The impact of core labour standards on Foreign Direct Investment in East Asia

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1. Introduction

The recent decades have seen a surge in Foreign Direct Investment (FDI) flows in the face of rapid globalization. The potential role of FDI in a country's development is well-recognised as it also brings technology, managerial skills and employment along with capital and foreign exchange. Achievements of some of the East Asian countries in successfully employing FDI highlight its importance in a country's overall development, if used strategically. This perceived important role of FDI has sparked competition among countries to attract investors by offering them various incentives. As this global competition intensifies, some developed countries feel concerned about the "unfair competitive advantage" in attracting FDI that some developing countries have over them because of their low labour standards (poor worker rights). They feel that the low labour standards of these countries may force them to lower their labour standards in order to remain in competition. This can lead to a "race to the bottom" where countries start weakening their regulations in order to gain a competitive edge. There can be a "prisoner's dilemma" type of situation where everyone has an incentive to lower standards but everyone would be better off if no one lowered standards. To avoid this, they claim some universal set of labour standards to be enforced on all countries.

Many of the East Asian countries were able to attract fair amounts of FDI when their labour standards were relatively weak. Were they able to attract this FDI because of their weak labour standards or were there any other reasons specific to the region? Is there a case to enforce some labour standards universally and what are its implications on developing countries in terms of their competitiveness to attract FDI? These are some questions I attempt to answer in this paper. The remaining part of this section looks at the complex debate of international labour standards from the perspective of both who are in favour and against them. Section 2 focuses on core labour standards (CLS) which are considered to be basic worker rights which every country must respect. Section 3 explores the relationship between labour costs and FDI. Section 4 looks briefly at the theory and determinants of FDI. Section 5 reviews existing literature

which explores the links between FDI and labour standards. In section 6, I apply the same model specification and methodology as used by Daude et al. (for determining FDI and labour standards linkages in Latin American and Caribbean countries) to the sample countries[1] in East Asia. The purpose of doing so is to simply test whether the same model is applicable to a different set of countries or not. The conclusions of this paper are presented section 8.

As manufacturing FDI moves to the emerging markets of the South, workers in the North see it as unskilled, labour-intensive jobs moving out of their countries. They feel that the main motivation for multinationals corporations (MNCs) to move abroad is to exploit deliberately neglected weak labour standards combined with low wages of the South. They demand action (like trade sanctions or other punitive measures) to be taken against the countries who might, on purpose, keep their labour standards low to attract FDI. Increasing trade and investment in the South has been considered as one of the main reasons of falling wages, rising income inequality and unemployment (Wood 1995). However, not everyone subscribes to this view just because the volume of North-South trade is still not substantial enough to have such an impact (Krugman 1995). Although this maybe one of the reasons but there are other reasons like "trade imbalances between developed countries themselves, cyclical movements in economic activity and its slow long-term growth in advanced countries, technical change, and changes in economic and social policy in these countries" (Singh and Zammitt, 2000). Even if there are some losses in the unskilled manufacturing sector, they can be easily offset and compensated by gains coming from cheap imported goods and wage-rise experienced by the skilled sector.

Apart from the workers of the North, there are others (like activist NGOs and human rights organizations) who feel concerned about poor labour standards of the South. It is very common to hear about cases of MNCs exploiting workers in the South by paying them too little or making them work under extremely poor conditions or making children work. They make their case on a humanitarian ground that human beings cannot be treated in this way to increase profits. They campaign against MNCs and raise

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[1] Sample countries used for this study referred to as East Asia are China, Hong Kong (China), Indonesia, South Korea, Malaysia, Philippines, Singapore and Thailand. Selection criteria were based on the availability of FDI data (from both US and Japan) for these countries. However, China and Hong Kong (China) drop out of the sample when regressions are run as strike data for China and political rights data for Hong Kong (China) are not available.

awareness among consumers to boycott their products. As these MNCs care about their brand image and not losing any customers, they often come up with codes of conduct and accept some social responsibility for their actions. Elliott and Freeman (2003) observe that overall these activists have been successful in creating a "market for standards" in the North and in general consumers demand labour standards as much as they demand other aspects of goods and services.

Developing countries often perceive labour standards as privileges of the rich North. They argue that labour standards improve automatically after a certain level of economic development has been achieved. Any attempt to improve their labour standards before this level would raise average labour costs reducing their global competitiveness and thus hindering their economic growth. So, for them, economic growth comes first followed by improved labour standards, rather than the other way around. They often criticise the North of being protectionist in the pretext of labour standards to deny them free and fair access to their markets. They consider that their comparative advantage lies in low-skilled labour-intensive manufacturing in the same way that the North has a comparative advantage in high-skilled capital-intensive manufacturing. The North is often accused of trying to destroy their comparative advantage by raising their labour standards which goes against free trade. They believe that the North itself went through this phase of weak labour standards during the process of industrialization and it is unfair to stop others in achieving growth in the same manner.

Looking at both sides of the debate, one realizes that both sides have some valid arguments and the solution is a complex one. Even if one accepts that workers from the North have some protectionism hidden in their agenda, concerns of the activists seem to be genuine in improving the conditions of workers. This protectionism was also faced by Japan in the 1950s while it was going through industrialization but it actually resulted in improving working conditions. Japan's high productivity and low labour costs raised concerns in Europe and the USA about its competitiveness. External pressure was applied on Japan through the IMF and American trade unions to improve its working conditions with the intention of raising its labour costs and discouraging exports (Nakakita, unpublished paper). Regarding this debate, Elliot and Freeman (2003) observe that both sets of concerns are exaggerated as weak standards in one country do not encourage race to the bottom and on the other hand observance of some basic worker rights does not reduce comparative advantage of low wage countries.

2. Core Labour Standards

There is no strict definition of labour standards as they can range from very broad to very specific issues related to work. Portes (1994) categorises them into four groups: basic rights, survival rights, security rights and civic rights (see Table 1 for examples). International Labour standards are set by the ILO through conventions, which once ratified by the member states, become legally binding upon them. Ratification reflects the commitment of the member states to respect these standards by law but does not necessarily reflect how effectively these conventions are enforced in practice. Till date (September 2005), there are 185 conventions. Not all of them are equally important for all member states. Eight of these conventions are identified as fundamental principles and rights at work. With the adoption of the ILO Declaration on Fundamental Principles and Rights at Work in 1998, these conventions became universally binding on all member states and cover the following four core labour standards (ILO, 2000).

(a) freedom of association and the effective recognition of the right to collective bargaining;

(b) the elimination of all forms of forced or compulsory labour;

(c) the effective abolition of child labour; and

(d) the elimination of discrimination in respect of employment and occupation.

Each of these core labour standards is covered by two conventions. Table 2 enlists these conventions and their ratification dates by member states used for this study.

These core standards are considered to be a part of basic human rights (OECD, 1996) and do not necessarily affect labour costs directly. Singh and Zammitt (2003) question the criteria of choosing these rights as fundamental rights over other important rights like health and safety at work and the right to a decent living. In this regard, Elliot and Freeman (2003) differentiate them from cash (or cost) standards (such as minimum wages, safety at work) which can have a direct effect on labour costs and thus on the ability to attract FDI. The following section discusses the effects of these standards on FDI inflows in the context of East Asia.

2.1 Forced labour

This standard appears to be the most widely accepted out of the four. With the exception

of China[2], the violation of this right does not appear to be linked with the sectors related to FDI in East Asia. Most incidents related to forced or compulsory labour are in the form of domestic servants, farm workers, sex workers and prison labourers (ILO 2001). Myanmar military has been accused by the ILO for using forced labour in a systematic manner for agriculture and infrastructure development projects. However, these forms of forced labour are not linked to FDI in the region. Thus, the ban on forced labour will not have any effect on global competitiveness. In this regard, Kucera (2001) observes that "connections between forced labour and the formal manufacturing sector as well as with FDI inflows appear tenuous at best". Owing to the lack of consistent data availability and weak links with FDI, this study is not able to use any alternative measure of this standard apart from the ratifications

2.2 Child Labour

The prevalence of child labour increases the supply of unskilled labour, resulting in low labour costs and thus increasing comparative advantage of a country in the unskilled manufacturing sector. Labour costs could be also kept low by discriminating against children and paying them less compared to adults. This is the main logic behind how ban on child labour can affect FDI inflows. Even if foreign firms are not directly involved in hiring child labour, their supply chains or associates could be involved in it. However, Wood (1994) argues that workers with no schooling (including child labourers) "work mainly in agriculture or other traditional activities, and are generally unsuited to manufacturing and other modern activities, which require at least literacy or primary schooling". Following this logic, Kucera and Sarna (2004) argue that "a decline in child labour will not have a negative effect on a country's comparative advantage in unskilled labour-intensive manufactures because the unskilled labour market in which children work is not, by and large, the unskilled labour market that matters for manufacturing exports".

Even if we consider that children work in manufacturing sectors related to FDI, this percentage is very small[3] and firms' losses by removing these children can be compensated by premium charged from the labour standards conscious consumers

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[2] ILO (2001) reports incidents related to the confinement of workers to the employer's premises in some foreign-owned firms.

[3] ILO (2002) estimates are that only 8.3 percent of the total child labour is in manufacturing, so the percentage of children involved in FDI related manufacturing will be even smaller.

(Elliott and Freeman, 2003). The problem in abolishing child labour does not lie with the commitment of countries but in their poor economic conditions. In most cases, child labour is a matter of survival and not choice. A sudden ban on child labour can deprive families an important part of their incomes and children can end up being in worse illegal activities (Basu, 1999). Realising this, the ILO introduced a new convention (no. 182) in 1999 to set its priorities on tackling the worst forms of child labour before other forms. Thus, for an effective abolishment of child labour, measures should be taken to compensate the losses of parents and firms while children should be given incentives to join schools.

Child labour also has an adverse impact on the human capital development of an economy by depriving children of education. If children are well-educated, it adds on to the future labour force being more skilled serving as an important determinant of FDI. In order to achieve maximum benefits from foreign technologies, the importance of having an educated labour force in the host economy is well established in the literature (Lim, 2001). The emphasis laid on education and human capital was one of the main determinants of the success of the HPAEs (High Performing Asian Economies) (World Bank, 1993). In this regard, Kucera and Sarna (2004) observe that the increase in educational attainment in East Asia occurred along with sharp declines in the labour force participation rates of ten to fourteen year olds reflected in Table 3.

2.3 Discrimination (Gender inequality)

Workers can face different types of discrimination based on their race, colour, gender, religion, nationality, etc. This study deals only with discrimination based on gender because of its pervasive nature and data availability constraints for other types of discrimination. The logic behind gender inequality being able to attract FDI is through low wages paid to women compared to men for equally productive work.

In most developing countries, the traditional role of women was confined to household and childcare activities and men were responsible to earn for the family. In the face of globalization, urbanization and more women getting educated, this pattern is changing rapidly and more women are entering the labour force. MNCs take advantage of this increased supply by employing women in low-skilled labour-intensive manufacturing jobs such as garments, footwear and consumer electronics. MNCs prefer to hire women as they have less bargaining power compared to men and accept lower wages. Women are perceived as more productive in these sectors because of their "nimble fingers" and

are considered to be more flexible, patient, reliable, trainable, obedient and less prone to strikes compared to men (Anker and Hein, 1985). It is worth noting that even if they are paid less compared to men, MNCs tend to pay them much more than domestic firms and they are better off with these jobs than they would be otherwise (Kabeer, 2000). On the one hand these jobs have empowered women and increased their autonomy and on the other hand their work burden has doubled along with their routine household work. This has also segmented and branded women into particular types of low-paid jobs and increased their chances of being discriminated against other types of jobs.

