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Asia Rising: Emerging East Asian Economies as Foreign Investors*

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Abstract

This paper documents and analyzes the rise of emerging East Asian economies as major international investors. Foreign direct investment (FDI) from these economies is rising faster than their economic growth, trade, and inward FDI, and the region is by far the most important investor from the developing world. We develop an analytical interpretation of the behaviour and competitive strategies of major developing East Asian outward investors. We conclude that the drivers of this outward FDI are generally consistent with the international investment literature. But in addition particular factors are at work, including the desire for natural resource security, and exceptionally high domestic savings rates. The major challenge for the rest of the world is to accommodate these FDI flows, as part of the global reorientation of economic activity towards East Asia.

Key words: East Asia, outward foreign investment, emerging economies

JEL codes: F21, F23, O33, O53.

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(1) Introduction

The traditional view that rich countries run current account surpluses and are therefore capital exporters while poor countries are capital-scarce importers has been turned on its head over the past decade, as the world's largest rich economy, the United States, is now the largest debtor, while the largest creditor is China, a still poor country that only graduated to the middle-income developing economy ranks a little over a decade ago. Much of these 'reverse' capital flows reflect current account balances between these and other economies, and the adjustment to very large international differences in savings-investment relationships. Foreign direct investment (FDI) flows have also begun to change radically. Emerging market economies have become major international investors, none more so than the dynamic East Asian economies.

The purpose of this paper is to document and explain the rise of emerging East Asian (that is, excluding Japan) economies as major foreign investors.¹ We draw upon three major interrelated factors to explain this phenomenon. These are, first, the rising importance of East Asia in global production, trade, investment and technology flows; second, the increasingly open foreign investment regimes in the region, for both inward and outward flows; and third, the stronger competitive advantages of East Asian firms that have underpinned their outward orientation. The third factor includes growing technological competence, knowledge of international markets, and the ability to operate in small, segmented, and sometimes risky commercial environments.

Our organization is as follows. Section 2 reviews the trends in and literature on emerging economy investors. Section 3 examines the patterns of foreign investment in and from East Asia. Section 4, the major part of our paper, investigates the major drivers of these investments, while section 5 summarizes our main conclusions.

(2) The Rise of Emerging Economy Investors

According to the standard theory of foreign direct investment (FDI),² multinational enterprises (MNEs) introduce into the host economy a package of highly productive resources – technological capabilities, managerial skills, knowledge of international markets – that is superior to that possessed by domestic firms, and that is sufficient to overcome the intrinsic cost disadvantages of operating in a less familiar commercial environment. Moreover, these firms prefer to exploit their firm-specific competitive advantages through direct investment abroad rather than exporting from their home bases or through licensing their use to an affiliate in the host economy.

There are diverse motives for, and hence drivers of, FDI. An analytically useful distinction is sometimes drawn between four types of FDI, commonly

¹ We use the terms 'developing' and 'emerging' economies interchangeably.

² See for example Caves (1996) and Dunning (1993).

termed 'market-seeking' (or rent-seeking), 'efficiency-seeking', 'resource-seeking' and 'asset-seeking' motives. The first type is typically domestic-market oriented, that is attracted to the host economy market, either because of restricted access to that market or for investment in non-tradable activities. Here, foreign investors are primarily attracted to the domestic market of the host country. Therefore, the availability of tariff protection and investment incentives is an important determinant, along with a broader set of factors such as market size and growth. A variant of this class of investments is FDI in services, which by definition are mostly non-tradable.

The second, efficiency-seeking investments, refers to those that locate in an economy owing to its superior efficiency as a production centre. Here what matters are factors such as labour costs and quality, physical infrastructure costs and quality, the quality of the regulatory, financial, legal environment, and the broader macroeconomic environment (including importantly the exchange rate regime) and trade policy, as compared to alternative locations. The availability of fiscal incentives may matter at the margin, but they are not a principal determinant. These investments are by necessity more likely to be highly export-oriented. MNEs 'slice up' the production processes across international boundaries according to the economics of manufacturing and service provision at each stage of the production process. This form of FDI has been growing rapidly, driven by the rapid spread of global production networks, especially in the electronics, automotive and machinery goods industries (Athukorala, 2006, Kimura 2006).

Resource-seeking FDI is by definition motivated by the presence of a particular resource in the host market economy, which the investor judges can be most effectively accessed via FDI. Historically, the natural resource sectors were the main recipient of FDI in developing countries. A more recent variant, generally categorized as asset-seeking FDI, refers to FDI in R&D-intensive firms, as a means of accessing firm-specific technology and patents that are generally not accessible through arms-length transactions. For developing economy investors, the most common form is so-called reverse-engineering acquisitions.

Alongside these broad motivations are a variety of firm-specific behaviours. One approach emphasizes transactions costs to explain why firms tend to invest in countries where the information barriers are low (Froot, ed, 1994). Relevant factors here include strong historical ties (eg, countries continuing to invest heavily in their former colonies), geographical proximity, membership of an economic association (particularly if reinforced by preferential trading arrangements), and cultural/linguistic familiarity (eg, the large ethnic Chinese investments straddling borders in East Asia). These transaction cost advantages are thought to be particularly significant for small and emerging investors owing to scale economies associated with the acquisition of international business knowledge.

Home and host country FDI policy regimes obviously matter. Most countries do not seek to regulate or influence outward FDI flows, other than through general restrictions on capital movements, and these commonly apply to short-term capital flows rather than FDI. Over time, these restrictions have

been diluted as part of general policy liberalizations. A particular motive for outward FDI liberalization in East Asia in recent years has been to slow down the rate of exchange rate appreciation in response to concerns about declining competitiveness. Inward inflows are more heavily regulated, in spite of the general trend towards more liberal FDI regimes over the past quarter century. Many countries restrict the sectors open to FDI, the equity stake of the foreign investor, the freedom to repatriate principal and dividends, and the freedom to borrow domestically. Screening and regulatory processes also vary significantly. Moreover, account needs to be taken of the difference between de jure and de facto openness.

The earlier literature was consistent with the theoretical prediction that FDI would mainly flow from advanced to developing economies. This prediction is based on the propositions that MNE competitiveness relied heavily on intangible advantages based on tacit knowledge, and because over 90% of global R&D activity occurs in the advanced economies. Dunning (1981) for example proposed the investment development path (IDP) model, according to which FDI flows are dependent on the level of economic development. Five stages were identified, and countries made the transition from net FDI recipients to outward investors during the fourth stage, corresponding to advanced economy status. In the first two stages, corresponding to lower and middle income developing status, outward FDI (OFDI) was expected to be negligible. Such an approach was broadly similar to the 'flying geese' model that sought to explain the evolution of the manufacturing sector, initially in Japan and then by extension other East Asian economies (Kojima, 2000).

Until around 1980, the overwhelming proportion of FDI accorded with this pattern. However, these models do not address the rapidly rising FDI flows from and between developing economies, and the increased complexity of their motives. Several developing countries that would be classified as stage 1 or 2 in the above schema are now major international investors, and moreover, not just in other developing countries (see Sauvant and McAllister (eds, 2010) for an overview). Figure 1 demonstrates this pattern by comparing outward FDI and GDP per capita across countries. Beginning in the 1980s, an increasing volume of research drew attention to the substantial and increasing FDI flows from developing economies (for example Lall et al, 1983, Wells, 1984). The emergence of these 'third world multinationals' (TWMNEs) has blurred the historical distinction between capital and technology exporting rich economies and capital and technology importing poor economies. The phenomenon highlighted the rise of dynamic developing economies and firms within them, and the various layers in international technology markets and information flows. The rise of TWMNEs also sharpened the analysis of the competitive advantages of foreign investors. In the memorable observation of Wells (1984), 'Third world multinationals compete on one thing – price.'

