergies focusing on trade policies and exports. This discussion explains further differences between China and India's emergence, focusing on China's dominance in manufacturing and exports, and India's preeminence in the service provision sector.

Exports-led growth

In terms of exports, China outclasses India for several reasons. China's exports have staggeringly grown during the past two decades (Khanna 2009b). Between 1993 and 2013, China's exports have increased at an average annual growth rate of 17.6%, while exports from India have grown at an average annual rate of 14.9% (calculated based on data detailed in Table 2). A major difference between China and India is related to trade policy and trade patterns. Chinese export growth has been much quicker compared with India's (Khanna 2009b), because of China's cheap labor and heavily

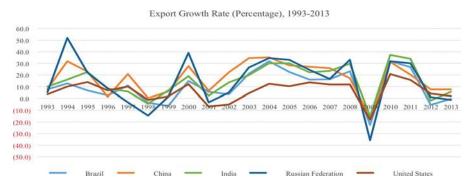
Table 2.	Exports Growth Rates 1993–2013 (1993–2003) & (2004–2013).

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Brazil	7.7	12.9	6.8	2.7	11.0	(3.5)	(6.1)	14.8	5.7	3.7	21.1
China	8.0	31.9	23.0	1.5	21.0	0.5	6.1	27.8	6.8	22.4	34.6
India	9.9	16.0	22.4	8.1	5.7	(4.5)	6.7	18.8	2.3	13.6	19.7
Russian Federation	5.4	52.1	22.3	8.8	(3.1)	(14.3)	1.5	39.0	(3.0)	5.3	26.7
United States	3.7	10.3	14.1	6.9	10.3	(1.0)	2.0	12.4	(6.8)	(4.9)	4.6
	2004	2005	2006	200	7 20	08 20	009	2010	2011	2012	2013
Brazil	32.1	22.6	16.3	16.	6 23	3.2 (2	2.7)	32.0	26.8	(5.3)	(0.2)
China	35.4	28.4	27.2	26.	0 17	'.2 (1	6.0)	31.3	20.3	7.9	7.8
India	30.0	30.0	22.3	23.	3 29	9.7 (1	5.4)	37.3	33.8	(2.0)	5.5
Russian Federation	34.8	33.1	24.5	16.	8 33	3.1 (3	5.7)	32.1	30.3	1.4	(1.1)
United States	12.4	10.6	13.9	11.	9 12	2.1 (1	8.0)	21.1	16.0	4.3	2.2

subsidized infrastructure, resulting from its high investment rate. For this reason, China's rapid economic growth has largely been due to exports of labor-intensive commodities (Rodrik 2006), suggesting that manufacturing growth will be sufficient to generate employment. Nevertheless, processing exports are seen as generating fewer added values but more employment than resource-based or capital-intensive exports (Koopman, Wang, and Wei 2008), making it all the more likely that the pattern of Chinese growth will create more employment in the manufacturing sector.⁴

As opposed to China, India has not been an attractive location for FDI, and its export growth rate has been significantly lower than China's. Nonetheless, India's GDP and export growth rate during the last two decades have been much higher than those of other emerging economies, such as Brazil and Russia (see Table 2 and Figure 2). In China, the accelerated export growth produced a net addition to domestic employment. Because China's imports have not been as liberalized as those of most other emerging countries (Wei and Liu 2006; Yao 2006), gains in manufacturing employment in China were not offset by employment losses caused by a displacement of domestic industry because of import competition. On the other hand, increases in export employment in India were outweighed by employment losses, especially in small-sized enterprises, resulting from import competition (Khanna 2009b; Paul and Gupta 2013). Nevertheless, India's cheap labor resulting from low absolute wages, because of its population size of 1.2 billion people, has allowed India to become an international hub in the service provision sector, attracting the outsourcing of services from developed countries (Dossani and Kenney 2007).

The following section discusses the synergies between China and India in terms of FDI, agriculture, manufacturing, services, telecommunications, infrastructure, and population. After this discussion, we identify the main drivers of economic progress in these countries in hopes of enlightening emerging countries in reaching the same.



