China's FDI in ASEAN: Trends and impact on host countries

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Abstract

This paper provides a first qualitative assessment of the impact of China's outward foreign direct investment on local workers and local firms in Cambodia and Vietnam. Based on interviews with 60 Chinese investors, other foreign investors, and domestically-owned firms in the garment, automotive, and consumer electronics industries in the two countries the study assesses employment and income effects, training, spillovers, and linkage effects.

The analyses show that positive effects from Chinese investments are limited, while negative ones could not be observed. Chinese firms have a strong positive impact on the domestic workforce, but little interaction with local firms which reduces the potential gains from spillovers. This contrasts with UNCTAD's expectations but is in line with findings on industrialised country FDI and shows that the impact of any, not just Chinese, investments is constrained by the pre-existing host country conditions. The findings suggest separate policy recommendations for Cambodia and Vietnam in order to increase inflows of Chinese investments and better utilise these investments for the local economy.

1. INTRODUCTION

The public perception of China's outward foreign direct investment (OFDI) has been dominated by two kinds of investments which in recent years received considerable attention: resource-seeking FDI on the African continent (e.g., Alden and Davies, 2006) and the acquisition of well established companies in developed countries by Chinese multinational enterprises (MNEs), such as Lenovo's acquisition of IBM's PC section in 2005 (e.g., Deng, 2008). This focus has hidden the fact that a large share of Chinese OFDI remains within Asia and in Southeast Asia in particular. It has been suggested that an Association of Southeast Asian Nations (ASEAN)-China Free Trade Agreement (ACFTA) will bring a fourth wave of FDI for Southeast Asia (Wong and Chan, 2003). Despite the focus of China's OFDI on its 'home region' (Rugman and Li, 2007), there is little understanding about the nature and distribution of those investments. We intend to close this first gap by characterising China's investments in the region for the time period 2003-08 to provide a baseline and enable comparisons with other regional studies of China's OFDI. The latter point is of significance as Buckley et al. (2007) and Morck et al. (2008) have indicated that the characteristics of China's intraregional OFDI can be expected to differ from China's OFDI into other parts of the world in terms of risk-taking and local involvement with Overseas Chinese.

Chinese OFDI stocks are still comparably low in relation to both worldwide FDI stocks (0.9%) and China's GDP (3.4% in 2008`; UNCTAD, 2010a). Nevertheless, China's OFDI is rising quickly and has remained stable during the global economic crisis in 2008-09 with non-financial OFDI reaching USD\$ 40bn and US\$ 43bn (MOFCOM, 2010), respectively, while global FDI flows contracted by 39 per cent from 2008 to 2009 (UNCTAD, 2010b). As a consequence of its growth, for a number of less developed countries in Southeast Asia China's OFDI has become very important. In Cambodia, for example, China ranked as No. 1

investor in 2009, and Chinese FDI is assumed to be similarly important in Laos and Myanmar (Frost, 2005). Despite the importance of Chinese OFDI for these, exemplary, ASEAN member states, rigorous empirical evidence on host country developmental effects of Chinese OFDI does to our knowledge not exist to date. A considerable body of literature has assessed host country effects from FDI in developing countries, often without differentiating between source countries effects (e.g., Ernst and Kim, 2002; Mirza et al., 2004; Jenkins, 2006), or, if source countries are accounted for, mostly focussing on industrialised source countries (e.g., Fortanier, 2007). Lall (1983) and UNCTAD (2006), however, argue that the effects from developing countries' OFDI are likely to have greater employment-generating potential and creating larger indirect effects. Further, studies that combine the theory on FDI effects with MNEs from developing economies are scarce. We attempt to address this second gap in using primary data from Cambodia and Vietnam to deliver a first assessment of the direct and indirect effects of Chinese outward investment in these economies. In the light of increasing FDI flows between developing countries it will be beneficial to have more empirical evidence to facilitate our understanding of host country effects of this type of FDI. This will inform theorising on the development effects of interdeveloping countries FDI as well as policy-making.

The remainder of this paper is structured as follows. The next section gives an overview about trends in Chinese OFDI with a focus on the ASEAN region. This is followed by a summary of existing literature on host country effects of FDI. Section four explains the methodology applied, while section five is concerned with the development effects of Chinese OFDI in Cambodia and Vietnam. The last section concludes and suggests first policy recommendations.

2. TRENDS IN CHINA'S OFDI TO SOUTHEAST ASIA

In the early 1990s, when outward investment from China started to expand following domestic policy liberalisations (Buckley *et al.*, 2007; Luo *et al.*, 2010), the major recipient countries (by value) were industrialised economies, such as Australia, the United States, and Canada. While only one third of OFDI volume went to developing countries, the same country group attracted almost two thirds of Chinese OFDI projects. These proportions indicate that FDI projects in developing countries were of smaller scale in comparison to those in developed countries. By then, the ASEAN member states received around five per cent of China's outbound investment (UNCTAD, 2010a). The share of developing countries rose over time and by 2008 developing countries accounted for 60 per cent of China's OFDI volume; indicating a more even spread of investment sizes. ASEAN's share rose to 17 per cent by 2008 (see Table 1).