(Figure 1 about here)

Studies of these firms have revealed that these investors compete on the basis of a range of specific attributes, as we will demonstrate in section 4 below. These include superior knowledge of developing country commercial

and regulatory environments, familiarity with more labour-intensive and less scale-intensive technologies, a greater appetite for risk (or at least a capacity to operate in environments that are less secure in a formal legal sense), and deeper country knowledge. These characteristics, and the differences with developed country investors, can in turn be explained by a range of factors, including transaction costs and proprietary knowledge. Thus, for example, the greater willingness of TWMNEs to establish joint venture operations reflects their weaker bargaining power, which in turn results from a less powerful technological or brand name advantage. Their greater propensity to operate in the immediate neighbourhood is also explained by a similar set of factors.

(3) Emerging East Asia and Outward Foreign Investment

This section provides an overview of outward FDI from developing East Asian economies, drawn principally from the annual UNCTAD World Investment Report.³ East Asia is by far the major investor among developing regions: OFDI from developing countries averaged \$261.6 billion during 2006-09, and of this 53% (an average of \$139.2 billion during the period) originated from East Asia. Similarly, all but one of the top ten non-financial MNEs from developing countries were located in developing East Asia.⁴ However, none of the East Asian economies is a major outward investor on a global scale. In 2006-07, Hong Kong was ranked ninth and China nineteenth, with much of this investment actually flowing between these two economies.

Table 1 provides a detailed picture of FDI flows and stocks to and from the major East Asian economies. By 2009, Hong Kong had by far the largest stock of OFDI, some 49% of the region's total stock of \$1,703.9 billion. This was followed by China (\$229.6 billion), Singapore (\$213 billion), Taiwan (\$181 billion), Korea (\$115.6 billion), and Malaysia (\$75.6 billion). The four NIEs, together with China and Malaysia, accounted for 97% of the emerging East Asian total. Normalizing these outflows relative to source country gross fixed capital formation (GFCF), Hong Kong's outflows are extraordinarily high, at 122.9% of gross fixed capital formation (GFCF) during 2006-09 (Table 2). Since 2000 Singapore has also been very high, at about 33% of GFCF in 2006-09, while Malaysia and Taiwan are also high, at about the ratio corresponding to mature investor countries in the OECD.

(Tables 1 & 2 about here)

Inflows and outflows are typically, but not always, highly correlated. That is, the economies with very open inward regimes are more likely to be open towards outflows. Inward flows to the region, again relative to GFCF, clearly show that several economies are highly open to FDI, especially the region's

³ The following data are taken from the latest volume, World Investment Report 2010.

⁴ The companies are ranked by the value of their foreign assets in 2006. The major home economies were Hong Kong (with companies ranked 1 and 9), Korea (ranked 3, 5, 10), China (ranked 7), Malaysia (ranked 2), Singapore (ranked 6) and Taiwan (ranked 8).

two city states (Table 2). The ratio for Malaysia is also well above that for developed economies as a whole, as is Vietnam since the 1990s and Thailand for some periods. The data indicate that China's large inflows reflect principally its size and its very high investment levels. Since 2000, FDI inflows, relative to GFCF, have been below the global average. Korea, like Japan, has been a very small recipient, except in the immediate aftermath of the 1997-98 economic crisis.

Comparing the trend in outward and inward FDI flows across countries, three main features are observable (Table 1 and Figure 2). First, as noted, there is the general increase in FDI flows, in both directions. Second, while most countries continue to be net FDI recipients, OFDI flows have generally been growing faster than IFDI. This reflects several factors: the freeing up of capital accounts, the region's increased financial and technological sophistication, high savings rates, and the fact that, consistent with the FDI theories discussed in the previous section, several economies are now among the global middle-high income group, and therefore more likely to be outward investors. Third, there is no general pattern in these flows, in the sense of, for example, a steadily rising OFDI/IFDI ratio associated with rising per capita GDP. It is therefore instructive to briefly examine the country trends. This overview provides an introduction to these countries' FDI experiences, which we examine in more detail around the major drivers of outward FDI in the following section.

(Figure 2 about here)

China

Inward FDI flows began to grow extremely quickly from the early 1990s. They then dipped in the late 1990s, as a result of the Asian economic crisis, but surged again after 2000, when for a period China was the world's largest recipient of FDI. OFDI has been small by comparison, but it has begun to increase very rapidly from around 2002. Annual outflows are now almost one-quarter of inflows, while the stock totalled \$246 billion at the end of 2009, with estimates that it will reach \$500 billion by 2013. However, China's share of the stock of global FDI is modest, about 6% in 2009.⁵ The offshore acquisitions have consisted of a mixture of greenfields and M&As. As is generally the case with early outward investors, Chinese MNEs have been quite flexible about the form their OFDI takes. Unusually among the major global investors, state-owned enterprises (SOEs) are the major investors, accounting for about 63% of the stock. Its 10 major international investors are all SOEs (Farrell, 2011). Through to the early 2000's, 90% of its OFDI went to Hong Kong, much of it 'round-tripping' to re-enter China as FDI to avail of preferential treatment.

As the most authoritative study of China's outward FDI (Chen and Ping (2008) has emphasized, the liberalization of the country's trade and inward

⁵ This compares with global shares of about 50% at the height of UK and US global commercial dominance, in about 1914 and 1967 respectively (Economist, November 13, 2010).

FDI policy regimes has been a major driver of the country's outward flows, especially in strategic asset-seeking, but also in its resource, market, and efficiency-seeking investments. This is because these liberalizations have placed Chinese companies under tremendous competitive pressure, and forced them to go abroad to acquire complementary assets such as established brand names, advanced technology, and a reputation from their presence in advanced economies. Thus, '...outward FDI is to a large extent a response to FDI inflow to China ...' (p.184).

The Asian NIEs

Hong Kong: Reflecting its international orientation, and the dominance of China, inflows and outflows have moved closely together. The two series rose appreciably during the 1990s, with the city state's return to China and the onset of the Asian economic crisis, both in 1997, having little effect. Both series fell sharply in the early part of this decade before returning to the record levels registered at the turn of the last century.

Korea: Both inward and outward FDI flows were modest until the late 1980s, reflecting the country's restrictive FDI regime and its capital controls. Both series then began to increase substantially, with outflows exceeding inflows. This occurred as labour-intensive activities moved offshore, and the major conglomerates (chaebol) began to quickly internationalize their operations. Both series then fell during the 1997-98 economic crisis, and inflows briefly exceeded outflows. The latter occurred because the more liberal FDI regime (in part forced on the country by the IMF) attracted 'fire-sale FDI', while the overseas operations of the chaebol were curtailed by the domestic financial crisis. From 2000, outward FDI then began to increase quickly, and to again exceed inflows.

Singapore: Like Hong Kong, Singapore has always been very open to FDI, and inflows and outflows have generally moved closely together. Both increased from the late 1980s, fell sharply in 1997-98, with Singapore's strong exposure to other crisis-affected magnifying the downturn, then recovered, apart from another dip during the electronics contraction earlier that decade. Since 2005, IFDI flows have been at record levels, while OFDI has been strong. In spite of its extraordinarily high savings rate, inward flows have almost always exceed outflows. As in China, SOEs (referred to in Singapore as 'government-linked corporations') have been major investors.

Taiwan: Since the mid 1980s, outward flows have exceeded inflows, often by a significant margin. There was a very large increase in outflows from the mid 1980s, the first major wave of outward investments, as much of the country's labour-intensive manufacturing base was moved off-shore. Both flows contracted during the Asian economic crisis, but they recovered quickly. However, inward FDI fell sharply in 2003-05 owing to political uncertainty caused by serious China-Taiwan tensions.

The Southeast Asian Four⁶

⁶ See Bartels and Freeman (eds, 2003) for a broad overview.