While income equality at the household level is considered the main determinant of the East Asian success (World Bank 1993), Seguino (2000) argues that gender inequality within the household also played an important role in the region's success. She finds that low female wages (and thus low labour costs) stimulated investment and exports, which provided the foreign exchange to import capital goods, which raised productivity and growth rates. This is in contrast to other studies which find positive relationship between gender equality and economic growth. Klasen (1999) finds that gender inequality in education lowers the level of average human capital of workers, which decreases investment and growth. Regarding the positive relationship between FDI and women's employment, Braunstein (2005) observes that "there is mounting evidence that women either lose these jobs to more qualified men as industries upgrade, or get pushed down the production chain into subcontracted work as competition forces firms to continually lower costs. There is likely to be some short-term improvement in women's incomes as FDI expands, but the longer-term trajectory of women's wages is less promising."

In spite of this mixed and contrary evidence, one can question if it is a useful strategy to ignore overall long-term development in order to attract short-term FDI. Braunstein (2005) rightly points out that "equity has its own merit in terms of development, whether or not it is directly linked to economic growth". World Bank (2001) considers gender equality a development objective in its own right and its absence can harm the level of human capital and well-being of future generations through mothers' lack of education. In this regard, Fontana et al. (1998) observe that "growth and social development which rests on the exploitation of women is a pattern that threatens human resource development in the broadest sense: immediately, in terms of the attack on the dignity and right to equality of leisure of women and, in the longer term, through its impact on the well-being of children".

2.4 Freedom of association and collective bargaining (FACB)

This standard is concerned with workers rights to participate freely in forming unions, strikes and negotiating collectively with employers. This is the most disputed right out of all the four. Many employers resist enforcing this standard as it transfers some power to workers. They believe unions can unnecessarily cause strikes, politics and corruption hindering productivity and discouraging investment. Enforcement of this standard also gives workers the right to negotiate for higher wages, thereby increasing average labour costs and affecting FDI. Aidt and Tzannatos (2002) conclude that on average, union members in both developed and developing countries are paid more than non-unionized workers. Freeman (1994) confirms these findings, even after controlling other productivity related determinants of wages. OECD (1996) argues that the observance of FACB rights can offset negative effects of wages if they create a stable social climate through better worker-employer relationship. This can improve workers' motivation and productivity, resulting in positive effects on FDI.

Singh and Zammitt (2003) question the inclusion of this right as a fundamental right from a developing countries' perspective where most of the workers operate in the informal or agricultural sector. From the workers' perspective this right is much more important than others as it gives them access to a mechanism to negotiate other rights with their employers. This right provides them a voice at work and its absence can make them more exploitable and vulnerable to employers. Portes (1994) place these rights under "civic rights" (Table 1) and consider them an important precondition for development. In this sense they can be thought of as an extension to civil liberties and democracy.

Concerns are often raised about some developing countries' deliberate suppression of FACB and other rights in EPZs (Export Processing Zones) to attract FDI. While this might be true in many cases, Romero (1995) argues that unionization rates in EPZs might be lower even in the absence of government restrictions because generally wages and working conditions in EPZs are better compared to the rest of the economy and also because of the difficulty in organizing workers.

Many of the East Asian countries experienced fair amounts of FDI in spite of their relatively weak FACB rights. Serious restrictions were placed on FACB rights in the

NIEs[4] in the 60s and 70s during the period of their high growth (Brown 2000, Singh and Zammitt 2000). However, Singh and Zammitt (2000) observe that the reason why Singapore and Korea placed these restrictions was not because they wanted to attract FDI but to discourage the creation of communist trade unions and deny them any political power. FACB violations are also common in other East Asian countries. Malaysia restricted unionization in the highly foreign invested electronics sector and the Philippines also banned strikes in certain important industries (Brown 2000). Significant restrictions existed in Thailand as well (OECD 1996). Union activities in Indonesia were restricted under Suharto until 1998 but it was able to attract a fair amount of FDI until was hard hit by the financial crisis. Though FACB rights improved after Suharto's rule, FDI inflows declined to negative. Investor confidence has still not revived owing to political unrest, restructuring and legal uncertainties. China does not allow any FACB rights and also happens to be the world's most favourite FDI destination. Again, some argue that motivation behind this is purely political and comes from the government's fear of giving power to trade unions. These examples do not necessarily mean that these countries were able to attract FDI only because of their weak FACB rights. One cannot generalise this link by looking at only these countries.

There are two observations worth noting about the NIEs from their past experience: first, even after their FACB rights improved, they continue to be competitive in receiving FDI; second, even when they had weak FACB rights, their real wages continued to rise. Can one conclude from this that rising wages and strong FACB rights do not pose a threat to FDI as long as countries are able to move their comparative advantage over time from low value-added to high value-added industries as these countries did? Does this mean that it is important to maintain low wages through weak FACB rights when countries are still in the initial stage of this transition? The answers to these questions depend on how much do foreign investors actually care about labour costs, which I address to in the next section.

3. Labour costs and FDI

Many countries oppose strict enforcement of labour standards as it raises labour costs which can make them less attractive for foreign investors. In a regression analysis, Kucera (2001) directly explores the effects of CLS on labour costs and does not find

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[4] NIEs- Newly Industrialized Economies (Hong Kong, Singapore, South Korea, Taiwan)

any strong evidence on more child labour or greater gender inequality being associated with lower labour costs. However, he does find a fair amount of evidence suggesting weaker FACB rights being associated with lower labour costs.

Labour costs might be an important factor in deciding location of FDI especially for some labour-intensive manufacturing industries. Developing countries usually have an abundant supply of labour and thus can offer low labour costs to the investors but investors care about other things as well, not just the labour costs. When considering factors related to labour market, investors care about the availability of skills, education levels and productivity levels rather than just labour costs (OECD 1996). Table 4 lists the results taken from Hatem (1997)[5] of a survey of MNCs' managers and international experts in which they were asked to rank (from 0 to 5: 0- not important, 5- very important) thirteen FDI location criteria. Labour costs rank ninth out of thirteen, showing that there are many other important factors investors take into account before labour costs. "Political and social stability" and "Quality of labour" rank fourth and fifth, respectively. The observance of labour standards can improve these two factors, in the long run which can even displace the negative effects of labour costs on FDI. Educating child labourers and female children (equally as male children) improves the quality of labour of future generations. Giving equal rights and opportunities to women equally qualified as men adds to the pool of human capital available to foreign investors. FACB rights to workers can give them a sense of fair treatment at work which can improve worker-employer relationship and creates a socially stable atmosphere at work. This can also have a positive impact on workers' motivation, productivity and quality of work.

Core labour standards need to be looked at from the broader context of development and not just in terms of affecting labour costs. One needs to think about what role labour costs can play in attracting FDI and what role FDI can play in the overall development of the economy. Labour costs might not rise substantially by enforcing core labour standards and on the other hand, they can still rise even if these standards are not imposed, as we saw in the case of the NIEs. Moreover, there are other ways of remaining competitive than through suppressing worker rights, for example, by increasing productivity through improved technology. This is clear from the example of NIEs that rising labour costs *per se* do not pose a problem to competitiveness as long as countries are able to introduce superior technologies. However, this remains conditional to the human capital being sufficiently developed to absorb new technologies. The NIEs

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[5] also cited in Kucera (2001), Braunstein (2005)

had a sufficient level of human capital to employ new technologies and were able to succeed through 'reverse engineering' and 'learning by doing'. Keeping labour costs low through lax enforcement of standards might seem an attractive and easy option to draw FDI in some industries and may result in only some short-term benefits. However, in the long run, these countries might find themselves trapped in a comparative advantage of only low-tech, labour-intensive industries and never be able to move up the ladder without investing in technological changes and human capital. Worse would be to experience a situation where labour costs and standards are deliberately kept low and the FDI still shies away.

So far, I have only talked about how wages (or labour costs) can affect FDI inflows, there are more than one ways in which FDI inflows can also affect wages. So, the causal link exists both ways between FDI and wages. There are an overwhelming number of studies which show that MNCs pay higher wages, to equivalent workers, than their domestic-owned counterparts. Thus, the inflows of FDI itself can raise wages. Zhao (2001) examines wages in a sample of 5345 state owned firms and 188 foreign owned firms taken from the Chinese economy as a whole in 1996. He concludes that workers in foreign-owned firms are paid twice as much as their counterparts with similar levels of education and skills in state owned firms. In order to hire skilled workers from the state-owned firms, foreign firms pay more to skilled workers, while less skilled workers were available at a much lower or even negative wage premium. Lipsey and Sjöholm (2004) examine host country wage effects of foreign firms in Indonesian manufacturing industry using a cross-section dataset of plants for 1996. They control for different characteristics of the workforce, as well as industries and enterprises. They conclude that the wage premium in Indonesian manufacturing is about a quarter for blue-collar workers and over half for white-collar workers. They also find that a higher foreign presence in an industry is associated with a higher level of wages in domestic firms. Velde and Morrissey (2004) use ILO data for wages and employment by occupation for the period 1985-1998 to study the effects of FDI on wages in five East Asian countries (Hong Kong, Korea, Singapore, Thailand and Philippines). They find that overall, FDI raised wages in all countries significantly, regardless of skill level. However, they observe some differences in the effects of FDI across these five countries. For instance, FDI had a much larger effect on skilled workers than on low-skilled workers in Thailand.

Whether foreign firms pay more or not could depend on a lot of factors related to worker or firm characteristics. The worker characteristics refer to their education, skill,

age, gender and experience. It is possible that multinationals would pay more to get the best workers available in the labour market based on these features. The firm characteristics refer to firm size, industry, capital intensity, location, or other characteristics associated with multinationals that could belong to few domestic firms as well. For example, a large size firm or a capital-intensive firm or a firm located in a big city would tend to pay more irrespective of whether it is foreign or domestic firm. So, these are the differentials that are not necessarily intrinsic to foreignness, although they may be associated with it in practice. Multinationals could be paying premium to its workers simply to avoid the costly labour turnover and to prevent workers from leaking out the insights about firms' specific assets (e.g. new products or technologies) to competing firms.

If MNCs pay more and if this can lead to domestic firms also paying more due to increased competition, this can raise overall wages and thereby improve living standards in an economy. However, it is also possible that this competition remains limited to only one type of industry or MNCs pay more only to special types of workers or the amount of FDI is negligible for this overall "wage spillover" to happen. On the other extreme and negative end, it could also be possible that with their superior and cost-reducing technologies, foreign firms push local firms out of business and enjoy a monopoly in those areas and are able to exploit local workers to their advantage. From the above discussion, one can conclude that MNCs generally pay more to their workers (and much more to skilled) compared to domestic firms showing their concern for the quality of labour rather than just the labour costs.