The large share ASEAN member states receive may have been caused by the regional integration which is fostered by ASEAN and its policies. Wong and Chan (2003) reasoned that the ASEAN-China FTA will stimulate inflows of FDI from China to ASEAN and predicted that "[i]n the near future, China could well constitute the fourth wave of FDI for Southeast Asia, following the first three waves associated with the West, Japan, and the four Asian NIEs". However, a positive influence of the institutionalised ASEAN integration process on OFDI from China to ASEAN per se cannot be supported on the basis of the official data (Kubny *et al.*, 2008). This is because integration agreements have not yet fully been implemented and investors view the prospects of the process sceptical. Although the 'fourth wave' has not materialised yet, Chinese investments have triggered a change in mindsets regarding regionalization (Frost, 2005). While China was mainly seen as an economic threat, the opportunities arising from China as an outward investor are increasingly

acknowledged and appreciated by its neighbours to the extent that ASEAN countries increasingly try to attract Chinese investments (Chia and Sussangkarn, 2006).

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--------------------------------------------|-----------|-----------|-----------|-----------|------------|------------|
| Total world | 33,222.22 | 44,777.26 | 57,205.62 | 75,025.55 | 117,910.50 | 183,970.71 |
| Total world excl. BVI, CI, HK ⁱ | 4,366.64 | 6,635.08 | 9,779.37 | 13,796.05 | 25,691.96 | 37,320.65 |
| Singapore | 164.83 | 233.09 | 325.48 | 468.01 | 1,443.93 | 3,334.77 |
| Indonesia | 54.26 | 121.75 | 140.93 | 225.51 | 679.48 | 543.33 |
| Vietnam | 28.73 | 160.32 | 229.18 | 253.63 | 396.99 | 521.73 |
| Myanmar | 10.22 | 20.18 | 23.59 | 163.12 | 261.77 | 499.71 |
| Thailand | 150.77 | 181.88 | 219.18 | 232.67 | 378.62 | 437.16 |
| Cambodia | 59.49 | 89.89 | 76.84 | 103.66 | 168.11 | 390.66 |
| Malaysia | 100.66 | 123.24 | 186.83 | 196.96 | 274.63 | 361.20 |
| Lao People's Democratic Republic | 9.11 | 15.42 | 32.87 | 96.07 | 302.22 | 305.19 |
| Philippines | 8.75 | 9.80 | 19.35 | 21.85 | 43.04 | 86.73 |
| Brunei Darussalam | 0.13 | 0.13 | 1.90 | 1.90 | 4.38 | 6.51 |
| ASEAN | 586.95 | 955.70 | 1,256.15 | 1,763.38 | 3,953.17 | 6,486.99 |
| ASEAN as % of total | 1.77% | 2.13% | 2.20% | 2.35% | 3.35% | 3.53% |
| ASEAN as % of total excl. BVI, CI, HK | 13.44% | 14.40% | 12.84% | 12.78% | 15.39% | 17.38% |
| Japan | 89.31 | 139.49 | 150.70 | 223.98 | 558.27 | 509.69 |
| Korea, Republic of | 235.38 | 561.92 | 882.22 | 949.24 | 1,214.14 | 850.34 |
| ASEAN+3 ⁱⁱ | 911.64 | 1,657.11 | 2,289.07 | 2,936.60 | 5,725.58 | 7,847.02 |
| ASEAN+3 as % of total | 2.74% | 3.70% | 4.00% | 3.91% | 4.86% | 4.27% |
| ASEAN+3 as % of total excl. BVI, CI, HK | 20.88% | 24.97% | 23.41% | 21.29% | 22.29% | 21.03% |

 Table 1. Chinese OFDI stocks in ASEAN and ASEAN+3 (US\$ mn)

Notes: (i) Hong Kong, Cayman Islands and British Virgin Islands together account for nearly 80% of total Chinese OFDI stocks by 2008. They are excluded to provide a more accurate picture of China's OFDI distribution. (ii) ASEAN +3 comprises ASEAN, China, Japan, and South Korea. China is excluded here. Source: UNCTAD (2010a)

From the viewpoint of the ASEAN host countries, the ratio of FDI from China to total inward FDI is small for ASEAN as a whole (below one per cent in 2006). FDI to Singapore and other more advanced ASEAN member countries is dominated by investments from Japan and the US, and Singapore alone accounted for 50 per cent of all FDI inflows to ASEAN in 2006 – which explains the low share of Chinas FDI for ASEAN. For other countries in the region, however, Chinese inflows are substantial. According to unpublished data obtained from the

Cambodia Investment Board, China was the largest investor in Cambodia in 2009. Also for Lao PDR and Myanmar Chinese investments are substantial and accounted for nine and 22 per cent respectively of total inward FDI (UNCTAD, 2010a). China's share may be higher than official home and host country data show as the example of Vietnam illustrates. As large amounts of Vietnamese FDI inflows originate from Hong Kong and the British Virgin Islands, Frost (2005) suspects significant further amounts of Chinese capital to be routed to Vietnam via these and other offshore financial centres. On the other hand, there are also reasons to assume that China's share is overestimated in some host countries. During the field research in Cambodia and Vietnam we found that a number of companies that were identified and registered as mainland Chinese were in fact owned by a parent company from Hong Kong, Macao, or Taiwan. In some cases, these parent companies were established in mainland China and later moved to Hong Kong for reasons like taxes, logistics, or proximity to clients. In other cases, however, companies originated from Hong Kong or Taiwan and were incorrectly registered as mainland Chinese.

