

Foreign Direct Investment from Developing Countries: Evidence, Trends and Determinants

Dr.SayeedaBano
Department of Economics
The University of Waikato
Hamilton, New Zealand
Email: sbano@mngt.waikato.ac.nz
Ph: 64 7 838-4045
Fax: 64 7 838-4331

And

Professor Jose Tabbada
University of the Philippines
Diliman Campus
Manila, Philippines
Phone: 6329311022

Abstract

Traditionally, foreign direct investment (FDI) has been mostly the exclusive preserve of the developed countries. However, the past few decades saw the emergence of foreign direct investment from the ranks of developing countries. This paper explores the magnitude, growth and principal sources of such investment, as well as some of the principal trends, patterns, and implications of the new phenomenon.

One of the findings of the study is that while there has been a perceptible rise in developing-country direct investment abroad, the field is still dominated by a few developed countries, although their dominance is on the decline. The bulk of the new outward investment, however, comes from a few countries which are geographically concentrated in East, South and Southeast Asia, and who are themselves current and/or previous recipients of substantial inward FDI. The data show that developing countries with high and growing outward FDI also have high GDP growth, relatively high GDP per capita, high savings rates, substantial FDI inflows, and are export-oriented. Correlation tests performed on selected countries in East, South and Southeast Asia show that outward FDI, domestic savings rates, GDP, and GDP per capita are highly correlated, the sole exception being Malaysia. Further tests using regression analysis will be performed on the same variables (or an expanded set of variables) in order to test for causal relationships.

Two opposite conclusions emerge from the findings. On one hand the analysis shows the possibility of developing countries themselves becoming major sources of FDI. On the other hand, the fact that only a few developing countries, which are geographically concentrated, have so far joined the rank of investors shows how difficult it is for the majority of developing countries to break into the ranks of capital-exporting countries. Thus, the prospects for the rest of the developing countries are both pessimistic and optimistic.

Key Words: Foreign direct investment, developing countries, globalization, Asia, South-East

Asia, world investment, developed countries

JEL Classification: F21, F43, F41

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INTRODUCTION: THE CHANGING INVESTMENT LANDSCAPE

It used to be assumed as part of the natural order that foreign direct investment (FDI) naturally flows from the more industrialized to the less-industrialized countries, or from capital-rich countries to capital-scarce poor nations, in the same way that water, if unimpeded, flows from higher to lower elevations. In recent decades, however, a new phenomenon appeared in the world stage-- a reverse flow of FDI (henceforth reverse FDI) from developing to the developed as well as other developing countries. This phenomenon, although new, is a logical continuation of the process of globalization that has been going on since the second half of the 19th century, interrupted only briefly by World Wars 1 and II and the Great Depression of the 1930s¹.

This is not to suggest that the bulk of the world's FDI now comes from the developing countries and have as their main destination the developed countries. That is still far from being the case, as most FDI still comes from the developed countries and goes to other developed countries, as this study will show. But reverse FDI has been significant enough during the past couple of decades to cause, if not tsunami-size waves, big enough ripples to be visible from afar, or at least to be noticeable in the host countries.

Reverse FDI started with Japan, the first Asian country to experience modern industrialization and rapid as well as sustained economic growth, barely two decades after it rose from the rubbles of the World War II. Japanese investment flowed in successive waves to the neighboring countries, first to the so-called "Asian tigers" (Hong Kong, South Korea, Taiwan and Singapore) and then to other rapidly-industrializing Southeast Asian economies

¹While most writers consider globalization to be a late 20th century phenomenon, the more history-conscious ones are aware that it has been going on for most part of the 20th century, and in fact may go as far back as the second half of the 19th century under various other names such as "internationalization", "imperialism", etc. What differentiates the current phase of globalization from earlier ones is the speed of transport, communications and financial transactions, the latter two owing largely to the (ongoing) ICT revolution.

(Malaysia, Indonesia and Thailand). Japan's overseas expansion was replicated during the 1980s-1990s by the "Asian tigers". Now other rapidly-industrializing countries - Thailand, Malaysia, and Indonesia in Southeast Asia, and China and India in East and South Asia, respectively - have also joined the race and collectively are changing the world's investment landscape. The "flying geese" model, which was advanced to describe the Japan-led East and Southeast Asian trade pattern and economic growth, may also describe the new phenomenon of reverse FDI.

Being a new and largely unexpected phenomenon, reverse FDI created quite a stir in some of the host countries, most of which have been used to being sources rather than hosts to FDI. Thus, China's acquisition of Volvo, which is as Nordic as any firm can possibly be, raised not a few eyebrows in the host country. Similarly with Philippine-based San Miguel Corporation's acquisition of controlling shares in Australia's National Foods, besting its nearest rival, New Zealand's food and dairy conglomerate Fonterra.

It should be recalled that similar investments in the 1980s by Japanese multinationals in the US entertainment, real estate and other industries also elicited similar reactions in the host countries, even fuelling fears of a "second Japanese invasion" and resurrecting the "yellow peril"- fears that, again on hindsight, turned out to have been overblown, as the Japanese economy soon entered a prolonged period of stagnation which forced many Japanese firms to downscale or abandon their overseas ventures.

During the 1960s and the 1970s, when US multinationals were spreading rapidly across Europe and other parts of the world, similar concerns over an "American invasion" of Europe were also raised in the host countries. To meet the "American challenge", European corporations, with the active backing of their respective governments, went through consolidation and rationalizations to be able to compete with the giant US corporations.

To a large extent, these negative reactions to “foreign intrusions” probably stem partly from a lack of understanding of what FDI or MNCs are. This study is thus an attempt to understand and explain this new phenomenon. Specifically, this paper aims to:

- 1) describe reverse FDI: its major sources, magnitude, growth and other relevant characteristics;
- 2) identify current as well as emerging patterns, trends and tendencies; and
- 3) offer some explanations for the observed trends, patterns and tendencies.

The paper is organized as follows. The first section after this introduction provides a brief survey of the literature on FDIs, focusing on the reasons why firms invest abroad and the effects on the host and home countries of such investment. The next section describes FDI trends and patterns, with emphasis on FDIs from selected countries and regions. Section 4 explores some possible explanations for the observed trends, tendencies and patterns. The final section presents the study’s conclusion and draws some implications of the new phenomenon for the international economic order; it also suggests areas and directions for future research.

LITERATURE REVIEW ON FDI

This section presents a selective review of the literature on FDI and revolves around the following questions: What motivates firms to invest abroad? What benefits and costs do home and host countries derive from foreign direct investment? And why are some countries home or host to more FDI than others?

In the review that follows, four fairly recent papers on FDIs/MNCs provide us with an update and background on the literature: Nonnemberg and Cardoso de Mendonca (2004), Nunnenkamp(2002), Pavida Pananond (2010), and Nissan and Niroomand (2010). But we also liberally draw upon the observations and insights of many other scholars, some of whose

works have become so frequently cited that they have practically become part of the public knowledge on FDIs. Failure on our part to individually cite them in this paper is testament to how much influence their works have on us.

Economists of different persuasions have long grappled with the question on why firms invest abroad, as well as with the consequences for the host and the home countries of their decision to do so. In the 1960s-1970s a veritable academic cottage industry in fact rose around the subject of firms from developed countries - called “multinational corporations” (MNCs; henceforth to be used interchangeably with FDI), “multinational enterprises”, “international firms”, “global corporations”, “foreign corporations”, etc. – investing in other countries. Among the more influential mainstream economists who wrote on MNCs were Stephen Hymer (before he converted to Marxism), John Dunning and Raymond Vernon, to mention just three, but there were many other economists and assorted social scientists who came on board the then-popular (if controversial) subject.

Firms invest abroad as part of their overall business strategy. Their investment takes the form of either portfolio investment or direct investment. The former refers to investment in the stocks, bonds and other instruments offered by other countries and is undertaken for the purpose of realizing higher yields from such instruments. Direct investment, although it is also undertaken with financial gain as an objective, differs from portfolio investment in that it aims at control over the enterprise established abroad. One or the other form has been preferred or has predominated at different times. During the early decades of the 20th century portfolio investment was the preferred form, but in the post-World War II period direct investment became the preferred form; in recent decades, however, especially in the run-up to the Asian financial crisis of 1997-1998, portfolio investment was on the rise. But with the experience from the financial crisis, in which huge portfolio investment inflows were

followed by equally large and sudden outflows, host country preference seems to have shifted back to direct investment.

FDIs are a vehicle for the transmission from developed to less-developed as well as other developed countries of capital, technology, and entrepreneurial-managerial skills, which are usually in short supply in the recipient countries. Although based in the developed countries, FDIs have certain advantages over local firms – e.g., superior technology or know-how, a new or better product, an improved or more efficient process - which enable them to compete with the local firms, despite the advantages that the latter enjoy in their home market, such as knowledge of the local condition and experience in working with the host government.

In terms of their impact, FDIs are regarded as generally beneficial to the host as well as the home countries. Although FDIs tend to dominate the sectors in the host countries in which they have made their investment, such dominance, it is argued, is due to their greater productivity and efficiency, is generally benign and is, in any case, needed if the host countries are to grow and prosper.

Left-leaning economists have advanced very strong views on the causes and consequences of the flow of capital from the industrialized countries to the colonies and former colonies. Taking off from the works of Marx and Lenin, they regard FDI (and foreign capital, which includes foreign loans and foreign aid) with skepticism, if not outright hostility, as being a (if not the) major obstacle to economic growth and development in the host countries. MNCs also infringe on the sovereignty of the host countries and stifle their development by obstructing the emergence and growth of domestic entrepreneurs, by siphoning off capital from the host countries (where it is in short supply, to begin with), by

widening income and wealth inequality, and by distorting domestic political and decision-making processes through corruption, undue pressure on government officials, etc.²

The debates that raged during the 1960s and the 1970s on whether MNCs are beneficial or bad for the host countries have considerably died down, and there is now a near-unanimous consensus among academic economists and policymakers that the benefits to the host country from the presence of MNCs outweigh the costs. The debate on the impact of MNCs may have actually shifted back to the home countries, and revolves mainly around the issues of loss of jobs and the “hollowing out” of the manufacturing sector due to the migration to the developing countries of many of the more routine operations of developed-country firms.

Firms invest abroad for three broad reasons: 1) to seek or source raw materials from countries where these are located or are in plentiful supply (resource-seeking FDI); 2) to gain access to important markets (market-seeking FDI); and 3) to reduce cost and improve efficiency or productivity (efficiency-seeking FDI).

Multinational firms aim to gain access to the natural resources or raw materials that are located or are relatively abundant in the host countries. Examples of resource-seeking FDI are those engaged in mining, oil exploration and extraction, logging and lumber, fisheries, and agricultural plantations. Gyorgy Adam (Radice 1975) calls this “world-wide sourcing”, which is perhaps one of the most important motivations of developed-country firms to maintain their presence even in far-flung areas of the globe. Under the current phase of globalization, labor

²Left-leaning economists are not, however, unanimous in their condemnation of foreign capital. Some of them, citing Marx in **The Communist Manifesto**, even see capitalism as a “progressive force” (their favored term for positive or beneficial effects) that would transform the backward societies (the colonies) into capitalist societies in the image of Great Britain and other western capitalist societies. By and large, however, the dominant view among left-leaning economists is Lenin’s well-known thesis that capitalism in its imperialist or “last” stage has a negative impact on the less-developed countries.

and parts (of cars, computers, etc.) are also increasingly sourced from developing countries, where wages and costs of production are still relatively cheap.

“Market-seeking FDIs”, for their part, establish plants and facilities abroad to gain access to markets, especially the large and rapidly-growing ones. Market access is the single most important reason why industrialized-country firms have been scrambling to get into China: to have direct access to the country’s huge domestic market as well as large pool of relatively low-cost labor. Vernon’s well-known “product life-cycle” theory, according to which a product goes through different stages –first, production for the domestic market, which is usually narrow at the beginning; then mass production as costs and prices drop; later, production for export; and finally, production abroad –provides a model to describe and explain the decision of developed-country firms to invest abroad.

In previous decades, “tariff-hopping” became an important factor in the decision of foreign firms to invest abroad. Instead of exporting finished or manufactured products to other countries and be made to pay the corresponding tariff and customs duties, MNCs put up plants and facilities to produce goods for the domestic markets of the host countries as well as for export to third countries. With trade liberalization and the general reduction of tariffs and other trade barriers, however, this motivation to invest abroad is no longer as compelling as it once was.