Export growth rate (%), 1993–2013. Based on the data from http://unctadstat.unctad. org/wds/TableViewer/tableView.aspx.



Antecedents and characteristics of emerging China and India: Literature review and insights

Long before Europe and America emerged, China and India were both the richest and largest countries on earth, also being two of the oldest civilizations in the world. Now, measuring both countries' GDP in terms of purchasing power parity exchange rates (which measure the actual purchasing power of a country's currency), China is currently the world's second largest economy and India the fourth largest.5

Although India is nowadays world-renowned for its exports of services, China outperforms India in that realm as well. Chinese service exports constitute US\$62 billion, whereas India's constitute US\$42 billion (UNCTAD Statistics 2013). Chinese growth relies on FDI and exports, whereas Indian firms have focused on providing world-class IT services and other high value services in the business process outsourcing and knowledge process outsourcing sectors. On the other hand, China has emerged as an international hub for manufacturing activities, with its cheap labor and deregulation reforms instituted by the government during the past two decades India could still catch up with China in the industrial sector.

The following subsection describes FDI in both China and India. This subsection explains how the different government objectives of these two countries have established China's dominance over India in this respect.

FDI

In terms of FDI, China outranks India for several reasons. As per UNCTAD Statistics (2013), during the past two decades, China has been the largest recipient of FDI in the world. The country's authoritarian regime allows it flexibility to implement policy to incentivize FDI from foreign companies and multinational corporations (MNCs). To further incentivize FDI, China has liberalized and privatized some of its stateowned enterprises, selling them at significantly less than market value. The resultant heavy inflow of FDI enabled China to develop infrastructure, becoming the world's leading manufacturer of many durable goods (Zhang and Felmingham 2001; Zhang and Song 2002), and gaining credibility from international financing institutions by establishing relationships with strategic foreign partners. In addition, China has increased outward FDI with state-owned firms normally seeking to invest in markets with large sources of available natural resources (supply-side argument) and private firms seeking to invest in order to grow their reach and global market share by taking advantage of a previously untapped niche—demand-side argument (Ramasamy, Yeung, and Laforet 2012; Kothari, Kotabe, and Murphy 2013). Similarly, competition between domestic firms and foreign firms



becomes stronger, knowledge is flowing to and being sourced in many different directions (Li, Zhang, and Lyles 2013).

India's FDI development, however, pales in comparison because of several political inadequacies. India first opened its doors to FDI via the enactment of the Foreign Exchange Management Act in 1999. Its low labor cost and sizeable domestic market are factors that make India one of the most attractive FDI destinations, being the services, telecommunications, construction activities and computer software sectors the most attractive to foreign investors (Dossani and Kenney 2007). However, high corporate taxation, strict labor laws, and poor logistics infrastructure serve as hindrance to foreign investments in India (Singh and Paul 2014). At present, China is India's major competitor for FDI.

Following is a discussion of China and India's reliance on agriculture as a revenue generator. As subsequently explained, both countries' industrialization patterns have moved them away from agriculture—though it still remains an important socioeconomic factor in both countries - but in very different directions.

Agriculture

From the late 1970s, China has focused on agricultural reforms. As part of these reforms, the country increased investment in rural infrastructure, decollectivized farming, allowing individual laborers to own farmlands, and reduced the mandatory delivery of output to the state by farmers, permitting farmers to enjoy a more market-oriented output mix.

India has also focused on agricultural reforms but for very different circumstances. Since gaining independence from the United Kingdom in 1947, India has made substantial progress in the field of agriculture, considerably increasing food production and food security (Ahluwalia 2002). The Green Revolution of the 1960s, which aimed to improve productivity through high-yielding seed varieties and latest farming technology, further helped India achieve this status, but India's recent exponential growth in nonagricultural sectors, such as services and industry, has drastically reduced agriculture's contribution to the countries' GDP. Nevertheless, agriculture continues to be an important component of the country's socio-economic fabric.⁶

The following subsection compares and contrasts China and India's economic development in the manufacturing sector. It describes the reasons that have facilitated China's dominance in this sector, and those that hinder India's development despite its large population and consequently low labor costs.