Chinese OFDI to ASEAN member countries is attracted by individual country attributes. Resource-rich countries like Cambodia, Indonesia, and Laos have attracted Chinese investments in the primary sector (Pangestu, 2004). Thailand benefits from an FTA with China which has significantly increased FDI, especially to Northern Thailand (Frost, 2005). Singapore catches the attention of Chinese investors due to its hub status in financial services, trade, shipping and logistics. As a consequence, Chinese OFDI in Singapore predominantly goes to the services sector (Chia and Sussangkarn, 2006). Low-wage countries like Cambodia and Vietnam have received substantial Chinese OFDI in labour-intensive manufacturing. These investments are concentrated on the garment sector in Cambodia while spread over a range of industries in the economically more advanced Vietnam. Other factors attracting Chinese OFDI to ASEAN member countries are historical ties, e.g. with Thailand, and conducive policies like the provision of infrastructure for investment.

3. HOST-COUNTRY EFFECTS OF FDI

After presenting the spatial distribution of China's OFDI across ASEAN, we intend to assess its effects on the host economy. Foreign direct investment can have a variety of direct and indirect effects in host countries. We define direct effects as the immediate consequences of an MNE's activity in the host country, which includes employment and income effects. Indirect effects result from the interaction of an MNE or its employees with other enterprises or non-business entities in the host country and comprise spillovers and linkage effects.

3.1 Direct effects

Foreign firms directly affect a host economy through the creation of new jobs (employment effect) and thus the generation of income for their employees (income effect). The income effect is augmented if foreign firms pay higher wages for comparable tasks than domestic firms (Aitken *et al.*, 1996). The extent to which these effects occur depends largely on the type of FDI as well as on host country characteristics, including the educational level of the labour force.

Effects on employment and income depend on the extent to which foreign firms use the local labour force. They are usually most profound for efficiency-seeking Greenfield investment in labour-intensive industries (Jenkins, 2006). This type of FDI commonly exploits international differences in labour costs. Firms in these industries employ mainly low-skilled labour (e.g. in the garment industry) and provide less training than firms in skill-intensive industries like consumer electronics (UNCTAD, 1994; Vind, 2008). In contrast, capital-intensive

investments like the exploration of natural resources tend to create few jobs. In an analysis of the employment generation effect of FDI in Vietnam, Jenkins (2006) finds limited effects and even conjectures that the indirect effect on employment may be negative. This he mainly attributed to the higher capital intensity in foreign firms (cf. IMF, 1999). Moreover, he finds a negative correlation between the degree of foreign ownership and employment in an industry and explains this by the few linkages created by foreign firms and the possibility of crowding out of domestic competitors.

3.2 Indirect effects

Spillover effects are indirect effects of inward FDI and are here defined as the unintended transmission of knowledge and skills from the FDI enterprise to domestic enterprises via demonstration effects and/or worker mobility. As external effects of the FDI enterprise's activity, they are not priced. It is generally assumed that foreign investors produce at a higher level of technology than local firms and therefore can stimulate such effects.

Spillover effects occur through different types of indirect demonstration effects, imitation, and competitive pressure (Wang and Blomström, 1992; Blomström and Kokko, 1998; Glass and Saggi, 1998; Görg and Greenaway, 2003), through mobility of the workforce from MNEs to local firms, which supports the dissemination of advanced managerial practises, know-how, and technology (Fosfuri *et al.*, 2001; Glass and Saggi, 2002), and through unintentional outcomes in linkage relationships with local buyers and suppliers (e.g. Görg and Greenaway, 2003; Hansen and Schaumburg-Müller, 2006; Fortanier, 2007). Spillovers also depend on the difference in the level of technological intensity between MNEs and local firms (Kokko, 1994) and the degree of export-orientation of the FDI (Jenkins, 2006). The larger the technology gap, the less likely are significant spillovers due to a lack of absorptive

capacity (Kokko (1994). This has implications for the desired type of FDI. FDI featuring a *slightly* higher technology level than domestic firms might be more desirable than high-technology FDI which cannot establish relations to the domestic economy. Export-oriented FDI tends to generate more employment and facilitates better access to the global economy via market access/export spillovers. On the other hand, it is often low-skill assembly activity which limits the upgrading of human resources (Giroud and Mirza, 2006). Similarly, foreign firms that operate in isolation with little linkages to domestic enterprises are less likely to generate a lot of spillovers to local firms.