Firms also invest abroad for strategic reasons, such as to reduce costs or increase productivity, enhance their competitive position, or a combination of these objectives. The now common practice among MNCs of outsourcing (or “offshoring”) their more routine or standardized operations, such as call centers, medical transcription, bookkeeping and accounting, is an example of the efficiency-seeking kind of FDI. Since they generally operate in oligopolistic markets or industries, MNCs also have to match the moves of their

competitors (reactive strategy) or forestall competition by “jumping the gun”, so to speak, on other firms (pre-emptive strategy) (see, for example, Hymer in Radice 1975).

The literature reviewed so far has emphasized the “pull factors” in FDI, or what induces or attracts firms to the host countries. Equally important are the “push factors”, or the forces in the home country that drive its firms to invest abroad. Here left-leaning economists have more to say than mainstream economists. Starting from the assumption derived from stage theories of development that the home countries have become advanced or “mature” capitalist economies, they see outward investment as a means by which capitalists try to forestall the fall of their profit rate (hence it is called the “falling rate of profit” thesis) or in order to seek higher returns for their surplus, the returns in the capital-surplus advanced economy being low. An influential variant of this line of Marxist-inspired thinking is the “under-consumption theory” associated with the German Marxist Rosa Luxemburg (but also advocated by other Marxists), which see low wages as the main problem in advanced capitalist countries, since it leads to depressed demand (i.e., under-consumption) and hence low firm profitability, which in turn compels the capitalist to look for more profitable investment outside the country, or to embark on imperialist adventures.

FDI FLOWS: FACTS AND FIGURES

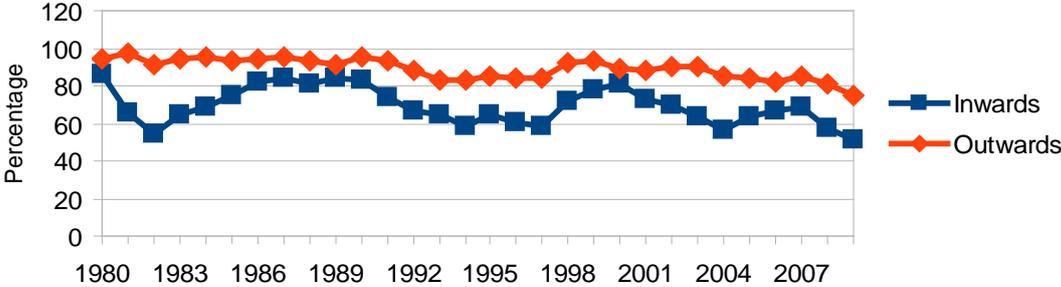
This section presents statistics and graphs on FDI flows, both inflows and outflows, as well as FDI stocks, in order to provide a comprehensive picture of the investment situation in the world. The raw data on FDI inflows and outflows are contained in Tables 1 and 2 of the Appendices.

Before going further, a caveat on the accurateness of the data is in order. In view of the fact that some countries in the sample may be “tax havens”, the magnitude of the investment outflows or of the FDI originating from them may be overstated. As a hypothetical example, investment recorded as originating from Hong Kong (and therefore listed as of Chinese or Hong Kong nationality) may in reality be that of, say, an Indonesian-owned firm whose headquarters is located in Hong Kong. It is our view, however, that any such overstatement would not materially alter the size and proportion to the total investment originating from those tax havens which are likely to be very large.

Overall trends and patterns

During the period under consideration (1980-2010), developed-country FDI outflows as a percentage of the world outflow dropped from 94% to 75%, representing a decline of 19 percentage points. FDI inflows into the developed countries as a percentage of world inflows also declined from 86% to 51%, or a decline of 35 percentage points. Compared to the outflows, which follow a relatively smooth curve, FDI inflows into the developed countries show sharper fluctuations. (See Figure 1)

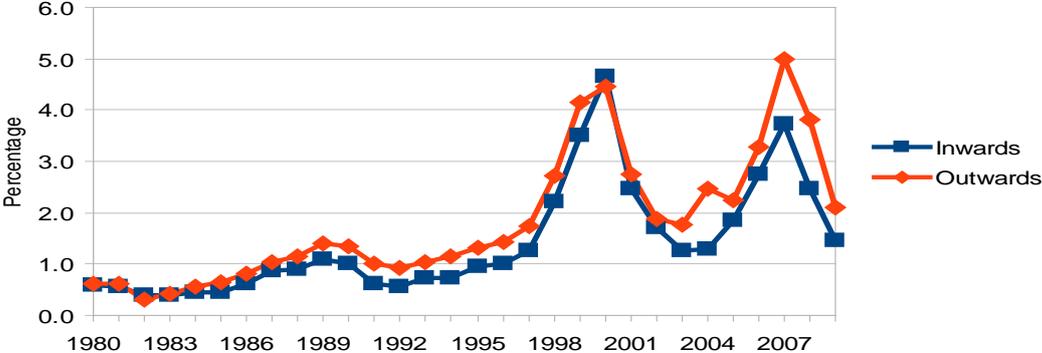
Figure 1- Foreign Direct Investment Flow in Developed Economies as Percentage of World



Source: UNCTAD Stats, retrieved 25July 2011 from www.unctad.org.

FDI inflows and outflows as a percentage of the developed countries' GDP follow each other closely, with outflows generally exceeding the inflows. The ratio of inflows and outflows to GDP peaked in 2000 and again in 2007. Note that the later year was the start of the current recession in some Western economies, while 2000 follows closely the 1997-1998 Asian financial crisis. (See Figure 2)

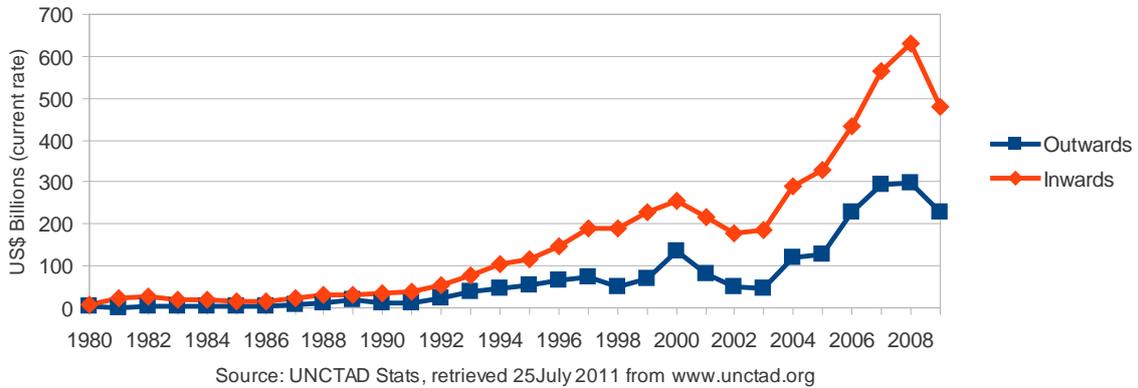
Figure 2 - Foreign Direct Investment Flow in Developed Economies as Percentage of GDP (1980-2009)



Source: UNCTAD Stats, retrieved 25 July 2011 from www.unctad.org.

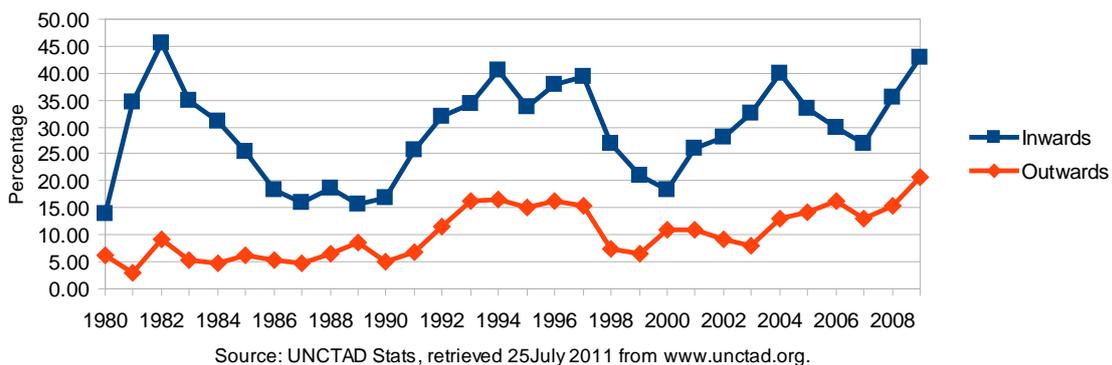
Developing-country inflows and outflows, on the other hand, were on an increasing trend during the same period, with FDI inflows increasing from \$7 billion in 1980 to \$478 billion in 2009, or a 68-fold increase, and FDI outflows increasing from \$3 billion to \$229 billion, or 76 times. Both inflows and outflows track each other throughout the period, with the inflows being always higher than the outflows, at least since 1990, and with both flows peaking in the same years, 2000 and 2008, and with the later peak being very much higher than the earlier peak (See Figure 3). Note again that the current recession started in 2008.

Figure 3 - Foreign Direct Investment Flow in Developing Economies (1980-2009)



As a result of the increased flows, developing countries' shares of world FDI inflows and outflows were on an uptrend, with inflows exceeding the outflows by more than twice, both at the beginning (1980) and at the end of the period (2009). The share of developing countries in FDI inflows peaked in 1980, with lower peaks in 1994, 2004 and 2009. FDI outflows from developing countries followed a smoother line and were also generally on an upward trend. (See Figure 4)

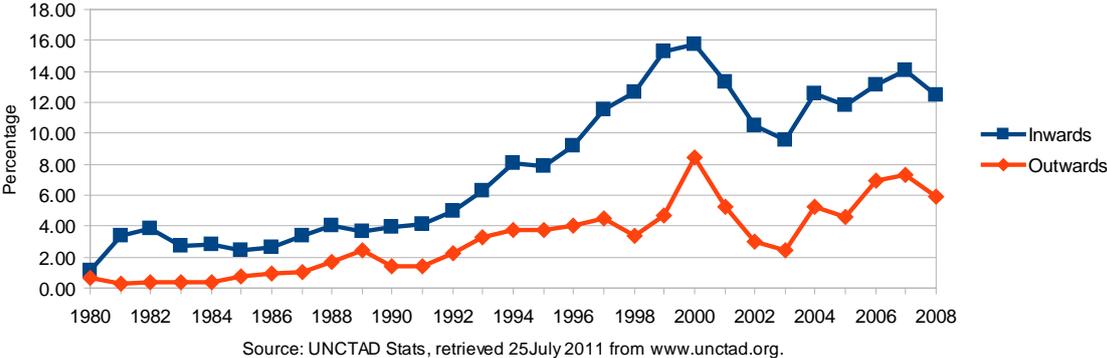
Figure 4 - Foreign Direct Investment Flow in Developing Economies as Percentage of World (1980-2009)



Developing countries' outflows and inflows as a percentage of Gross Fixed Capital Formation (GFCF), were generally on an upward trend, with inflows being higher than outflows during the entire period. Both flows peaked in 2000, when inflows reached 16

percent of GFCF, and in 2007 (although at a lower percentage), but dropped sharply in 2003 and were on a downward trend in 2009. (See Figure 5)

Figure 5 - Foreign Direct Investment Flow in Developing Economies as Percentage of Gross Fixed Capital Formation (1980-2008)



Inward FDI to developed countries grew more than 20 times over the 26-year period 1980-2006, from \$410.9 billion to \$8,453.8 billion. During the same period inflows to the developing countries grew by almost the same rate, from \$140.4 billion to \$3,155.9 billion. Growth rates also differed within a narrow range. Over the 20-year period, average FDI inflows to the developed countries grew 12.56%; to the developing countries, 12.97%; to Japan, 16.4%; to Asia as a whole (i.e., South, East and Southeast, excluding Japan), 14.98; and to Southeast Asia, 12.9%. More than a quarter of total FDI inflows in 2006 went to the developing countries, which means that almost three-fourth of the world’s FDI inflows still went to the developed countries. In other words, the rich countries were each other’s major investors.

In terms of the FDI outflows, however, the two sets of countries differ dramatically. For the period 1972-2006, FDI outflows from the developed countries grew more than 70 times, from 14.1 billion to 1,022.7 billion US dollars. FDI outflows from developing countries, on the other hand, grew from a mere \$113 million in 1972 to 174.6 billion in 2006, or an increase

of 1,543 times! This is reflected in the high average annual growth rates of FDI outflows over the whole period 1970-2006: 16.365% for developed countries, 46.58% for developing countries, 59.2% for Asia (East, South and Southeast), and 45.69% for Southeast Asia. It should be pointed out, however, that FDI outflows from developing countries were very small or virtually nil at the beginning of the period, which partly explains the large percentage increases in subsequent years.