Manufacturing

China has made astonishing progress in the manufacturing sector, overtaking the United States as the leading producer of manufactured goods in the year 2011. China is currently seen as a world leader of manufacturing, now known for low-priced, quality products (Saran and Guo 2005). In line with the development of the manufacturing industry, the country's per capita income almost doubled and is now the main pillar of China's national economy and the highest employment generator (Greenaway, Mahabir, and Milner 2008). Multinational enterprises in China positively affect local Chinese firms' exports through various spillover channels, and inward FDI brings significant, indirect spillovers (Buck et al. 2007).

The manufacturing sector in India, on the other hand, could be vastly improved. Currently, this sector contributes approximately 16% of the countries' GDP. Albeit the Indian government's efforts to boost this sector's growth, several factors hamper the development of India's manufacturing sector, including high utility, railway transport, finance, and transaction costs.8

The following subsection describes Chindia's economic development in the services sector. As subsequently discussed, India has a great advantage in this sector, but China is not too far behind and is actively trying to gain ground in this arena during the next few years.

Services

India has achieved exceptional growth in the services sector. The rapid economic growth rate the country has achieved since the liberalization and economic reforms of the 1990s has drawn international attention. Another particularity of India's development is that, unlike most other countries where development was achieved through a shift from agriculture to industry, in India, development was achieved through a shift from agriculture to the services sector (Arora and Athreye 2002; Dossani and Kenney 2007). Along with the rise in per capita income following the liberalization, the demand for better education and healthcare increased, boosting the services sector.

The wealth of a nation lies ultimately in the quality of the thought process of its population, which in turn is based on education. Market size is a function of levels of education and affluence (which are correlated) as well as population size. In a decade or less, India is slated to surpass China to become the nation with the largest population. This, accompanied by rising purchasing power and education levels, could position India to become one of the most exciting markets in the decades following 2020 (Contractor, Kumar, and Dhanraj 2015). Indian market has opened up substantially and there are many foreign players in most sectors and the country has recorded surge in Imports during post-World Trade Organization period (Paul 2015). Hundreds of educational institutions were set up in India in the fields of engineering and management as the sector was privatized in 1990s. This resulted into mass production of engineers, and MBA graduates those who are educated in English during the past two decades (Alkacer and Rivkin



2008; Paul and Gupta 2013). India's achievements in the field of technology and the availability of highly skilled manpower were the factors that accelerated the growth of IT and IT-enabled service sectors in the country (Kapur and Ramamurti 2001; Henley 2006).

China is also making valiant efforts to make progress in the service sector. According to the National Bureau of Statistics (NBS) of China, the service sector's contribution to China's GDP was 46.1% in the year 2013, surpassing the industrial sector's contribution. Aiming further growth in the services sector, China plans to improve five areas, including call centers and home internet access to foreign investors (Amiti and Freund 2010). However, surprisingly, Alon (2006) shows that Brazil, Russia, and Mexico outranked China and India as the markets with the largest economies for services franchising.

A brief discussion of Chindia's investment in the telecom sector is presented in the subsequent section. As subsequently described, China and India are vying for the top position in the global telecom market, with China currently having a slight advantage in this arena, while India shows the most promise for growth.

Telecommunications

India and China are expected to boast the top two telecom networks. Since the 1990s, China has invested heavily in telecom infrastructure, which is the reason why the Chinese telecom sector is prospering so quickly. Regarding subscribers, China has the world's largest fixed-line and mobile network industry. In terms of telephone density, China has 20 connections per 100 persons, whereas India has 8.5 telephone connections per 100 persons. Notwithstanding this edge, with a huge population of more than 1.2 billion, India is one of the most dynamic and promising telecom markets, being the second largest telecom market with 900 million connections (Khanna 2009a; Paul and Gupta 2013). The Indian government has permitted 100% FDI in this sector, which is expected to further accelerate growth.⁹

The following subsection provides an analysis of Chindia's infrastructure. As subsequently discussed, differences in infrastructure are what have allowed China to lead the global manufacturing sector.

