

FDI IN CHINA: TRENDS AND MACROECONOMIC CHALLENGES

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Abstract

This paper examines the role of FDI in the Chinese economic development process of the past decades and tries to predict imminent trends and their consequences. It is found that the type of FDI prevalent will most likely shift from the primarily efficiency-seeking kind producing for markets abroad towards the more market-seeking kind both in manufacturing sectors hitherto closed to foreign competitions and in service sectors. This trend will pose problems as market-seeking FDI proposes fewer benefits than efficiency-seeking FDI as the new kind of FDI is more likely to crowd out domestic firms and investment. Moreover, market-seeking FDI tends to be a burden on the current account in the medium and long term as companies repatriate their earnings. This might force China to rely on capital imports to finance domestic absorption and make the country more vulnerable for currency crises.

INTRODUCTION

Within 25 years, China has developed from being an almost completely closed economy to becoming the world's second largest recipient country of foreign direct investment (FDI) in the late 1990s. With FDI inflows to the United States slumping in 2002, China even managed to become the largest FDI recipient in that year. While FDI to the United States recovered in 2004, one thing is undisputable: FDI has played a significant role in the Chinese economy in recent decades. Especially in China's booming manufacturing export sector, foreign investment has been very strong. Foreign firms have invested heavily in China to benefit from cheap labour costs. More than half of China's exports are now produced by foreign-owned firms. A large proportion of these exports is in assembly trade, in which foreign

¹The opinions expressed in this paper are those of the author and do not necessarily reflect the views of UNCTAD. The author remains solely responsible for any shortcomings in this paper.

firms bring parts to China for final assembly and later re-exports. Foreign firms have used this mechanism to help China gain shares in world markets, particularly important at a time when China's domestic level of development in sectors such as electronics and appliances would not yet have allowed for.

However, with real wages and incomes increasing and a slight rise in inflation leading to a real appreciation of the Chinese renminbi since the end of the 1990s, the question is how long this heavy reliance on FDI in the export sector is sustainable. As relative unit labour costs start to rise in China² investors might find other Asian countries more attractive for efficiency-seeking FDI in a not too distant future. At the same time, China has also agreed to open domestic markets, e.g. in financial services to foreign companies. This will most likely lead to more foreign direct investment in activities aimed to provide for the domestic Chinese market. Thus, a shift from efficiency-seeking to market-seeking FDI (meaning that firms invest in a country to gain access to domestic markets) might be in the making. This shift might be further amplified by the global trend towards FDI in services as has been described in the *World Investment Report 2004* under the heading *The Shift Towards Services* (UNCTAD 2004b).

The interesting question now is what this change from a low-income economy, in which foreigners invest to profit from cheap labour to a middle-income economy in which foreigners compete for market shares implies for China, and where there may be obstacles in the way of a continued and smooth economic development process. This paper will attempt to answer these questions. The further analysis is structured as follows: section I will briefly outline the trends in Chinese FDI inflows; section II will examine the role FDI has played in the spectacular growth performance since the mid-1990s; section III will examine recent and imminent changes in China's inward FDI; section IV will diagnose potential problems and section V proposes possible remedies.

² See, for example, the unit-labour cost based real effective exchange rate in China (Dullien 2004b).

I. FDI IN CHINA: STYLIZED TRENDS

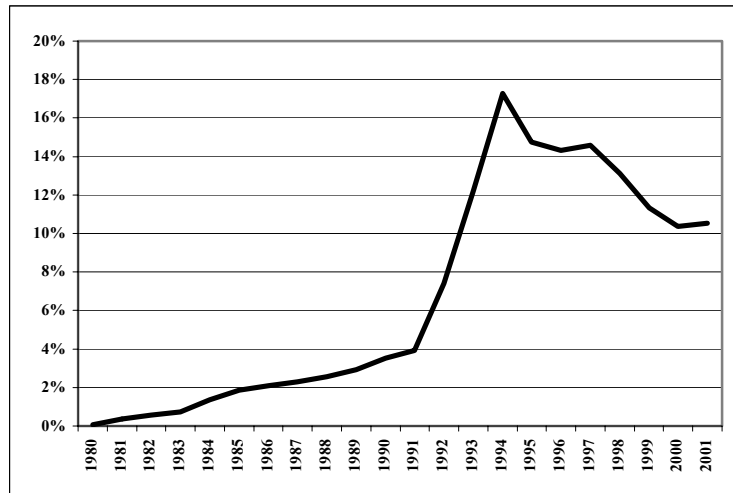
China's Government began to allow foreign direct investment into China very early on in the reform process. In 1979, the National People's Congress passed the Equity Joint Venture Law and thereby legislated for the first time an – albeit careful – opening of the Chinese economy. However, until 1986, foreign investment was “permitted” rather than “encouraged” (Huang 2003); however, after 1986 FDI in some, mainly export-oriented and technologically advanced sectors, was actively promoted.

FDI only became highly significant for the Chinese economy until the mid-1990s; it began to grow strongly after a number of bilateral investment treaties were signed in 1992 (including the important memorandum of understanding with the United States on a number of issues ranging from market access to intellectual property rights protection). An amplifying factor was the concurrent strong real depreciation of the Chinese currency which made producing in China relatively more attractive (UNCTAD 2004a). From 1991 to 1994, the share of FDI in the country's gross fixed capital formation increased from 3.9 to more than 17 per cent (Figure 1),³ FDI's share in GDP grew from 1.5 to 6.7 per cent over the same time period.

From 1994 onwards, the significance of FDI for the Chinese economy declined again, with FDI amounting to 11.2 per cent of gross fixed capital formation and 4.2 per cent of GDP in 2002. However, this decline was not brought about by an absolute fall in FDI, but by a strong growth of the Chinese economy and domestic investment in China. From 1994 to 2002, real GDP increased by roughly 90 per cent, while annual FDI inflow adjusted by the investment deflator increased by 40 per cent – still a significant increase, but below GDP growth. Moreover, the decline of the share of FDI in gross fixed capital formation hides the importance of foreign enterprises in some sectors: As a share of non-government

³ Of course, FDI does not transmit one-to-one into fixed capital formation as sometimes only the ownership of assets is transferred. However, this indicator gives an impression of the importance of FDI relative to overall investment.