4. Theory and determinants of FDI

The traditional Heckscher-Ohlin trade theory suggests that the two countries trade with each other as they differ in their relative factor endowments. This implies that a country will export the commodity that intensively uses its relatively abundant factor. This theory assumes that countries may trade commodities but factors of production (capital and labour) are immobile among countries. As we know, capital is mobile through FDI (and labour through migration), countries can benefit mutually by trading factors of production in the same way as by trading commodities. Thus, the FDI can act both as a substitute or a complement to trade. There are many theoretical models[6] explaining the

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[6] See Daude et al. (2003) for a review of different theoretical models of FDI

determinants of FDI but there is lack of consensus in recognizing one single theory that is widely accepted (OECD 1996).

The OLI framework offered by John Dunning in 1977 (taken from Markusen et al., 1995) suggests that a firm decides to undertake FDI if three conditions are met: ownership advantages (O), location advantages (L), and internalization advantages (I). Ownership advantages refer to anything which foreign firms own and local firms do not. These could include patent, blueprint, brand name, trade secret, goodwill, technical know-how, managerial skills etc. These assets are more likely to give rise to FDI than physical capital assets as they can be easily transferred to different locations at very low cost. Location advantages refer to the attractiveness of the host country that makes production more profitable compared to the source country. They could result from low labour costs, high trade barriers, cheap transport, developed infrastructure, easy availability of raw materials, customer access, growth and size of market or any incentives offered by the host countries to attract FDI. They could also be non-economic factors whether the host country shares the same language, culture or religion with the source country. Internalization advantages exist where the product or a process is better exploited internally within the firm rather than at arm's length through markets. For example, firms could also take into account that by selling blueprints or other knowledge based assets, they run a risk of these secrets being leaked or sold out to other firms.

According to Shatz and Venables (2000), there are two main reasons for why a firm would want to invest abroad. One is to better serve the local market, often called horizontal or market-seeking FDI, the other is to get lower-cost inputs known as vertical or efficiency-seeking FDI. Horizontal FDI (HFDI) takes place when firms can invest abroad to duplicate the same stage of production process. This type of FDI acts as a substitute for trade since firms replace their exports with production in the source country and save on transport and tariff costs which otherwise would have been involved in trade. Since the main purpose is to serve the local market, the growth and size of the local market is very important for HFDI[7]. Vertical FDI (VFDI) takes place when firms split its activities by function and invest in different places for different parts of the production process. The main purpose is not to produce to sell in the local market but to export to the home country or to third countries. Low-cost inputs such as

[7] This is also reflected in Table 4 where number one FDI location determinant is "Growth of market" and number two is "Size of market".

cheap labour costs and cheap raw material are more important here. VFDI acts as a complement to trade since products at different stages of production need to be shipped between different countries.

Thus, it is the VFDI which should get negatively affected with rising labour costs due to strengthening of labour standards. Since different types of FDI is attracted by different determinants, it is desirable to have a distinction between vertical and horizontal FDI but this distinction becomes blurred as one plant can serve both functions (Shatz and Venables 2000). Worth-mentioning is the example of the NIEs, which were once important for receiving VFDI (due to their low labour costs), are now important destinations for HFDI, reflecting their growing market opportunities and consumption patterns of western economies (Athukorala and Hill, 2000). Kucera (2001) interprets the survey of MNC managers by Hatem (1997) mentioned earlier and concludes that HFDI is more important in the services sector and VFDI in the manufacturing sector. He also concludes from the survey findings that the Japanese investors attach more importance to VFDI (thus, labour costs) compared to the investors from North America. This is slightly reflected for this region looking at Graph 2, which shows the percentage of US and Japanese outward FDI (share of the region from total FDI flowing out of US and Japan) in the sample countries. Clearly, Japanese investors attach much more importance to the manufacturing sector in the region compared to the US. The region attracted 40% of Japan's total manufacturing FDI in 1995 before declining to 25% in 2003. Since labour costs can have different effects on FDI depending on the sector and the source country, this study does not just look at the total inflows of FDI, it splits FDI into two broad categories- manufacturing and non-manufacturing, coming from two different sources- the United States and Japan.

The efficiency-seeking FDI played an important role in the region's increasing stock of FDI through the emergence of vertically integrated global production networks. Liberal FDI policy regimes, increasing capital mobility, declining communication costs and superior technologies helped MNCs to 'slice' their production into cross-border multi-plant operations. In stead of relocating entire industry to one host country, MNCs distributed the production process to different countries within the region depending on their skill and factor price differentials. This led to an intensification of intra-regional trade and FDI (Athukorala and Hill, 2000). This regional concentration of FDI also occurred due to what Krugman describes as 'economic geography' or 'agglomeration effects'. Production gets concentrated in one region as producers have an incentive to benefit from each other through economies of scale. Agglomeration can also arise from

reasons like concentration of skilled and specialized labour force, adequate telecommunication and transport infrastructure and cultural similarities. These agglomeration effects were important in attracting FDI in the region. Once a critical mass of production was established in the region, more investors were attracted to the region and FDI intensified through backward and forward linkages.

The overall dynamic growth of the region also played an important part in attracting investors and FDI did not remain limited only to manufacturing. In other words, as the region grew, it became an important recipient of HFDI as well. During the 90s, new sectors in non-manufacturing like finance, real estate, construction, retail trade and infrastructure emerged as major recipients of FDI (*ibid.*). This is also reflected in Appendix 1 which compares US and Japanese manufacturing and total FDI in individual countries. Since the total FDI roughly comprises of manufacturing and non-manufacturing, bigger gaps in the curves of manufacturing and total FDI shows the dominance of non-manufacturing FDI. This gap is striking especially in the case of US FDI in Hong Kong, Singapore and South Korea for the 90s pointing towards the importance of non-manufacturing FDI in the NIEs.

5. Literature review

This section looks at the small but gradually increasing number of studies that examine links between FDI and CLS. The main problems in studying these links stem not only from the multiple and uncertain factors affecting FDI but also from the issues of measuring CLS in a meaningful way. An OECD study (1996, updated in 2000) looks at the relationship between the enforcement of FACB rights and FDI in 75 countries between 1995 and 1998. Based on textual coding, a composite index was constructed reflecting the situation on enforcement of FACB rights in these countries. Countries were ranked from 1 to 4, where 1 represented strongest rights and 4 represented weakest rights. This study observes a small and positive correlation coefficient of 0.20 between the FACB index and FDI inflows but other factors affecting FDI are not taken into account.

Rodrik (1996) studies manufacturing FDI outflows from the US in 40 countries between 1982 and 1989 in a regression analysis. For the benchmark model specification, he identifies three explanatory variables affecting FDI decisions as black-market premium for foreign currency (proxy for government policy distortions), population and income

growth in the host country. He then adds various measures of labour standards to this specification. He measures labour standards as the total number of ILO conventions ratified, the number of core conventions ratified, democracy index and the child labour index. The democracy index is an average of civil liberties and political rights index constructed by Freedom House and used as a proxy for FACB rights. The child labour index is based on inadequacies in legislation or enforcement related to child labour restrictions. He does not find any relationship between the number of conventions ratified and FDI inflows. He finds a significantly positive relationship with the democracy index, indicating more FDI inflows for countries with stronger FACB rights. He also finds a significantly negative relationship with the child labour index, indicating more FDI inflows for countries with less child labour. The main weakness of his model specification is that he does not control for labour costs as a determinant of FDI.

Cook and Noble (1998) study the links between U.S. FDI outflows and labour standards in 33 countries for 1993 in a regression analysis. Their determinants for FDI include GDP per capita, education and labour costs. They find a positive relationship between the number of conventions ratified and FDI on the one hand and a negative relationship between FDI and other measures of labour standards like unionization rates, centralized wage-setting structure and government restrictions on layoffs. The main shortcoming of their model is that they do not take labour productivity into account.

Kucera's (2001) study offers the most detailed and extensive analysis of the links between FDI and CLS. He looks at the multiple measures of labour standards constructed by him for up to 127 countries for the period between 1993 and 1997 in a regression analysis. He also controls for regional differences and differences in effects on developed and developing countries through creating dummy variables. For the benchmark FDI model specification, he uses explanatory variables as manufacturing wages to value-added ratio, population, GDP per capita, openness, exchange rate volatility, education and infrastructure. Dependent variable used is the inflows of FDI in a country as a share of world FDI inflows. Apart from using the available measures of labour standards, he also constructs his own measures for FACB rights and child labour by coding textual sources related to violations of these rights. The overall and general conclusion he draws from his study is that weak labour standards do not attract FDI. On the contrary, the evidence found points in the opposite direction that countries with sound political and social environment (and hence better worker rights) offer a better investment climate.

Daude et al. (2003) study the effects of CLS on FDI in the Latin America and the Caribbean region through a panel data regression analysis for the period between 1989 and 2000. In order to study the differences in FDI inflows for manufacturing and non-manufacturing sectors, they break FDI into these categories. They look at FDI coming from US and Japan only, as sectoral breakdown of FDI data is available from these countries only. For the benchmark FDI model specification, factors affecting FDI decisions taken into account are: source and host country GDP, distance between source and host, inflation, openness, illiteracy, political rights workers involved in strikes and manufacturing wages to value-added ratio. Enforcement of labour standards is not measured through conventions ratified. The study uses labour force participation rates of 10 to 14 years old to measure child labour, civil liberties index to measure FACB rights and female to male illiteracy ratio as a measure for gender inequality. The study concludes that better observance of FACB rights and greater gender equality are associated with more, not less, FDI. Coefficient estimates on child labour are found to be insignificant. I rely on the model specification and methodology used by Daude et al. for this study.

6. The model

The way I look at the effects of CLS on FDI is by first estimating the benchmark model for the determinants of FDI and then adding on the measures of CLS to this model. Owing to the multiple factors which can affect FDI decisions and lack of one widely accepted theory, it is very difficult to come up with a model specification which captures the determinants of FDI. For this reason, rather than coming up with my own model specification, I rely on the specification (for both determinants of FDI and measures of CLS) already tried and tested by Daude et al (2003) in their study. I am not aware of any other study that tests the effects of CLS on FDI statistically and specifically for the East Asian countries. For the sake of convenience, I refer to this specification as Daude et al model. Though their study is for the Latin American and Caribbean countries, this study tests whether their model and findings hold for the East Asian countries as well. I use the same methodology and variables for a different set of countries.

This model looks at FDI inflows from the MNCs of the United States and Japan only. This approach has certain advantages and disadvantages as well. It is desirable to look at the total FDI inflows but these data are not available in sectoral breakdown over time.

Since the effects of CLS on FDI can differ from manufacturing to non-manufacturing or from labour-intensive manufacturing to capital-intensive manufacturing, it is important to be able to make this distinction for the FDI data. These data are available only for the U.S. and Japan. They are considered to be leading investors and offer data broken down by industry and country over time. This model also allows controlling for the source country characteristics as the importance of CLS could differ for investment coming from different countries.

On the other hand, by only looking at the U.S. and Japanese FDI, it is hard to draw any conclusions about the overall FDI, especially when these countries do not have a significant share in the total FDI of the host countries. Graph 1 shows the declining share of U.S. and Japanese FDI (63% in 1989 to merely 18% in 2003) in the sample countries out of total FDI inflows from everywhere. This shows that the investment attracted by this region is no more predominantly from the U.S. and Japanese MNCs only. East Asian countries used for this study and for which both U.S. and Japanese data are available are China, Hong Kong (China), Indonesia, South Korea, Malaysia, Philippines, Singapore and Thailand[8]. Annex 1 shows the inflows of total and manufacturing FDI from the U.S. and Japan in these countries.