Infrastructure

China has a relatively superior basic infrastructure, while India's manufacturing sector is limited by relatively inefficient and costly infrastructure, including electricity, roads, ports, and airways. Realizing the importance of infrastructure in fostering economic development, Chinese policy makers have heavily invested in basic infrastructure facilities, outspending India in infrastructure over eight times in absolute terms (Khanna 2009b). In

particular, China's total capital spending on electricity, construction, transport, telecom and real estate is much higher than India's (Khanna 2009a). While China's highway network amounts to 1.4 million km, India's merely comprises 0.2 million km. The amount China has defrayed on highways represents 2-2.5% of its GDP, whereas India has spent a paltry 0.3% of its GDP on the same. Since the early 1990s, total infrastructural investment in China averaged to 19% of GDP compared with 2% in India (Khanna 2009a, 2009b).

The succeeding subsection highlights the crucial role that having a large population has played in Chindia's economic development. The subsection also details the population-control policies that both China and India have implemented, highlighting the challenges that further population growth could present in the near future.

Population

China and India are the world's two most populous countries. According to some experts, the population explosion, which was once these countries' major challenge, has now transformed into one of their major strengths (Nilekani 2013). As aforementioned, China's manufacturing sector is booming because of its large population and cheap labor costs, to the extent that some have declared it the "the workshop of the world" (Khanna 2009b; Paul 2013). Similarly, in addition to its well-educated workforce, India's cheap labor resulting from its large population size has allowed it to dominate the global service provision sector, and have one of the fastest-growing telecom markets (Paul and Gupta 2014).

Nevertheless, whether the strengths outweigh the weaknesses is still up for debate. China's population size is 1.36 billion, whereas India's is approximately 1.25 billion, making China and India the first and second most populous countries, respectively (United States Census Bureau 2015). China and India's populations are expected to rise to around 1.392 billion and 1.592 billion, respectively, by 2050, when India will become the most populous country (as per forecasts by different international organizations, including the United Nations). In light of these preoccupations, the fact that India has not successfully controlled its population growth over the past several decades is particularly a subject matter of concern. By contrast, China's family planning policy, known as the one-child policy, has proven effective. China's population annual growth rate has been approximately 12-13 million persons, but the country's one-child policy has reduced it to 10 million persons per year, and the country is expected to sustain this growth rate until reaching 1.6 billion in the next century (Paul and Gupta 2013).

More critical for economic growth, however, is the labor force growth rate, which is best estimated by projecting growth in the working-age population (ages 15-60 years). In this respect, India has an edge over China, as India's working-age population growth is expected to exceed that of its lighting population growth. As it stands, China's working-age population dwarfs India's by 230 million, nevertheless, by 2050 India's working-age population is expected to exceed China's by the same amount. The working-age population in India is expected to grow until 2045 and decline thereafter, whereas in China it is expected to start declining between 2020 and 2050 (Khanna 2009a; Nilkani 2013).

Factors contributing to the emergence of Chindia

According to the available literature, Chindia's emergence in the global market is due to several factors. These factors are identified with testable theoretical propositions in this section.

The role of knowledge and entrepreneurial skills

Javalgi et al. (2011) discuss the competitive advantages of emerging markets and the importance of matching these advantages with the needs of firms looking to trade with host market companies. Their research indicates that knowledge-based services are largely responsible for Chindia's emergence, particularly in India's case. They found that the increase in knowledge-based services is what allows firms from emerging economies to compete with developed market firms, and in Chindia's case, has enabled market share increase for firms from those countries, which are now on par with developed market firms, especially in terms of research and development. Similarly, Filatotchev et al. (2009) studied the exports of high-tech products and services in emerging economies, such as China and India, who are currently highly sought out for research and development outsourcing, arguing that entrepreneurial management skills are vital for successful research and development exports. These skills include managerial experience in international trade with MNCs, and the "returnee" entrepreneur (ex-patriots who return and invest in their home market).