Figure 1
FDI AS SHARE OF FIXED CAPITAL FORMATION IN CHINA



Source: Estimations based on UNCTAD and World Bank data.

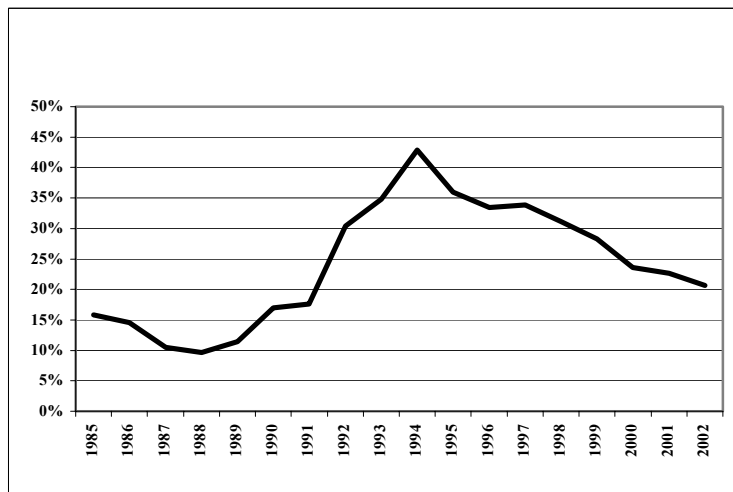
and non-state-owned-enterprise investment, FDI still amounts to more than 20 per cent (Figure 2).⁴ The share of exports originating in foreign-owned firms even reached more than 50 per cent in 2003. Finally, FDI stocks account for a significant share of the domestic capital stock. Estimations hint that roughly 14 per cent of the capital stock is owned by foreign companies (Figure 3).

If we take a look at recent FDI developments by sector (Table 1), we can see that manufacturing received almost three quarters of overall FDI in 2001.⁵ Moreover, FDI in manufacturing also experienced the largest increase, both in absolute terms and in percentage terms since the late 1990s.

⁴ The number is derived as follows: Inward FDI stock in dollars is converted into 1990 Yuan using the investment deflator. This number is set into relation to an estimated capital stock using the perpetual inventory methods from Chinese investment data going back to the 1960s. While this method might not be quite accurate given the large technological changes in China's investment during the past decade, it seems to be the best proxy available.

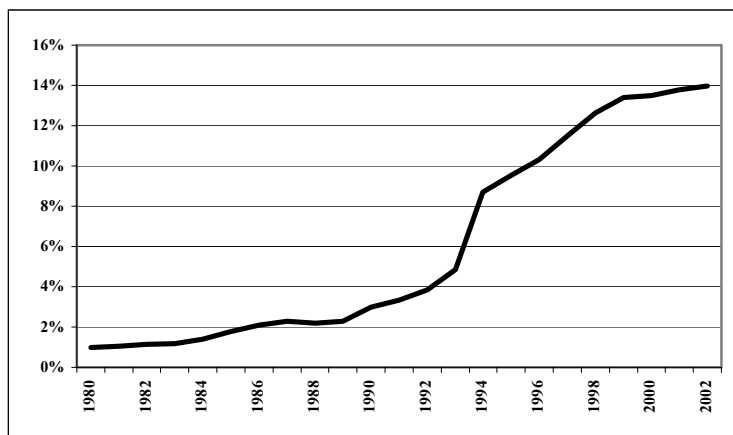
⁵ Unfortunately, more recent data is not available.

Figure 2
FDI AS SHARE OF PRIVATE INVESTMENT IN CHINA



Source: Estimations based on UNCTAD and World Bank data.

Figure 3
SHARE OF FDI IN CHINA'S CAPITAL STOCK



Source: Estimations based on UNCTAD and World Bank data.

Table 1
SINGLE SECTORS' SHARES OF FDI
(In per cent)

<i>Sector</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>
Farming, foresting, etc.	1.4	1.8	1.7	2.6
Mining and quarrying	1.3	1.4	1.4	0.9
Manufacturing	56.2	56.0	63.4	71.3
Electric power, gas & water	6.8	9.2	5.5	3.1
Construction	4.5	2.3	2.2	2.7
Transportation, storage, posts and telecom services	3.6	3.8	2.5	1.3
Wholesale and retail trade and catering	2.6	2.4	2.1	2.0
Real estate management	14.1	13.9	11.4	7.3
Social services	6.5	6.3	5.4	6.3
Health care, sports and social welfare	0.2	0.4	0.3	0.2
Education, culture and arts	0.2	0.2	0.1	0.1
Other	2.5	2.4	3.9	2.1

Source: Chinese Statistical Office.

However, the high growth rate of manufacturing FDI hides the fact that foreign investments have not only been efficiency-seeking and thus sought at producing for export. A certain (but unfortunately not quantifiable) share of FDI has already been set aside to provide for the growing Chinese domestic market. For example, all of the investments made by foreign automobile companies have been made to provide for the Chinese market and circumvent high import duties of sometimes more than 100 per cent. This can be seen in the fact that Chinese exports (both from domestic and foreign-owned firms) in automobiles are currently negligible. Even though some analysts believe in an upturn in Chinese car exports in the near future, persistent high costs and the low quality of Chinese car production suggests that global car companies would rather use production bases outside China for exports to the world market in the coming years.⁶

Moreover, all the investments in service sectors such as wholesale, retail, real estate, but also in construction and energy production are

⁶ An exception might be some limited exports in third low-income markets.

clearly aimed at providing for local customers and firms and must therefore be classified as market-seeking.

Unfortunately, it is hard to distinguish exactly how much FDI has been efficiency-seeking and how much has been market-seeking as it is impossible to distinguish between the two types of FDI in manufacturing from the aggregate data. The fact that the aggregate wage sum has been growing rather strongly and real incomes in urban areas have also been increasing briskly (albeit from a very low and competitive level),⁷ would lead us to expect that the trend has rather been towards a larger share of FDI of the market-seeking type in total FDI, particularly in recent years.