This model pools the U.S. and Japanese data together in one equation but there are some issues related to comparability of the U.S. and Japanese data owing to different methodologies used in collecting them. The U.S. FDI data used for this study are collected by the Bureau of Economic Analysis (BEA) for the FDI already undertaken by the U.S. firms. On the other hand, Japanese FDI data collected by the Ministry of Finance (MOF) represent the planned and notified investments. These data sometimes can be overstated as some firms do not undertake these notified investments or do so by lesser amount or much later after notifying (Huang, 1997). Where Japanese data reflect only new investments, the U.S. data also take into account equity flows, inter-company loans and reinvested earnings between the U.S. parent firms and their foreign affiliates. Thus, the U.S. FDI inflows can also show negative values, for example when loans paid back by foreign affiliates increase the amount of investments; when parent firms reduce or withdraw equity from existing foreign affiliates; when dividend earned from foreign firms exceeds the amount of reinvested earnings[9]. The Japanese data do not account for

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[8] FDI data for Taiwan are also available but other data for Taiwan is hard to find. Only Japanese data are available for Vietnam. For these reasons, we did not include Taiwan in the sample.
[9] For details, refer to Bureau of Economic Analysis (1995).

these components and thus do not have negative values. Table 5 shows the industrial breakdown offered by two datasets, which reflects the problem of comparability. For example, it is interesting to know the effects of weak CLS on attracting FDI in labour-intensive industries like textiles but such data do not exist for both countries. This is the reason for looking at only the broad categories- manufacturing and non-manufacturing, but even these categories are not completely problem-free. The U.S. data do not have a category for non-manufacturing. I create this category by adding up all other industries other than non-manufacturing. The problem arises when the U.S. data do not report investment in certain sectors in order to conceal the individual company data for confidentiality reasons[10]. For this reason, sometimes manufacturing and non-manufacturing do not add to the total. Due to all these reasons, the approach of pooling the U.S. and Japanese data is doubtful.

6.1 Variables for the benchmark model

The years covered by this study are 1986 to 2003. All the variables are used as three-year averages to smooth-out the data discrepancies[11]. Hence, the six periods covered are 1986-88, 1989-91, 1992-94, 1995-97, 1998-2000 and 2001-03. Appendix 2 lists the sources used to collect data for these variables. Both OLS and panel data random effects are employed with White's heteroskedasticity-consistent standard errors to run regressions. The benchmark model specification used is:

Log $(1 + $ FDI-USJP$_{ijt}) = \beta_0 + \beta_1$ Log (GDP source$_{it}) + \beta_2$ Log (GDP host$_{jt}) + \beta_3$ Log (Distance$_{ij}) + \beta_4$ Log (Inflation$_{jt}) + \beta_5$ Openness$_{jt} + \beta_6$ Illiteracy$_{jt} + \beta_7$ Polrights$_{jt} + \beta_8$ Log $(1 + $ Strike$_{jt}) + \epsilon_{ijt}$

where subscript i refers to the FDI source country, j refers to the FDI host country, t refers to the time period, β_0 is the intercept and ϵ is the error term. The explanation of the variables used is as follows:

Log $(1 + $ FDI-USJP): This dependent variable represents the natural log of FDI flows from the source country (US or Japan) to the host country. 1 is added to the amount of FDI in order to preserve the zero values, which would otherwise get eliminated when the log of zero is taken. As already discussed, the US FDI data can sometimes be negative and these observations get eliminated when logs are used for negative values.

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[10] Sometimes, data are omitted for major categories as well. For example, the figure for total manufacturing in China for the year 1986 is not disclosed.
[11] In order to increase the number of observations, I use three-year averages instead of four-year averages used by Daude et al.

Three categories of FDI are looked at (total, manufacturing and non-manufacturing) in three different equations. The Japanese FDI data were converted to US dollars using average annual exchange rate for Japanese yen per US dollar[12]. Then, both US and Japanese data were converted into constant prices of the base year 2000, using the US GDP deflator[13].

Log (GDP source): GDP of the source country is represented by constant US dollars (base year- 2000) and is included to capture the source country characteristics. The expected sign is positive, as the big economies tend to invest abroad more compared to the small economies.

Log (GDP host): GDP of the host country is represented by constant US dollars (base year- 2000) and is included to capture the market size of the host economy. The expected sign is positive as investors tend to go for countries with big markets. However, this can also depend on the type of FDI. For example, market size can be more important for HFDI compared to VFDI.

Log (Distance): Distance is measured in miles as the great circle distance between Chicago or Tokyo to the host country capital. Short distance can be of more importance to vertical manufacturing FDI to save on transport costs.

Log (Inflation): Average inflation rate in the host country is included to look at the overall economic and investment climate. High inflation rates can mean high levels of uncertainties and can have a negative impact on FDI.

Openness: This is measured as the sum of exports and imports of goods and services as a share of GDP. A more open country may experience more FDI in the export-oriented manufacturing sector to facilitate imports and exports of raw and finished products.

Illiteracy: This variable captures the level of skilled or unskilled labour force available in the host country and is measured as the percentage of illiterate people of ages 15 and above out of total. Illiteracy rates are constructed

Polrights: This variable is a Political Rights index constructed annually by Freedom

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[12] Exchange rates were obtained from the on-line version of International Financial Statistics (IFS) database released by the International Monetary Fund (IMF) and the series code used was 158..RF.ZF.

[13] Data for GDP deflators were obtained from the on-line version of World Development Indicators (2005) released annually by the World Bank.

House and captures the political environment of the host country. This index is based on a scale of 1 to 7, with 1 representing the highest degree of political rights available in the country and 7 representing the lowest degree. Inclusion of this variable can be questioned on the grounds of subjectivity involved in constructing it.

Log (1 + Strike): This represents the total number of workers involved in strikes and lockouts in a given year. Large number of strikes can create a negative investment climate. Daude et al. warn about the interpretation of this variable as large number of strikes can mean a poor collective bargaining environment where workers are left with no choice but to strike. On the other hand, it also reflects that workers are able to organise in large numbers and they can exercise their rights. However, the inclusion of this variable in the benchmark equation is questionable as it reflects more of a measure of worker rights and it eliminates those countries from the sample where strikes are not allowed (China, in the case of this study).

Wages to value-added: This variable represents wages as a share of value-added for the entire manufacturing sector in a given year. This is used as a single measure to capture labour costs relative to labour productivity[14]. This variable is not shown in the main equation as it is used only for the manufacturing sector since its relevance is very sector-specific.

6.2 Measuring core labour standards

It is not only the multitude of factors affecting investment decisions but also the weak measures of labour standards available, which makes it difficult to examine linkages between the two. Most of the studies measure labour standards through the number of ratifications of ILO conventions signed by a country. The ratification itself does not necessarily mean that the standard is also actually enforced in practice and hence, is not a good measure of capturing the level of labour standard if used on its own. Relative ease of availability of this measure makes it popular. Owing to lack of data availability, direct measures to capture actual enforcement of labour standards are difficult to come across. Kucera (2001) overcomes this problem by constructing his own measures by coding textual sources related to violations of CLS. These measures are of course desirable and better than using mere ratifications or other proxy measures but the process involved in constructing them is time-consuming and lacks consistency related

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[14] See Kucera (2001) for a detailed explanation of why this measure is preferred over others to control labour costs.

to textual sources over time as mentioned by Kucera himself. This study employs both ratifications and proxy measures used by Daude et al. to capture the enforcement of labour standards. These measures are to the benchmark model and are explained below.

Child Labour: The incidence of child labour is captured through the labour force participation rates of 10 to 14 years old. The problem with this variable is that these figures are based on ILO estimates and projections from country surveys and their level of accuracy is not uniform across countries. Many counties where minimum age for recording economic activity is set at above 14 omit this category altogether (Mehran, 2001). Another problem related to the use of this variable is that it does not take into account child labourers below the age of ten.

Freedom of association and collective bargaining (FACB): There is no direct measure available over time to quantify the enforcement of this standard. Though unionization rates can capture this right partially but such data are not available in time series for many countries. A broader indicator, reflecting the general situation of civil liberties in a country, is used. This measure is civil liberties index, constructed annually by Freedom House in a similar way as the political rights index described earlier. It is based on a scale of 1 to 7, with 1 representing the strongest civil liberties and 7 representing the weakest. This measure does not directly capture the FACB rights but they are considered while constructing this index. Issues of whether formation of trade unions are permitted and if they have collective bargaining rights are considered while constructing this index.

Gender inequality: This is captured by looking at the gaps of illiteracy rates between males and females. The female-to-male illiteracy ratio for adults aged 15 and above is constructed. Differences in male-female earnings are a better way to capture inequality but due to limited availability of these data, differentials in their education are considered. The working assumption for this variable is that the gaps in education will also persist in the job market, that is, "labor market and pre-labor market discrimination would occur in roughly similar proportions" (Daude et al., 2001)

Ratification index: This index is constructed as a percentage of core conventions ratified by a country in a given year[15]. I add this measure in the benchmark model separately without including the three variables mentioned above. Though Daude et al

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[15] Total number of fundamental conventions considered was seven till the year 1999, when the eighth convention, no. 182 was introduced.

do not consider this *de jure* measure in their study, I look at it if it has any significance in the sample countries I use.

6.3 Model results

Results from this model are reported in appendix 3. Table A3-1 shows results from the benchmark model for six equations- two each for total, manufacturing and non-manufacturing US and Japanese FDI using OLS and random effects. China and Hong Kong drop out of the sample as strike data for China and political rights data for Hong Kong do not exist. The model is quite weak as the variables explain only 32 to 48 percent (compared to 59 to 82 for Daude et al.) of the variation in FDI inflows for the sample countries and moreover most of the model estimates are statistically insignificant. However, there are still some interesting differences observed between manufacturing and non-manufacturing FDI. Random effects estimates do not differ from OLS estimates for total and non-manufacturing FDI, perhaps suggesting that there is no or very little cross-sectional variation left after controlling for all the explanatory variables. The source country GDP is either insignificant or negatively significant (especially in manufacturing) in contrary to the expected sign. This could be driven by Japan's greater amount of FDI in spite of being a smaller economy compared to the US. GDP of the host country is significantly positive at the level of 1% and as expected, in most of the specifications confirming that the market size of the host economy is important. Distance is insignificant, except in the case of manufacturing FDI (random effects) where it is negatively associated and significant at a 10% level. More openness is associated with more FDI in manufacturing only and more illiteracy is associated with less FDI in manufacturing sector but both these variables are insignificant in all specifications. Inflation and political rights are significant and positively associated with non-manufacturing FDI only. Number of workers involved in strikes is significant at 5% and negatively associated but only in the case of non-manufacturing FDI. This suggests that investors are not concerned about rising inflation and worse political rights and they do care about strikes in the non-manufacturing sector, however the same cannot be said about the manufacturing sector. Though wages to value-added ratio has a negative sign, it is insignificant. The correlations of these variables in Table A3-4, offer an interesting insight into how these signs of association change when other variables are taken into account in the regression equation. For example, all types of FDI inflows are positively associated with source GDP, host GDP, openness and negatively associated with inflation, strikes and political rights.