3.3 Linkages

Linkages are "formal and informal collaborative exchanges between legally independent firms, where material and immaterial resources are transferred, and/or practices shared and transmitted" (Hansen and Schaumburg-Müller, 2006:8) that can also include non-business entities, such as universities, research institutes, government institutions, or private stakeholders (UNCTAD, 2001; Mirza *et al.*, 2004). Linkages in the shape of backward, forward, or horizontal linkages act as facilitators for effects, but are not effects in and of themselves.

The establishment of linkages depends on the foreign firms' experience and embeddedness in the host economy (McAleese and McDonald, 1978), the entry mode (UNCTAD, 2000b; Belderbos *et al.*, 2001), the level of technology acquaintance of the local firm and market position of the domestic firm (Altenburg, 2000; Belderbos *et al.*, 2001), and the investment motivation of the MNE. Industries with a production process that can easily be fine-sliced and split up into multiple production stages have a higher potential for linkages than other industries (UNCTAD, 2001). This, however, also depends on the level of development of

supplying industries (Battat *et al.*, 1996; UNCTAD, 2000a; , 2001) and the size of supplying industries, which has been found to be positively correlated with backward linkages (Belderbos *et al.*, 2001). The electronics and automobile industries show heterogeneous depth of linkages depending on the availability of respective supplies. Where local suppliers have not been established or do not meet international standards MNEs either integrate the respective production steps in their intra-firm value chain or use foreign suppliers. Evidence of relatively strong linkages in both industries was found for Southeast Asian economies (e.g., Giroud, 2003), but weak linkages were identified in studies on the electronics industry in Mexico and the automobile sector in South Africa (Barnes and Kaplinsky, 2000; UNCTAD, 2001). In some instances, linkages are weak (e.g., Girma and Gong, 2008) or the local sourcing ratio of foreign firms is below the ratio of domestic firms (McAleese and McDonald, 1978; Görg and Ruane, 1998). In industries such as garment, local sourcing is generally rare (Tavares and Young, 2002).

Regarding the motivation of the investment, market-seeking FDI in developing countries facilitates more linkages than investment for other purposes (Reuber *et al.*, 1973; Belderbos *et al.*, 2001). One reason is that affiliates which produce for the domestic market often have more freedom to choose suppliers than affiliates fulfilling their role in the international production system of their parent company (UNCTAD, 2001). Other factors relate to the size of the affiliate and the role assigned to the foreign affiliate. Small affiliates have stronger linkages than large ones in the Irish electronics industry (Görg and Ruane, 1998); affiliates with greater autonomy have stronger linkages in the electronics and garment industry in ASEAN (Giroud and Mirza, 2006).

The occurrence of these direct and indirect effects and linkages has been extensively examined for FDI from industrialised countries to developing countries. For developing source countries, in contrast, rigorous empirical assessment of the development effects is to date scarce and results are expected to contrast. UNCTAD (2006) assumes, for example, that inter-developing countries FDI is more beneficial for host-country development based on theoretical considerations of the 'technology gap' and greater labour-intensity of this type of investment. But this prediction lacks empirical evidence. In the light of soaring FDI inflows into developing economies from China, sound data on host-country effects is needed. We address this below.

4. METHODOLOGY

This paper is based on field research conducted in Southeast Asia and China between October 2008 and November 2009. The two case study countries Cambodia and Vietnam have been chosen because of the relative importance of Chinese FDI to their economies and the variation in their economic development (see Table 2).

| Criteria and source | Cambodia | Lao PDR | Myanmar | Vietnam | Indonesia | Philippines | Thailand |
|----------------------------------------------------------------------------------------|---------------|---------------|---------------|---------------|---------------------------|---------------------------|---------------------------|
| LDC status (United Nations, 2009) | yes | yes | yes | no | no | no | no |
| Income group (World Bank, 2009) | Low income | Low income | Low income | Low income | Lower middle income | Lower middle income | Lower middle income |
| FDI stock from China in 2006 (million USD, UNCTAD, 2010a) | 103.66 | 96.07 | 163.12 | 253.63 | 225.51 | 21.85 | 232.67 |
| Share of Chinese FDI in total inward FDI in 2006 (UNCTAD, 2010a, mirror data) | 3.51% | 11.22% | 3.26% | 0.76% | 1.18% | 0.13% | 0.34% |
| Institutional links and practicalities | + | - | - | ++ | + | - | + |

 Table 2. Country selection criteria

Note: "Institutional links and practicalities" refers to the authors' access to institutions in the host countries to facilitate the field work

Analyses of the impact of Chinese investments are constrained by the lack of available quality secondary data. We therefore conducted interviews with mainland Chinese (32), other foreign (8), and one local company in Cambodia. In Vietnam, interviews with mainland Chinese (33), other foreign (8), and local companies (4) were conducted (see Tables A1 and A2 in the Appendix). The firm interviews were complemented by interviews with twelve stakeholders (business associations and labour unions) and 53 expert interviews (i.e., representatives from government institutions and ministries, international donors, local researchers, journalists and NGOs) across both countries. Expert interviews were also held in China, Singapore, and Thailand. The coordination and execution of the fieldwork has been facilitated by the Central Institute for Economic Management (CIEM), Hanoi, Dr. Hem Socheth, independent consultant in Phnom Penh, and the Institute of Southeast Asian Studies (ISEAS) in Singapore.