Since FDI outflows from the developing world have been growing faster than those from the developed world, its percentage share of total FDI outflows is correspondingly expected to increase, and indeed it did. Thus, while in 1975 (when data on developing countries' outward FDI first appeared in the sources) the developing countries' share of total world outflows was less than 2 percent, by 1985 their share had gone up to 6.25%, in 1995 to 15.2%, and in 2006 to over 14%. Although there were years when the developing countries' percentage share went down, their average share in FDI outflows for the entire period was 11%, which is far higher than their 2% share at the beginning. As far as FDI outflows are concerned, the developing countries, or at least some of them, have gone a long way since the 1970s.

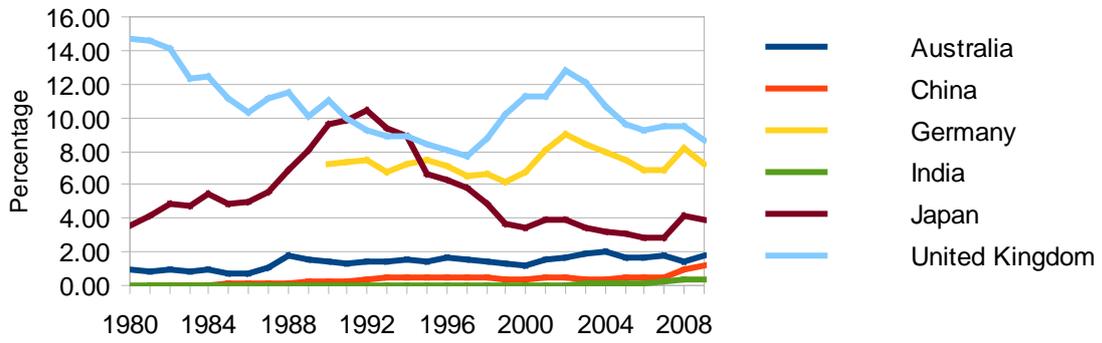
As a result of the investment flows during the past decades, the world's investment landscape has changed, and continues to change, as Figures 6, 7 and 8 below show. The traditional FDI sources and recipients of FDI, all of which are developed countries – the US, UK, Germany, Switzerland, the Netherlands, Japan, and to a lesser extent Australia - still dominate the world's investment landscape and are not likely to yield the ground to the newcomers very soon. But the decades when the US and the UK, especially the former (see Figure 7) accounted for an overwhelming proportion of the world's FDI stock are coming to an end – maybe not a very abrupt end, as the graphs show periods of decline alternating with periods of recovery, but the downward trend is unmistakable.

As in the FDI flows, the distribution of inward and outward FDI stock has been highly unequal. The share of developing countries in outward FDI stock increased only slightly from 13.1% of the total in 1980 to 14.2% in 2009; in fact, it decreased between the two end points. On the other hand, the percentage share of developed countries first increased and then decreased. But the percentage share of East Asia rose from 2.4% in 1980 to 7% in 2009, while that of Southeast Asia increased from 0.2% to 1.8 percent.

In terms of inward FDI stock, the percentage share of developing countries actually decreased from 42.6% in 1980 to 23.2% in 2000, but then increased to 27.6% in 2009. Even the percentage share of East Asia declined, from 26.4% in 1980 to 8.8% in 2009, while that of Southeast Asia increased only slightly from 2.6% to 3.9%. On the other hand, the percentage share of developed countries in inward FDI stock increased from 57.4% in 1980 to 75% in 1990, remained more or less steady at 76% in 2000, and then declined to 70% in 2009.

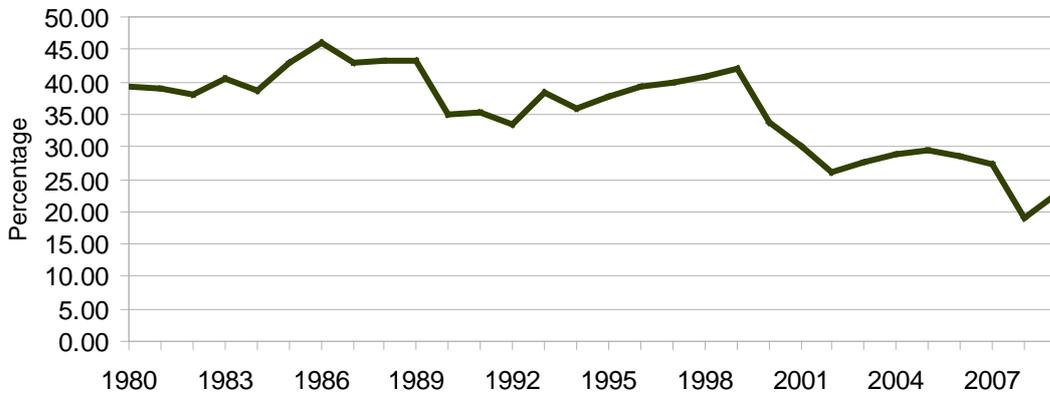
How can the increasing share of developing countries in the annual FDI inflows and outflows which we noted earlier be reconciled with their decreasing share of the inward FDI stock? One probable explanation that comes to mind for the apparent contradiction is that although FDI outflow from developing countries increased during the period, most probably went to the developed countries (as in the examples of Volvo and National Foods, though not necessarily representative, cited at the beginning of the paper), thus increasing the latter's inward FDI stock. Another possibility is that, since developing countries are inherently less stable than developed countries, there may be investment withdrawals as MNCs seek more investment- friendly hosts.

Figure 6 - Percentage of World's Outward FDI Stock
Selected Countries (1980-2009)



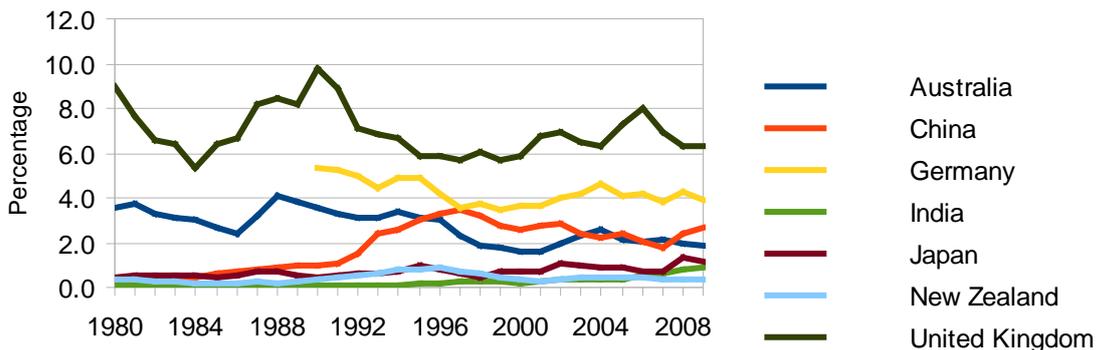
Source: UNCTAD Stats, retrieved 25 July 2011
from www.unctad.org

Figure 7 - USA's Percentage of World's Outward FDI Stock
(1980-2009)



Source: UNCTAD Stats, retrieved 25 July 2011 from www.unctad.org

Figure 8- Percentage of World's Inward FDI Stock
Selected countries (1980-2009)



Source: UNCTAD Stats, retrieved 25 July 2011 from www.unctad.org

Highlight on East, Southeast and South Asia

Lumping together the share of the developing countries in both flows, as we did above, conceals the highly unequal shares among the developing countries in FDI outflows and inflows. Disaggregation of the data shows that only a small group of countries located in a few contiguous regions account for a large share of total FDI outflows and inflows. These are East Asia, Southeast Asia and South Asia, in particular India. In 2006, almost 60% of total FDI outflows from developing countries came from Asia, and in Asia 80% of the total FDI

outflow came from East Asia (excluding Japan). Hong Kong (China), the Peoples' Republic of China, Taiwan and South Korea account for the bulk of the region's FDI outflows. The rate of increase is phenomenal: FDI outflow from East Asia increased from almost nothing in 1970 to more than \$103 billion in 2006, and continues to increase. (See Appendices, Table 3)

The case of China is particularly interesting because the country has come so far and so fast in so short a time – in just a little over three decades if we start reckoning from 1980, or a few years after its policy makers took the crucial decision to open the economy and pursue market-oriented reforms. In 1981 China's FDI outflow was a mere \$44 million, slightly over one-tenth of its inflow of \$430 million. In 1990 the ratio of outward to inward FDI was 1:4. In 2000 the ratio drastically dropped to 1:45 (for reasons as yet unknown to the authors), but the following year (2001) it was back to 1:7, and further increased to 1:3 in 2006 and to 1:2 in 2009. If the trend during the last few years continues, China's outward FDI will outstrip its inward FDI in a few years and the country will become a net investor, in much the same way that it has become a net lender to the world. As we write this paper, with the Western world still in recession, the prospect of such a scenario happening appears increasingly likely.

In Southeast Asia, the five ASEAN member-countries Singapore, Malaysia, Indonesia, Thailand and Vietnam accounted for more than 90 percent of the total FDI outflow in 2006, while the rest, which was less than 10 percent was shared among the Philippines and four other ASEAN member-countries (Brunei, Laos, Cambodia and Myanmar). It is the same with FDI inflows, with the same five countries earlier mentioned, chief among them Singapore, getting the lion's share (Appendices, Table 5).

Thailand is an interesting case because during the last two years, 2008-2009, its FDI outflows and inflows have come close to parity. This happened despite the domestic political turmoil that has time and again disturbed the country's tranquility. This is so because,

according to pundits, there has been remarkable policy continuity despite political instability in the country.

The Philippines is obviously the odd man out in the region. This is so despite the fact that it had an early start when it comes to originating outward FDI. In 1980, when Thailand had only \$3 million in outward FDI and Vietnam none at all, the Philippines already had \$86 million in outward FDI. The next decade was, however, a roller coaster ride for the Philippines, with its outward FDI increasing in certain years but dropping steeply in other years, and surpassing its peak 1980 level only in 1992; overall the country's relative position as a source of FDI has deteriorated.

What is true of the Philippines' FDI outflow is also true of its FDI inflow. In 1980, or five years after the end of the Vietnam War, Vietnam only had FDI inflow of \$1.67 million, while the Philippines already had \$114 million. Twelve years later, FDI inflow to the Philippines (at \$1.2 billion) was still higher than Vietnam's (over \$900 million). A year later, however, FDI inflow into Vietnam surpassed that of the Philippines, and the former has since consistently outperformed the latter except on three years, one of them during the Asian financial crisis and the other two in its aftermath. By 2010, FDI inflow into Vietnam was five times that of the Philippines, and was growing by leaps and bounds (Appendices, Table 5).

In South Asia, India accounted for most of the region's FDI outflow. It started modestly enough in 1980 with a mere US\$4 million. In subsequent years, however, it has grown by leaps and bounds: to \$119 million in 1995, almost \$3 billion in 2005, \$14.3 billion in 2006, \$17.2 billion in 2007, and \$18.5 billion in 2008, before going down to \$14.9 billion in 2009. FDI inflows have grown even faster: from \$79.2 million in 1980, to \$237 million ten years later, and then to \$3.59 billion in 2000. In 2006, annual FDI inflow exceeded \$20 billion and later peaked at \$42.5 billion in 2008, before going down to \$35.6 billion in the following year.

(Appendices, Table 3) In 2009 FDI inflow into India was more than 80% of all inflows to South Asia; FDI outflow, on the other hand, was even higher at 98% of the total FDI outflow from South Asia. Clearly, India has a dominant position in South Asia on both ends of the investment flow, in the same way that Singapore is also dominant in Southeast Asia and China in East Asia. China and India are, of course, very large countries with populations in excess of one billion, while Singapore is a tiny city-state with a small population. Size does matter, but sometimes it also doesn't.

FDI FLOWS: ANALYSIS AND INTERPRETATION

How may the trends, patterns and tendencies observed in the preceding section be explained? As we've already pointed out, the bulk of FDI from the developing world originated from a small group of countries in East Asia, Southeast Asia, and South Asia. Individually and as a group, these countries have experienced rapid and sustained economic growth as well as structural transformation, and by the last decades of the 20th century some of them, like Singapore and South Korea, have already achieved, or were close to achieving, developed -country status. China is of course now the world's second largest economy, overtaking another East Asian country, Japan, just a few years ago.