Adding CLS measures to the benchmark equation does not improve the model. These results are shown in table A3-2 of appendix 3. The R-square increases by 3 to 9 percent (depending on the specification) but most of the variables remain insignificant. Political rights and strikes become insignificant for non-manufacturing as well. Openness becomes significant and positively associated to the manufacturing FDI only. Measures for FACB rights (civil liberties) and child labour are both statistically insignificant. Measure for gender inequality for FDI in manufacturing is the only significant (at 5% level for OLS) CLS measure. The female to male illiteracy ratio is negatively associated with FDI in manufacturing, implying that more gender inequality is associated with less, not more, FDI in manufacturing. The ratification index is added separately into the benchmark equation (not together with other CLS measures) and results are reported in table A3-3 of appendix 3. It does not change the benchmark model results much except that the wages to value-added ratio becomes significant at 10% level with a negative sign for FDI in manufacturing (random effects). The only significant estimate for the ratification index is for the manufacturing FDI (random effects) hinting towards more ratifications being related to less FDI. The problem with adding this type of composite index is that the effects on ratifications related to individual labour standards measures cannot be isolated.

Since the predictive power of the model is weak, adding CLS measures in this specification can be questioned. Brown (2000) points out that since labour standards are only one of several determinants of FDI, entering them as a dependent variable without properly controlling for other key variables can lead to biased estimates. The weakness of the model can be explained due to several reasons. First of all, the determinants of FDI used in this model do not explain the variation in FDI inflows among the sample countries as there could be some other more important variables (for example, agglomeration effects) which are omitted and are specific to only these countries. In other words, there could be the specificity of the sample countries which produces different results from this model as compared to when used by Daude et al. Also, the sample size for this study is much smaller compared to theirs, indicating that a wider and diverse range of countries can get better results for this specification. This study offers a very basic and preliminary analysis of a model already used to test the linkages between FDI and CLS. The results of this model should not be taken at face value and more sensitivity analysis is required before reaching any definitive conclusion.

Given that these countries had relatively weak enforcement of some of the CLS and high inflows of FDI, an interesting future research topic would be to look at a different

model specification for these countries. Also, a better way to study these countries would be to look at them in the context of a broader set of countries. If one has to generalize the effects of CLS on inflows of FDI, most of the countries can be lumped into two broad groups. Group A contains most of the developed countries. Since most of the FDI is exchanged within developed countries, these countries show big amounts of FDI inflows. This group also happens to be relatively rich and can afford to have better labour standards. Group B contains most of the developing countries with relatively small amounts of FDI and weak enforcement of labour standards. If a regression is run between all countries to study the effects of CLS on inflows of FDI and if the factors explaining the differences between these two groups are not controlled properly, it is likely that the results observed would be positive because of the influence of these two big groups. Apart from these two big groups, there is also a small group C of countries with relatively weak enforcement of labour standards and fair amounts of FDI inflows. These are mostly East Asian countries used for this study. When this small group is also included in a set of regressions for all countries, it is quite likely that their effect disappears as outliers due to the influence of the other two big groups and the net result remains positive. That is why it is not only important to study group C in a broader context but also to isolate their effects from the general regression, for example through dummy variables. By including as many countries as possible in the sample and then controlling for different regions, one can also study the different effects of manufacturing and non-manufacturing FDI in a more conclusive way. This can also allow for studying the differences in patterns followed by the Japanese and US investors in a better way. One can also come up with a more meaningful breakdown of FDI, rather than just looking broadly at manufacturing and non-manufacturing. For instance, manufacturing can be further broken down into FDI in labour-intensive and capital-intensive industries.

7. Conclusions

This study contributes to the evolving body of literature examining the effects of CLS on FDI. I investigate whether the relatively weak CLS in East Asia played any role in attracting FDI through regression analysis. I use the same model specification and methodology as used by Daude et al. for Latin American and Caribbean countries. The preliminary analysis shows that this model specification is not applicable to the sample countries in East Asia. The explanatory variables used in the model fail to explain much of variation in FDI inflows among the sample countries hinting towards other more

important factors that are not accounted for in this model. Some ideas are suggested to for future research to study these countries in a more conclusive way.

Though weak labour standards may not have been completely absent from investors' minds while deciding about FDI location in East Asia, there were other more important factors affecting their decision. Important reasons for the region's success in attracting FDI were factors like maintaining competitiveness through superior technology, high levels of human capital, skilled labour force, agglomeration effects, dynamic growth and the role played by the state in strategically allocating FDI in the right sectors. While the enforcement of CLS may increase labour costs and may have negative effects on FDI in certain industries but in the long run these negative effects can be offset by the positive effects gained through human capital development and stable environment if CLS are enforced. The deliberate lax enforcement of CLS might seem an easy option for developing countries to attract investors but this strategy may result in some short-term benefits restricted to low-tech, labour-intensive industries. In the long-run, this strategy may harm the human capital development of LDCs and restrict their technological upgrade.

It is generally well-accepted that labour standards and workers' conditions improve by themselves through economic growth and FDI brings this growth but these improvements cannot be taken for granted. In the absence of enforcement of standards, benefits coming from economic growth may remain restricted to only a small section of privileged workers, failing to improve conditions of majority of common workers. Lax enforcement of standards can leave workers vulnerable to exploitation from the ever growing powers of MNCs. With the increasing globalization and multinational operations, the need to have some global and basic labour standards in order to protect workers becomes more important than ever. Complying with these basic and minimum of labour standards, developing countries will not only improve conditions of their workers but will also gain legitimacy against the protectionist concerns (under the guise of labour standards) raised by the North. Complying with CLS does not necessarily hinder competitiveness of developing countries. Their search for FDI and improvement in labour standards can be pursued hand in hand.

8. References

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9. Appendices, Graphs and Tables

Appendix 1: Comparison of US and Japanese FDI in sample countries

Source for US FDI data- Bureau of Economic Analysis website:

http://www.bea.doc.gov/bea/di/di1usdbal.htm

Source for Japanese FDI data- Ministry of Finance website:

http://www.mof.go.jp/english/e1c008.htm

US and Japanese FDI in China
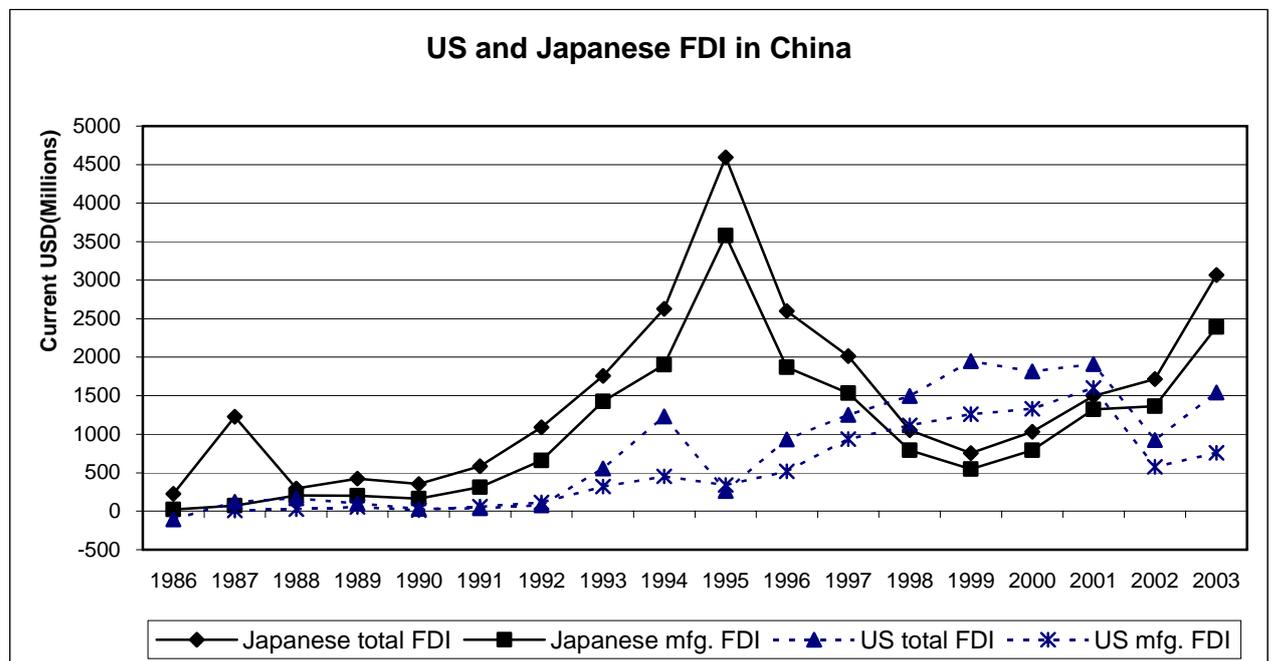
US and Japanese FDI in Hong Kong, China
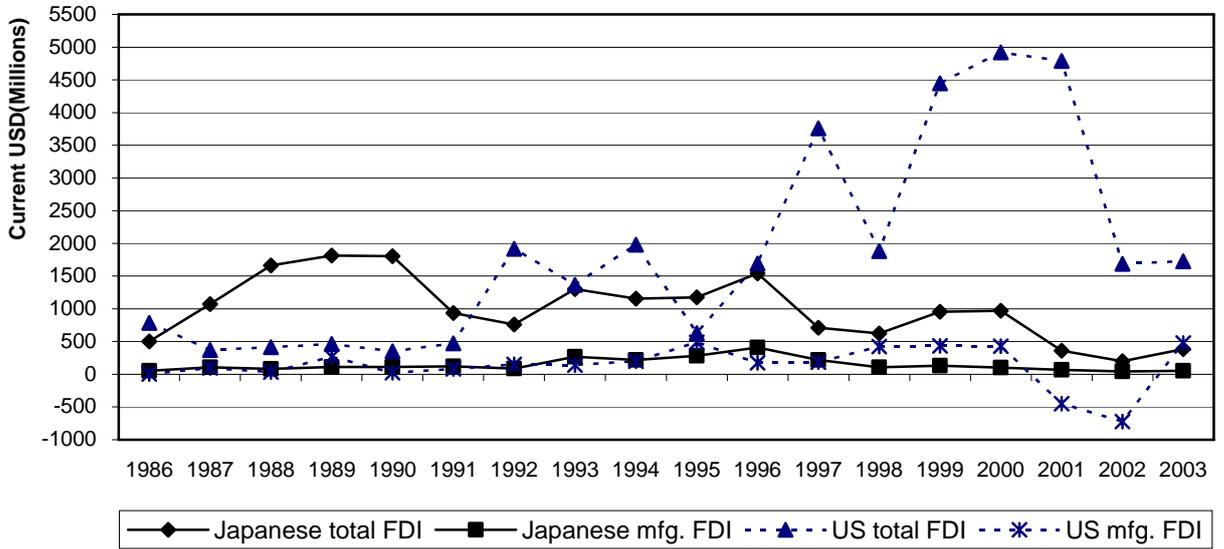
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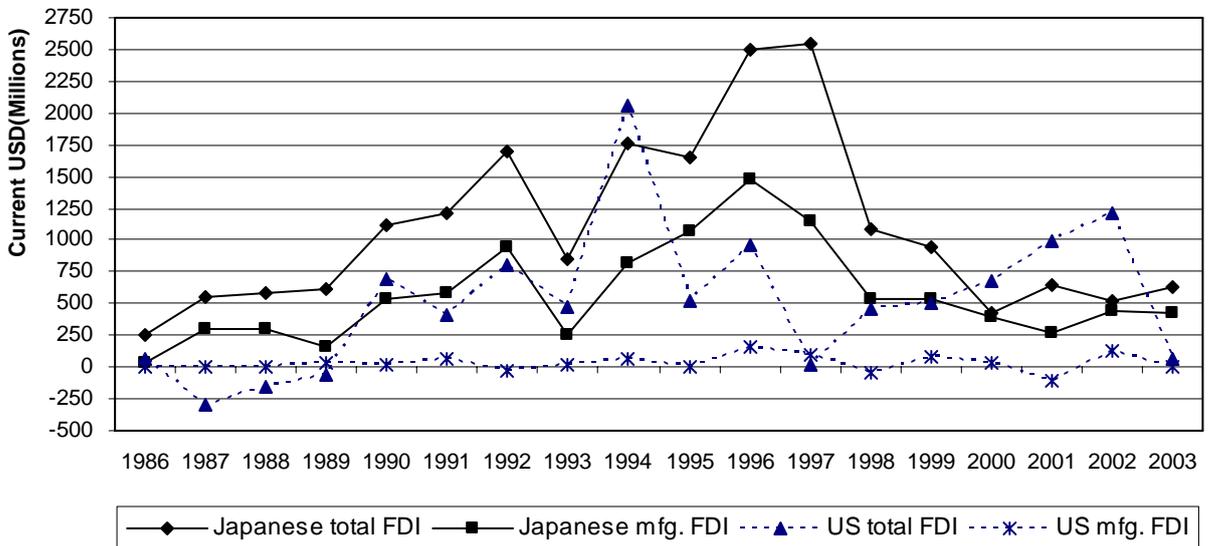
US and Japanese FDI in Korea, Rep.
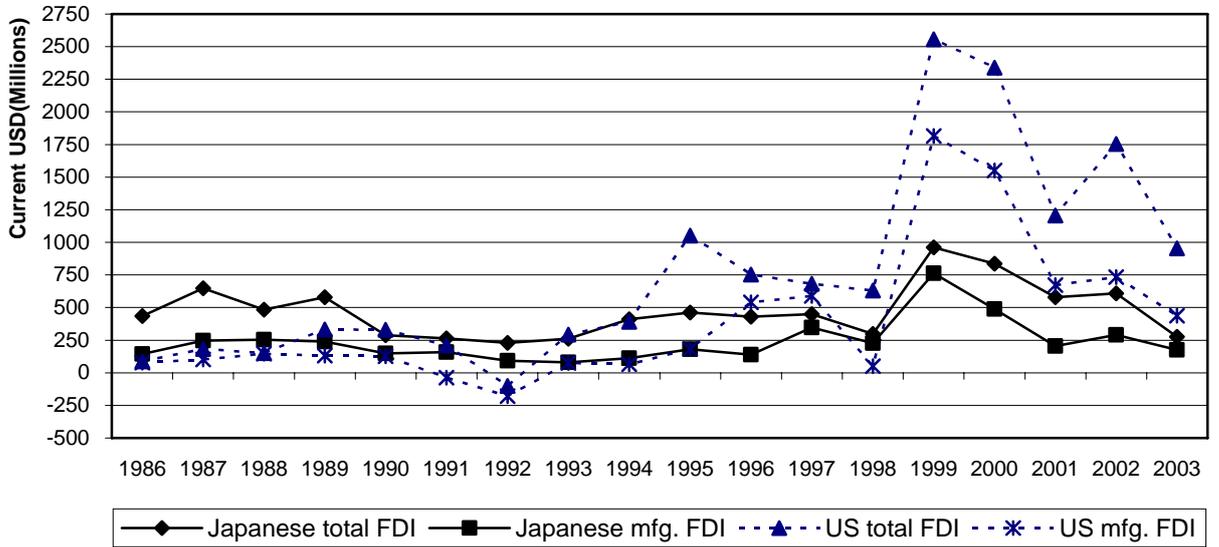
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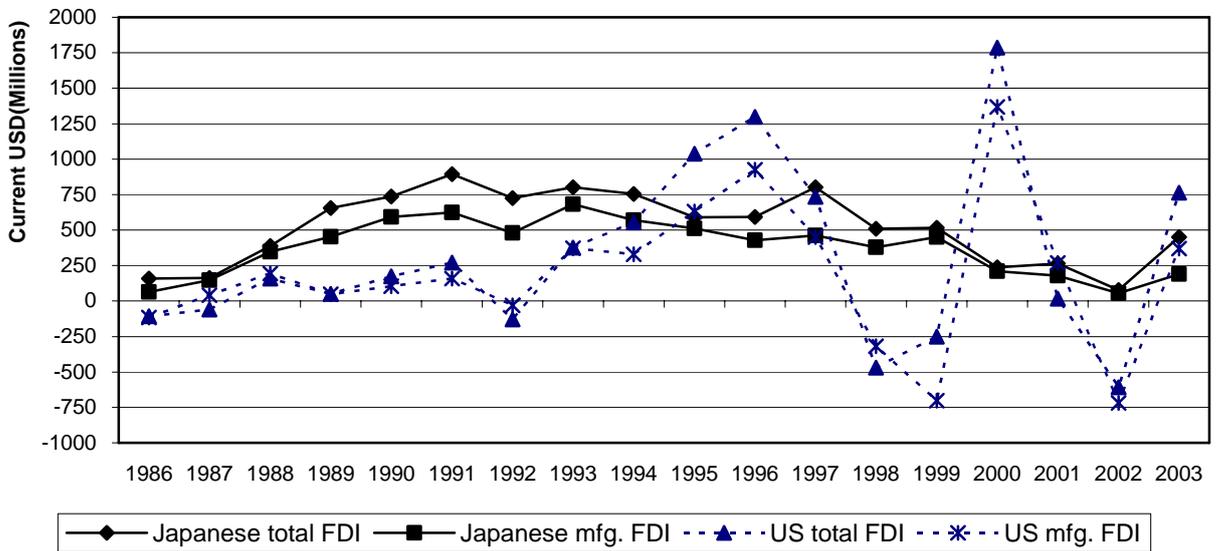
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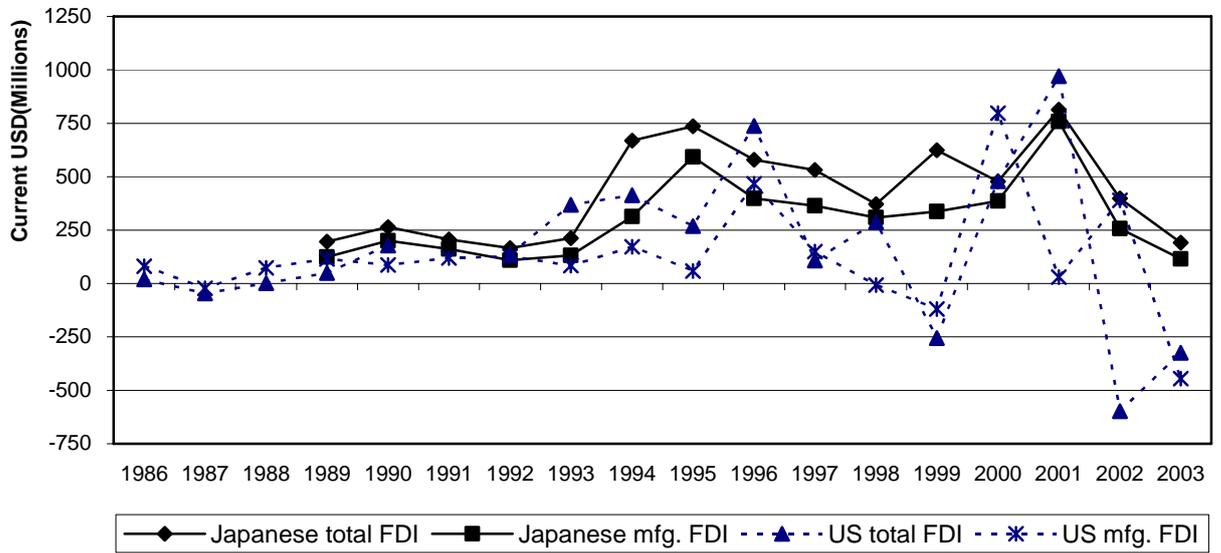
US and Japanese FDI in Singapore

US and Japanese FDI in Thailand
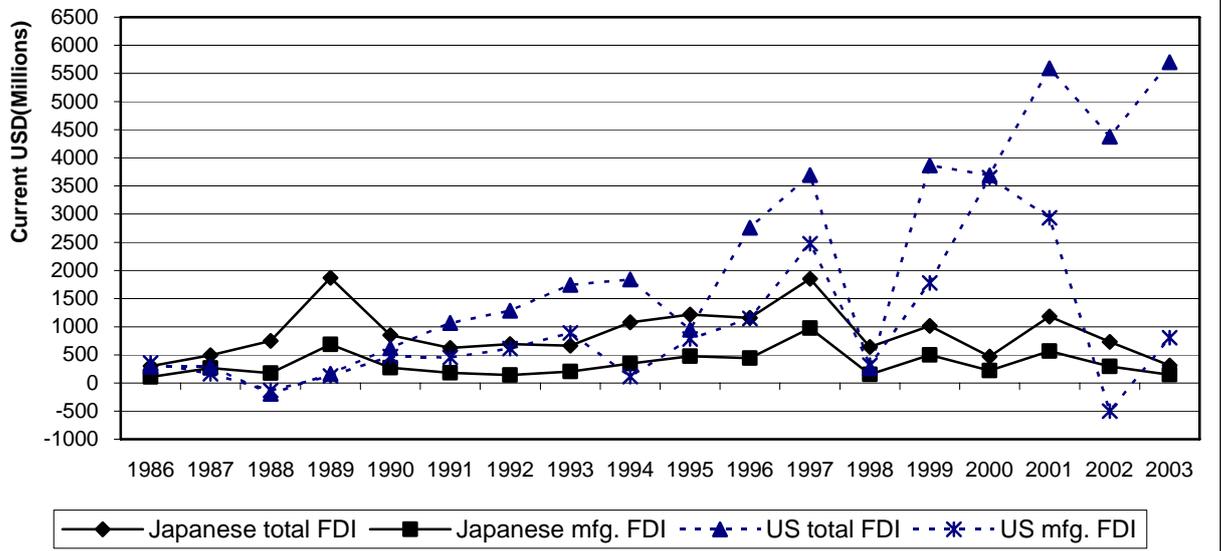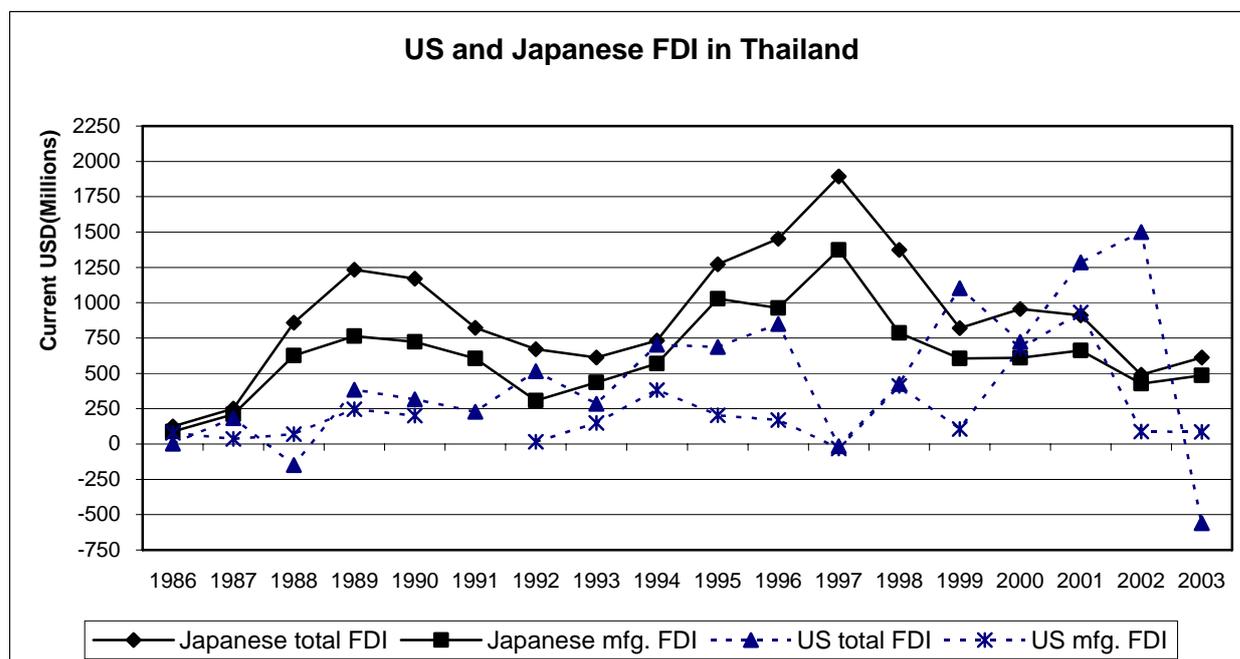
Appendix 2: Data sources