Indonesia: This country has registered the most volatile FDI flows, reflecting political uncertainty and major regime change in 1997-98 (Aswicahyono et al, 2009), and also fluctuating inflows in response to natural resource booms. Inward flows were increasing strongly prior to the crisis; they then fell sharply, and remained negative until 2004. Outward FDI has generally been much smaller, except for the years immediately before the Asian financial crisis and more recently (Carney and Dieleman, 2011). Most of the OFDI is thought to be investment by the country's ethnic Chinese community, who dominate much of the country's modern business sector, and whose political vulnerability leads them to diversify their asset holdings abroad, with Singapore a favoured destination.

Malaysia: This country historically reflected the more typical developing country pattern, with inward FDI exceeding outflows by a large margin. Both series were rising strongly during the 1990s, fell sharply during the 1997-98 crisis, and again during the electronics downturn in 2001-02. They have since grown strongly, to record levels in 2007, when for the first time outward flows exceeded inflows. Tham (2005) observes that, as expected, historically Singapore in particular and ASEAN in general have been the principal destination of Malaysian OFDI. Hong Kong, China, the US and Australia have also received significant flows. There has also been a major change in the country's net overseas position over the past decade, reflecting the fact that the savings rate has exceeded the investment rate by around 10 percentage points of GDP: in 2002 net external liabilities were equivalent to 35% of GDP, but by 2008 net external assets were 20% of GDP (World Bank, 2009).

Philippines: Outward investment has always been negligible, in contrast to its very large human capital flows. Historically, inward FDI was quite small, owing to lackluster economic performance and a restrictive approach to foreign ownership. But it accelerated in the 1990s as effective reforms were implemented. The decline in 1998 was modest as the country managed to avoid a serious contraction. The volatility since 2000 has been mostly associated with domestic political uncertainty.

Thailand: Inward FDI grew strongly during the 1990s, and remained at high levels during the 1997-98 crisis, owing to continued openness and attractive buying opportunities. After declining in the early part of this decade, inflows have been strong again, apparently undeterred by political uncertainty through to 2008 (Ramstetter and Sjöholm, eds, 2006). Outward FDI grew modestly prior to the crisis, and has increased again in recent years, but it remains much smaller than inward flows (Pananond, 2004). Since 2007, the government has progressively removed restrictions on OFDI by Thai firms, partly to ease upward pressure on the currency.

Returning to the general picture, developing Asian countries are the key destination of outward FDI from emerging countries in the region (Table 3). The share of developing Asian countries for seven emerging Asian countries (where the data are available) in 2008 ranged from 48.7% to almost 80% of

total outward FDI stock.⁷ The trend of intra-regional FDI increased slightly in Hong Kong (41% in 2003 to 48.7% in 2008) and Malaysia (44% to 53.4%), whereas it declined from very high levels in China (to 70% in 2008 from 80% in 2003), reflecting increased FDI in other regions. Interestingly, most investors still invested in their immediate neighbourhoods. For example, around 65% of China's total outward FDI stock was located in Northeast Asia, especially Hong Kong, compared to only 3.5% in Southeast Asia. Likewise, in Malaysia, Thailand and Singapore, most of investments were located in other ASEAN countries. Singapore in fact accounts for over two-thirds of intra-ASEAN FDI. By contrast, the share of developed countries in these outflows was relatively stable. There were some increases, but generally from a small initial base. For example, the share of the US in Thai outward FDI rose from 3.1% to 9% over the period, and the EU share rose slightly (from 1.3% to 2.1%). The EU share also rose for China and Malaysia.

(Table 3 about here)

(4) The Major Drivers of Outward FDI

We now provide an analytical survey and interpretation of the major drivers of OFDI from these economies. Our approach is to identify these drivers, seven in total, consistent with general theories of FDI outlined above and specific East Asian circumstances, and to provide a range of country illustrations. The latter are drawn from a wide range of sources, including business case studies, press reporting, and field interviews.

(4.1) Macroeconomic imbalances and high savings rates

Countries with high savings rates and current account surpluses – China and also much of the rest of East Asia – need to recycle their surpluses. Most of the surpluses are held as passive portfolio investments (as in most of China's foreign exchange reserves that currently exceed \$2.3 trillion), in the form of government-guaranteed instruments (the most important being US Treasury Bills) and gold. The general presumption is that surpluses per se do not lead to FDI, as there needs to be some special underlying competitive advantage factors to explain the decision to undertake equity investment abroad. However, large surpluses can be a facilitating factor in OFDI. For example, in a world of imperfect capital mobility, where the domestic banking sector is highly liquid but there are restrictions on outward portfolio capital flows, these resources may be deployed for investments abroad.

The fact that two of the major East Asian investors, China and Singapore, not only have large savings rates but also a large SOE sector that operates in part as a sovereign wealth fund (SWF), serves as one obvious connection between the level of savings and outward FDI. We consider the SWF issue separately, below in section 4.3.

⁷ A similar regionalization is evident in the case of patent flows. See Hu (2009).

Aside from this direct SOE investment abroad, there are numerous East Asian examples of government exhortations and preferential facilities for firms to go offshore. During the 1990s, Taiwanese governments instituted a 'Go South' campaign, encouraging firms to invest in Southeast Asia in preference to China (Chen, 1998). The Singapore government has pushed its large GLC sector to go abroad since the 1980s (Park and Estrada, 2010). China announced a 'Go Global' strategy in 2001, and reaffirmed it in its 10th, 11th and 12th five-year plans, 2001-15. China's major outward investors have included the SOE giants, such as China Ocean Shipping Company and China National Petroleum Corporation (Chen and Ping, 2008). These companies benefited from state financial and technological support. There are also cases of governments pushing firms towards investments that they might not undertake if the calculus was purely a commercial one. Some of the East Asian investment in Africa since the 1990s falls into this category (see United Nations, 2007). Malaysia's largest company, the state-owned oil company Petronas, has also been pushed to undertake substantial investments in exploration and extraction, as have some other GLC's such as Telekom Malaysia.

(4.2) Natural resource security

A second driver is natural resource-seeking FDI. This is the case of developing country firms undertaking outward FDI to access immobile natural factor endowments abroad such as oil and mineral for supply security reasons. The three major Northeast Asian economies, China, Japan and Korea, are resource-poor, especially the latter two, and all are major net energy and mineral importers. The scale of the former two is such that their strategic purchasing decisions may affect prices in relatively thin international markets characterized by medium to long-term lags in supply-side responses; at least that is the perception of policy makers in these economies. Their market access concerns are heightened during periods of market volatility, very high commodity prices, and in extreme cases even restrictions to supply access, such as the 1970s oil crisis (which particularly alarmed Japan) and the period since 2005, of major concern for China. In such cases, FDI is seen as the most effective means of guaranteeing supply security. These three economies initially focused this type of outward FDI on the resource-rich economies of Southeast Asia, particularly Indonesia, to meet their resource-security objectives (Athukorala and Hill, 2010). Now, as we demonstrate below, they have become major global players.⁸ Since the largest flow of resource-seeking FDI is from Chinese SOEs, we return to this issue in the next section.

(4.3) Sovereign wealth funds

⁸ Although its economy is much smaller than China's, and its natural resource endowments superior, Indian outward FDI is beginning to display similar characteristics. See for example Kent (2008) on the overseas acquisitions behaviour of the oil and natural company, ONGC.

As noted, several emerging East Asian economies, such as China, Korea, Malaysia, Singapore and Taiwan, have either SWFs or a large SOE sector that actively invests abroad, or both. SWFs were generally established with the aim of actively managing foreign exchange reserves. Following the success of two SWFs in Singapore – Temasek Holdings (established in 1974) and Government of Singapore Investment Corporation (GIC) – new SWFs emerged in Asia. These include the National Stabilization Fund of Taiwan, established in 2000; the Korean Investment Corporation (KIC) in 2005, and the China Investment Corporation in 2007. Khazanah Nasional is the major holding company for Malaysia's large SOE sector.