The field research and the analyses of development effects focus on FDI in the consumer electronics, garments, and automotive industries. The unequal distribution of interviews between the three sectors corresponds to the relative importance of the sectors for the given economy; in Cambodia the vast majority of interview data is from the garment industry, while the automotive industry (in particular motorcycles) is dominant in the sample for Vietnam.

5. IMPACT OF CHINA'S FDI ON CAMBODIA AND VIETNAM

This study focuses on the direct effects Chinese OFDI entails for workers as well as its indirect effects on local firms in the garments, automotive, and consumer electronics industries in Cambodia and Vietnam. This covers employment and income effects, training, spillovers and linkage effects.

5.1 Direct effects on local workers

In Cambodia and Vietnam, Chinese manufacturing FDI is concentrated in low-skill, labourintensive manufacturing and tends to be of relatively small scale. Chinese companies in Cambodia on average have 979 employees. The surveyed 27 manufacturing companies employ together 26,439 people, of which 98% are Cambodians. The average employment is lower in Vietnam with 304 employees. The surveyed 33 companies here account for 10,020 jobs with 95% Vietnamese employees (see Tables A1 and A2 in the Appendix). The higher average and total employment in Cambodia is owed to the sectoral distribution of the investments. The majority of Chinese FDI in Cambodia is in the garments industry where large, labour intensive factories are typical. In contrast, the more capital-intensive motorcycle industry is more important in Vietnam. Moreover, the production facilities of one Chinese investor are fragmented into a number of small factories that are specialised in particular components which reduces the number of employees per firm.

Given the efficiency-seeking investment intend, it is no surprise that 100 per cent of the shop floor workers in Cambodia are local. Although this is generally the case in Vietnam as well, two larger Chinese companies have employed a very limited number of Chinese shop floor workers. The situation is different at the more skill-intensive level of the firms. In Cambodia, less than 30 per cent of positions in the top or middle management are occupied by local employees and the most senior management positions are usually occupied by Chinese expatriates. Typical positions allocated to Cambodian employees are lower management positions like human resources manager, accounting manager, shipping manager, and head of administration. Supervisors, who control the performance of workers in the shop floor, are predominantly Chinese. This was found to be caused by the perceived low skills and missing experience of local candidates. Thus, for the garment industry, it is also common for companies from other (Asian) source countries to employ a large share of Chinese supervisors. Employing Chinese supervisors is, however, compromised by miscommunication and cultural differences between the Chinese and Cambodian workforce, which occasionally leads to problems including labour unrest and strikes.

In Vietnam, the relation of local staff to expatriates in the top and middle management and engineers is almost reversed. Almost 63 per cent of positions in this category are covered by Vietnamese. The main reason for this major difference between Chinese firms in Cambodia and Vietnam can be attributed to differences in educational levels between Cambodia and Vietnam. In Vietnam, Chinese companies require less costly training to hire local staff in management positions. For many positions within management, it therefore pays off to employ Vietnamese management staff instead of costly Chinese expatriates.

Wage levels in Chinese companies are not significantly different in the two host countries (around US\$86), but are considerably lower than in the Eastern provinces of China (around US\$300 in the corresponding parent companies), which was one main reason for the majority of respondent companies for investing. The wage level of Chinese companies in Cambodia corresponds to average wages paid in the Cambodian garment industry (US\$86.88) and exceeds the "ideal" monthly minimum wage that, according to Chandarot & Dannet (2009), suffices to cover basic living costs (US\$71.99 or US\$74.85 depending on the scenario) as well as the official minimum wage of US\$50. The actual wage includes an obligatory living allowance, payment for overtime, which is common in the garment industry, and frequently a

bonus depending on performance (e.g., piece rate). In Vietnam, in contrast, 38% of respondents stated that wages in their company are lower than wages paid by firms from other countries in the same industry and province, and seven per cent said their wages are lower than those paid by domestically owned firms. On the other hand, 34 per cent (15 per cent) of respondents stated that their wages are higher than those paid in domestically-owned (other foreign) companies. Apparently, representatives of Chinese companies in Vietnam by the majority see their average wage levels somewhere between wage levels of Vietnamese-owned and other foreign-owned companies.

Training to local employees is mostly very basic in both countries. This is partly rooted in the types of production undertaken by the companies. The garment industry by its nature does not require high skills. Though the motorcycle industry in generally more skill-intensive, those production steps located in Vietnam are mainly assembly activities and accordingly do not necessitate much training. Moreover, worker mobility was very high around 50 per cent per year in the companies surveyed. The worldwide economic crisis in 2008-09 and subsequent dismissals probably biased this figure upwards, but labour turnover still tends to be high in the covered industries. Given a combination of low skill requirements, high worker mobility, and a perfectly elastic supply curve of labour it is rational for a profit-maximising firm to keep expenditure on training low, and this is exactly what we find for Chinese companies in Cambodia and Vietnam.