Literacy data: This taken from *Statistical Indicators for Asia and the Pacific* 2004 Compendium, Volume XXXIV and *World Development Indicators* CD-ROM, 2004.

Distance: This is calculated as a great circle distance by taking geographic coordinates of the cities involved from the website- http://www.timeanddate.com/worldclock/

Wages to value-added ratio: This ratio is calculated from the 'Total Manufacturing' category from UNIDO *Industrial Statistics Database* CD-ROM (3-digit ISIC, Revision 2), 2003.

Civil Liberties and Political Rights indices: These rankings are taken from the Freedom House website- http://www.freedomhouse.org

Strike: Data for 'Number of workers involved in strike' are taken from Table 9B of yearly data form the ILO labour statistics website- http://laborsta.ilo.org.

Ratification index: This is constructed by using information from the ILO website- http://www.ilo.org/ilolex/english/docs/declworld.htm

All other data: *World Development Indicators* on-line version, 2005 is used for all other data.

Appendix 3: Results of the model

Table A3-1: Results of the Benchmark model

Dependent variable (3 equations)- US and Japanese FDI for all, manufacturing and non-manufacturing industries

	Total FDI		Manufacturing FDI		Non-manufacturing FDI	
	OLS	Random Effects	OLS	Random Effects	OLS	Random Effects
Constant	**42.313** *	**42.313** *	**66.179** **	**-50.082**	**12.434**	**12.434**
	1.833	1.833	2.416	-1.354	0.700	0.700
Log (GDP source)	**-1.590**	**-1.590**	**-2.032** *	**2.798**	**-0.422**	**-0.422**
	-1.521	-1.521	-1.766	1.638	-0.556	-0.556
Log (GDP host)	**0.875** ***	**0.875** ***	**0.379**	**-0.039**	**0.736** ***	**0.736** ***
	2.831	2.831	1.164	-0.066	3.909	3.909
Log (Distance between source and	**0.346**	**0.346**	**0.469**	**-1.433** *	**0.220**	**0.220**
	0.820	0.820	1.044	-1.758	0.688	0.688
Log (Inflation)	**0.085**	**0.085**	**-0.198**	**-0.069**	**0.236** **	**0.236** **
	0.504	0.504	-0.902	-0.379	2.124	2.124
Openness	**0.000**	**0.000**	**0.007**	**0.003**	**-0.003**	**-0.003**
	-0.108	-0.108	1.378	0.797	-0.915	-0.915
Adult Illiteracy rates	**0.007**	**0.007**	**-0.080**	**-0.0002**	**0.008**	**0.008**
	0.164	0.164	-1.114	-0.003	0.267	0.267
Political Rights (1= highest, 7= lowest)	**0.130**	**0.130**	**0.053**	**0.168**	**0.187** *	**0.187** *
	0.834	0.834	0.215	1.012	1.771	1.771
Log (no. of workers in strikes + 1)	**-0.140**	**-0.140**	**0.050**	**-0.014**	**-0.222** **	**-0.222** **
	-1.412	-1.412	0.399	-0.174	-2.484	-2.484
Wages to value-added	**-**	**-**	**-4.212**	**-1.950**	**-**	**-**
	-	-	-1.457	-1.159	-	-
Observations	60	60	57	57	55	55
R-squared	0.332	0.332	0.320	0.434	0.479	0.479

Bold numbers are regression coefficient estimates and numbers below are their associated *t-statistics*
*, **, and *** denote significance at the 10, 5, and 1 percent level, respectively.

Table A3-2: Results of the model, including the measures of CLS

Dependent variable (3 equations)- US and Japanese FDI for all, manufacturing and non-manufacturing industries

	Total FDI		Manufacturing FDI		Non-manufacturing FDI	
	OLS	Random Effects	OLS	Random Effects	OLS	Random Effects
Constant	**27.526**	**27.526**	**65.983** **	**-0.736**	**0.287**	**0.287**
	1.227	1.227	2.174	-0.017	0.014	0.014
Log (GDP source)	**-2.075** *	**-2.075** *	**-3.200** **	**0.326**	**0.094**	**0.094**
	-1.819	-1.819	-2.557	0.164	0.104	0.104
Log (GDP host)	**1.916** ***	**1.916** ***	**1.666** ***	**0.636**	**0.615**	**0.615**
	2.778	2.778	3.072	0.891	1.171	1.171
Log (Distance between source and host)	**0.478**	**0.478**	**0.871** *	**-0.519**	**0.010**	**0.010**
	1.122	1.122	1.885	-0.588	0.027	0.027
Log (Inflation)	**0.169**	**0.169**	**-0.266**	**-0.153**	**0.268** **	**0.268** **
	0.857	0.857	-1.050	-0.920	2.365	2.365
Openness	**0.009**	**0.009**	**0.012** **	**0.006**	**0.000**	**0.000**
	1.370	1.370	2.107	0.999	-0.019	-0.019
Adult Illiteracy rates	**0.054**	**0.054**	**-0.040**	**-0.019**	**0.026**	**0.026**
	1.100	1.100	-0.544	-0.316	0.585	0.585
Political Rights (1= highest, 7= lowest)	**-0.130**	**-0.130**	**0.041**	**0.165**	**0.119**	**0.119**
	-0.555	-0.555	0.134	0.841	0.780	0.780
Log (no. of workers in strikes + 1)	**-0.038**	**-0.038**	**0.049**	**-0.007**	**-0.159**	**-0.159**
	-0.319	-0.319	0.383	-0.061	-1.497	-1.497
Wages to value-added	**-**	**-**	**-1.793**	**-1.850**	**-**	**-**
	-	**-**	-0.666	-0.611	**-**	**-**
Civil Liberties	**0.106**	**0.106**	**-0.310**	**-0.212**	**0.065**	**0.065**
	0.475	0.475	-1.232	-1.019	0.341	0.341
Child Labour	**0.056**	**0.056**	**0.024**	**0.010**	**0.195**	**0.195**
	1.539	1.539	0.689	0.150	0.757	0.757
Female to male illiteracy ratio	**-0.414**	**-0.414**	**-0.784** **	**-0.397**	**0.033**	**0.033**
	-1.250	-1.250	-2.318	-0.925	1.146	1.146
Observations	60	60	57	57	55	55
R-squared	0.397	0.397	0.417	0.492	0.500	0.500

Bold numbers are regression coefficient estimates and numbers below are their associated *t-statistics.*
*, **, and *** denote significance at the 10, 5, and 1 percent level, respectively.

Table A3-3: Results of the model, including the ratification index

Dependent variable (3 equations)- US and Japanese FDI for all, manufacturing and non-manufacturing industries

	Total FDI		Manufacturing FDI		Non-manufacturing FDI	
	OLS	Random Effects	OLS	Random Effects	OLS	Random Effects
Constant	**47.761** **	**37.316**	**69.854** **	**-82.834** **	**11.230**	**11.152**
	2.106	1.378	2.507	-2.090	0.584	0.577
Log (GDP source)	**-1.980** *	**-1.600**	**-2.308** *	**4.174** **	**-0.334**	**-0.330**
	-1.802	-1.222	-1.902	2.197	-0.367	-0.360
Log (GDP host)	**1.055** ***	**1.056** **	**0.510**	**-0.155**	**0.695** **	**0.694** **
	2.588	2.295	1.280	-0.256	2.342	2.331
Log (Distance between source and	**0.496**	**0.362**	**0.572**	**-1.897** *	**0.187**	**0.185**
	1.182	0.713	1.239	-1.895	0.492	0.486
Log (Inflation)	**0.102**	**0.103**	**-0.195**	**-0.163**	**0.231** **	**0.229** **
	0.579	0.583	-0.872	-0.903	2.102	2.083
Openness	**0.000**	**0.001**	**0.006**	**0.003**	**-0.003**	**-0.003**
	0.013	0.230	1.281	1.020	-0.920	-0.910
Adult Illiteracy rates	**0.010**	**0.024**	**-0.082**	**0.018**	**0.008**	**0.008**
	0.244	0.532	-1.114	0.213	0.244	0.248
Political Rights (1= highest, 7= lowest)	**0.106**	**0.084**	**0.055**	**0.162**	**0.192** *	**0.191** *
	0.653	0.491	0.224	1.002	1.765	1.761
Log (no. of workers in strikes + 1)	**-0.143**	**-0.117**	**0.038**	**-0.002**	**-0.221** **	**-0.220** **
	-1.476	-1.120	0.285	-0.029	-2.457	-2.440
Wages to value-added	**-**	**-**	**-3.271**	**-3.583** *	**-**	**-**
	-	-	-0.992	-1.936	-	-
Ratification index	**0.005**	**0.004**	**0.005**	**-0.018** *	**-0.001**	**-0.001**
	0.732	0.522	0.676	-1.752	-0.204	-0.208
Observations	60	60	57	57	55	55
R-squared	0.340	0.535	0.325	0.470	0.480	0.480

Bold numbers are regression coefficient estimates and numbers below are their associated *t-statistics*
*, **, and *** denote significance at the 10, 5, and 1 percent level, respectively.