Thus, we posited the following:

Proposition 1: Knowledge and Entrepreneurial skills are important factors contributing to the competitiveness of an industry in a developing country.

Price competitiveness

With regard to China, its unique labor force gives the economy a competitive advantage, as it has both an abundance of unskilled labors that can be employed at a low cost, and a skilled workforce that has been significantly



growing, particularly in the technology field, allowing for an increase in exportation of high-technology products (Greenaway, Mahabir, and Milner 2008). Concerning India, Khan et al. (2003) identify the country's surplus of technically trained workers and lower cost of living as one of India's main economic drivers, allowing developed economy firms to outsource this resource at 30-40% less than in developed economies. Thus, we postulated the following:

Proposition 2: Price competitiveness is a critical variable contributing to the emergence of an industry/economy.

The role of FDI and exports

Chinese acceptance of inward FDI has also proven to be another important factor, increasing the adoption of new foreign technology (Rodrik 2006; Yao 2006). This inward FDI generates productivity spillovers, especially in research and development, that contribute to the nation's economy (Wei and Liu 2006). Zhang and Felmingham (2001) and Zhang and Song (2002) provide further evidence of inward FDI's importance in the Chinese economy. At the time of the later study, 44% of China's exports were from foreign affiliates, showing the direct relation between FDI and exports, which can be explained by an increase in technology, manufacturing, and improved marketing and distribution methods. The authors mention that the increase in FDI is among the top reasons the Chinese government strives to attract inward FDI. Kshetri (2011) notes that shift toward increasing inward FDI and China's strong governmental control over the economy allowed the country to minimize the effects of the global economic recession that began in 2007.

According to Kwan and Cotsomitis (1991), China's export sector growth is directly related to increase in per capita income, heightening the importance of exports to the country's economic growth. Chinese export growth was sparked by the opening of the economy in the late 1970s for FDI. China's entrance into the World Trade Organization in 2001 further opened the country's economy, increasing exports even more (Yao 2006). After entering the World Trade Organization, domestic value-added exports (exports that include some domestic content prior to resale) from China grew from 50-60% (Koopman, Wang, and Wei 2008). Amiti and Freund (2010) note that by 2004, China had surpassed Japan's exports, becoming the third largest exporter worldwide. They attribute this success to the introduction of new export goods, as well as a reduction of prices. As technical knowledge increases, exports tend to move from labor-intensive industries such as agriculture and textile to knowledge intensive industries such as electronics and machinery.

Table 2 shows the time series data on exports from emerging nations, including China, using the United States' exports as a baseline. In studying the global impact of these exports, Fernald, Loungani, and Schindler (2003) examined the relationship between the growth of Chinese and other Asian market exports. They attribute Chinese growth to an increase in trading partner income; namely, as Chinese exports increase, the Chinese economy has more income to spend on trade with neighboring markets. Although the overall effect of Chinese export growth is positive, when other Asian market exports are analyzed separately, as either consumer or capital good exports, they found that China's growth affects more developed and less developed Asian economies differently. Because of its competitive advantage in manufacturing, China normally takes away consumer good market share from their less-developed Asian neighbors, but increases market share for capital goods in more developed Asian countries by consuming these in domestic operations (Eichengreen, Rhee, and Tong 2007). Lall and Albaladejo's (2004) research complement these findings by noting that most of the market share lost to Chinese exports in Southeast Asia are from low-tech consumer goods, with China still driving increased exports in the region. However, they state, as the Chinese intensify competitive advantages, especially in the area of high-tech manufacturing and research and development, market share may be taken from other Asian firms in other sectors.

Hence, we posit,

Proposition 3: FDI and Export growth have causal effect on the process of emergence of a developing country.