II. THE ROLE OF FDI IN CHINA'S DEVELOPMENT

Given the enormous weight of FDI in the Chinese economy, a central question is what role this investment has played in China's growth performance in the past decade. Among economists, net benefits of FDI are highly disputed. While proponents argue that foreign direct investment bring about an injection of productive resources into the host economy including new technology which increases the rate of technological progress in the host economy and might lead to additional investment ("crowding in"), opponents warn that by competing for scarce resources such as qualified labour, natural resources, but also market opportunities and market demand, foreign investment might actually replace and thus crowd out domestic investment.⁸

II.1. Theoretical arguments in favour and against FDI

Proponents base their arguments on two points: First, they claim that FDI gives countries access to resources they could otherwise not obtain, one example of this is foreign exchange. If a country is not able to obtain the foreign exchange necessary to buy capital goods either by exporting or by borrowing in international financial markets, so the argument runs, FDI might be an option to gain access

⁷ See the figures in ILO's *LABORSTA* database.

⁸ For a discussion of arguments for and against FDI with a special focus on services, see also chapter III in UNCTAD 2004.

to these funds. Second, proponents also maintain that FDI leads to a spillover of advanced technologies and knowledge from foreign investments into the host country. According to this view, foreign firms are demonstrating new technologies, providing technological assistance to their local suppliers and customers, and are training workers who may subsequently work in domestic firms (Kokko 1994). Moreover, the advanced technology that these imported intermediate goods may contain could spill over into the domestic economy, along the lines of the endogenous growth model of Bayoumi et al. (1999). In addition, foreign firms may have a wealth of knowledge on access to world markets which the host country does not have, or could only acquire slowly, and which provides local suppliers with income-generating possibilities. Finally, the additional competition induced by foreign firms might also force domestic firms to become more efficient, forcing them to innovate.

Skeptics, on the other hand, argue that foreign firms may simply push domestic firms out of the market as they are more technologically advanced. Even a partial crowding out might be a problem as it is not evident whether the foreign-owned firms are as beneficial for domestic technological progress as similarly successful domestic ones. First, foreign firms might use domestic upstream and downstream production networks to a much lesser extent than domestic firms. Thus, a partial crowding out in one stage might choke off investment and thereby potential income and technology generation at other stages. Second, there are some indications that research and development activities in multinational enterprises remain heavily concentrated in their headquarters (Dunning 1998). Thus, a partial crowding out of some activity by a foreign affiliate might reduce technology enhancing research and development activity in the host country.

Finally, if FDI is market-seeking, it might have adverse balance-of-payments-effects later on (Nunnenkamp and Spatz 2003). As the foreign company will try to repatriate (part of) its earnings later, the inflow of FDI will be followed by an outflow of profit incomes in the future. As this profit outflow constitutes a debit in the current account of the balance of payments, this might weaken the external position and might even lead to a deficit in the current account, making further inflows of foreign capital necessary. Considered in the context of volatile private capital flows, this may increase the risk of balance of

payments crisis in the future, which may in turn inflict serious damage on growth prospects.

II.2. Empirical evidence on FDI

The overall empirical evidence as to whether the net effect of FDI is positive or negative on the host country's economic performance is inconclusive, both across and within countries. While older studies such as De Gregorio (1992) find evidence for the positive growth effects of FDI, particularly in favourable environments, studies on the impact on micro-data such as Aitken and Harrison (1999) do not find evidence for any positive effect of FDI. Moreover, Carkovic and Levine (2002) seriously question the robustness of older macroeconomic studies as they do not take into account a possible simultaneity bias, country-specific effects, and lagged variables. They find that using modern econometric techniques, a significantly positive effect of FDI on economic growth cannot be found. Nunnenkamp and Spatz (2003) confirm the finding that a general link between FDI and economic growth cannot be established. However, they identify a number of host country and investment characteristics which determine whether the effect of certain FDI is positive or negative. For example, according to their study, FDI in manufacturing has significant positive effects as long as it is efficiency-seeking, but not if it is market-seeking.

For a single country, especially in a country such as China that has experienced lots of structural changes due to a transformation to a market-based economy, it is impossible to empirically determine the net effect of past foreign direct investment. However, theoretical considerations can give a hint as to which partial effects might have had a significant effect on growth.

The first question would be whether China needed FDI in order to bridge some "foreign exchange gap" (ADB 2004) between the foreign exchange it could earn itself and the amount it needed in order to import capital goods necessary for its economic development. For the country as a whole, it is plainly evident that, from the time FDI really took off in China in the mid-1990s, the country was not short of foreign exchange: Since 1994, China achieved a surplus in the current account balance, thus earning more foreign exchange with its exports than were necessary to pay for the imports. Lately, the country's problem has even become an excess

than a lack of foreign reserves, with a net accumulation of reserves of more than US\$200 billion in 2004 alone (an equivalent of roughly 12.5 per cent of GDP and way above FDI inflows).

However, what is true on an aggregate level does not necessarily hold on a micro-level. As Huang (2001) argues, private Chinese firms have for a long time been disadvantaged in their access to foreign exchange. These problems have eased with attempts of Chinese monetary authorities to promote foreign exchange outflows in 2003.⁹ However, according to the World Bank's Business Environment Survey of 2000, obtaining access to long-term finance is still considered to be the greatest single obstacle for Chinese companies doing business in China. The banking system still seems to be geared towards the needs of State-Owned Enterprises (SOEs) and only makes very small loans to privately-owned domestic firms. This situation might effectively amount to a lack of access to foreign exchange at the micro-level and could be cured by FDI inflows as the foreign parent companies usually have access to the originating country's banking system and can thus provide their affiliates with foreign exchange. Thus, the FDI inflow might alleviate problems private firms have with the domestic banking sector. However, the question of whether this effect could not have been easier achieved by reforming the banking sector is open to debate.

Another question is whether domestic Chinese firms have been crowded out by the strong FDI inflow, or whether FDI has triggered an increase in domestic investment ("crowding in"). Agosin and Mayer (2000) do not find evidence for any crowding in or crowding out of domestic investment by FDI in China in the period up to 1996. However, single country econometric studies are highly questionable as relevant time series are often very short and the danger exists that other exogenous factors are responsible for domestic investment have not been included into the equation. Thus, it might be helpful to consider the theoretical arguments that would support or weaken the argument of crowding out effects on domestic investment by FDI in China.