5.2 Indirect effects on local firms

As outlined above, FDI can entail positive spillovers to local firms via worker mobility and demonstration effects. Linkages between foreign and local firms tend to increase (unintended) spillovers as well as intended linkage effects. The following explains the degree

to which linkages have been built between Chinese-owned and domestically-owned companies in Cambodia and Vietnam, and to which degree preconditions for the occurrence of spillover effects are met.

The average share of local sourcing (i.e. backward linkages) is very low in Cambodia with six per cent, but significantly higher in Vietnam with 40 per cent. In both countries, the type of input goods that are sourced locally are relatively low-technology products, e.g., plastic bags, cartons, hangers, and thread for the garment industry or steel products for the motorcycle industry in Vietnam. 70 per cent of respondents in both countries stated that the limited amount of local content is caused by a lack of domestically-owned suppliers. Moreover, in Cambodia those local companies that supply simple input goods to Chinese companies are mostly owned by Overseas Chinese since entrepreneurship among Khmer people is still very low. In contrast, local suppliers of various input goods exist in Vietnam, but often cannot produce competitively at the required specification. In addition, in the garment industry international buyers have a strong influence on the procurement of materials. They negotiate with the Chinese parent company which in turn sends the materials to the Cambodian or Vietnamese affiliate, so that the affiliate has very limited decisionmaking power in the sourcing of inputs.

As a consequence of the low share of local sourcing (Cambodia) and the low skill-intensity of locally procured inputs (both countries), relations with local companies focus on market transactions, especially in Cambodia. Therefore they do not involve any training or other kinds of support to local companies. Product specifications and quality requirements are passed on to suppliers in a number of cases in the Vietnamese motorcycle and consumer electronics industry. In three cases this also involves visits of Chinese managers or engineers and some technical support in the local company.

Chinese OFDI in Cambodia is concentrated in the garments industry, and thus is exportoriented and efficiency-seeking by nature. The affiliates are dependent on their parent companies in terms of procurement of input goods and capital matters. This type of 'insular' investment entails considerable employment and income effects, but has limited potential for linkages and spillover effects. Accordingly, the findings cannot be attributed to special characteristics of Chinese OFDI.

In Vietnam, Chinese OFDI is mostly oriented towards the local market with the exemption of few export-oriented garment companies. Production activities are often vertically fragmented with the last production step being located to Vietnam in order to avoid high import tariffs and to exploit labour cost differentials in low-skill assembly activities. As expected, Chinese companies in Vietnam are less dependent on their parent company.

6. DISCUSSION AND CONCLUSION

The upsurge of China's OFDI has received considerable attention. Most has been directed towards the targets of Chinese acquisitions, the strategic intent of Chinese MNEs, and patterns of 'neo-colonisation' in Africa with potentially negative impacts for the host economies. Rigour assessment of the impact of Chinese investments is, however, scarce. We intend to address this last shortcoming. We anchor our research in a well established body of theoretical and empirical literature on the effects of FDI on the host economy. This research has mainly been theorised for industrialised country investments and comes to inconclusive results. Building upon that research, UNCTAD (2006) proposed that FDI from developing

economies delivers more positive effects for developing host countries due to lower technology gaps and greater institutional familiarity which lead to investments that are more attuned to the local business environment.

For Chinese investments in the geographically very close nations of Cambodia and Vietnam, we find little evidence for the notion that they would contribute more to their host economies. The investments in Cambodia are mainly in the labour intensive garment industry, which explains the large number of employees per firm. But these average figures do not seem higher than for comparable foreign-invested firms in the region. Further, the average wages paid by Chinese firms correspond to the average wages paid by other foreign firms in Cambodia. The picture is more diverse for Chinese investments in Vietnam. Although the level of employment is significant as well given that investments take place in more capital-intensive industries, the effects on wages are inconclusive. It follows from these observations that Chinese investments can have neutral to positive direct effects on the host economy in terms of employment and wages. Although not subject of our research, negative indirect employment effects via crowding-out of local firms or poaching of qualified staff are very unlikely in the considered industries and host countries.

The other direct effect, training, and the indirect effects considered tend to be very limited for Chinese investments. The low-skilled assembly activities do not require specialised training and upgrading of local employees, and learning-on-the-job through managerial responsibilities is almost bared to Cambodian employees as the majority of senior positions are held by Chinese expatriates. Even though Vietnamese more often hold senior positions, evidence for any systematic training is lacking here as well. Linkages to local firms barely exist. This is not due, however, to a particular self-centred business strategy, but caused by a lack of competitive and reliable suppliers. In such circumstances, Chinese firms rely more extensively on their parent firm's business network. Indeed, the other option to help to build a local supplier network, as has been the case for companies like Nestle in China, is not present among our sample. This could indicate a short-term investment orientation that can sufficiently rely upon its own business network and therefore does not require extensive local linkages.

It follows from this that we find that the effects of China's OFDI on the host economy are similar, and similarly inconclusive, as the effects from industrialised country investments. This gives further support to the conclusions from studies on the determinants and strategies of Chinese MNEs which argued that these are very similar to industrialised country MNEs and therefore common theories apply. With regard to FDI from emerging economies our findings suggest that no significantly different effects or pre-conditions for the existence of effects should be expected than has been found and suggested for industrialised country investments. This has clear implications for policy-making.