Table A3-4: Correlation matrix of all the variables used

	Host country GDP	Source country GDP	Distance between source and host	Inflation	Openness	Illiteracy rates	Political Rights (1=best, 7= worst)	No. of workers in strikes	Total FDI	Mfg. FDI	Non-mfg. FDI	Ratification index	Wages to value added	Civil Liberties (1=best, 7= worst)	Child Labour	Female to male illiteracy ratio
Host country GDP	1.00															
Source country GDP	0.03	1.00														
Distance between source and host	0.01	-0.55	1.00													
Inflation	-0.18	-0.24	-0.02	1.00												
Openness	0.72	0.11	0.13	-0.23	1.00											
Illiteracy rates	-0.30	-0.19	0.22	0.03	0.14	1.00										
Political Rights (1=best, 7= worst)	0.00	-0.11	0.19	0.30	0.30	0.72	1.00									
No. of workers in strikes	-0.09	-0.25	-0.18	0.41	-0.45	-0.23	-0.09	1.00								
Total FDI	0.47	0.22	0.07	-0.20	0.39	0.00	0.33	-0.09	1.00							
Mfg. FDI	0.35	0.28	-0.10	-0.24	0.31	-0.03	0.20	-0.13	0.79	1.00						
Non-mfg. FDI	0.46	0.12	0.06	-0.04	0.37	0.12	0.46	-0.002	0.78	0.59	1.00					
Ratification index	-0.40	0.38	0.10	0.35	-0.13	0.14	-0.03	-0.40	-0.14	-0.16	-0.21	1.00				
Wages to value added	0.61	-0.29	0.06	-0.22	0.38	-0.23	-0.15	-0.03	0.08	0.00	-0.03	-0.41	1.00			
Civil Liberties (1=best, 7= worst)	-0.10	-0.16	0.17	0.41	0.33	0.71	0.86	-0.19	0.23	0.15	0.34	0.01	-0.22	1.00		
Child Labour	-0.68	-0.06	0.06	0.31	-0.48	0.14	0.11	-0.21	-0.09	-0.02	-0.09	0.24	-0.53	0.21	1.00	
Female to male illiteracy ratio	0.63	-0.07	-0.17	-0.22	0.15	-0.41	-0.15	0.43	0.22	0.15	0.31	-0.71	0.34	-0.30	-0.54	1.00

Table 1: Types of labour standards

Type	Examples
I. Basic rights	Right against use of child labour
	Right against involuntary servitude
	Right against physical coercion
II. Survival rights	Right to a living wage
	Right to accident compensation
	Right to a limited work week
III. Security rights	Right against arbitrary dismissal
	Right to retirement compensation
	Right to survivors' compensation
IV. Civic rights	Right to free association
	Right to collective representation
	Right to free expression of grievances

Source: Portes (1994)

Table 2: Ratification of Core Labor Standards Conventions

	Freedom of association and collective bargaining		Elimination of forced and compulsory labour		Elimination of discrimination in respect of employment and occupation		Abolition of child labour	
Country	Conv. 87	Conv. 98	Conv. 29	Conv. 105	Conv. 100	Conv. 111	Conv. 138	Conv. 182
China					02:11:1990		28:04:1999	08:08:2002
Hong Kong, China	15:10:1963	06:09:1975	06:03:1931	25:11:1959			28:04:1999	08:08:2002
Indonesia	09:06:1998	15:07:1957	12:06:1950	07:06:1999	11:08:1958	07:06:1999	07:06:1999	28:03:2000
Korea, South					08:12:1997	04:12:1998	28:01:1999	29:03:2001
Malaysia		05:06:1961	11:11:1957		09:09:1997		09:09:1997	10:11:2000
Philippines	29:12:1953	29:12:1953	15:07:2005	17:11:1960	29:12:1953	17:11:1960	04:06:1998	28:11:2000
Singapore		25:10:1965	25:10:1965		30:05:2002			14:06:2001
Thailand			26:02:1969	02:12:1969	08:02:1999		11:05:2004	16:02:2001

Source: ILO website- http://www.ilo.org/ilolex/english/docs/declworld.htm

*Both Malaysia and Singapore ratified but later denounced the convention no. 105 due to problems related to compulsory prison labour (ILO, 2001).

Convention names:

Convention no. 87: Freedom of Association and Protection of the Right to Organise Convention, 1948

Convention no. 98: Right to Organise and Collective Bargaining Convention, 1949

Convention no. 29: Forced Labour Convention, 1930

Convention no. 105: Abolition of Forced Labour Convention, 1957

Convention no. 100: Equal Remuneration Convention, 1951

Convention no. 111: Discrimination (Employment and Occupation) Convention, 1958

Convention no. 138: Minimum Age Convention, 1973

Convention no. 182: Worst Forms of Child Labour Convention, 1999

Table 3: Labour force participation rates of ten to fourteen year olds

Country	1960	1965	1970	1975	1980	1985	1990	1995	2000	2003
China	43.17	41.10	39.03	34.76	30.48	22.86	15.24	11.55	7.86	5.50
Hong Kong, China	7.44	6.96	6.48	6.23	5.97	2.99	0.00	0.00	0.00	0.00
Indonesia	22.11	20.38	18.64	16.09	13.53	12.42	11.30	9.56	7.82	6.77
Korea, Rep.	14.41	11.89	9.37	4.87	0.36	0.18	0.00	0.00	0.00	0.00
Malaysia	10.12	9.25	8.38	8.18	7.97	5.98	3.98	3.16	2.33	1.63
Philippines	21.39	19.53	17.67	15.92	14.17	12.42	10.66	8.05	5.44	3.81
Singapore	5.58	4.51	3.44	2.58	1.71	0.86	0.00	0.00	0.00	0.00
Thailand	35.19	32.71	30.22	27.73	25.24	22.74	20.24	16.23	12.22	10.04
Vietnam	36.22	31.24	26.26	24.01	21.76	17.40	13.04	9.13	5.22	3.65

Source: World Development Indicators (2005)- on-line version

Table 4: FDI location criteria

FDI Location Criteria	Score
1. Growth of market	4.2
2. Size of market	4.1
3. Profit perspectives	4
4. Political and social stability	3.3
5. Quality of labour	3
6. Legal and regulatory environment	3
7. Quality of infrastructure	2.9
8. Manufacturing and services environm	2.9
9. Cost of labour	2.4
10. Access to high technologies	2.3
11. Fear of protectionism	2.2
12. Access to financial resources	2
13. Access to raw materials	2

Source: Hatem (1997)

Table 5: Industrial breakdown available from U.S. and Japanese FDI data.

Industrial breakdown of US FDI data		Industrial breakdown of Japanese FDI data
	Format changed to the following since 1999	Food
Food and kindred products	Food	Textile
Chemicals and allied products	Chemicals	Lumber&Pulp
Primary and fabricated metals	Primary and fabricated metals	Chemical
Industrial machinery and equipment	Machinery	Metal
Electronic and other electric	Computer and electronic products	Machinery
Transportation equipment	Electrical equipment, appliances, and components	Electrical
Other manufacturing	Transportation equipment	Transport
Manufacturing Total	Manufacturing Total	others
Petroleum	Mining	Manufacturing Total
Wholesale trade	Utilities	Farming&Forestry
Banking	Wholesale trade	Fishery
Finance, insurance and real estate	Information	Mining
Services	Depository institutions	Construction
Other industries	Finance (except depository institutions) and insurance	Trade
All industries (Total)	Professional, scientific, and technical services	Finance&Insurance
	Other industries	Service
	All industries (Total)	Transportation
		Real Estate
		others
		Non-Manufacturing Total
		Branches
		TOTAL

Source for US FDI data- Bureau of Economic Analysis website:

http://www.bea.doc.gov/bea/di/di1usdbal.htm

Source for Japanese FDI data- Ministry of Finance website:

http://www.mof.go.jp/english/e1c008.htm

Graph 1: Percentage of U.S. and Japanese inward FDI out of total FDI inflows from the world in sample countries
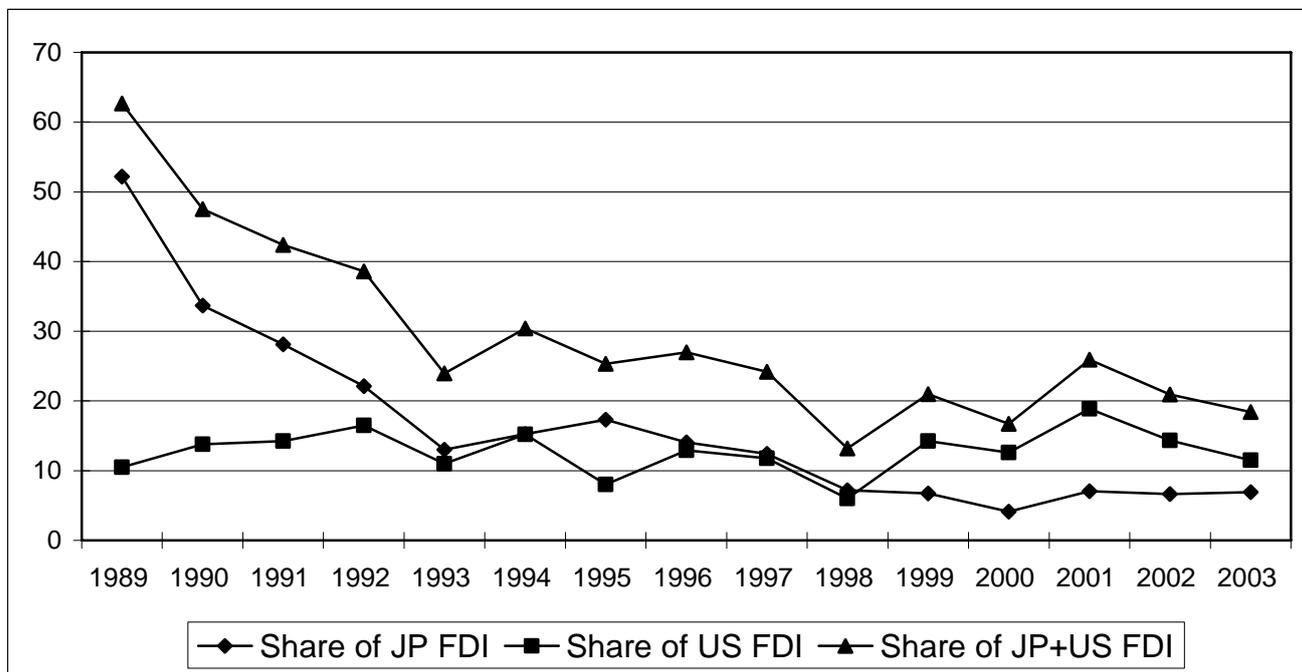

Source for US FDI data- Bureau of Economic Analysis website

Source for Japanese FDI data- Ministry of Finance website

Source for total FDI inflows- World Development Indicators (2005) - on-line version

Graph 2: Percentage of US and Japanese outward FDI in sample countries

Source for US FDI data- Bureau of Economic Analysis website

Source for Japanese FDI data- Ministry of Finance website