⁹ The policy has become most evident in the increase in foreign exchange that Chinese tourists are allowed to take with them when travelling abroad. See: China to give its citizens more freedom in forex purchase, *China Daily*, 4 September 2003.

In principle, the larger the share of FDI going into a sector in a developing country in which there were previously no companies, and the more the FDI is complementary to the horizontal economic structure, the less plausible crowding out appears to be (Agosin and Mayer 2000). A similar argument applies to the vertical relationship of FDI with the host economy. The more complementary the production stage to the host economy, the larger the chance of crowding in, as the FDI might then lead to additional investment in upstream and downstream production. If FDI is in an isolated activity without upstream and downstream links, there might not be much direct crowding out, but there may possibly be indirect crowding out as the FDI might still use the same scarce inputs such as qualified labour.

For the past decade, however, there is little evidence that foreign-owned enterprises have taken away scarce resources from domestic firms in China. Labour, the main local input of foreign affiliates, has been abundant, especially if one assumes that multinational enterprises (MNEs) had to train their own workers and – as they invested in sectors that had not existed before in China – could not hire trained workers from existing firms.

Moreover, as the largest part of foreign direct investment in China from the 1990s onwards has been of efficiency-seeking kind geared at export markets in which China did not play an important role prior to the opening of the economy (and has shown heavy emphasis on the assembly stage), it cannot be argued that foreign firms took sales opportunities from domestic Chinese firms.¹⁰ A large part of the assembly trade can be expected to be conducted by MNEs which treat assembly stage as an integrated part of the production network. An independent domestic firm would not have been able to gain market shares in such assembly business. Another hint that FDI has helped China to gain access to new markets – at least for those provinces that are most important for Chinese exports – is the fact that the causality between FDI and exports is bi-directional (Zhang and Felmingham 2001). This might be a sign that for these provinces, FDI has helped

¹⁰ Note that the case might have been slightly different in the textile sector. With textiles losing significant for overall Chinese exports, this is not of much importance for the latest efficiency-seeking foreign direct investments.

to open export markets instead of just taking developing export opportunities from domestic producers.

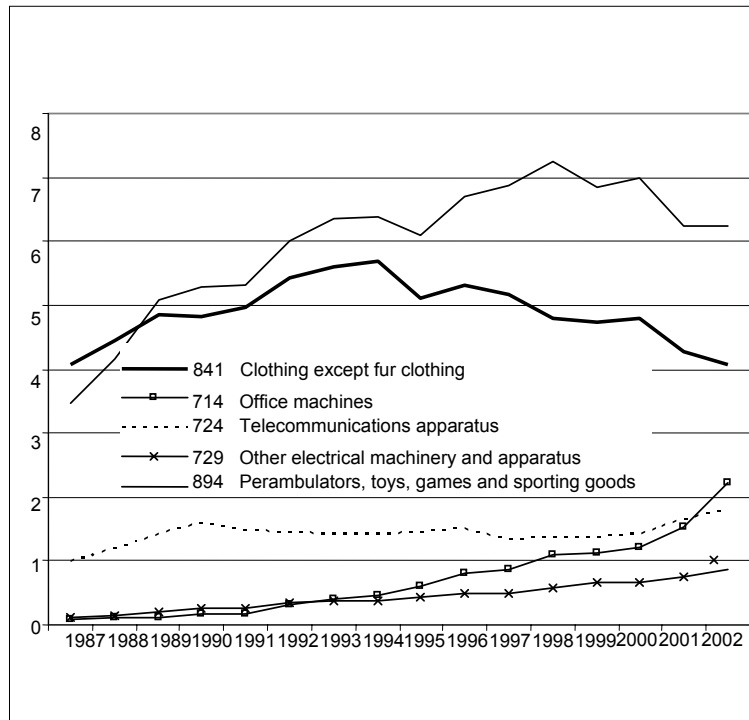
However, the question remains whether the FDI in assembly industry has brought any additional benefits to the Chinese economy. There is some evidence that FDI helped to integrate China in a regional production chain. Especially since the mid-1990s, labour-intensive exports have lost importance relative to capital-intensive export goods. If we take a look at the development of the Samuelson-RCA indices for Chinese exports over the past decade,¹¹ the peak for clothing exports, a traditional labour-intensive good, was reached in 1994, and those for toys and other gaming and sporting goods in 1998. At the same time, office machines, telecommunication equipment and other electrical machinery gained in importance (Figure 4 and Table 2). In absolute importance, office machinery has almost caught up with clothing, and in 2002 seven out of the top ten export goods have not been simple products such as footwear or clothing, but more elaborated products such as machinery or appliances. However, most of these goods are – different from textiles – not entirely produced in China, but only some (mostly final) production stages take place there.

For an increasing part of Asian exports to the United States and Europe, China has thus become the final assembly stage (Lemoine and Ünal-Kesenci 2002; Ng and Yeats 2003). Moreover, there are some signs that upstream linkages from assembly trade are building up and the depth of value added in Chinese production is increasing and thus a crowding in might occur. Figure 5 shows the ratio of the import value of inputs of certain components and the final output of finished goods for a few selected items.¹² As can easily be seen, the

¹¹ Of course, Samuelson's revealed comparative advantage (RCA) index does not necessarily tell anything about real comparative advantages, as a country might find itself for historical reasons exporting goods in which it does not really have a comparative advantage, or industrial policy has pushed exports which are not those goods in which a country has a comparative advantage from its initial endowments. However, it is a useful proxy to show in which sectors a country exports a lot.

¹² For colour TVs, the ratio of imports of TV tubes to TV sets produced is plotted; for cars the ratio of car parts to cars produced and for microcomputers the ratio of parts for them to actual units produced.

Figure 4
CHINA'S RCA FOR 5 TOP EXPORT GROUPS IN 2002



Source: Author's calculations based on UN Comtrade database.

ratio of output to imported parts has increased for both TVs and computers, but fallen for cars – cars are not an important export product for China, as they are mainly assembled for sale in the domestic market.