Some developing countries in ASEAN, and likely elsewhere, are heavily dependent on Chinese investments to renew their capital stock, create employment, and stimulate competition and productivity. While we cannot find negative consequences from Chinese investments, we also find limited positive effects. It becomes, however, clear that the impact of any, not just Chinese, investments is limited by the pre-existing business environment. Sparse and poorly qualified supplier networks naturally limit the generation of linkages and spillovers as no receivers are present. Human capital improvements can take place but are limited by the absorptive capacity of the employees. These aspects have been discussed before in the context of FDI from industrialised countries. What is new is that FDI from emerging economies, which is expected to be more suitable for exactly the kind of difficult business environments described above and therefore entail better development effects, also does not bring about the anticipated effects. Ironically, its failure to do so is for largely the same reasons as in the case of "traditional" FDI. This indicates that heavy tasks are left to the host countries: Besides identifying the industries in which the national economy has comparative advantages and supporting local entrepreneurship in the same, improving skills and education is a central task. As becomes clear in our research, Chinese firms do not take over this task, but assume activities that suit the environment they find in the host countries.

Given the difficult environment in countries like Cambodia and the fact that improvements in the education level and the business environment will not materialise quickly, Chinese investments nevertheless play a very important role in providing employment and income. One of the few characteristics that differentiate them from "traditional FDI" by industrialised country MNEs is that they do invest on a substantial scale in countries like Cambodia.

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APPENDIX

| Table A1 Overview of | f mainland Chinese f | firms interviewed in | Cambodia |
|----------------------|----------------------|----------------------|----------|
|----------------------|----------------------|----------------------|----------|

| Firm | Position of | Location | Ownership type | Industry | Size | Year |
|------|-----------------------------------------------------|-----------------------|-----------------------------------|---------------|--------|------|
| | Interviewee(s) | | | | | |
| F1 | HR Supervisor | Phnom Penh | 100% foreign- owned investment | Garments | Large | 2004 |
| F2 | Owner and General Manager | Kandal | 100% foreign- owned investment | Garments | Large | 2005 |
| F3 | Shipping Manager | Phnom Penh | 100% foreign- owned investment | Garments | Large | 2007 |
| F4 | Factory Manager; Shipping Manager | Phnom Penh | 100% foreign- owned investment | Garments | Large | 1997 |
| F5 | Finance Manager; Secretary of General Manager | Phnom Penh | Sino-Cambodian Joint venture | Cigarettes | Large | 1993 |
| F6 | General Manager | Kandal | 100% foreign- owned investment | Garments | Large | 2006 |
| F7 | Shipping Manager | Phnom Penh | 100% foreign- owned investment | Garments | Large | 1996 |
| F8 | General Manager | Phnom Penh | Sino-Cambodian Joint venture | Paper | Medium | 1996 |
| F9 | General Manager | Phnom Penh | Sino-Cambodian Joint venture | Garments | Large | 2005 |
| F10 | Vice General Manager | Kandal | 100% foreign- owned investment | Garments | Large | 2005 |
| F11 | Owner | Phnom Penh | 100% foreign- owned investment | Garments | Large | 2007 |
| F12 | Managing Director | Phnom Penh | 100% foreign- owned investment | Garments | Large | 2005 |
| F13 | Owner | Kandal/ Phnom Penh | 100% foreign- owned investment | Garments | Large | 2002 |
| F14 | Administration Supervisor | Phnom Penh | 100% foreign- owned investment | Garments | Large | 2004 |
| F15 | Director | Phnom Penh | 100% foreign- owned investment | Garments | Large | 2002 |
| F16 | Administration Manager | Phnom Penh | 100% foreign- owned investment | Garments | Large | 2000 |
| F17 | General Manager | Phnom Penh | 100% foreign- owned investment | Garments | Large | 2000 |
| F18 | General Manager | Phnom Penh | 100% foreign- owned investment | Garments | Large | 2000 |
| F19 | Broker | Phnom Penh | 100% foreign- owned investment | Motorcycles | Small | 2004 |
| F20 | Broker | Kandal | 100% foreign- owned investment | Picture frame | Medium | 2007 |
| F21 | General Manager | Phnom Penh | 100% foreign- owned investment | Garments | Large | 1994 |
| F22 | Vice General Director | Phnom Penh | 100% foreign- owned investment | Garments | Large | 1998 |

| F23 | Owner | Kandal/ | 100% foreign- | Garments | Medium | 2007 |
|-----|------------------------------------------------|-----------------------|-----------------------------------|----------|--------|------|
| | | Phnom Penh | owned investment | | | |
| F24 | Shipping Manager; Administrative Manager | Phnom Penh | 100% foreign- owned investment | Garments | Large | 2003 |
| F25 | General Manager | Preh Sihanouk | 100% foreign- owned investment | Garments | Large | 2005 |
| F26 | Owner and General Manager | Phnom Penh | 100% foreign- owned investment | Garments | Medium | 2006 |
| F27 | Owner | Kandal/ Phnom Penh | 100% foreign- owned investment | Garments | Large | 2001 |