The global value of FDI by SWFs increased from an annual average of less than \$4 billion during 1990-2004 to almost \$20 billion in 2008, while the number of major M&A deals by SWFs jumped from less than five per year during 1990-2004 to 40 in 2008 (UNCTAD 2009). Developed and Middle Eastern countries have accounted for 70% of total FDI by SWFs since 1990. SWFs have begun to play a bigger role in FDI since 2005 through their growing involvement in M&A. For example, the GIC of Singapore was notably aggressive, acquiring companies to the value of almost \$1 billion in 2007 alone, in the UK, the US, Japan and Australia.

It is important not to overstate the role of SWFs in FDI, however. UNCTAD (2008) reported that SWFs accounted only for 0.6% of total FDI flows and FDI generated by SWFs was only 0.2% of their total assets. Moreover, the rapid growth since 1990 came to a temporary halt in the wake of the 2008-09 global financial crisis. FDI by SWFs declined to about \$10 billion in 2009. Some SWFs incurred very large losses,⁹ prompting them to rebalance their portfolio towards less risky activity, especially from equities towards bonds and other fixed-income holding (Kern 2009, Balin 2010). Because of their more passive-investment behavior, the ability of SWFs to help stabilize the global economy, as has been done during this global crisis, could be constrained in the future. Nevertheless, their continued investments in major international financial institutions in 2008-09 assisted in stabilizing global equity markets at a time of unprecedented volatility.¹⁰ This was clearly a case where their alleged non-economic rationale played an important role in promoting global commercial stability (UNCTAD 2008). Martin's (2010) study of the China Investment Corporation observes that it is gradually shifting from a passive to a more active investor. At the end of 2009, 36% of its portfolio holdings abroad were in equities.

⁹ As for example in the CIC's acquisition of Merrill Lynch and the GIC's acquisition of Citigroup.

¹⁰ For example, major investments in global financial institutions over this period included CIC's \$3 billion in Blackstone and \$5 billion in Morgan Stanley, KIC's \$2 billion in Merrill Lynch, and Temasek and GIC's investments in UBS (\$10.3 billion), Standard Charter (\$4 billion), Barclays (\$2 billion), Merrill Lynch (\$5.9 billion) and Citigroup (\$6.9 billion).

Much of the outward FDI by China's SOEs has been motivated by a natural resource security objective.¹¹ This legitimate commercial objective has frequently raised suspicion in the recipient country. An illustration is its investment in the Australian mining industry. This constitutes their largest single country flow of its international natural resource-based outward FDI. It provides both a case study of the rapid growth in the outward FDI, and the challenges associated with its management where that FDI is dominated by SWFs (Drysdale and Findlay, 2008). Chinese FDI has become a contentious policy issue, with opponents of the attempted (and ultimately unsuccessful) purchase by Chinalco of a 9% stake in the Anglo-Australian mining company RioTinto valued at \$19.5 billion, raising two major concerns. These related to the activities of state-owned or directed investors, and whether buyer/investor tie-ups may limit the gains from FDI, particularly through allegations of depressed prices and hence royalty payments. The analytical and policy issue is whether these SOE investors behave differently from their private sector counterparts, and whether therefore a different policy regime is required for them. FDI in the mining industry displays certain characteristics that reflect the nature of the industry – its capital intensity, huge 'lumpy' projects, commercial and regulatory risk, and the need for long planning horizons. Hence major buyers often have a preference for either FDI or long-term supply contracts.

From the host country perspective, the principal benefits of FDI are the royalties that flow from the subsequent exploitation of the natural resources. For this reason, its taxation authorities need to ensure that the revenues reflect international prices for the goods exported. These transfer pricing issues apply regardless of ownership. Moreover, the usual national interest rules and taxation regime can accommodate the concerns surrounding investment by SOEs and SWFs (Drysdale and Findlay, 2008). This is especially so as the Chinese investments are invariably joint venture or minority shareholding projects.

(4.4) Exploiting competitive advantages abroad

The competitive advantages of emerging East Asian investors abroad are highly diverse, reflecting a mixture of international business factors and a range of country-specific advantages. As a general observation, these investors tend to eschew direct competition with those from the advanced industrialized economies, and rather seek 'niche' entry points. It is also important to emphasize the rapidly changing dynamics of these drivers of outward FDI in East Asia, as a result of fast economic growth, changing comparative advantage, major investments in human capital and R&D, and increasingly porous international boundaries for goods, capital and people. At least four general sets of factors are relevant, which we briefly identify and examine:

¹¹ See Broadman (2008) and Moran (2009) for balanced reviews of Chinese OFDI in natural resources, the former with special reference to Africa.

(i) The first is rising R&D strengths, particularly in China and the four NIEs. For example, China's growing technological proficiency has been well documented.¹² R&D expenditure has grown rapidly, from 0.71% of GDP in 1990 to 1.62% in 2009, while the number of domestic patent registrations rose from 41,881 in 1995 to 502,000 in 2009 (Wu, 2010).¹³ The rapidly increasing R&D expenditure is particularly noticeable in the computing, electronics and telecommunications equipment industries:¹⁴ the US accounts for one-third of global R&D in this sector, but that in China grew by 23% over the period 2001-06, and its corporate R&D expenditure is now similar to European levels. South Korean firms have also continued to develop their R&D capacity rapidly. Its ICT firms spend about 6.5% of sales on R&D, compared to the European and Japanese figure of 5% and 8% in the US. Its leading company, Samsung, has overtaken IBM in its expenditures, and now ranks second in the industry for patents issued by the US Patent Office. The earlier emphasis on heavy industry in both countries, while costly, did bequeath pockets of advanced industrial competence. And now, as demonstrated below, their leading companies have the financial capacity, underpinned by very high domestic savings rates, especially in China, to undertake reverse-engineering FDI as a means of quickly moving up the technology ladder.¹⁵

As a consequence of this rising technological competence, developed country MNEs are adjusting their strategies in each country, viewing them not just as efficient production locations for routine goods and services but now increasingly as efficient mid-level R&D centres (Bruche, 2009). In 2001 there were about 100 MNE R&D centres in China and India. By the end of 2008, this had grown to around 1,100 in China (representing 920 MNEs) and 780 from 670 MNEs in India. There has been a concomitant rise in domestically owned operations, and spillovers between foreign and local players. A major attraction in both countries is the large pool of low cost intellectual infrastructure, interacting with a sizeable diaspora, especially in the Indian case. Reflecting the early stage of this process, these R&D activities are concentrated both by sectors (ICT is by far the largest, followed by the health sector) and geography (Beijing/Shanghai and Bangalore/National Capital Region respectively). This process is likely to accelerate as the human capital bases in both countries expand rapidly. Moreover, MNEs from both countries, such as Huawei and Tata, have acquired or established R&D centres in the US and Europe as a means of tapping into advanced knowledge and technology clusters.

¹² See Wu (2010), Jin et al (2008), Gao and Jefferson (2007).

¹³ In 2010, for the first time, the number of patents filed in China exceeded that of Japan (Economist, October 2, 2010).

¹⁴ Figures in this paragraph are from the Economist, January 3, 2009.

¹⁵ There is however some debate concerning how quickly China's technological and entrepreneurial capacities are advancing. For example, the widely cited study by Huang (2008) argues that the major Chinese firms remain heavily state dependent, and that most of the firms going overseas have benefited from SOE support or special foreign connections.