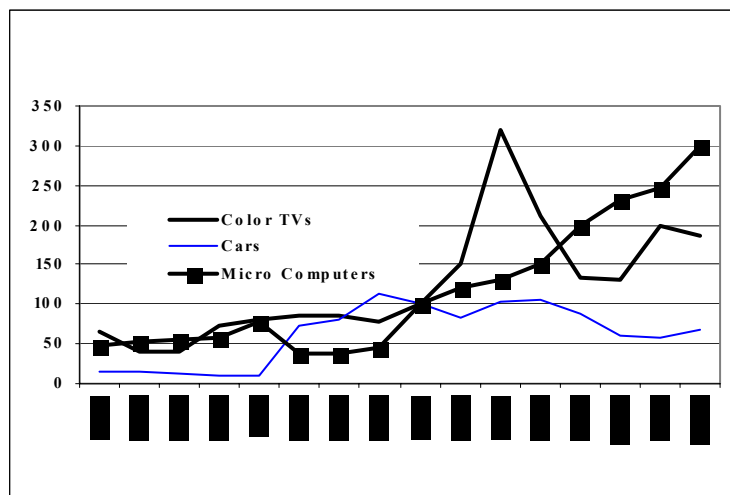
Another indicator for the increase of domestic value added in the assembly industries is the relative depth-of-value-added (RDVA). The indicator shows the ratio of exports in a certain category to imports of parts for a similar SITC category and compares this ratio to the rest of the world. Values above 1 show that this sector generates more value added in foreign trade than other countries, values below 1 show that the value added is comparatively low. As can be seen in Figure 6, the depth of Chinese production of office machinery and data processing equipment (SITC-classification 759)

Table 2
CHINA'S TOP 10 EXPORTS IN 2002
 (3-digit SITC codes)

SITC	Description	Share of China's Exports (In per cent)
841	Clothing except fur clothing	12.5
714	Office machines	10.7
724	Telecommunications apparatus	6.8
729	Other electrical machinery	4.7
894	Perambulators, toys, games, sporting goods	3.9
891	Musical instruments, sound recorders	3.4
722	Electric power machinery and switch	3.4
851	Footwear	3.3
719	Machinery and appliances-non electrical	2.9
861	Scientific, medical, optical meas./contr. instruments	2.1

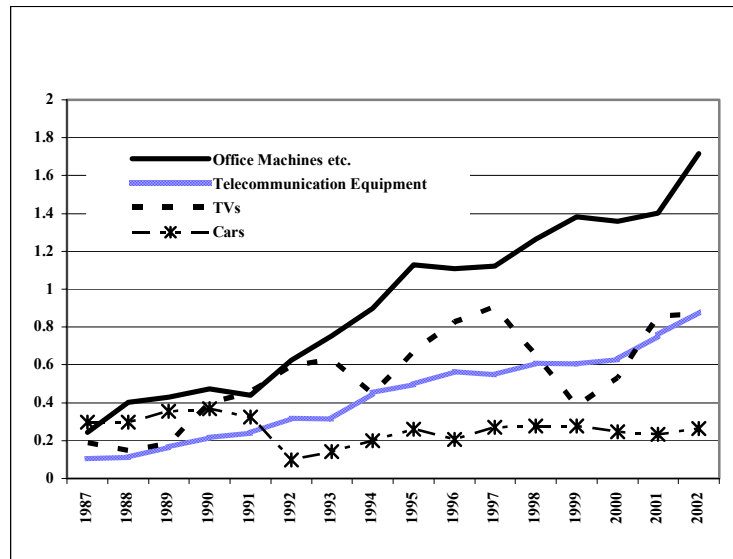
Source: UN Comtrade database.

Figure 5
RATIO OUTPUT VOLUME TO VALUE OF IMPORTED PARTS
 (1995 = 100)



Source: Author's calculations based on UN Comtrade and Chinese Statistical Office data.

Figure 6
RELATIVE VALUE ADDED FOR DIFFERENT PRODUCTS



Source: Author's calculations based on UN Comtrade data.

has increased over recent years and now stands at a higher level than the global average. For telecommunication equipment, this indicator has also risen, but has not yet reached the global average. The same is true for TVs even though the upward trend came temporarily to a standstill in 1999/2000.

Finally, there are even some indications of a technology spillover. Case-studies on the micro-level point to positive spillover effects from FDIs (Fan 2003:50). Cheung and Lin (2004) also find evidence that on a provincial level, FDI seems to have a positive impact on patent applications from domestic Chinese firms. Thus, the evidence points toward FDI having, in fact, helped the development of a competitive manufacturing industry, at least in some sectors. Given the large weight of foreign firms in the country's exports, FDI seems to have contributed strongly to China's good export performance over the past decade.

It remains open to debate, however, how quickly China might have integrated into the world economy without FDI. According to Zhang and Felmingham (2001) those provinces with only moderate FDI activity have also experienced impressive export growth, even if it was significantly lower than in high-FDI provinces. In these cases, exports seem to have Granger-caused FDI. This might be seen as an indication that given enough time a competitive domestic export industry would have developed. However, the superior penetration of world markets by foreign companies compared to domestic companies indicates that this would have taken significantly longer than a rather FDI-based approach.

Thus, the large inflow of FDI indeed seems to have helped China to reap the fruits of its favourable currency valuation over the past decade¹³ and also helped to accelerate China's integration into the regional supply chain.

A final question is whether the inflow of FDI and the resulting repatriation of profits have burdened the Chinese current account to such an extent that the risk of a currency crisis may have increased. So far, this does not seem to have been the case. As most FDI into China has so far been of the efficiency-seeking kind, i.e. setting up production for export, there should not have been any negative effect on the future outlook of the current account. This kind of FDI has, in fact, helped China penetrate world markets and helped it earn foreign exchange. Even if part of the income earned is transferred abroad, the net effect on the current account is expected to be positive.

In conclusion, the evidence seems to suggest that FDI in China has, so far, had an overall positive effect on the Chinese economy, even though some of the benefits could probably also have been reaped without foreign capital, albeit at a slower pace.

¹³ For the relevance of the currency valuation on Chinese development, see Dullien (2004b).

III. IMMINENT TRENDS IN CHINESE FDI

Purely resource- and efficiency-seeking FDI has, in recent years, gradually been supplemented, and to a certain extent, been replaced by market-seeking FDI. There are a number of reasons why we can expect this trend to continue over the next few years.