Observations and Possible Explanations

We start with the observation that the developing countries which have become major sources of outward FDI are the same countries which in previous decades were, and continue to be, recipients of substantial inflows of FDI. This leads us to conjecture that the confluence is no mere coincidence, and that there may be a systematic relationship between inward and outward flows which goes this way: FDI inflow leads to growth, which leads to increased savings, which in turn leads to investment, which may be either domestic or outward or both.

Thus, it is not surprising that China, which has been in receipt of very large FDI inflows, has achieved high and sustained growth, making possible high savings rates, which in turn has made possible high levels of outward FDI.

FDI outflow may also be influenced by other factors, such as the level and rate of growth of GDP, GDP per capita, domestic savings rate, and trade orientation, specifically export orientation. We can easily note that most of the countries with high and rising levels of outward FDI have had rapid growth rates, rising levels of income, high savings rates, and are all export-orientated economies.

Size of GDP and level of income per capita, as well as their growth rates, indicate the overall productivity of the economy and the potential for saving and investment. The larger a country's total GDP and the higher the per capita income, and the faster these are growing, the greater are the potential resources that are available for investment, either domestic or foreign. High income levels and rapid economic growth not only attract inward FDI but may also drive outward FDI.

The link between a country's savings rate and outward FDI is quite easy to see: high savings rates make possible high levels of domestic or outward investment. While domestic savings is not a binding constraint where capital is internationally mobile (as it is), it certainly helps if a country has a relatively high one. A cursory examination of Table 8 (see the Appendices) would show that the countries in East, Southeast and South Asia which have relatively high outward FDI also have high savings rates or vice-versa. Singapore, with one of the highest savings rate in the world, is the source of substantial outward FDI. Japan during its period of rapid overseas expansion during the 1960s-1980s also had very high savings rates. There is the current example of China, with the world's highest savings rates for a major economy and one of the largest and fastest-growing outward FDI. (Some small countries like

Equatorial Guinea in Africa have even higher savings rates –averaging an unbelievably high 80 plus percent - but they cannot be considered major economies in the sense that China or India are. In any case, the high savings rate may be a statistical fluke.)

If we move from individual countries to groups of countries, the same observation -of high savings rate and high outward FDI -obtains. For the period 2001-2010, the average savings rate for the world as a whole for was 21.3%. But the average savings rate for the small set of countries in East, Southeast and South Asia with high and growing outward FDI is more than 38%, almost double that of the world as a whole. On the other hand, the savings rate for the region goes down to 31.1% if relatively low savers like the Philippines, Cambodia and Myanmar are included; even so, their average savings rate is still way above the world average. (Appendices, Table 8a)

A strong trade orientation, indicated by high export-to-GDP ratios, is also characteristic of most countries that have received (and still receive) large FDI inflows and have become sources of substantial outward FDI. Japan epitomized this strong export orientation in earlier decades, as did Germany. Singapore, Taiwan, South Korea, Hong Kong, China, Thailand and Malaysia have been called “tigers” and “dragons” in large part because of their export prowess and performance. The seeming exception to the close connection in East, Southeast and South Asia between export-oriented-ness and high outward FDI was India, which for a long time pursued policies that were anchored on socialist-style planning and self-sufficiency, but that has changed, as India has also become a major exporter of manufactured goods and IT products. Indian firms are also well represented among the world’s multinationals.

Lastly, a country’s international or foreign exchange reserves indicate not only a country’s capacity to import goods and services but also to invest in other countries, because foreign direct investment may require bringing in foreign currency to the host country, where

it is in short supply. Thus, we see that countries with huge international reserves – China, Taiwan and Singapore – are also the ones with large and rapidly-growing outward FDI.

Having discussed the various factors that may explain a country’s outward FDI, we examine the hypothesized relationships through correlation and regression analysis in the next sections.

Correlation Analysis

We performed Pearson correlations on outward FDI and savings rate (as percent of GDP), outward FDI and GDP, and outward FDI and GDP per capita for the years 1999-2009. Because of the absence of data on Indonesia’s outward FDI, the country is not included in the analysis. Earlier we have provided the reason for the inclusion of these variables. The results are presented below in Table 1.

Table 1 – Correlation Analysis for Group of Five Developing Asian Countries, 1999- 2009

Country	FDI and Savings	FDI and GDP	FDI and GDP per capita
	Pearson	Pearson	Pearson
China	.762**	.956**	.955**
India	.691*	.936**	.929**
Philippines	.632*	.952**	.961**
Malaysia	-.024	.926**	.919**
Thailand	.307	.925**	.924**
All Countries	.745**	.865**	.303*

Source: World Bank National Accounts,
Retrieved August 20 & August 25, 2011, from
<http://data.worldbank.org/indicator>

a) Country selection is on the basis of 2nd tier East Asian developing

economies, with India as the most dynamic economy in South Asia.
b) ** Significant at the 0.01 level (2 tailed)- * Significant at 0.05 level
(2 tailed)

The results are interesting, and generally confirm our earlier hypotheses. The exception is Malaysia which, interestingly, has a negative but statistically insignificant relationship between outward FDI and the savings rate, while Thailand has a positive but not statistically significant correlation between the same variables. China shows a very strong relationship of the variables, while India and the Philippines also have fairly strong relationship between outward FDI and domestic savings rates. There is also a statistically highly significant correlation between FDI and GDP in the selected countries. Similar results were obtained for outward FDI and GDP per capita, where there was almost perfect positive correlation. For the group as a whole, similarly strong and significant relationships obtain. Overall the analysis clearly indicates fairly strong or very strong relationships between outward FDI, domestic savings rate, GDP, and GDP per capita for the selected countries, both individually and as a group.

Econometric Test and Analysis

An ordinary least squares regression model was used to test the econometric relationship and the impact of some macro indicators on the outward FDI of selected Asian countries, namely, China, India, Malaysia, Philippines and Thailand. The data used are taken from the World Bank's Development Indicators for various years. The tested model is:

$$FDI_{outward} = \alpha + \beta_1 \log \text{GDP per capita} + \beta_2 \text{GDP} + \beta_3 \text{Savings} + \beta_4 \text{Exports} + \beta_5 + \varepsilon \text{ ----- Eq.(1)}$$

Table 2 below presents the regression results using the above model. As we can see, the results are statistically highly significant and are an extension of our earlier analysis; they also confirm the correlation results presented in Table 1. According to Table 2, a one percent increase in GDP per capita increases outward FDI by close to US \$ 0.2 million. Similarly, a

US \$1 billion increase in GDP results to an increase in outward FDI of US\$38.86 million in the selected countries. The coefficient of savings as percent of GDP is negative, indicating that a 1 percent decrease in the savings rate decreases outward FDI by up to US \$1091.5 million. This can be illustrated by the example of India. Until the year 2003, when India's savings rate as percent of GDP was less than 30 percent, FDI was US\$6073 million; when the savings rate rose to 37 percent in 2007 India's outward FDI increased to US\$ 44080 million.

Table 2: Factors Affecting Outward Foreign Direct Investment from Developing Countries, 1999-2009

Independent Variables	Coefficient	Std. Error	p values
<i>Log of GDP per capita</i>	196959.2	591.93	0.000***
<i>Gross Domestic Product (US \$ m)</i>	38.86	3.77	0.000***
<i>Savings rate (percent of GDP)</i>	-1091.5	591.93	0.07*
<i>Constant</i>	-110480.6	22314.3	
Observations	55		
R-squared	0.86		

*significant at 10 percent, ***significant at 1 percent level

Note on data: Due to the data availability, all data used in this part are from 1990 to 2010. Countries included in this part are Australia, China, India, Indonesia, Malaysia, New Zealand, the Philippines and Thailand. The data sets for GDP and GDP per capita were retrieved directly from the World Economic Outlook Database of IMF (September, 2011 version), and the data set for total savings come from the authors' calculations through "gross national savings as percentage of GDP" in the same database. The data sets of foreign direct investment (inflows and outflows), total foreign reserves and exports were retrieved and calculated from the World Bank Database. All data are in units of billion current U.S. dollars.

Regression Analysis with Extended Models

For the purpose of catching the patterns and other characteristics of outward FDI, our earlier model is extended using additional variables and three different levels: individual countries, country groups classified by level of development level, and the whole dataset. The extended models can be summarized through the following formulations:

$$\text{Model 1: } FDI(\text{outflow})_t = \alpha + \beta_1 GDP_t + \beta_2 GDP_{t-1} + \beta_3 GDP_{t-2} + \beta_4 FDI(\text{inflow})_t + \beta_5 SAVING_t + \beta_6 SAVING_{t-1} + \beta_7 SAVING_{t-2} + \beta_8 RESERVE_t + \beta_9 RESERVE_{t-1} + \beta_{10} RESERVE_{t-2} + \beta_{11} Export_t + \varepsilon$$

$$\text{Model 2: } FDI(\text{outflow})_t = \alpha + \beta_1 LnGDP_t + \beta_2 LnGDP_{t-1} + \beta_3 LnGDP_{t-2} + \beta_4 FDI(\text{inflow})_t + \beta_5 LnSAVING_t + \beta_6 LnSAVING_{t-1} + \beta_7 LnSAVING_{t-2} + \beta_8 LnRESERVE_t + \beta_9 LnRESERVE_{t-1} + \beta_{10} LnRESERVE_{t-2} + \beta_{11} Export_t + \varepsilon$$

We also used two other models to examine whether population can significantly affect the results, since China and India each have very large most populations. These two models are similar to the above models, the only modification being the replacement of GDP by GDP per capita (and LnGDP by LnGDP per capita). However, the use of GDP per capita, instead of just GDP, does not make a significant difference in explaining FDI outflows, hence the results using GDP per capita are not reported here.

Results for individual countries

The following tables show three of the most significant single-regressor regression results and one multiple-regressor regression results for each individual country:

Results of Regressions for individual countries(Part 1)

Dependent Variable: Foreign Direct Investment Outflow (FDIO)

Regressor	Australia				China				India				Indonesia			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
<i>GDP_t</i>				-0.05 (0.03)	0.01*** (0.001)			-0.04 (0.01)				-0.02*** (0.002)				0.03** (0.01)
<i>SAVING_t</i>			0.07*** (0.02)				0.02*** (0.001)	0.12 (0.04)				0.07*** (0.01)				-0.06** (0.02)
<i>RESERVE_t</i>								-0.02 (0.02)			0.06*** (0.01)					-0.09*** (0.02)
<i>FDI(inflow)_t</i>	0.67*** (0.06)			0.67*** (0.09)					0.50*** (0.03)			0.54*** (0.04)			0.34*** (0.06)	
<i>LnGDP_t</i>														2.73*** (0.50)		
<i>GDP_{t-1}</i>																
<i>SAVING_{t-1}</i>									0.05*** (0.004)							
<i>RESERVE_{t-1}</i>					0.02*** (0.001)							-0.09*** (0.01)				
<i>SAVING_{t-2}</i>																
<i>Export_t</i>		0.09*** (0.02)		0.26 (0.13)				-0.02 (0.01)				0.05* (0.01)	0.04*** (0.01)			0.05 (0.02)
<i>α</i>						-8.0** (2.15)			-4.16*** (0.93)	-1.69* (0.75)			-1.44* (0.50)	-13.60*** (2.74)		-2.00*** (0.32)

Summary Statistics and Joint Tests

F-Statistics					141.889				133.482 132.829				38.335 29.776 37.702			
SER	6.090	11.783	11.888	5.761	5.360	6.405	6.981	5.053	1.763	2.448	2.472	0.632	1.053	1.142	1.332	0.618
\bar{R}^2	0.805	0.272	0.259	0.826	0.916	0.876	0.852	0.923	0.933	0.875	0.868	0.992	0.651	0.590	0.442	0.880
n	21	21	21	21	20	21	21	21	21	20	21	20	21	21	21	21

Notes: *** significant at 0.1%, **significant at 0.5% and * significant at 1%

Results of Regressions for individual countries (Part 2)

Dependent Variable: Foreign Direct Investment Outflow (FDIO)