Role of education and English language

India's competitive advantage in the global market stems from the skillintensive service sector, mainly the software industry, which can be outsourced from virtually anywhere in the globe at very low costs (Kapur and Ramamurti 2001; Henley 2006). In India, the majority of software exports are from India-based firms, and result from India's absolute advantage in the form of low wages and prices (Arora and Athreye 2002). Paul and Gupta (2014) discuss how the internationalization of Indian IT firms drives economic growth in India, providing evidence that, not only have new Indian IT firms developed faster over the past 20 years, but also that these younger firms are far more likely to internationalize sooner than older firms. This is especially true now, with the influx of global firms in India, putting competitive pressure on local firms who were previously protected from the external threats (Todd and Javalgi 2007).

India's abundant technically trained workforce (especially in the engineering field) has risen because of heavy investments in education in the science and technology fields. While the outsourcing of IT services has become increasingly crucial to many firms, these services are deemed of low risk and value to the procuring firm. Therefore, the challenge for Indian IT firms is to increase the value of their services without increasing the risk level perceived by procuring firms, which Henley (2006) suggests that can be achieved by having an in-depth understanding of these firms' operations. Indian IT firms, he states, should become better equipped to solve complex and sensitive business problems, making themselves indispensable in the procuring firm's operations.

Management skills have also been identified as a crucial factor in economic development, particularly in companies engaged in research and development exports. India's competitive advantage in the global market comes from the skill-intensive service sector, mainly the software industry, which can be outsourced from virtually anywhere in the world (Kapur and Ramamurti 2001). The lower cost of these engineering services is the major incentive for companies to seek out Indian firms (Henley 2006). There has been an increased growth of outsourcing of services from developed countries to Indian firms in recent years. It is also worth noting that the majority of software exports from India are mostly from Indian firms; and is more a result of comparative advantage because of the availability of a large number of software engineers than a result of an absolute advantage as price competitors (Arora and Athreye 2002). Paul and Gupta (2014) discuss how this—the internationalization of Indian IT firms—drives emergence of India as a fastest growing economy. Their empirical evidence shows that not only has there been a rapid increase in new Indian IT firms over the past 20 years, but these younger firms are also far more likely to internationalize quickly, than older firms.

Khan et al. (2003) discuss India's abundant technically educated workforce (especially in the area of engineering), because of heavy investments in education, in the areas of science and technology. This surplus in supply and lower cost of living in India allows for developed economy firms to tap into this resource at a significantly lower cost; between 30% and 40% lower than in developed economies. Dossani and Kenney (2007) discuss the growth of outsourcing to India, mentioning the direct relationship with the development of the software industry, technically educated workforce, and proficiency in the English language, which is also supported by Arora and Athreye's (2002) study. While the outsourcing of IT services is becoming increasingly important to many firms, the majority of this work is of a lower risk and value to the procuring firm. However, over the past ten years, the trend has been to move outsourced services from more menial tasks (such as call centers) to more important, strategically oriented tasks that contribute to the core competencies of the firm. This can be seen in the example of Swiss International Airlines and Austrian Airlines, who outsourced some accounting, billing, and loyalty programs to Tata Consultancy Services, from India

(Kedia and Lahiri 2007). Henley (2006) postulates that while the low cost of labor is an initial and essential factor for foreign firms to seek Indian IT firms, the relation will grow and be sustained by competence and credibility of the provider firms. Alcacer and Rivkin (2008) show that India has the second largest number of English-speaking people in the world. According to them, English being lingua franca of the world helps Indian firms to outsource service sector jobs from developed countries, such as the United States, which indirectly created thousands of new jobs in India. They also found that India produces the largest number of engineers, MBAs and information technology graduates every year, compared to any other country in the world.

Therefore, we posit the following theoretical proposition.

Proposition 4: The maximum number of the educated graduates and Englishspeaking workforce, the higher the likelihood of success of a country/state in this era of globalization.