III.1. WTO accession

First, with the country's accession to the World Trade Organization (WTO), China has pledged to grant foreign companies greater access to previously sheltered service sectors such as financial services, insurance, legal services and telecommunications. This may lead to more market-seeking FDI. This is especially true in high-end services, e.g. financial services and insurance. Western governments, including the United States Government, therefore hope that their companies will have a competitive advantage. Moreover, the service sector is by definition a sector in which the product is hard to export as close proximity to the customer is necessary, even though some services become increasingly tradeable because of the technological progress in communication technology.¹⁴ Consequently, implementation of the WTO accession agreement will most likely result in an increase in market-seeking FDI into newly opened sectors.

The effect might be slightly different for those manufacturing sectors which have, in principle, been opened up to foreign investment but in which high import tariffs have provided a strong incentive to companies to operate in China in order to circumvent tariffs. The automobile sector might be a good example of such a development: With tariff rates once standing at 100 per cent, global car companies have invested in China to assemble cars for the domestic market. In principle, the agreed tariff cuts to a maximum of 47 per cent (OECD 2002) will lower incentives to conduct market-seeking investment in these sectors. However, this trend may to a certain extent be compensated for by the desire of manufacturing companies to have subsidiaries in their customers' markets to shield from exchange rate fluctuations. Moreover, the perspective of WTO accession should

¹⁴ See for a discussion also UNCTAD (2004b).

have already dampened market-seeking FDI in relevant sectors as the timetable and framework for tariff reduction has been known for some time and firms should have anticipated the impact this may have on the attractiveness of producing in China for the Chinese market. Thus, the gross negative effect of WTO accession on market-seeking FDI in manufacturing should be negligible, rendering the net effect of WTO accession on overall market-seeking FDI strongly positive.

Finally, falling barriers against Chinese products in other WTO member states will make China more attractive as a production platform for further re-export. This might have some positive influence on further efficiency-seeking FDI in the export sector. The effects of the elimination of textiles export quotas at the beginning of 2005, on the other hand, has to a certain extent been counteracted by a new export tax on Chinese textile exports. Thus, as China will be opening up several sectors formerly closed to foreign companies while the fall of further quota and tariff barriers in Chinese export markets will only be incremental, WTO accession is expected to have a much larger impact on market-seeking than on efficiency-seeking FDI.

III.2. Real appreciation

Second, the continuing real appreciation of the renminbi will also alter the amount and composition of FDI. Since the mid-1990s, the real effective exchange rate has been on an upward trend. Measured in unit labour costs, China has appreciated in real terms by roughly 25 per cent vis-à-vis the main trading partners (Dullien 2004b). The real appreciation is mainly due to a slow increase of Chinese unit labour costs since the late 1990s while unit labour costs in other Asian countries have, in fact, fallen after the Asian Crisis. The current strong economic growth and pick-up in measured domestic inflation will most likely intensify this trend as it will exert upward pressure on wages. Given the de facto fixed exchange rate, this would inevitably lead to a real appreciation. Another element which, of course, would lead to a further real appreciation would be any nominal rise in the

renminbi, as it has been discussed among academic and private sector economists since late 2003.¹⁵

No matter whether real appreciation stems from the increase in domestic wages or in a nominal appreciation of the Chinese currency, it would dampen efficiency-seeking FDI. In the event of a real appreciation, producing for export in China would become less profitable as all domestic inputs become more expensive in foreign currency. While the costs for intermediary imports remain unchanged in foreign currency, either profit margin would have to fall or sales prices in export markets would have to increase. Both options would lead to a reduction of profits in the export sector: Falling profit margins would directly dampen profits while an increase in sales prices would indirectly dampen profits by lowering sales volume and thus absolute profits. In this scenario, efficiency-seeking investments would become less attractive.

However, as long as real appreciation does not hinder domestic income creation and is compensated by stronger domestic demand, market-seeking FDI becomes more attractive. First, with real wages rising, the purchasing power of Chinese customers would increase, thus also increasing business opportunities for foreign companies. Second, with a real appreciation, profits in business tailored for the domestic Chinese markets would become larger in dollar terms. This again might make market-seeking FDI in China more attractive.

Thus, the current trend of a real appreciation of the Chinese currency will, without any doubt, lead to a decrease in efficiency-seeking FDI and most likely to an increase in market-seeking FDI.

III.3. Opening of the capital account

The gradual opening of the capital account might also influence the composition and volume of FDI. As the repatriation of profits and reversal of investment undertaken in China has so far been limited, any liberalization of capital account regulations would potentially increase the attractiveness both for market-seeking and efficiency-seeking FDI. However, as the repatriation of earned foreign exchange

¹⁵ See exemplarily Williamson (2003) or Greenspan (2003).

in the export sector is already much further liberalized than the repatriation of profits in companies providing for the domestic market,¹⁶ FDI in the latter will gain relatively more attraction. Thus, the opening of the capital account would also let us expect an increase in market-seeking FDI.

Thus, overall, we can safely expect that there will be a shift from the efficiency seeking FDI in the export sector to FDI in sectors providing for domestic markets.

IV. POTENTIAL PROBLEMS

As has been pointed out before, the effects of market-seeking FDI might be quite different from those of efficiency-seeking FDI. In many instances, they compete much more directly with existing firms, especially in developing countries formerly closed to international trade. Moreover, they compete for domestic demand, not for world market demands. These two characteristics might pose problems.

IV.1. Increased crowding out of domestic firms

The first question would be whether market-seeking FDI has, in principle, a higher propensity to crowd out domestic enterprises than efficiency-seeking FDI. For those sectors which have to date been sheltered against foreign competition, this will without any doubt be the case. Possible examples for such a mechanism could include the banking or automobile sectors. In both markets, domestic Chinese firms are widely believed to have technological disadvantages compared with new entrants. These often date back to the legacy of complete state control over the private sector. In banking, for example, domestic financial institutions are burdened with large amounts of non-performing loans.¹⁷ In the medium term, banks will have to write off these loans and incur associated costs. Foreign

¹⁶ For details on foreign exchange restrictions, refer to IMF (2004) and previous issues.