Regressor	Malaysia				New Zealand				Philippines			Thailand			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(1)	(2)	(3)	(4)
GDP_t	0.08*** (0.01)													0.02*** (0.002)	
$SAVING_t$			0.23*** (0.02)					0.24 (0.11)			0.02* (0.01)				
$RESERVE_t$					0.04 (0.03)							0.04*** (0.002)			0.04*** (0.005)
$FDI(inflow)_t$				0.54* (0.17)		0.21 (0.10)		0.42* (0.13)	0.30** (0.09)						
$LnGDP_t$															
GDP_{t-1}															-0.03* (0.01)
$SAVING_{t-1}$								-0.66** (0.17)							0.09 (0.02)
$RESERVE_{t-1}$		0.15*** (0.01)		0.14*** (0.010)			0.04 (0.04)	0.18 (0.08)					0.05*** 0.004		
$SAVING_{t-2}$								0.26 (0.12)							
$Export_t$										0.01* (0.004)					
α	-6.19*** (0.87)	-3.44*** (0.71)	-5.94*** (0.88)	-5.03*** (0.76)								-0.79*** (0.16)	-1.04*** (0.21)	-2.66*** (0.35)	-1.21** (0.33)
Summary Statistics and Joint Tests															
F-Statistics	141.139	131.377	131.559	103.944								215.358	157.647	132.763	147.537
SER	1.707	1.747	1.760	1.424	1.284	1.209	1.255	0.871	0.676	0.700	0.701	0.458	0.523	0.569	1.678
\bar{R}^2	0.875	0.873	0.867	0.916	0.007	0.120	0.047	0.562	0.188	0.129	0.127	0.915	0.892	0.868	0.959
N	21	20	21	20	21	21	20	19	21	21	21	21	20	21	20

Notes: *** significant at 0.1%, **significant at 0.5% and * significant at 1%

Several patterns and observations can be deduced from the above regression results using the extended models. First, at individual country level, GDP, total savings, international reserves, FDI inflow, and export-GDP differ in their explanatory power for different countries' outward FDI. For instance, the most powerful regressor in explaining Australia's FDI outflow is the inflow of FDI; it can explain 80.5% of the changes in Australia's FDI outflow. However, FDI inflow can only explain 12% of the changes in the FDI outflow of New Zealand. This differential effect is also present among the developing countries in our sample. For example, while the explanatory power of FDI inflow is 93.3% for India, it is only 18.8% for the Philippines. Similar differences can also be found for GDP, total savings, total reserve and exports when these are used as single regressors. The five regressors also show similar explanatory power for the single country's FDI outflows (except for Australia, where FDI inflow is more powerful than other regressors in explaining FDI outflow). For example, the adjusted R-square of Thailand's regression has a value between 87% and 96%, but for the Philippines its value is only between 13% and 18%.

Secondly, regression results using GDP, total saving, total reserve, FDI inflow and export as variables exhibit interactions between them. This can be seen in their similar explanatory power for one particular country and from the multiple-regressor results. For instance, the adjusted R-square of India's regression (4) is 99.2%, but the coefficients for reserve_{t-1} is -0.09, which means that when the reserves of India increase by 1 billion U.S. dollars, its FDI outflow in the following year will decrease by about 2 million U.S. dollars. We have no plausible explanation for this result. No meaningful multiple-regressor results can also be obtained for the Philippines, where the explanatory power of multiple-regressor models is even less than that of the single- regressor models.

Thirdly, another characteristic shown by above results is that FDI outflows are related to the (absolute) amounts of the regressors instead of to marginal changes in them. In all the

eight countries included in the sample, only one logarithmic regressor can be included among the top three significant regressors. However, its explanatory power is not very satisfactory and the F-statistic is not as high as in other non-logarithmic regressors.

Finally, time lag effects are found in GDP, total saving and total reserve when these are used to explain a country's FDI outflow, but there are no such effects in FDI inflow and exports. Time-lagged reserves are especially important for China, Malaysia and Thailand; in all three countries, $reserve_{t-1}$ by itself can explain about 90% of the changes in FDI outflows and the coefficients are significant at 0.01% level.

Results for country groups

To examine whether the above results also hold at the general level, panel data of developed countries, developing countries, and the whole data set were also used in our models. The following table (Table 5?) reports four (4) of the most significant results for each country group. For developed and developing countries, the single regressor still has explanatory power for changes in FDI outflows. These are reported in the first three columns of the table. Since no single-regressor result is as good as multiple regressor regression for the whole data set, no single-regressor result is reported for this group.

Dependent Variable: Foreign Direct Investment Outflow (FDIO)												
Regressor	Developed Group				Developing Group				Whole Group			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
GDP_t								0.03*** (0.003)	0.03*** (0.004)	0.03*** (0.004)		0.008 (0.01)
$SAVING_t$									-0.108*** (0.02)			
$RESERVE_t$				0.27 (0.13)				-0.07*** (0.01)	0.070*** (0.01)		-0.089*** (0.02)	-0.104*** (0.02)
$FDI(inflow)_t$	0.66*** (0.04)			0.73*** (0.06)			0.23*** (0.01)		0.356*** (0.05)	0.278 (0.05)	0.453*** (0.05)	0.418*** (0.05)
GDP_{t-1}				-0.04 (0.02)		0.01*** (0.001)						
$SAVING_{t-1}$			0.08*** (0.01)							-0.095 (0.014)		
$RESERVE_{t-1}$				-0.52*** (0.14)	0.03*** (0.001)			0.12*** (0.01)		0.069 (0.01)	0.128*** (0.03)	0.120*** (0.03)
GDP_{t-2}											0.035*** (0.004)	0.008** (0.01)
$SAVING_{t-2}$				0.15 (0.06)							-0.149*** (0.02)	-0.149*** (0.02)
$RESERVE_{t-2}$				0.35 (0.14)							0.086** (0.03)	0.108*** (0.03)
$Export_t$		0.08*** (0.01)							-0.03*** (0.01)	-0.034 (0.008)	-0.024** (0.01)	-0.017 (0.01)
α						-1.81*** (0.50)						-1.061 (0.64)
F-Statistics						437.667						73.226
SER	4.416	8.379	8.733	3.913	3.475	4.184	5.084	2.520	5.024	5.113	4.465	4.417
\bar{R}^2	0.822	0.360	0.336	0.873	0.873	0.815	0.715	0.936	0.708	0.710	0.788	0.793
N	42	42	40	38	100	100	105	95	168	160	152	152

Notes: *** significant at 0.1%, **significant at 0.5% and * significant at 1%

We can see that the patterns and characteristics of FDI outflows of developed countries differ from those of developing countries. First, FDI inflow is the most important factor in explaining FDI outflows in developed countries. Even the most significant multiple-regressor regression can only increase the explanatory power of single FDI inflows from 82.2% to 87.3%, and most of the coefficients of the other regressors are not significant enough. Exports and prior year's savings are two factors that can also partly explain changes in FDI outflows of developed countries. For developing countries, on the other hand, the most powerful explanatory factor is the previous year's reserves. Previous year GDP and FDI inflow also have satisfactory explanatory power, although not as much power as reserve t-1. The multiple-regressor results for developed and developing countries show the difference more clearly: for developed countries, FDI inflow is the single most important factor in explaining FDI outflows. No significant relationships are observed between FDI outflows and either GDP or total saving. For developed countries, reserves and previous year's reserves have an ambiguous relationship with FDI outflows. For developing countries, however, GDP and previous year's reserves are the most important factors in explaining FDI outflows. For these countries, FDI inflow has no significant relationship with FDI outflow.

Another pattern that can be observed from the results is that, compared to other regressors in our model, total savings is a weak regressor for explaining changes in FDI outflows. Although some results show that lagged savings has similar effects as GDP, the total effect of savings is not clear.

For reference, the results for the whole sample of countries are also reported. Compared to developed and developing-country groups, the results for whole data set do not have the same significance as the previous two. This can be explained by the fact that the results of whole data set are mixed, thus weakening the special characteristics of developed

and developing countries. However, the results show that FDI inflows, GDP and reserves are the general variables which are positively related to FDI outflows.

How does one explain the observed differences in the patterns and characteristics of FDI outflows of developed and developing countries? For the developed countries, since they have gone through long-term, high-growth development, FDI outflows focus on two objectives. The first is to go to high-growth developing countries to obtain higher returns than can be obtained from the domestic economy. Where capital is abundant, as in the developed-country economy, the marginal return on investment is generally low; but where capital is scarce, as in less developed countries, marginal returns are generally high. Second, MNCs use foreign direct investment as financial instruments to hedge financial risks. The first inference can explain why there is no observed relationship between FDI outflows and GDP in these countries; the second can explain the significant relationship between FDI outflows and FDI inflows. On the other hand, because developing countries are experiencing long-term economic growth, catch-up effects will make FDI outflow grow at the same pace as the other variables, such as GDP, FDI inflow and reserves.

CONCLUSION

FDI is a dynamic force, and has been especially so since the last decades of the 20th century, which coincided with a period of very rapid globalization. Prior to the last few decades, FDI was almost the exclusive preserve of a few rich countries – the members of G-7 (expanded to G-20) or the OECD countries- which invested mainly in each other's economies and, to a lesser extent, in the developing economies. The investment flow between the developed and developing countries was essentially one way, even if the benefits may have gone both ways.

That exclusiveness, that “old boys club”, is becoming more open and more inclusive with the entry of new FDI players from the developing countries, especially from East and South-East Asia. The flow is no longer as unidirectional as it once was, although the reverse flow is still nowhere near the volume and value of the more traditional flow from the developed to the developing countries, or for that matter, to other developed countries. But at the rate that reverse FDI has been growing in recent years, it may sooner or later - perhaps sooner than later - catch up with, maybe even overtake, traditional FDI, considering the current economic malaise that continues to afflict some of the traditional sources of FDI.

FDI is welcome since it has the effect of figuratively “lifting all boats” in the same sea, and should therefore be encouraged by governments and their constituents alike. The experience of the group of countries from East, Southeast and South Asia shows, on the one hand, that it is possible for less-developed countries to join the ranks of the world’s investors, and in the process, or as a result, achieve prosperity. On the other hand, only a small group of countries have so far participated in the process and shared in the proceeds. These are the same countries who have, for the past decades, also enjoyed substantial FDI inflows, rapid and sustained economic growth, equitable distribution of wealth, and improved quality of life. The process has largely left out the most of the 200 or so countries of the world, which have been bypassed and continue to be left behind in the march to progress.

The potential implication of this fact is that the countries that that are already well-off, or are well on their way to being so, will continue their march towards economic prosperity, while the rest will continue to fall behind. Thus, the divide that already separates the have- and the have-not countries, which is already wide, will further widen. This does not augur well for global peace and stability, which are indispensable for sustained economic growth and development. The challenge for international policy and diplomacy is, thus, to ensure that

the world environment which has allowed or even encouraged the entry of new players remains open and that the rules of the game are not stacked against newcomers.

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Appendices

Table 1 – Annual Growth of FDI Inflow, Selected Countries, 1980-2009 (amounts in USD Billion)