Notes: 'Year' refers to the year the company was established in the host country. 'Size' refers to the number of employees of the company: Small 10-49; Medium 50-249; Large ≥ 250 .

| Firm | Position of | Location | Ownership type | Industry | Size | Year |
|------|------------------------------------------------------------------------------------------------|-----------|-----------------------------------|---------------------------------------------|--------|------|
| | Interviewee(s) | | | | | |
| F1 | Assistant of General Director | Hanoi | 100% foreign- owned investment | Motorcycles | Large | 2001 |
| F2 | 1: General Director; 2: Assistant of General Director | Hanoi | 100% foreign- owned investment | Motorcycles | Medium | 2006 |
| F3 | Administrative Officer | Hung Yen | Sino-Vietnamese Joint venture | Motorcycles | Large | 2000 |
| F4 | 1: General Director; 2: Assistant of General Director | Hung Yen | Sino-Vietnamese Joint venture | Motorcycles | Medium | 2002 |
| F5 | Administrative Office | Hung Yen | 100% foreign- owned investment | Motorcycles | Medium | 2005 |
| F6 | Administrative Office | Hung Yen | Sino-Vietnamese Joint venture | Motorcycles | Large | 2002 |
| F7 | Administrative Office and Translator | Hung Yen | 100% foreign- owned investment | Consumer electronics/ airconditioning | Small | 2003 |
| F8 | Head of Administration | Hung Yen | Sino-Vietnamese Joint venture | Motorcycles | Medium | 2002 |
| F9 | 1: Head of HR; 2: Accountant | Hung Yen | 100% foreign- owned investment | Motorcycles | Small | 2005 |
| F10 | Head of Accounting Department | Hung Yen | Sino-Vietnamese Joint venture | Motorcycles | Medium | 2002 |
| F11 | 1: Assistant of General Director; 2: Head of Workshop; 3: Translator and Assistant | Hung Yen | Sino-Vietnamese Joint venture | Motorcycles | Small | 2004 |
| F12 | Vice Director (also Senior Consultant of the company) | Hanoi | 100% foreign- owned investment | Motorcycles | Small | 2007 |
| F13 | Vice General | Hai Phong | 100% foreign- | Trucks | Medium | 2007 |

| | Director | | owned investment | | | |
|-----|--------------------------------------------------------------------------------------|------------|-----------------------------------------------------------------|---------------------------------|--------|------|
| F14 | 1: General Director; 2: Assistant | Hai Phong | 100% foreign- owned investment | Electricity meters | Small | 2004 |
| F15 | Vice General Director | Hanoi | Established as JV, then changed to 100% foreign- owned | Garments | Large | 1994 |
| F16 | 1: Director of Financial Department; 2: Translator | Dong Nai | 100% foreign- owned investment | Textiles | Large | 2006 |
| F17 | Head of Accounting Department | Dong Nai | 100% foreign- owned investment | Automotives | Large | 2007 |
| F18 | Head of Accounting Department | Dong Nai | 100% foreign- owned investment | Consumer electronics | Large | 1999 |
| F19 | Head of Accounting Department | Binh Duong | 100% foreign- owned investment | Electrical products | Medium | 2000 |
| F20 | General Director; Assistant of the General Director | Binh Duong | 100% foreign- owned investment | Textiles /trading company | Small | 1995 |
| F21 | 1: Manager; 2: Accountant | HCM City | 100% foreign- owned investment | Textiles | Small | 2008 |
| F22 | Chief Accountant | Hanoi | 100% foreign- owned investment | Industrial machines | Small | 2006 |
| F23 | Accountant | Hanoi | Sino-Vietnamese Joint venture | Grindstones | Medium | 2001 |
| F24 | Head of Administration | Hanoi | 100% foreign- owned investment | Animal feed | Medium | 2000 |
| F25 | Accountant | Hung Yen | Sino-Vietnamese Joint venture | Motorcycles | Small | 2003 |
| F26 | Accountant | Hung Yen | Sino-Vietnamese Joint venture | Motorcycles | Small | 2003 |
| F27 | Chief Accountant | Hung Yen | 100% foreign- owned investment | Motorcycles | Small | 2001 |
| F28 | Assistant and Translator | Hung Yen | 100% foreign- owned investment | Motorcycles | Medium | 2005 |
| F29 | Secretary of General Director | Hung Yen | Sino-Vietnamese Joint venture | Motorcycles | Medium | 2007 |
| F30 | Accountant | Hai Duong | 100% foreign- owned investment | Garments | Large | 2003 |
| F31 | Accountant | Hai Duong | 100% foreign- owned investment | Textiles | Medium | 2008 |
| F32 | Accountant | Hai Duong | 100% foreign- owned investment | Garments | Large | 2003 |
| F33 | Director | Hai Phong | 100% foreign- | Compact lights | Medium | 2003 |

Notes: 'Year' refers to the year the company was established in the host country. 'Size' refers to the number of employees of the company: Small 10-49; Medium 50-249; Large ≥ 250 .