(ii) The second competitive advantage is knowledge of global labour-intensive manufacturing and service export markets, of particular relevance to the Asian NIEs with their earlier global market penetration and deep knowledge of these markets. Efficiency-seeking outward FDI began to assume significance among the more advanced emerging economy investors as they began to lose comparative advantage in labour-intensive activities from the late 1980s. As has been well documented, the four Asian NIEs commenced large-scale FDI, first in the lower-income Southeast Asian economies and then China in textiles, garments, footwear, sporting products, toys and other labour-intensive manufactures.¹⁶ Although the technological edge of firms from these economies may not have been markedly superior, the principal attribute these investors brought to the host country was their extensive knowledge of international marketing channels and consumer tastes.

Subsequently, as wages in these lower-income economies have also risen, they in turn have invested abroad for similar reasons. This pattern is most pronounced in Malaysia, the highest-income economy among the followers, and now also China. Wages in China's coastal regions have been rising quickly, hence eroding these regions' competitiveness in labour-intensive activities, and therefore inducing firms to relocate offshore to lower wage neighbours, or the interior of the country. For instance, China has emerged as one of the largest investors in the Cambodian garment industry, and its firms have already begun to invest in Vietnam. As noted above, the increasing importance of international product fragmentation — the cross-border dispersion of component production/assembly within vertically integrated production processes — and a shift in the composition of trade toward intermediate goods (parts and components) will accelerate this particular pattern of efficiency-seeking OFDI.

(iii) A third factor is deep commercial knowledge of neighbouring markets, often cultural, linguistic or historical in nature, and of the type that is not readily accessible to outsiders in a cost-efficient form through the usual international business networks.

A significant competitive advantage for investors from small emerging economies is 'cultural proximity'. Consistent with the transaction cost theory of FDI, the informal channels facilitated by this proximity can lower firm costs, especially those related to search and information, and also mitigate risk perceptions in the investing company. A considerable body of research supports such a conclusion in the East Asian context. Ethnic and family networks constitute one such firm-specific advantage (Li, 2003). Johanson and Vahlne (2003) point out that Chinese companies have been able to internationalize quickly on the basis of business and social networks that overseas Chinese communities have already established. Casson (1997) argues that the recursive exchange of information could occur through a social group and thus a set of high-trust relationships can be built. Buckley et. al (2007) found a positive and significant relationship between the proportion of the population in host countries who are ethnic Chinese and the level of OFDI. Malaysia has emerged as one of the top three investors in Indonesia,

¹⁶ See Athukorala and Hill 2010, Huang 2003, Naughton 2007, Thee 2010.

facilitated by linguistic ties, as well as strong complementarities in plantation agriculture (Tham, 2005).

(iv) A fourth competitive advantage is a higher risk appetite, including the ability to operate in uncertain political and business environments without the level of formal legal guarantees that OECD investors usually require.

On the adaptability of emerging economy investors, Cross et. al (2007) argue that developing-country firms can exploit their home-country competitive advantages abroad since they can effectively deploy their experience of operating in a domestic environment characterized by regulatory constraints, bureaucratic hurdles, high barriers to entry and market volatility. For example, Tata tea spent nearly \$1.4 billion for its three major acquisitions in packaged tea, coffee, and flavoured water to gain access to developed countries, while constraints of domestic market in India led Tata Motor to establish its subsidiaries across the globe. Kent (2008) argues that this strategy has also acted as a portfolio diversification mechanism, to the extent that business cycles in their various markets are not synchronized, that is a cyclical downturn in one market may not occur in another.

Returning more generally to the theme of rapidly developing and broad-based competitive advantages among developing economy investors, Aguiar et al (2006, 2007) of the Boston Consulting Group unpackaged some of these technology and market-based competitive advantages for emerging economy firms going abroad. Consistent with our analysis, they identified at least five distinct sources. The first is taking brands from the local to the global market, building on an efficient, low-cost domestic operation. Examples include the Chinese appliance manufacturer Hisense, and Bajaj auto, the Indian producer of two and three-wheelers. The second, and related, is innovating on the basis of local engineering excellence, with Embraer, the Brazilian regional aircraft manufacturer as an example. The third is developing global leadership in a narrow product category, also on the basis of excellence at home, combined sometimes with strategic international acquisitions of technology. Examples include BYD, the Chinese, battery maker, and Johnson Electric, Hong Kong, which produces tiny electric motors for cars, and other equipment. A fourth model involves building on technological competence in a natural resource base at home, which is then taken abroad, as in Brazilian grain and meat producers and Vale in iron ore, and also Malaysia's Petronas. A final category refers to the development of a new or better business model, for example Mexico's Cemex, which is now a major supplier of ready-mix cement, and operating in many countries.

Also consistent with our findings is the conclusion of Aguiar et al (2006) that TW MNEs tend to resort to M&As as a means of entry. This was particularly for the fourth and fifth strategies, applying to almost 70% and 31% of the relevant firms respectively. By contrast, about 70% of firms employing the first three strategies entered via greenfield investments.

(4.5) Strategic asset acquisitions and 'reverse engineering'

Outward FDI has sometimes been a vehicle to acquire technology through 'reverse engineering'. This is particularly so in the case of technologies that cannot be acquired 'off the shelf' through arms-length transactions, or in countries with historically restrictive inward FDI regimes (such as Korea and Japan) that have thereby denied their firms the opportunity of technology spillovers. The early Japanese literature drew attention to imitation as one such related strategy, that is, where firms would disassemble a product from an advanced economy in order to understand the technology embodied in it. From the late 1980s, a substantial proportion of Korean and Taiwanese investment in the US was motivated by this factor (Dunning et al 1996). Firms undertake this asset-augmenting FDI to create, sustain or maintain their competitive position by acquiring the proprietary assets of another foreign company. Firms in the home country aim to tap into existing technology, knowledge, managerial practice and expertise of the foreign company. Firms also aim to participate more fully in new product development and standards setting in order to maximize their competitive position. In contrast to resource, market and efficiency-seeking FDI, investments by companies in this category lack ownership advantage (outside of their domestic market) so that they need to invest in foreign company to acquire such advantages. Thus for example, Lee (2001) argued that outward FDI into developed countries has been a key to the success of Samsung's camera business, while Kim (1998) showed that investment of Hyundai in the US and Japan helped to catch-up new technology and force organizational learning. Buckley et. al (2008) showed that there is evidence of Chinese companies investing in developed countries to acquire advance technology and manufacturing know-how.

On occasion, reverse-engineering type FDI has also been linked to defensive FDI, discussed in the next sub-section, for market access considerations, such as import quota restrictions and potential anti-dumping suits in OECD markets. One such example was the purchase by the Chinese firm Lenovo of IBM's PC business for \$1.25 billion in 2006. Korean investments in the US automotive industry from the 1990s had a similar mix of motives (Kim, 1998). In the case of Taiwan's reverse-engineering outward FDI, much of it was directed at the US, and facilitated by the large number of Taiwanese scientists studying and residing in that country (Dunning et al 1996). In cases where the firms are financially well-resourced investors from countries with a much weaker technological base, the absorptive capacity may force firms into larger-scale acquisitions, but the strategy can still be effective.¹⁷

(4.6) Market-seeking and defensive FDI

In addition to the general market-seeking FDI referred to above, as firms enter more technologically sophisticated sectors, they are more likely to encounter trade barriers in rich-country markets, in addition to the challenge of weak linkages to customers of specialized products. Buckley et. al (2008) point out that firms can perform market-seeking FDI in both developed and

¹⁷ For example, Lecraw (1993) showed that the performance of Indonesian firms that invested abroad 'improved dramatically', with respect to management expertise, exports, quality and costs.

developing countries to either support trade and facilitate exports of domestic producer, or to substitute trade in response to trade barriers imposed by the host country.