Annual Growth of FDI Inflow, Selected countries (1980-2009) in US\$ Billions											
YEAR	World	Developed economies	% Growth	Japan	% Growth	Developing economies	% Growth	East, South & SE Asia	% Growth	SE & E Asia Excl. China	% Growth
1980	\$700	\$402		\$3		\$299		\$208		\$203	
1981	\$750	\$432	7.64	\$4	19.72	\$318	6.54	\$214	2.51	\$207	2.4
1982	\$791	\$449	3.97	\$4	2.12	\$342	7.36	\$218	2.06	\$211	1.9
1983	\$844	\$488	8.68	\$4	9.15	\$355	3.95	\$222	1.72	\$214	1.3
1984	\$873	\$506	3.63	\$4	2.15	\$367	3.29	\$227	2.35	\$218	1.7
1985	\$995	\$614	21.23	\$5	6.39	\$381	3.88	\$232	1.97	\$220	0.9
1986	\$1,143	\$746	21.54	\$7	37.34	\$398	4.35	\$238	2.61	\$223	1.6
1987	\$1,344	\$919	23.18	\$9	38.44	\$426	7.04	\$254	6.97	\$238	6.4
1988	\$1,529	\$1,078	17.28	\$10	15.50	\$450	5.72	\$271	6.49	\$251	5.6
1989	\$1,838	\$1,355	25.77	\$9	-12.06	\$482	7.02	\$287	5.98	\$263	4.9
1990	\$2,082	\$1,556	14.78	\$10	7.53	\$525	8.93	\$312	8.70	\$284	8.0
1991	\$2,347	\$1,782	14.53	\$12	24.84	\$563	7.42	\$332	6.49	\$300	5.5
1992	\$2,429	\$1,807	1.43	\$16	26.14	\$622	10.30	\$360	8.32	\$315	5.2
1993	\$2,632	\$1,928	6.70	\$17	8.85	\$701	12.74	\$412	14.51	\$339	7.5
1994	\$2,844	\$2,072	7.48	\$19	13.78	\$765	9.20	\$458	11.22	\$372	9.8
1995	\$3,381	\$2,521	21.66	\$34	74.54	\$848	10.88	\$525	14.69	\$409	9.8
1996	\$3,874	\$2,871	13.88	\$30	-10.71	\$985	16.09	\$617	17.45	\$469	14.7
1997	\$4,453	\$3,307	15.16	\$27	-9.55	\$1,117	13.37	\$661	7.19	\$482	2.7
1998	\$5,547	\$4,277	29.33	\$26	-3.75	\$1,237	10.82	\$699	5.75	\$495	2.8
1999	\$6,758	\$5,138	20.15	\$46	76.93	\$1,576	27.38	\$932	33.30	\$717	44.7
2000	\$7,443	\$5,653	10.02	\$50	9.12	\$1,728	9.65	\$1,007	8.07	\$784	9.4
2001	\$7,469	\$5,593	-1.07	\$50	-0.01	\$1,788	3.45	\$991	-1.59	\$755	-3.7
2002	\$7,519	\$5,652	1.07	\$78	55.29	\$1,751	-2.07	\$959	-3.26	\$699	-7.5
2003	\$9,373	\$7,216	27.66	\$90	14.83	\$2,002	14.35	\$1,073	11.94	\$790	13.1
2004	\$11,056	\$8,526	18.15	\$97	8.09	\$2,331	16.42	\$1,235	15.05	\$925	17.1
2005	\$11,525	\$8,536	0.12	\$101	4.04	\$2,714	16.41	\$1,431	15.88	\$1,083	17.0
2006	\$14,276	\$10,526	23.32	\$108	6.67	\$3,352	23.53	\$1,820	27.16	\$1,417	30.8
2007	\$17,990	\$12,859	22.16	\$133	23.43	\$4,453	32.83	\$2,500	37.36	\$2,012	42.0
2008	\$15,491	\$10,851	-15.61	\$203	53.08	\$4,214	-5.37	\$2,174	-13.04	\$1,624	-19.3
2009	\$17,743	\$12,353	13.83	\$200	-1.59	\$4,893	16.13	\$2,469	13.59	\$1,778	9.5

Source: UNCTAD Stats, retrieved 10 October 2011 from www.unctad.org

Table 2 – Annual FDI Outflows,1980-2009, Selected Countries

Annual Growth of FDI Outflow, Selected countries, 1980-2009 (in US\$ Billions)											
YEAR	World	Developed economies	% Growth	Japan	% Growth	Developing economies	% Growth	East, Sout& SE Asia	% Growth	SE & E Asia Excl. China	% Growth
1980	\$549	\$477		\$20		\$72		\$15		\$14	
1981	\$587	\$514	7.64	\$25	24.95	\$73	1.95	\$15	2.88	\$15	2.5
1982	\$598	\$521	1.44	\$29	18.21	\$77	4.95	\$16	5.19	\$16	5.1
1983	\$678	\$600	15.12	\$32	11.08	\$78	2.27	\$17	5.16	\$16	4.2
1984	\$699	\$618	3.00	\$38	17.85	\$81	3.30	\$17	3.41	\$17	2.5
1985	\$899	\$813	31.63	\$44	15.96	\$86	5.47	\$19	11.23	\$18	7.6
1986	\$1,156	\$1,065	30.91	\$58	32.06	\$91	6.35	\$21	10.68	\$19	8.7
1987	\$1,375	\$1,275	19.73	\$77	32.63	\$100	9.87	\$25	20.53	\$23	18.7
1988	\$1,607	\$1,497	17.43	\$111	43.83	\$110	9.79	\$33	30.41	\$30	29.6
1989	\$1,928	\$1,799	20.15	\$154	39.35	\$130	18.12	\$45	34.80	\$41	35.9
1990	\$2,087	\$1,941	7.92	\$201	30.49	\$145	12.03	\$59	31.61	\$54	32.6
1991	\$2,342	\$2,182	12.41	\$232	15.07	\$159	9.79	\$67	13.25	\$61	12.7
1992	\$2,383	\$2,197	0.70	\$248	7.02	\$185	16.16	\$85	27.05	\$75	22.7
1993	\$2,777	\$2,551	16.11	\$260	4.73	\$223	20.58	\$114	34.52	\$100	33.4
1994	\$3,103	\$2,824	10.69	\$276	6.07	\$276	23.65	\$159	39.33	\$142	42.9
1995	\$3,607	\$3,272	15.88	\$238	-13.47	\$330	19.54	\$200	26.11	\$182	27.6
1996	\$4,090	\$3,700	13.09	\$259	8.45	\$384	16.37	\$241	20.45	\$220	21.2
1997	\$4,709	\$4,144	11.98	\$272	5.14	\$557	45.00	\$396	63.95	\$372	68.9
1998	\$5,588	\$5,001	20.69	\$270	-0.69	\$577	3.58	\$396	0.07	\$369	-0.7
1999	\$6,761	\$6,020	20.38	\$249	-7.87	\$730	26.64	\$516	30.41	\$487	31.8
2000	\$7,967	\$7,083	17.66	\$278	11.92	\$863	18.11	\$597	15.61	\$566	16.3
2001	\$7,685	\$6,780	-4.29	\$300	7.78	\$859	-0.38	\$573	-4.00	\$535	-5.6
2002	\$7,764	\$6,833	0.78	\$304	1.37	\$866	0.83	\$557	-2.84	\$514	-3.8
2003	\$9,867	\$8,824	29.15	\$335	10.28	\$948	9.38	\$605	8.61	\$564	9.8
2004	\$11,640	\$10,412	17.99	\$371	10.45	\$1,116	17.79	\$721	19.18	\$667	18.2
2005	\$12,417	\$10,956	5.23	\$387	4.33	\$1,308	17.20	\$851	18.07	\$782	17.3
2006	\$15,661	\$13,682	24.88	\$450	16.29	\$1,756	34.21	\$1,180	38.66	\$1,077	37.7
2007	\$19,314	\$16,507	20.64	\$543	20.70	\$2,420	37.84	\$1,703	44.28	\$1,560	44.8
2008	\$16,207	\$13,586	-17.69	\$680	25.38	\$2,393	-1.12	\$1,572	-7.66	\$1,357	-13.0
2009	\$18,982	\$16,011	17.85	\$741	8.91	\$2,691	12.46	\$1,786	13.58	\$1,474	8.6

Source: UNCTAD Stats, retrieved 10 October 2011 from www.unctad.org

Tables 3a and 3b – FDI flows in developed and developing economies as percentage of world flows

Foreign Direct Investment Flow in Developed Economies as Percentage of World			Foreign Direct Investment Flow in Developing Economies as % of World		
YEAR	Inwards	Outwards	YEAR	Inwards	Outwards
1980	86	94	1980	13.83	6.12
1981	65	97	1981	34.56	3.05
1982	55	91	1982	45.43	9.18
1983	65	95	1983	34.95	5.37
1984	69	95	1984	30.98	4.74
1985	75	94	1985	25.35	6.31
1986	82	95	1986	18.21	5.30
1987	84	95	1987	15.91	4.72
1988	81	93	1988	18.49	6.59
1989	84	92	1989	15.62	8.44
1990	83	95	1990	16.90	4.93
1991	74	93	1991	25.82	6.81
1992	67	88	1992	32.03	11.46
1993	64	83	1993	34.38	16.22
1994	59	83	1994	40.41	16.57
1995	65	85	1995	33.85	15.19
1996	61	84	1996	37.81	16.17
1997	59	84	1997	39.21	15.50
1998	72	92	1998	26.97	7.43
1999	78	93	1999	20.97	6.38
2000	81	89	2000	18.30	10.95
2001	73	89	2001	26.01	11.01
2002	70	90	2002	28.03	9.25
2003	64	90	2003	32.51	8.04
2004	56	85	2004	39.86	13.09
2005	63	84	2005	33.49	14.24
2006	66	82	2006	29.77	16.21
2007	69	85	2007	26.90	12.88
2008	58	81	2008	35.58	15.36
2009	51	75	2009	42.93	20.81

Source: UNCTAD Stats, retrieved 25 July 2011 from www.unctad.org

Source: UNCTAD Stats, retrieved 25 July 2011 from www.unctad.org

Table 4a and 4b – FDI flows in developed and developing economies as percentage of GDP

Foreign Direct Investment Flow in Developed Economies as % of GDP		
YEAR	Inwards	Outwards
1980	0.6	0.6
1981	0.6	0.6
1982	0.4	0.3
1983	0.4	0.4
1984	0.4	0.5
1985	0.5	0.6
1986	0.6	0.8
1987	0.9	1.0
1988	0.9	1.2
1989	1.1	1.4
1990	1.0	1.3
1991	0.6	1.0
1992	0.6	0.9
1993	0.7	1.0
1994	0.7	1.1
1995	1.0	1.3
1996	1.0	1.4
1997	1.3	1.7
1998	2.2	2.7
1999	3.5	4.2
2000	4.6	4.5
2001	2.5	2.7
2002	1.7	1.9
2003	1.3	1.8
2004	1.3	2.5
2005	1.9	2.2
2006	2.7	3.3
2007	3.7	5.0
2008	2.5	3.8
2009	1.5	2.1

Source: UNCTAD Stats, retrieved 25 July 2011 from www.unctad.org

Foreign Direct Investment Flow in Developing Economies as Percentage of Gross Fixed Capital Formation		
YEAR	Inwards	Outwards
1980	1.15	0.63
1981	3.34	0.24
1982	3.83	0.40
1983	2.73	0.34
1984	2.85	0.40
1985	2.44	0.71
1986	2.64	0.91
1987	3.33	1.06
1988	3.99	1.65
1989	3.67	2.48
1990	3.90	1.37
1991	4.15	1.45
1992	5.00	2.23
1993	6.29	3.27
1994	8.05	3.75
1995	7.86	3.78
1996	9.15	4.03
1997	11.51	4.52
1998	12.65	3.41
1999	15.31	4.68
2000	15.71	8.42
2001	13.35	5.23
2002	10.47	3.00
2003	9.57	2.41
2004	12.56	5.28
2005	11.85	4.62
2006	13.13	6.98
2007	14.05	7.35
2008	12.48	5.93

Source: UNCTAD Stats, retrieved 25 July 2011 from www.unctad.org

Table 5 – Percentage Share of World’s Outward FDI Stock, Selected Countries

Percentage of World's Outward FDI Stock Selected countries							
YEAR	Australia	China	Germany	India	Japan	United Kingdom	United States
1980	0.91			0.01	3.57	14.65	39.24
1981	0.88	0.01		0.01	4.18	14.61	38.91
1982	0.96	0.01		0.01	4.85	14.05	37.91
1983	0.87	0.02		0.01	4.74	12.36	40.44
1984	0.90	0.04		0.01	5.43	12.43	38.71
1985	0.74	0.10		0.01	4.89	11.16	42.98
1986	0.75	0.12		0.01	5.02	10.29	45.87
1987	1.08	0.15		0.01	5.60	11.10	42.94
1988	1.77	0.18		0.01	6.89	11.51	43.10
1989	1.50	0.19		0.01	8.01	10.07	43.17
1990	1.46	0.21	7.26	0.01	9.65	10.99	35.07
1991	1.32	0.23	7.40	0.00	9.90	9.91	35.33
1992	1.45	0.39	7.48	0.01	10.41	9.30	33.51
1993	1.46	0.50	6.70	0.01	9.35	8.84	38.21
1994	1.54	0.51	7.27	0.01	8.88	8.92	35.92
1995	1.47	0.49	7.44	0.01	6.61	8.45	37.81
1996	1.63	0.49	7.11	0.02	6.32	8.08	39.33
1997	1.53	0.48	6.56	0.01	5.77	7.66	39.91
1998	1.41	0.45	6.67	0.01	4.83	8.74	40.80
1999	1.32	0.40	6.11	0.03	3.68	10.15	42.00
2000	1.20	0.35	6.80	0.02	3.49	11.27	33.81
2001	1.59	0.45	8.04	0.03	3.91	11.32	30.12
2002	1.66	0.48	8.96	0.05	3.92	12.80	26.05
2003	1.86	0.34	8.42	0.06	3.40	12.03	27.66
2004	1.97	0.38	7.95	0.07	3.18	10.72	28.89
2005	1.68	0.46	7.47	0.08	3.11	9.65	29.30
2006	1.70	0.47	6.90	0.17	2.87	9.29	28.54
2007	1.76	0.50	6.90	0.23	2.81	9.50	27.31
2008	1.48	0.91	8.12	0.39	4.20	9.45	19.15
2009	1.81	1.21	7.26	0.41	3.90	8.70	22.67