Findings and discussion

In reviewing existing literature on the emergence of China and India in the global market, we have identified these countries' main economic growth factors. In China, these factors are: (1) high-demand for Chinese exports (E), (2) FDI in the industrial sector (FDI), and (3) price competitiveness (PC). Whereas in India, these factors are: (1) Availability of engineers (E for engineers), (2) Availability of millions of English-proficient employees (E for English) (3) Highly educated workforce (4) global outsourcing of services, and (5) price competitiveness.

These theoretical factors are summed up in Table 3, and depicted as a theoretical framework in Figure 3.

Both China and India have also been major contributors to the global business and world economy, which indirectly turns economic gravity toward Asia. Those countries' firms play a significant role in making the twenty-first century primarily about Asia. When countries the size of China and India together accounting for 2.5 billion people—unleash their creative energies, as they have during the past two decades, they are bound to have resounding worldwide impact.

Although China and India are quite similar, China's economic progress surpasses India's. While India's GDP has grown at an average of 6.7% each

Table 3. Key Theoretical Factors Contributing to the Growth in Chindia.

China's economic growth is a function of Exports (E), FDI in industrial sector, Price Competitiveness (PC) Growth in China = f (E, FDI, PC)

India's economic growth is a function of 3 Es: Engineers (E), English (E) and Education (E), Outsourced Services (OS), Price Competitiveness (PC)

Growth in India = f (E, E, E, OS, PC) i.e., = f (3E, OS, PC)

Investment

Competitiveness

Education
Outsourced
Services

Competitivenes

Figure 3. Factors contributing to the emergence of China and India.

year, China's has grown at an average of 10% over the past 20 years (see Table 1). China's earlier introduction into the global market and incentives for FDI have allowed it to emerge as the "workshop of the world". Having witnessed China's success, India has taken efforts to match China's FDI attractiveness. The forecast detailed in Table 4 provides further evidence of Chindia's emergence, stating that China will surpass the United States as the largest economy, and India will emerge as the third largest economy behind China and the United States by 2050.

The findings based on the literature review and growth rates computed for this study, based on the United Nations Development Programme data, are summarized and shown in Table 5.

Table 4. Projected Relative Size of Economies, 2007 and 2050 (US = 100).

Country (indices	GDP at market excha	GDP in F	GDP in PPP terms		
with U.S. = 100)	2007	2050	2007	2050	
United States	100	100	100	100	
Japan	32	19	28	19	
China	23	129	51	129	
Germany	22	14	20	14	
United Kingdom	18	14	15	14	
France	17	14	15	14	
Italy	14	10	13	10	
Canada	10	9	10	9	
Spain	9	9	10	9	
Brazil	8	26	15	26	
Russia	8	17	17	17	
India	7	88	22	88	
Korea	7	8	9	8	
Mexico	7	17	10	17	
Australia	6	6	5	6	
Turkey	3	10	5	10	
Indonesia	3	17	7	17	

Source: Pricewaterhouse Coopers estimates (using UN population projections).



Table 5.	Similarities and Differences	Economies and Business	Environments in China and India.	

Table 5.	Similarities and Differences Economies and	I Business Environments in China and India.
	Economy	Business environment
China	 Primarily command economy with small, but recently growing private sector Opened up to global market sooner than 	Focus on manufacturing of durable goods at low costWorld's largest fixed-line and mobile
	India • Entrance into World Trade Organization in 2001	network industry Chinese policy makers invested heavily in basic infrastructure facilities
	 Largest recipient of foreign direct investment in the world Flexibility to implement policy that 	 Large population and cheap labor costs Abundance of low cost unskilled laborers, and growing skilled workforce
	incentivizes foreign direct investment from foreign companies	 Acceptance of inward foreign direct investment increasing adoption of new
	 Global exports (export-led economy) Overseas Chinese help boost exports manufactured products Government use of public-sector research potential to boost the knowledge-based economy Government use of public-sector research potential to boost the knowledge-based economy 	 foreign technology Major player in critical technologies such as nanotechnology · Major player in critical technologies such as nanotechnology
India	 Transitioning to capitalist economy Traditional, mixed economy, with large private sector Focus on providing outsourced services No uniform language causes difficulties Suffer economic effects of British Colonization 	 Undergoing deregulation One of the fastest growing telecom markets Low-cost labor resulting from its large population Surplus of technically trained workers and lower cost of living
	 Overseas Indians help boost exports of knowledge-based services Privatized educational institutions in engineering and management resulted in surplus of English-speaking engineers and those with a master of business administration. 	 Second largest number of English-speaking people in the world Business process outsourcing and knowledge process outsourcing sectors are strong.