Some of these outward FDI projects have been undertaken in order to assuage major host country concerns about large bilateral current account imbalances. This has been a factor in US/East Asian relations, especially in the case of Japan in the 1980s (Yoichi, 1988) and 1990s, and China and other East Asian economies currently.¹⁸ Conversely, these very large foreign exchange reserves and a large SOE sector have resulted in alternative strategic partnerships abroad. For example, there is growing international wariness towards China's growing global investment presence. Sometimes of course this wariness conceals straightforward commercial protectionism, as in the blocking of the attempt by the China National Offshore Oil Corporation (CNOOC) to purchase Unocal in 2005 was blocked, and also Huawei's attempt to buy the US technology firm 3Com in 2008. Partly in response, PetroChina's acquisition of Singapore Petroleum on May 2009 was seen as an opportunity to deploy the latter as a less threatening beach-head for third country acquisitions. To allay such fears, Chinese firms have also adopted a strategy of minority joint venture partnerships in some of their acquisitions.

(4.7) Additional factors

Several additional drivers of outward FDI from East Asia have been relevant.

The first is the special cases of Hong Kong and Singapore as regional headquarter bases for MNE operations, building on their relatively superior legal, financial, and technological infrastructure. The importance of financial market development, especially in cases where it is more advanced than surrounding jurisdictions, has been noted in the general FDI literature.¹⁹ In both these economies, a substantial proportion of recorded outward FDI has been undertaken by MNEs basing their regional operations in the city states.

For example, Chia and Lim (2003) show that Singapore hosted more than 6,000 foreign MNEs and international companies performing manufacturing and service functions. Singapore has become an important international trading hub for information and communication technology (ICT), and foreign MNEs have increasingly established affiliates in Singapore as international

¹⁸ See Pang (2011) for a political economy case study of the US-Singapore free trade agreement, including the interaction between trade policy and FDI.

¹⁹ For example, Giovanni (2005) found that financial development, in terms of the size of the financial market, measured by stock market capitalization relative to GDP, has a strong positive association with the capacity of domestic firms to undertake cross-border M&As. The credit provided by banks and other financial institutions was also found to exert a positive influence but with limited impact. Brooks and Jongwanich (2011) also found a positive association between financial development, as indicated by bank loans and stock market development, and cross-border M&A purchases in emerging Asian economies.

procurement offices (IPOs) to source parts and components from the region for their worldwide manufacturing needs. The country is also positioning itself as a service centre (including financial services) and headquarter logistics base for Southeast Asia.

Second, there may be preferential market access owing to bilateral trade and investment treaties that influence FDI flows. These include bilateral investment treaties (BITs), double taxation treaties (DTTs), and preferential trading arrangements. However, to date, the empirical evidence concerning the impact of BITs and DTTs on investment flows is ambiguous. Tobin and Rose-Ackernman (2005) demonstrated that the impacts of BITs are conditioned by the country risk level. Ginsburg (2005) argued that BITs could have a counter-productive effect on investor confidence to the extent that countries may be encouraged to rely more on supranational bodies for dispute settlement at the expense of institutional development. Most empirical studies have found that DTTs have a negligible or even negative effect on investment profiles. Davies (2004) and Egger et. al (2006) argue that, owing to the fiscal cost of DTTs, governments have fewer resources to build the physical, commercial and social infrastructure needed to attract and support FDI. Brooks et al (2004) argued that the investment promotion regimes, such as tax concessions, tax holidays and tax credits, influence investment location decisions only at the margin. More important to most potential investors is the overall investment climate, including the size and expected growth rate of the market, the long-term macroeconomic and political stability of the host country, the supply of skilled and trainable workers, and the presence of modern transportation and communication infrastructure.

Although these preferential trade and investment agreements have been relatively unimportant in East Asia, owing to the fact that the major liberalizations have been unilateral and non-discriminatory, some official agreements can have an effect. For example, in the case of China-Taiwan commercial relations, a major impetus came in March 2008 with a new government in Taiwan committed to more cordial relations.²⁰ Taiwanese firms have invested extensively in China, and at least 5% of its population is estimated to live on the mainland. Prior to this, Taiwan had resisted reverse FDI flows. In April 2009, China Mobile purchased 12% of a telecommunications company for \$525 million, an acquisition that is viewed as a forerunner of much to follow, including access to currently restricted sectors of the Chinese economy.²¹

A final observation is that in some cases, increased outward FDI reflects an unattractive domestic investment climate, forcing firms to search for international opportunities. This has been the case in Taiwan, with the converse of the positive events discussed in the above paragraph leading to

²⁰ As an indication of the rapidly growing direct commercial ties, regular direct flights resumed after an absence of more than half a century. The number rose dramatically, from 36 per week initially to 270 by April 2009.

²¹ The significance of the event can be gauged by the fact that Taiwan's stock market jumped by more than 15% following the purchase, even though the investor is an SOE telecoms firm.

alternative outward investment destinations, a point emphasized by Aminian et.al (2008) and Sutter (2002). In the case of Malaysia, since 2000 a slowing economy and political uncertainty have resulted in sharply increased outflows. As the World Bank (2009, p. 53) observes: 'Malaysia's large private surplus on the current account suggests that investors find it more attractive to invest overseas than domestically.'

(5) Conclusion

Our main conclusions are as follows. First, outward FDI from emerging East Asian economies is growing very rapidly, faster than these economies' growth of GDP, trade, or inward FDI. East Asia is by far the most important source of FDI in the developing world.

Second, this growth is part of the general process of global economic integration and the liberalization of capital accounts. A variety of specific drivers are present, reflecting particular country circumstances, and these drivers are generally consistent with the literature on third world MNEs. In particular, we identify several major factors at work. These are rising levels of technological sophistication in the more advanced East Asian economies, the desire for natural resource security, defensive FDI, reverse-engineering and the acquisition of strategic assets abroad, and a range of more micro competitive advantages including risk tolerance, cultural familiarity, and knowledge of international markets. East Asia's exceptionally high savings rates are also a relevant factor, where capital markets are imperfect, and the savings are partly in government hands or subject to its direction, as in the case of sovereign wealth funds and SOEs.

The major policy challenge for the rest of the world, particularly the OECD countries, is a willingness to absorb these rising flows. These flows constitute a key element in the global reorientation of economic activity towards the developing Asian economies, which are likely to continue to be the major incremental drivers of the world economy. They also facilitate the international adjustment to large national differences in savings and investment rates, and the consequent current account imbalances. We also conclude that the concerns over the activities of sovereign wealth funds from these and other countries are overstated, and that these investments can be accommodated through the general regulatory procedures of host countries. The governments that control large SWFs could however increase the transparency of their operation to ameliorate these concerns.