¹⁷ Current estimates are that non-performing loans constitute up to 40 per cent of China's annual GDP or slightly less than a third of total outstanding loans. See: Root and Branch, *The Economist*, 4 November 2004.

entrants in the market which are not burdened with these costs would be able to offer higher interest rates on deposits and/or lower rates on loans. Given the large proportion of non-performing loans in the Chinese banks' portfolios, this competitive advantage might be rather large and could lead to a quick erosion of domestic players' market shares.

A similar argument can be made for cars, exemplarily for manufacturing sectors producing for the domestic Chinese market. With as many as 200 independent car producers and many of them only producing a few hundred units a year, the Chinese car industry is very fragmented (Zheng and Hu 2004). This fragmentation is founded on political reasons, some of them going back to the pre-reform area. At that time, the Chinese Government in many sectors promoted provincial autonomy. Moreover, provincial politicians are often judged by growth and employment performance in their region, making them very protective towards regional industries. They will try to keep local firms from going bankrupt, thus hindering consolidation. As most Chinese car firms are too small to efficiently carry out research and development or to reap benefits from learning-by-doing or achieving economies of scale, this prevention of consolidation hurts the competitiveness of domestic firms. Foreign companies entering the market, in contrast, do not face such a problem. Instead, they can even profit from learning-by-doing and achieving economies of scale in the world market. There is even a danger that they may gain market shares very quickly against Chinese producers and push them out of the market. This may be a reason for concern as foreign automobile companies may both carry out research and development as well as produce more complicated and sophisticated car parts in their home countries. Given that research and development as well as the production of technology-intensive car parts have positive external effects on the regional economy, this might mean a slower technological development for China. This problem also seems to have been recognized by Chinese authorities as, by 2010, they want 50 per cent of the cars produced in China to be built by purely Chinese companies that own 100 per cent of the technologies used (cf. *Automotive News*, 9 June 2003).

The question remains, however, whether the negative effects for the Chinese economy will be compensated by enhanced quality and/or lower costs of services and manufacturers in which foreign firms crowd out domestic players. In principle, one could imagine that the

fall in prices of a good or service brought about by the increased efficiency of foreign over domestic producers yields sufficient advantages for other sectors which, in turn, gain competitiveness helping them to reap benefits bigger than the adverse effects on economic growth brought about by the initial crowding-out. However, such effects can be primarily expected from goods and services which are used as inputs from other firms. As a large proportion of manufactured goods are in fact consumer goods, a positive growth effect cannot be expected from an efficiency increase in these sectors due to a crowding out of domestic activity. The same is true for those services which are mainly provided for final consumption in the country itself. However, as services tend to have less pronounced upward and downward linkages, a crowding out of service firms producing for domestic consumers might not have as much adverse impact as a crowding out of manufacturers producing for the domestic market. Thus, in principle, a crowding out in the manufacturing sector producing for the domestic market might be the worst kind of crowding out by FDI, followed by a crowding out of services geared for domestic consumers. The most harmless type of crowding out would be in the service sector providing services for other businesses as the positive consequences might offset the negative effects. This argument would also fit nicely with the empirical results from Nunnenkamp and Spatz (2003). According to them, market-seeking FDI in manufacturing has negative effects on the economic growth in the host country, while both efficiency-seeking FDI in manufacturing and market-seeking FDI in the service sector have slightly positive effects.

IV.2. Balance of payment problems

The second question is whether the shift from efficiency-seeking to market-seeking FDI will have any medium- or long-term implications on the balance of payments. In order to answer this question, we have to analyse whether the type and structure of FDI influences the pattern of profit repatriation the foreign owner will decide on. A higher rate of profit repatriation constitutes a higher permanent burden on the current account as repatriated profits appear in the balance of payments as income paid to the rest of the world. This would increase the need for capital inflows in the future as it might tilt the balance of payments' current account into a downward trend or aggravate a future current account deficit.

Since the de facto pegging of the renminbi exchange rate in 1994, Chinese officials have carefully tried to avoid current account deficits. Avoiding becoming reliant on capital inflows to finance domestic consumption and investment must be seen in the context of the emerging market currency crises which occurred in recent decades. In developing countries, foreign capital inflows have proved to be very volatile and susceptible to sudden reversals, forcing economic policy to use its macroeconomic instruments to dampen domestic economic growth so that the current account is adjusted rather than promoting domestic growth and stabilizing output and employment. As the financial market scare in the run-up to the Brazilian election in 2002 has shown, this problem is not only valid in the case of a fixed exchange rate, but might even be a problem for countries with a floating exchange rate. Thus, the only safe strategy for a developing country seems to become independent from capital imports (Dullien, 2003). The Chinese government has pursued this very strategy over recent years and has thus helped the country avoid a crisis in the regional financial turmoil of 1997/1998. In the medium and long term, a higher rate of profit repatriation might endanger this strategy and increase the danger of a future balance of payment or currency crisis.

At first sight, there does not seem to be much difference in the pattern of profit repatriation between efficiency- and market-seeking FDI. Both kinds of investment are arguably undertaken by foreigners to increase their wealth in their home currency. As they can be assumed to mainly consume in their home country, they can be expected to repatriate earnings regardless of whether an investment abroad has been of the efficiency- or the market-seeking kind.¹⁸ However, the two types of investment differ in their net effect on the current account. As long as efficiency-seeking FDI in the export sector is not crowding out domestic companies and can provide an additional source of foreign exchange revenue to a country, this type of FDI has a net positive effect on the current account position. In addition to this, as part of the value-added takes place in the host country and

¹⁸ Of course, this is only partly true for the kind of FDI which is only FDI in name, but consists of money funnelled by Chinese residents through Hong Kong or Macao. In these cases, the FDI has no consequence on the overall Chinese current account position

part of it is transformed into local factor incomes, the current account position improves, even if profits are repatriated.

With market-seeking FDI, this situation is fundamentally different: Here, the FDI does not help the host country earn any foreign exchange. Instead, the foreign investment is completely oriented to domestic demand and any profits will be earned from domestic demand. The more successful foreign companies strive to both penetrate and earn profits in the market – the larger are the profits, thus the larger its future repatriation. This trend will be further exacerbated when foreign companies producing for the domestic market use foreign capital goods and foreign intermediary products to a larger extent than domestic firms. In these cases, there is a further autonomous shift towards substituting domestic production by imports, further burdening the current account. In fact, there is a lot of anecdotal evidence that foreign firms bring with them machinery from their traditional home suppliers, hinting that this effect might in fact be quite strong.