Source: UNCTAD Stats, retrieved 25 July 2011 from www.unctad.org

Table 6 – Percentage Share of World’s Outward FDI Stock, Selected Countries

Percentage of World's Outward FDI Stock Selected countries								
YEAR	Australia	China	Germany	India	Japan	New Zealand	United Kingdom	United States
1980	3.5	0.2		0.1	0.5	0.3	9.0	11.9
1981	3.7	0.2		0.1	0.5	0.3	7.6	14.5
1982	3.3	0.2		0.1	0.5	0.3	6.6	16.5
1983	3.1	0.3		0.1	0.5	0.3	6.4	18.2
1984	3.0	0.5		0.1	0.5	0.2	5.3	19.7
1985	2.7	0.6		0.1	0.5	0.2	6.4	22.1
1986	2.4	0.7		0.1	0.6	0.2	6.7	23.9
1987	3.2	0.8		0.1	0.7	0.2	8.1	23.5
1988	4.1	0.9		0.1	0.7	0.2	8.5	25.6
1989	3.8	0.9		0.1	0.5	0.3	8.2	29.1
1990	3.5	1.0	5.3	0.1	0.5	0.4	9.8	25.9
1991	3.3	1.1	5.3	0.1	0.5	0.5	8.9	28.5
1992	3.1	1.5	4.9	0.1	0.6	0.5	7.1	28.7
1993	3.1	2.4	4.4	0.1	0.6	0.6	6.8	29.2
1994	3.4	2.6	4.9	0.1	0.7	0.8	6.7	26.6
1995	3.1	3.0	4.9	0.2	1.0	0.8	5.9	29.7
1996	3.0	3.3	4.2	0.2	0.8	0.9	5.9	31.7
1997	2.3	3.5	3.6	0.2	0.6	0.7	5.7	36.8
1998	1.9	3.2	3.7	0.3	0.5	0.6	6.1	39.3
1999	1.8	2.8	3.5	0.2	0.7	0.5	5.7	41.4
2000	1.6	2.6	3.6	0.2	0.7	0.3	5.9	37.4
2001	1.6	2.7	3.6	0.3	0.7	0.3	6.8	34.3
2002	2.0	2.9	4.0	0.3	1.0	0.4	7.0	26.9
2003	2.3	2.4	4.2	0.3	1.0	0.5	6.5	26.2
2004	2.6	2.2	4.6	0.3	0.9	0.5	6.3	24.6
2005	2.1	2.4	4.1	0.4	0.9	0.4	7.3	24.5
2006	2.1	2.0	4.1	0.5	0.8	0.4	8.0	23.1
2007	2.1	1.8	3.9	0.6	0.7	0.4	6.9	20.0
2008	2.0	2.4	4.3	0.8	1.3	0.3	6.3	16.5
2009	1.8	2.7	4.0	0.9	1.1	0.4	6.3	17.6
Source: UNCTAD Stats, retrieved 25 July 2011 from www.unctad.org								

Table 7a – Correlation Results for India and China, 1999 – 2009

Descriptive Statistics			
	Mean	Std. Deviation	N
Year	2004.0000	3.23669	22
FDIoutward	47849.8236	54335.81886	22
GDP	1607.4545	1274.53178	22
GDPpc	1289.1364	921.71488	22
Savings	38.2727	9.51781	22

Table 7b

		Year	FDIoutward	GDP	GDPpc	Savings
Year	Pearson Correlation	1	.696**	.613**	.640**	.541**
	Sig. (2-tailed)		.000	.002	.001	.009
	N	22	22	22	22	22
FDIoutward	Pearson Correlation	.696**	1	.940**	.947**	.766**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	22	22	22	22	22
GDP	Pearson Correlation	.613**	.940**	1	.999**	.897**
	Sig. (2-tailed)	.002	.000		.000	.000
	N	22	22	22	22	22
GDPpc	Pearson Correlation	.640**	.947**	.999**	1	.889**
	Sig. (2-tailed)	.001	.000	.000		.000
	N	22	22	22	22	22
Savings	Pearson Correlation	.541**	.766**	.897**	.889**	1
	Sig. (2-tailed)	.009	.000	.000	.000	
	N	22	22	22	22	22

** . Correlation is significant at the 0.01 level (2-tailed).

Note: Detailed results on correlation with FDI Outflow and Inflow by country are available on request from authors.

Table 8 – Gross Savings as % of Gross Domestic Product across countries

Country Name	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
World	21.24	20.88	20.94	21.60	21.74	22.28	22.49	21.40	19.07	
Afghanistan		-	-	-	-	-	-	-	-	-
Albania	9.36	-1.81	-1.82	2.07	-0.46	0.99	3.57	5.51	3.31	4.27
Algeria	41.98	40.86	44.86	47.69	54.89	56.59	57.54	56.73	45.47	
American Samoa										
Andorra										
Angola	15.09	23.91	19.22	25.08	37.92	49.08	44.16	41.08	20.82	28.78
Antigua and Barbuda	41.53	42.74	39.88	39.67	39.10	43.72	39.82	50.75	56.87	
Argentina	15.50	26.85	25.91	26.26	27.34	28.88	28.49	27.11	26.27	27.10
Armenia	-0.92	4.44	6.38	10.14	16.05	20.01	17.82	16.10	7.01	4.57
Aruba										
Australia	21.75	22.37	22.32	22.93	23.13	24.67	25.16	25.69		
Austria	25.93	26.85	26.45	26.53	26.55	27.42	28.93	28.98	25.83	
Azerbaijan	24.28	27.30	29.63	34.06	51.57	57.61	61.14	64.89	49.66	44.50
Bahamas, The	22.39	27.86	25.38	23.53	23.83	18.21	18.18	37.23	26.30	
Bahrain	34.04	35.87	39.13	44.15	47.52	50.27	52.37	55.76		
Bangladesh	16.97	18.38	17.58	18.67	18.06	18.38	17.54	15.80	17.25	18.57
Barbados	15.58	14.88	14.40	12.62	14.03	19.78	30.07	31.06	31.26	
Belarus	20.21	18.43	21.13	22.30	29.17	28.01	27.82	29.92	26.81	25.46
Belgium	24.72	24.83	24.72	25.71	25.78	26.19	26.65	24.89	22.91	
Belize	6.91	9.03	6.18	9.71	10.48	18.05	17.48	17.50		
Benin	6.47	3.73	5.98	5.50	6.94	6.86	6.08	7.09	10.69	12.18
Bermuda										
Bhutan	32.83	40.42	38.60	36.34	30.17	31.62	35.14	51.63	64.20	
Bolivia	8.98	10.21	12.47	15.83	17.71	22.87	22.72	24.50	19.79	21.80
Bosnia and Herzegovina	-	-	-	-	-	-	-	-	-	-
Botswana	28.46	28.02	34.03	25.85	19.29	-6.27	-3.30	-1.03	-2.44	-2.29
Brazil	34.68	38.10	40.98	40.49	43.09	40.37	37.85	32.17	13.22	32.88
Bulgaria	16.71	17.71	18.68	20.99	19.81	19.66	19.85	20.88	16.45	16.48
Brunei Darussalam	44.76	46.76	48.38	50.49	54.25	57.04	52.94			
Burkina Faso	10.82	11.59	10.82	11.28	12.46	14.55	14.38	17.03	17.76	19.26
Burundi	-0.10	3.65	4.51	1.80	4.82	2.84				
Cambodia	-7.82	-9.73	-8.66	-	-	-	-	-	-	-
Cameroon	11.04	23.12	19.87							
Canada	10.01	9.28	10.06	8.91	9.80	13.12	13.58	16.38	18.29	
Cape Verde	19.02	19.01	17.82	18.48	18.05	18.87	18.53			
Cayman Islands	24.92	23.71	23.75	25.04	25.80	25.53	25.18	24.69	19.26	
Central African Republic	-	-	-	-1.47	4.39	5.02	5.80	9.12	11.72	
	15.10	15.71	15.85							
	3.87	4.33	1.60	-0.01	0.14	1.37	1.47	-1.30	2.72	

Country Name	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Chad	5.26	40.81	18.01	24.53	35.11	36.36	20.50	27.40	5.90	12.00
Channel Islands										
Chile	23.62	24.07	25.22	29.21	30.71	35.53	34.49	28.98	27.22	
China	38.39	40.44	43.40	45.81	47.63	50.67	50.54	51.76	52.02	49.82
Colombia	13.36	14.05	15.56	17.30	18.45	19.29	19.40	20.42	20.32	20.39
Comoros	-5.22	-4.02	-3.37	-8.50	12.30	14.79	-15.42	-20.09	21.10	
Congo, Dem. Rep.	3.17	4.05	5.02	3.97	5.95	-0.64	8.78	8.61	17.06	
Congo, Rep.	50.47	50.98	30.85	52.21	52.02	43.30	49.61	48.38	45.54	56.75
Costa Rica	17.25	17.37	18.78	19.91	18.87	20.27	19.79	27.11	20.87	14.31
Cote d'Ivoire	19.54	26.69	21.04	20.00	17.20	19.63	14.56	17.85	19.41	18.44
Croatia	17.57	16.88	19.40	20.34	20.80	22.36	21.81	22.16	23.20	23.46
Cuba	8.57	7.52	7.82	9.53	13.45	11.97	12.89	12.77		
Curacao										
Cyprus	18.50	17.20	16.16	17.72	17.35	17.01	17.46	14.42		
Czech Republic	27.01	26.48	24.89	27.58	28.85	30.21	31.97	29.87	27.23	
Denmark	27.00	26.24	25.88	25.23	25.73	25.89	25.65	25.03	20.91	
Djibouti	-0.61	4.87	5.26	4.31	8.64	12.12	17.43			
Dominica	6.82	7.35	9.83	11.44	5.92	10.90	0.06	-1.54	1.79	
Dominican Republic	13.79	13.31	14.64	15.69	11.04	10.42	9.83	4.56	6.82	7.39
Ecuador	19.88	19.96	19.17	21.33	22.87	24.55	25.17	28.53	23.39	21.27
Egypt, Arab Rep.	13.41	13.91	14.30	15.58	15.71	17.11	16.27	16.79	12.39	12.08
El Salvador	0.87	1.68	1.07	-1.05	-2.95	-3.55	-5.64	-7.61	-2.38	-6.08
Equatorial Guinea	81.16	78.95	80.10	78.88	83.67	86.13	86.88	73.12	58.81	
Eritrea	18.50	27.41	36.23	35.13	29.04	18.17	-18.40			
Estonia	25.44	24.93	25.66	26.01	27.29	28.80	29.46	25.40	25.02	28.04
Ethiopia	9.73	9.93	7.75	8.79	2.61	1.52	4.16	0.44	4.14	0.41
Faeroe Islands										
Fiji	8.08	17.30	13.62	2.53	10.79	2.74	5.76	4.17		
Finland	29.86	28.40	26.26	26.54	25.96	26.04	28.03	26.35	20.78	
France	21.25	20.76	19.92	19.72	19.55	19.91	20.39	19.98	17.18	
French Polynesia										
Gabon	51.70	43.73	48.21	54.57	58.35	56.00	55.27	58.95	47.77	46.95
Gambia, The	11.99	12.87	11.05	8.90	4.00	11.19	6.62	6.08	6.25	6.50
Georgia	15.92	15.33	16.74	15.28	15.67	6.71	5.31	-3.82	-7.35	-2.00
Germany	21.50	21.83	21.37	22.25	22.17	23.36	25.43	24.92	21.44	
Ghana	7.02	7.44	7.01	7.31	3.73	6.10	3.80	2.00	8.73	9.28
Gibraltar										
Greece	10.04	8.76	12.22	12.45	10.70	10.15	9.90	7.86	5.62	
Greenland										
Grenada	13.22	7.34	10.36	13.43	4.76	-5.98	-9.26	-13.38	-6.77	