Limitations and recommendations for future research

This study was conducted mainly using secondary macro level data for China and India, primarily GDP and export growth as indicators of emergence for each nation. While these indicators are strong, the use of just two variables may bias the findings. The use of other indicators, such as alternate measures of corporate performance/business growth (including stock market indices, and unemployment rate) may help reduce bias in future research. Besides, we have not attempted to propose a theoretical framework describing the factors, although we have explained the factors contributing toward the success of China and India with the help of figures.

To find the micro level data to assess Chindia's emergence we relied on existing research on the subject. We recommend that future research replicate existing research in the context of other emerging economies, and investigate whether firms and governments in other countries could follow a path similar to Chindia's. There is potential to carry out studies, examining the micro-level factors contributing to the success of China based on the theoretical propositions posited in Section 4. Similarly, researchers can examine the antecedents and consequences of globally outsourced services from the firms in developed countries to Indian firms in different sectors. It is also possible to develop hypothesis and carry out future research based on our testable propositions and mathematical equations formulated in this study (Figure 3) and test them, with data in either Chinese (China = f (E, FDI, PC) or Indian context (India = f (E, E, E, OS, PC). Researchers can employ regression models with dummy variables or other suitable frameworks. There is immense scope for comparative studies too, as it attract more audience worldwide.

Conclusion

China and India had similar development strategies prior to their liberalization and institution of market-oriented economic reforms. However, China strived toward the liberalization of its market economy much sooner than India, strengthening its economy to a great extent. On the other hand, India was slow in embracing globalization and open-market economies. While India's liberalization policies were enacted in the 1990s, China welcomed FDI and private investment in the mid-1980s, facilitating great economic progress and success in the exports and manufacturing sectors. Though India has enjoyed significant economic growth, it does not match China's. Nevertheless, we find that India's economy has performed exceptionally well in the face of the most severe global recession, spanning from 2007 to 2010. Our findings corroborate with the perspectives and observations of Saran and Guo (2005) and Khanna (2009b).

On the basis of our findings, we argue that firms those who are interested in market access to China and India closely study the antecedents of their path toward their emergence, and adopt those strategies that are both feasible and have potential to enter, and run their business successfully. It is worth noting that factors such as a focus on exports, manufacturing growth, science and technology (engineers), and an English-proficient workforce helped China and India respectively to take avail of globalization and to gain competitive edge in the global market. The firms and governments in other emerging countries could also gain insights based on their model of growth and emergence.

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Notes

- 1. Extracted from a speech by Hilary Clinton, U.S. Secretary of State, during her visit to India. Available on YouTube: http://www.youtube.com/watch?v=w9ovMyo3OWs
- 2. PricewaterhouseCoopers estimates using UN population projections
- 3. http://www.econ.edu/~srinivas/C&I%20performance%20update
- 4. http://www.macroscan.org/anl/apr07/pdf/India_China.pdf
- 5. Based on data from the International Financial Statistics, International Monetary Fund.
- 6. Based on data from the Economic Survey, 2012-2013, Ministry of Finance, Government of
- 7. China Statistical Yearbook of various years.
- 8. Based on data from the International Financial Statistics, International Monetary Fund.
- 9. Based on data from the Economic Survey, 2012-2013, Ministry of Finance, Government of India.

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