A sharp shift from efficiency-seeking FDI to market-seeking FDI would thus add to the trend of a deteriorating China's current account balance. This would – if not counteracted by other macroeconomic or exchange rate policy measures – increase the probability that China will turn to a net capital importer in the not too distant future. This would have the effect of making the country more vulnerable to shifts in investor sentiment and ultimately to a balance-of-payment crisis.

V. POLICY CONCLUSIONS

Thus, with the imminent and already ongoing shift from efficiency-seeking to market-seeking FDI in China, the largest part of macroeconomic benefits to be reaped from foreign investment in China might have already been harvested. Future market-seeking FDI might still bring some efficiency increases in certain sectors, but may well be different from the efficiency-seeking FDI in the export sector which hardly carried any economic costs. The new type of FDI will most likely carry macroeconomic burdens which, in some cases, might even more than offset the potential benefits. The challenge for the years to come will thus be to keep the unwanted consequences of market-seeking FDI under control.

V.1. Strengthening domestic firms

One central point will be to strengthen domestic firms against foreign competition so that some of them will be able to survive increasing competition with foreign entrants into their market. To this end, it is necessary to treat domestic private firms better than in the past. There are substantial indications that domestic private firms are discriminated in comparison with to foreign-owned firms and state-owned enterprises in legal, tax and regulatory matters (Huang 2003). While there might be a rationale for preferring SOEs over other types of companies as SOEs are burdened with obligations to fulfil various policy goals from supporting social stability by sustaining excess employment to stabilizing aggregate demand with their investments, the fact that foreign-owned firms are treated better than domestically-owned private firms does not have any economic rationale. Reducing the burden on domestically-owned private enterprises might enable them to compete more successfully with foreign firms both in domestic sectors hitherto closed to foreign competition and in export markets.

Another necessity might be to allow a certain consolidation. According to Zheng and Hu (2004) there are 200 independent producers of automobiles in China. Cement is produced in more than 8,000 independent firms compared to 110 in the United States, 58 in Brazil and 106 in India. This high fragmentation keeps firms from reaping the full benefits of economies of scale as well as from learning by doing. Moreover, it can be expected that in sectors with a high degree of R&D such as cars, the over-fragmentation hinders innovation as most producers are too small to invest heavily in R&D. The government should therefore take a less prohibiting stance vis-à-vis consolidation among domestic firms than it has done up to now. As regional governments exert a strong influence on local economics, more pressure from the central government may be needed.

Finally, the access of domestically-owned private firms to the financial system needs to be improved. According to a World Bank survey, access to long-term loans is the most pressing problem for private Chinese firms. In 2003, only 1.2 per cent of total outstanding loans concerned private enterprises and individuals, while the private sector accounted for roughly half of the economy's production. Huang (2001) even argues that a significant share of efficiency-seeking FDI inflows can be explained by the fact that domestic firms had no

access to domestic finance and are forced to sell part of their businesses to foreign investors. Reforming the banking system in such a manner as to ensure that it becomes more accommodating towards the private sector would allow privately-owned Chinese firms to grow faster as they would neither be required to earn profits before they invest as is often the case today nor to get foreign finance for their investment.

An alternative to strengthening domestic firms appears to introduce local contents regulation, thereby forcing foreign entrants to use downward linkages. However, such regulations are difficult to enforce and may lead to foreign firms adopting strategies to circumvent regulations.¹⁹ As a strengthening of domestic firms yield additional benefits as distortions are removed, this approach should be seen as a priority.

V.2. Managing the real appreciation

A second important point is that the consequences of the shift in the type of FDI on the current account will need to be monitored when making choices on exchange rate and macroeconomic policies. With FDI becoming more market-seeking, the FDI-induced debit of the current account will increase over the medium term. This will add to the recent trend of a shrinking Chinese current account surplus. Against this background, proposals for an appreciation of the renminbi should be considered with great caution, as they would further strengthen this trend and make China dependent on foreign capital inflows to finance the current account deficit, thereby increasing the danger of a balance of payment crisis in the medium- and long-term future.

In this context, another important question is how much inflation and wage increases can be tolerated before the medium-term sustainability of the current account surplus is endangered. With a de facto fixed-exchange rate any domestic wage increases in excess of wage increases introduced by competitors dampen international competitiveness; they also have the potential to impact negatively on the current account balance – just as certain FDI inflows might in the

¹⁹ Chapter IV in UNCTAD (2003) deals with possible incentives and regulations on foreign firms to limit unwanted effects and discusses possible problems.

medium term through the channel of profit repatriation. Thus, the tolerance for excessive wage increases should decrease with an increase in market-seeking FDI. At the same time, keeping wage increases in line with productivity growth plus price increases in the home countries of the most important international competitors may also slow the trend from efficiency-seeking to market-seeking FDI as labour remains comparatively cheaper and the purchasing power (in dollar terms) of consumers remain lower.

As wage setting in China's private domestic firms is hardly regulated and uncoordinated across firms, keeping wage increases under control is crucial in efforts to keep the economy from overheating.²⁰ To this end, an active fiscal policy should be continued to be used. As the investments of SOEs play a large role in aggregate demand (Dullien 2004a), their actions must also be taken into account in macroeconomic demand management. Monetary policy is to a certain extent restrained by the fixed-exchange rate. Given that the capital account is not completely closed, the central bank will have to keep interest rates roughly aligned to United States interest rates. However, the room for manoeuvre that monetary policy still possesses should be used to stop the economy from overheating. Moreover, the Chinese central bank has used its influence over final loan rates and administrative measures to slow credit growth wisely to cool the economy in 1994/1995, and has recently begun to use them for the same purpose. As long as these instruments are still compatible with current efforts to deregulate the financial sector, they should also be used for purposes of macroeconomic stabilization.

²⁰ Such a stabilization policy is supported by the stability-oriented wage-setting in state-owned enterprises. However, with a diminishing weight of SOEs in the economy, an increasing part of the stabilization requirements will fall on monetary and fiscal policy (Dullien 2004b).

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