Country Name	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Guam										
Guatemala	6.53	7.12	5.89	5.72	3.80	3.87	4.06	1.67	3.27	3.46
Guinea	14.74	11.77	21.52	18.41	18.25	13.89	9.68	10.27	16.60	15.65
Guinea-Bissau	-19.35	-11.76								
Guyana	5.64	8.28	11.01	13.74	-46.26	3.60	-3.56	-8.81	2.03	0.99
Haiti	2.08	1.19	-1.35	-1.31	-1.48	-1.19	4.78	-2.62	-2.29	
Honduras	12.82	11.72	11.22	11.05	9.15	7.32	5.24	3.73	0.96	4.08
Hong Kong SAR, China	29.82	31.13	31.16	30.70	33.00	33.13	31.76	30.70	28.77	29.32
Hungary	23.20	22.32	20.44	22.61	23.75	24.21	23.62	23.61		
Iceland	20.22	19.75	16.72	17.79	16.05	17.40	18.35	21.65	22.63	
India	23.29	24.24	25.48	31.06	31.92	32.63	34.11	29.09	32.04	26.07
Indonesia	30.81	27.70	32.94	28.73	29.23	30.81	28.96	28.87	33.81	34.12
Iran, Islamic Rep.	34.58	38.91	37.82	39.14	41.09	40.59	43.80			
Iraq										
Ireland	38.28	39.31	39.42	39.66	38.91	37.68	36.30	31.32	29.35	
Isle of Man										
Israel	18.06	15.81	17.11	17.98	18.88	19.28	18.23	16.90	18.82	17.61
Italy	21.95	22.09	21.22	21.52	20.61	20.78	21.63	20.51	18.53	
Jamaica	12.30	11.06	11.36	12.28	8.75	8.50	4.41	-5.24	2.61	2.89
Japan	25.39	24.37	24.48	24.97	24.95	25.04	25.37	23.79	20.82	
Jordan	-3.96	0.89	-0.25	-2.87	-7.35	-3.10	-9.99	-6.03	-6.68	-6.05
Kazakhstan	28.67	33.79	34.26	34.85	38.89	44.10	43.84	47.67	38.67	47.25
Kenya	8.71	9.76	10.52	10.83	9.45	8.06	8.04	6.12	7.81	8.27
Kiribati										
Korea, Dem. Rep.										
Korea, Rep.	31.42	30.67	32.16	34.09	32.39	31.01	30.94	30.03	29.78	
Kosovo										
Kuwait	30.07	25.13	34.26	42.72	52.14	57.54	55.55	58.87		
Kyrgyz Republic	17.70	13.85	5.26	5.78	-4.71	-13.51	-18.27	-12.55	-8.62	3.15
Lao PDR	17.90	19.30	21.13	16.39	13.45	28.93	38.31	47.47	51.35	59.19
Latvia	17.08	16.93	16.17	17.42	20.00	18.22	20.36	17.53	18.80	19.83
Lebanon	-1.53	-0.10	-1.46	0.45	0.67	1.97	2.52	1.40	5.37	5.87
Lesotho	-21.35	-32.56	-25.94	-25.09	-27.11	-23.65	-27.05	-25.20	-27.49	-30.89
Liberia	-3.42	-3.35	-3.18	-0.68	2.42	-34.61	-142.55	-121.51		
Libya	24.79	24.97	46.85	42.68	48.05	66.84	63.61	67.82		
Liechtenstein										
Lithuania	13.77	14.98	16.05	15.62	16.79	16.16	17.53	14.90	9.19	15.38
Luxembourg	42.04	41.60	45.91	45.94	47.99	51.11	53.22	52.82	49.22	
Macao SAR, China	47.88	51.58	56.75	63.53	63.55	67.20	70.45	70.53	65.69	
Macedonia, FYR	5.16	0.48	3.04	1.15	3.46	3.28	5.21	1.65	1.32	

Country Name	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Madagascar	15.29	7.70	8.91	8.53	4.86	9.25	10.64	9.97	8.96	
Malawi	3.76	2.79	3.20	-0.02	-5.46	1.18	18.89	8.89	17.22	14.72
Malaysia	41.84	42.03	42.46	43.42	42.82	43.09	42.15	42.34	36.03	
Maldives	29.39	31.68	34.27	30.69	2.27					
Mali	14.04	11.27	13.29	8.60	10.96	14.75	12.96			
Malta	12.92	16.66	14.79	12.02	14.38	16.68	19.89	15.81	15.08	
Marshall Islands										
Mauritania	3.13	-1.93	-5.00	-3.07	15.00	18.56	8.01	5.60	7.34	12.65
Mauritius	26.62	25.13	24.89	22.05	16.53	15.26	16.06	12.04	10.44	10.09
Mayotte										
Mexico	18.64	18.84	21.43	22.89	22.27	24.96	23.96	24.72	20.73	19.53
Micronesia, Fed. Sts.										
Moldova	-3.68	-3.53	10.59	-4.93	-9.70	13.89	-11.58	-13.56	-9.37	14.55
Monaco										
Mongolia	9.99	7.58	16.67	21.43	32.69	41.84	40.05	30.40	27.11	32.64
Montenegro	-0.13	-5.76	-0.96	0.57	0.20	-4.91	-8.54	-13.99	-5.99	-1.41
Morocco	23.62	23.82	24.52	24.18	23.20	23.95	23.37	24.72	25.07	23.49
Mozambique	4.87	8.45	3.54	7.74	6.48	8.79	6.34	1.57	2.18	5.72
Myanmar	11.51	10.24	11.03	12.11						
Namibia	15.82	16.45	10.29	16.80	19.83	20.55	22.41	21.44	13.94	24.58
Nepal	15.08	9.49	8.56	11.75	11.56	8.98	9.88	11.24	7.77	
Netherlands	27.27	26.21	25.59	26.36	27.54	27.75	28.65	29.04	25.65	
New Caledonia										
New Zealand	24.36	23.78	23.53	23.70	22.47	21.74	22.75	20.77	19.80	
Nicaragua	2.56	-0.23	-1.00	0.66	-0.08	-0.53	-2.20	-3.90	-2.58	37.22
Niger	4.42	5.27	5.03	3.90	13.41					
Nigeria										
Northern Mariana Islands										
Norway	35.94	32.30	31.13	33.49	37.64	40.05	38.96	41.17	34.97	
Oman	33.79	40.19	39.37	38.13	50.52	49.00	47.21	50.99		
Pakistan	15.94	16.49	17.35	17.61	15.21	14.15	15.37	11.02	11.43	10.50
Palau										
Panama	24.43	20.92	24.05	22.40	24.79	26.70	30.39	29.16	41.79	22.66
Papua New Guinea	36.03	24.10	35.31	33.25	29.39	36.09	32.40	32.69	20.66	28.35
Paraguay	9.05	13.93	16.14	16.77	15.36	15.11	15.04	12.87	10.46	13.09
Peru	16.51	17.72	18.73	21.59	23.81	28.72	29.45	27.35	27.00	25.68
Philippines	15.29	15.53	15.45	16.11	15.95	16.22	17.24	16.83	15.47	18.73
Poland	17.11	15.16	16.05	17.72	18.52	19.25	21.57	19.71	20.27	18.78
Portugal	17.51	17.49	16.74	15.72	14.18	14.42	14.83	13.00	12.04	
Puerto Rico										

Country Name	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Qatar	65.94	64.86	68.10	69.61	69.34	60.57	60.44	63.72	54.46	
Romania	14.88	16.00	14.34	13.22	12.26	14.65	16.89	18.61	23.62	25.08
Russian Federation	34.63	30.84	32.23	33.16	33.77	33.90	32.79	34.73	26.30	31.04
Rwanda	2.93	-0.45	0.36	1.39	1.99	1.78	3.46	6.95	4.19	
Samoa										
San Marino										
Sao Tome and Principe										
Saudi Arabia	34.69	37.08	41.82	45.94	51.32	50.13	48.47	52.86	38.36	43.36
Senegal	9.35	6.76	8.77	7.92	14.09	10.75	8.56	3.63	7.99	9.39
Serbia	-4.17	-7.59	-0.92	3.17	2.75	2.57	4.29	5.27	7.65	8.79
Seychelles	19.19	24.39	21.53	14.71	3.11	8.13	-1.73	6.02	15.44	
Sierra Leone	-11.58	-8.20	-3.73	-0.44	4.06	7.64	6.14	1.67	2.32	3.32
Singapore	42.34	41.23	44.00	47.41	49.38	50.84	53.34	51.14	49.98	51.89
Sint Maarten (Dutch part)										
Slovak Republic	21.59	21.90	22.79	23.71	24.32	22.83	26.77	26.59	33.39	35.26
Slovenia	23.92	24.95	24.96	26.14	26.82	28.42	29.97	29.46	26.02	
Solomon Islands	-12.64	-5.23	4.14	-0.04	-6.77	-6.50				
Somalia										
South Africa	19.34	19.71	18.99	17.78	17.49	17.24	18.34	19.02	18.67	23.42
South Sudan										
Spain	23.83	24.51	25.01	24.28	24.20	24.60	24.26	23.33	22.27	
Sri Lanka	15.77	15.52	15.59	15.91	17.90	16.98	17.58	13.87	17.99	19.21
St. Kitts and Nevis	27.50	22.05	19.86	30.80	28.92	19.40	20.37	8.23	6.29	66.53
St. Lucia	12.36	9.15	4.33	14.36	9.71	-4.82	-5.38	-12.64	3.32	
St. Martin (French part)										
St. Vincent and the Grenadines	19.74	19.09	16.55	10.37	10.85	11.67	0.82	-4.90	-3.11	
Sudan	9.76	13.26	15.72	18.68	18.99	18.57	26.73	26.76	19.41	24.19
Suriname	-1.95	1.24	-2.98	0.44	10.12					
Swaziland	8.63	14.58	18.08	13.51	11.18	11.51	12.66	-0.18	0.22	-2.21
Sweden	24.93	24.18	23.97	25.17	25.57	26.83	27.78	27.34	23.58	
Switzerland	28.00	27.83	27.32	27.92	28.33	30.36	32.23	32.51	30.67	
Syrian Arab Republic	26.49	27.85	26.10	20.20	19.32	21.26	19.33	14.07	14.01	
Tajikistan	-0.65	-1.25	-0.12	0.61	12.51	20.23	-25.25	-34.00	21.27	23.04
Tanzania	13.17	16.88	16.09	15.24	14.00	11.05	12.65	10.31	17.88	16.85
Thailand	30.59	30.49	31.75	31.65	30.32	31.79	34.82	31.69	31.79	33.42
Timor-Leste										
Togo	0.96	0.57	5.33	4.53	1.49					
Tonga	-7.95	-6.13	-8.89	11.52	18.63	18.26	-18.80	-18.65	16.62	
Trinidad and Tobago	37.44	28.16	39.57	35.29	55.63	45.68	41.92	39.07		
Tunisia	23.34	21.40	21.23	21.22	21.37	21.55	22.03	22.38	21.33	

Country Name	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Turkey	19.21	19.25	16.55	16.76	16.49	17.14	16.32	17.35	13.75	16.13
Turkmenistan	36.24	43.20	31.12	25.17	40.17	57.67	54.87	40.33	44.44	
Turks and Caicos Islands										
Tuvalu										
Uganda	7.01	6.37	7.17	10.08	11.72	8.05	8.76	15.28	12.71	13.48
Ukraine	23.39	24.53	24.54	28.65	23.42	21.91	21.14	19.16	15.40	14.18
United Arab Emirates	36.42	33.51	37.26	36.64	41.54	44.95	43.76			
United Kingdom	15.11	14.47	14.45	14.36	13.64	14.39	15.14	14.08	11.24	
United States	15.36	14.33	13.80	14.09	14.15	14.35	14.02	12.54	11.48	
Uruguay	11.63	14.29	18.31	20.22	19.63	17.49	18.33	18.35	18.99	20.65
Uzbekistan	20.02	21.78	26.95	31.93	35.72	24.75	24.04	28.04	26.04	27.01
Vanuatu	6.27	4.78	12.08	13.74	12.64	15.64	17.44			
Venezuela, RB	30.85	33.45	32.35	38.83	42.19	40.19	33.85	34.96	22.56	24.63
Vietnam	28.89	28.04	27.08	27.91	31.39	31.67	28.19	24.51	27.78	27.79
Virgin Islands (U.S.)										
West Bank and Gaza	31.83	29.56	29.43	29.14	28.42					
Yemen, Rep.	20.05	20.18	20.93							
Zambia	2.75	7.86	13.03	19.87	21.69	31.39	30.19	24.63	25.59	31.48
Zimbabwe	12.29	1.84	2.27	-2.77	-7.65	-9.77	-1.57	-21.76	25.91	18.51