Table 1: Inward and Outward FDI Stock (Billion US\$), 1990-2009

	Inward FDI					Outward FDI				
	1990	1995	2000	2005	2009	1990	1995	2000	2005	2009
World	2081.8	3381.3	7442.5	11524.9	17743.4	2086.8	3606.6	7967.5	12416.8	18982.1
Developed economies	1557.2	2521.5	5653.2	8535.8	12352.5	1941.6	3272.2	7083.5	10956.4	16010.8
European Union	761.9	1146.9	2322.1	4690.2	7447.9	887.5	1487.9	3759.7	6299.7	9983.1
United States	539.6	1005.7	2783.2	2818.0	3120.6	731.8	1363.8	2694.0	3638.0	4302.9
Japan	9.9	33.5	50.3	100.9	200.1	201.4	238.5	278.4	386.6	740.9
Developing economies	524.5	848.4	1728.5	2713.6	4893.5	145.2	330.0	862.6	1308.4	2691.5
Africa	60.7	89.3	154.2	271.5	514.8	19.8	31.5	44.1	52.4	102.2
Latin America and the Caribbean	111.4	187.1	502.1	816.7	1472.7	57.6	87.9	204.4	353.8	643.3
Asia	349.6	568.1	1067.7	1619.5	2893.8	67.4	210.1	613.5	901.6	1945.2
East (and Southeast) Asia	304.9	509.9	977.5	1354.9	2251.5	58.5	199.6	594.1	839.5	1703.9
East Asia	240.6	357.4	710.5	950.5	1561.5	49.0	149.4	509.6	674.2	1361.5
China	20.7	101.1	193.3	272.1	473.1	4.5	17.8	27.8	57.2	229.6
Hong Kong, China	201.7	227.5	455.5	523.2	912.2	11.9	78.8	388.4	471.3	834.1
Korea, Republic of	5.2	9.5	38.1	104.9	110.8	2.3	10.2	26.8	38.7	115.6
Taiwan	9.7	15.7	19.5	43.2	48.3	30.4	42.6	66.7	106.5	181.0
South-East Asia	64.3	152.5	267.0	404.3	690.0	9.5	50.1	84.5	165.3	342.4
Indonesia	8.7	20.6	25.1	41.2	72.8	0.1	5.9	6.9	13.9	30.2
Malaysia	10.3	28.7	52.7	44.5	74.6	0.8	5.1	15.9	21.9	75.6
Philippines	4.5	10.1	18.2	15.0	23.6	0.4	1.3	2.0	2.0	6.1
Singapore	30.5	65.6	110.6	194.6	343.6	7.8	35.0	56.8	121.4	213.1
Thailand	8.2	17.7	29.9	60.4	99.0	0.4	2.3	2.2	5.1	16.3
South Asia	6.8	15.3	29.8	76.3	217.7	0.4	0.8	2.9	11.7	82.0
India	1.7	5.6	16.3	43.2	164.0	0.1	0.5	1.7	9.7	77.2

Source: UNCTAD, available at <http://www.unctad.org/Templates/Page.asp?intItemID=5545&lang=1>

Table 2: Inward and Outward FDI flows as a percentage of gross fixed capital formation, 1990-2009

	Inward FDI							Outward FDI						
	1991-95	1996-2000	2001-05	2006	2007	2008	2009	1991-95	1996-00	2001-05	2006	2007	2008	2009
World	4.0	12.2	9.5	13.4	16.9	12.6	9.1	4.6	11.7	9.3	13.0	18.4	13.8	9.0
Developed economies	3.4	11.9	8.6	13.3	18.2	12.1	8.4	5.1	13.7	11.1	15.9	24.3	18.6	12.2
European Union	5.5	19.5	15.5	19.4	25.7	14.0	11.6	7.1	26.1	17.8	22.9	35.8	23.8	12.4
United States	3.4	11.0	5.1	9.4	10.7	12.8	7.4	5.5	7.8	6.9	8.9	15.9	13.0	14.2
Japan	0.1	0.5	0.7	-0.6	2.2	2.1	1.1	1.7	2.2	3.5	4.9	7.3	11.2	7.1
Developing economies	6.4	13.1	11.6	13.0	14.0	12.5	9.3	3.0	5.1	4.1	7.0	7.3	5.9	4.5
Africa	6.1	9.5	18.0	26.5	23.9	22.9	18.7	2.3	2.4	0.3	3.8	4.6	3.5	1.8
Latin America and the Caribbean	7.0	21.5	18.6	14.9	21.3	19.7	14.6	2.1	6.4	7.0	11.1	7.4	9.0	6.0
Asia	6.3	10.4	9.3	11.4	11.2	9.8	7.4	3.3	4.9	3.7	6.2	7.5	5.4	4.4
East Asia	6.6	12.0	9.2	8.6	8.3	7.6	5.6	5.0	6.4	3.7	5.4	6.1	5.4	4.2
China	10.9	12.6	8.8	6.4	6.0	5.3	4.0	1.4	0.6	0.9	1.9	1.6	2.6	2.0
Hong Kong, China	14.8	53.6	61.9	108.5	130.3	138.9	110.2	41.7	61.8	58.6	108.3	146.5	117.9	118.9
Korea, Republic of	0.6	4.1	2.9	1.8	0.9	3.1	2.4	1.3	3.1	1.8	3.0	5.2	7.0	4.3
Taiwan	2.2	3.4	2.9	8.8	9.0	6.4	4.0	4.4	6.8	8.6	8.8	12.8	12.1	8.3
South-East Asia	11.2	17.2	16.5	22.4	23.9	12.5	9.4	3.5	6.0	8.6	11.6	16.4	4.1	5.5
Indonesia	5.3	-0.8	1.2	5.6	6.4	6.6	2.9	2.4	0.4	2.4	3.1	4.3	4.2	1.8
Malaysia	19.7	16.8	11.6	18.6	21.2	16.8	3.5	4.0	7.2	6.6	18.7	28.0	34.5	20.6
Philippines	8.4	9.9	6.9	17.7	13.8	6.3	8.2	1.3	0.9	1.4	0.6	16.7	1.1	1.5
Singapore	29.3	40.9	56.8	94.6	89.3	20.8	32.9	13.0	21.6	37.3	61.3	69.0	-16.2	11.7
Thailand	3.8	15.4	15.1	16.4	17.4	11.4	9.2	0.7	0.8	1.0	1.7	4.4	3.4	5.9
South Asia	1.2	2.7	4.3	6.7	6.4	8.6	7.4	0.0	0.2	0.9	3.6	3.4	3.3	2.8
India	1.0	2.9	3.6	6.8	6.3	9.6	8.4	0.0	0.2	1.2	4.8	4.4	4.4	3.6

Source: UNCTAD, available at <http://www.unctad.org/Templates/Page.asp?intItemID=5545&lang=1>

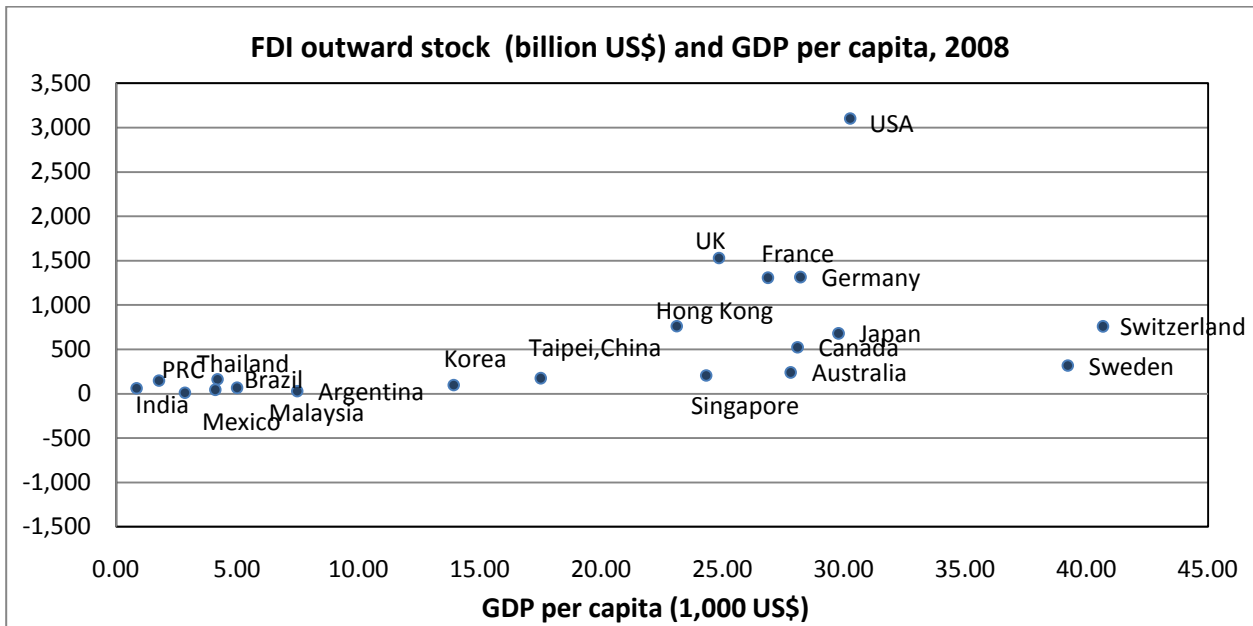
Table 3: Direction of Outward FDI from Selected Emerging Asian Countries, 2003 and 2008 (% of total outward FDI)

	China		HK		Korea		Philippines		Malaysia		Singapore		Thailand	
	2003	2008	2003	2008	2003	2008	2003	2008	2003	2008	2003	2008	2003	2008
US	1.5	1.3	0.8	0.8	27.7		14.2		20.5	11.1	5.4		3.1	9.0
EU	1.3	1.7	2.3	1.3	12.9		13.9		14.5	17.2	5.9		1.3	2.1
Japan	0.3	0.3	0.6	0.0	1.8		0.2		2.7	1.5	1.3		0.0	0.0
Asia	79.7	70.0	41.0	48.7	41.0		72.8		44.0	53.4	48.2		73.1	73.2
East/Southeast	78.0	68.4	41.0	48.7	37.7		72.8		42.2	49.9	47.8		71.8	71.4
East Asia	76.2	64.8	37.5	46.5	25.6		25.7		11.9	13.0	24.8		19.3	16.8
- China	0.0	0.0	36.3	46.5	20.7		19.4		2.6	2.9	13.2		13.0	11.0
- HK	74.1	63.0	0.0	0.0	4.4		5.6		7.8	8.7	7.4		6.3	5.7
- Korea, Republic	0.7	0.5	0.3	0.0	0.0		0.0		0.2	0.2	0.0		0.0	0.0
- Taiwan	0.0	0.0	0.6	0.0	0.3		0.7		1.3	1.3	2.5		0.0	0.0
Southeast Asia	1.8	3.5	3.5	2.2	12.1		47.1		30.3	36.9	23.0		52.5	54.6
- Indonesia	0.2	0.3	0.1	0.0	3.8		0.1		5.2	9.6	6.9		1.9	1.8
- Malaysia	0.3	0.2	0.9	0.6	1.0		7.2		0.0	0.0	9.1		1.9	2.7
- Philippines	0.0	0.0	0.4	0.0	1.5		0.0		1.8	0.9	2.1		5.7	2.1
- Singapore	0.5	1.8	1.2	0.9	1.3		33.9		19.7	22.1	0.0		17.5	15.0
- Thailand	0.5	0.2	0.8	0.7	1.6		0.3		2.1	1.9	3.1		0.0	0.0
- Viet Nam	0.1	0.3	0.0	0.0	2.7		5.5		0.9	1.6	1.0		9.1	3.9
South Asia	0.2	1.0	0.0	0.0	2.4		0.0		1.4	2.2	0.4		1.3	1.8
- India	0.0	0.1	0.0	0.0	1.6		0.0		0.4	0.4	0.4		1.3	1.8
Africa	1.5	4.2	0.0	0.7	1.7		0.0		6.0	7.3	4.0		1.5	3.3
Latin America	1.0	0.7	0.9	0.0	4.3		0.0		0.4	0.4	0.0		0.0	0.0
Other	14.8	21.7	54.3	48.5	10.8		0.0		12.0	9.1	35.2		21.0	12.5
Total	100	100	100	100	100		100		100	100	100		100	100

Note: There is no data for Korea, Philippines, and Singapore in 2008.

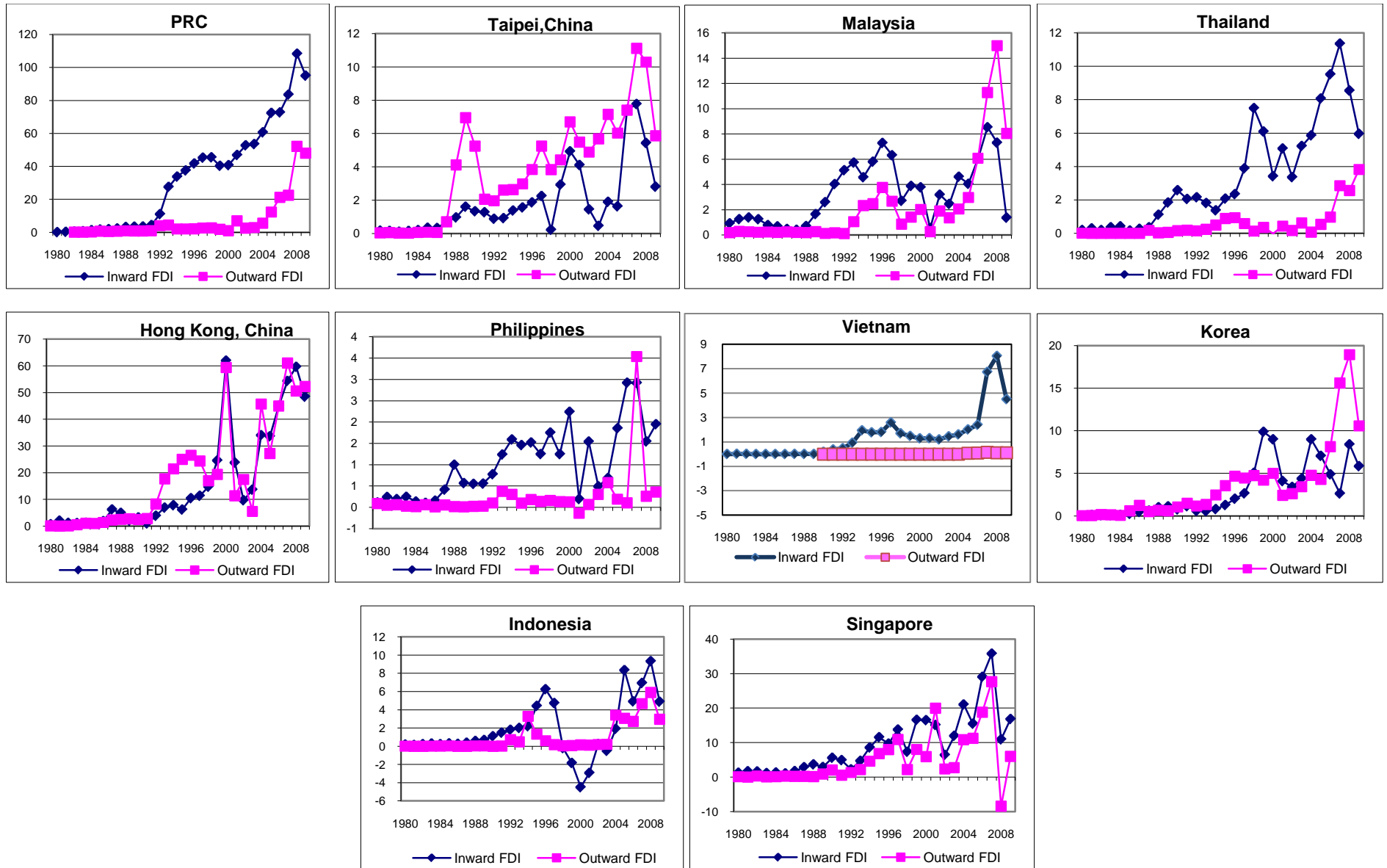
Source: Authors' calculation from bilateral outward FDI (stock) from UNCTAD

Figure 1: Outward FDI stock and GDP per capita



Source: UNCTAD for FDI data and World Development Indicator for GDP per capita

Figure 2: Outward and Inward FDI Flows in East Asia (Billion US\$), 1980 – 2009 (Million US\$)



Source: UNCTAD, available at <http://www.unctad.org/Templates/Page.asp?intlItemID=5545&lang=1>

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