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Managing Success in Viet Nam:  
Macroeconomic Consequences of  
Large Capital Inflows with Limited  
Policy Tools

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## **Abstract**

Viet Nam has experienced spectacular economic growth over the past decade, in part the result of massive foreign direct investment (FDI) inflows. Although much has been written on the impacts of FDI in developing countries, previous studies have generally ignored macroeconomic consequences in cost-benefit assessments. These macroeconomic aspects can be particularly important in transitional economies like Viet Nam, where some of the tools for macroeconomic stabilization may be blunt or unavailable. First, capital inflow growth needs to be accommodated by real exchange rate appreciation. In dollarized economies like Viet Nam, the nominal exchange rate cannot be relied upon to deliver it, so inflation usually results. In these economies, it is also difficult for the central bank to conduct open market operations to sterilize large capital inflows or mop up excess liquidity. Again, this could feed inflation. The combination of a young and inexperienced banking system and an investment-hungry state-owned enterprises (SOE) sector only exacerbates the situation, and increases the risk of imbalances that could result in crisis.

*Keywords:* capital inflow, macroeconomic adjustment, FDI, real exchange rate, Viet Nam

*JEL Classification:* F32, F21, F49

## 1. Introduction

Attracting foreign direct investment (FDI) has been a key goal of market-oriented policy reforms in Viet Nam. The thrust to encourage FDI is rooted in the belief that it can play a catalytic role in supporting the process of economic transition, and act as a conduit for igniting or revitalizing the private sector. Viet Nam has seen spectacular economic growth over the past decade (Table 1). Rapid capital growth is the main reason. Capital is drawn into countries like Viet Nam as policies that encourage FDI tend to reduce required rates of return. These range from tax holidays to direct subsidies to measures designed to increase the security of foreign investment.

Although much has been written on the role and impacts of FDI in developing countries, they have focused on the direct developmental impacts of FDI and generally ignored macroeconomic consequences. There are potentially significant macroeconomic consequences of capital inflows, especially if they are large and rapid. These consequences need to be considered in an overall assessment of the costs and benefits of playing host to FDI. They are particularly important to transitional economies like Viet Nam, where at least some of the tools of macroeconomic stabilization may be blunt or unavailable. So far, macroeconomic consequences have been largely ignored, and this paper aims to overcome this limitation.

The paper is in two parts. First, it examines the trends, determinants, and impacts of FDI, and second, it explores issues relating to managing the macroeconomic consequences of FDI inflows. The paper is organized in six sections. To provide the setting for part one, Section 2 offers an overview of policies relating to FDI, focusing on recent reforms. Section 3 maps the trends and patterns of FDI inflows, including source country composition, and sectoral and geographical distribution. Evidence relating to the impacts of FDI on Viet Nam's economy is summarized in Section 4. Section 5 deals with the macroeconomic consequences of capital inflows. Large FDI inflows can have wide-ranging consequences on transitional economies, and unless managed capably, can result in macroeconomic imbalances and even crises. In dollarized economies in particular, where the ability to conduct open-market operations or, more generally, implement an independent monetary policy, may be impaired, the result can be a sharp rise in inflation. In this section, we also examine what policies are available to transitional economies like Viet Nam, where the full complement of macroeconomic tools may not be available. A final section concludes.

## 2. Investment Policy

The opening of the economy to FDI was part of Viet Nam's "renovation" (*doi moi*) reforms initiated in 1986. The Vietnamese National Assembly passed the first Law on FDI on 29 December 1987. The law specified three modes of foreign investor participation: (i) business cooperation contracts (BCC), (ii) joint-ventures; and (iii) fully foreign-owned ventures. Foreign participation in the fields of oil exploration and communications was strictly limited to BCC. In some sectors such as transportation, port construction, airport terminals, forestry plantation, tourism, cultural activities, and production of explosives, joint-ventures with domestic state-owned enterprises (SOEs)

was prescribed as the means for foreign entry. Fully foreign-owned ventures were to be allowed only under special circumstances primarily relating to policy priorities for domestic industrial development.

The Government provided constitutional guarantees against nationalization of foreign affiliates and the revocation of ownership rights of enterprises. The incentives offered to foreign investors included exemption from corporate tax for a period of 2 years, commencing from the first profitable year, followed by a preferential corporate tax rate of between 15% to 25% in priority sectors (as against the standard rate of 32%). Foreign investors were permitted to repatriate after tax earnings subject to a 10% withholding tax. Overseas remittance of payments for the provision of technology services and repayment of principal and interest on loans were freely allowed. The specific emphasis on joint ventures with SOE as the prime mode of foreign entry reflected the government's decision to use FDI as a vehicle for industrial transition while ensuring state dominance in the economy. However, in 1990, the foreign investment law was amended to permit economic organizations in the private sector to engage in joint ventures with foreign partners. In 1991, legislation was passed allowing export processing zones (EPZs) to be set up, and generous incentives were provided to firms involved in the production of goods for export.

Under the 1996 Law on Foreign Investment, procedures for the approval of investment projects were streamlined and fresh investment incentives were granted. The Law gave local governments authority to issue licenses for projects, up to specified sizes. For investments in so-called priority sectors, the tax holiday period was extended to 8 years, after which a rate of 10% applied. A three-tier withholding tax of 5%, 7%, and 10%, based on the "priority status" of the investment, was introduced in place of the original flat rate of 10%.

These revisions to the foreign investment law led to a massive influx of FDI, which in turn fuelled a growing sense of resentment within Viet Nam. This resentment resulted in a number of measures that raised serious concerns in the international investment community about Viet Nam's commitment to promote itself as a new investment center. These included a proposal to establish liaison offices of the Government in all foreign ventures, the doubling of commercial and residential rents for foreign enterprises and expatriate staff, the imposition of a maximum time limit of 3 years on work permits issued to foreigners employed in FDI projects, and restrictions on foreign capital participation in labor-intensive industries. There is also some evidence that suggests that the foreign investment approval process was skewed in favor of key high-tech industries such as metallurgy, basic chemicals, machinery, pharmaceuticals, fertilizer, electronics, and motor vehicles. Notwithstanding the new legislation that permitted domestic private enterprises to enter into joint ventures with foreign firms, joint ventures with SOEs continued to receive powerful support in senior policy circles as the prime mode of FDI entry.

All of this changed after the 1997/98 Asian financial crisis. Policy reforms following the economic downturn placed renewed emphasis on FDI promotion. Under an amendment to the FDI law in June 2000, foreign-invested enterprises (FIEs) and parties to BCCs were given freedom to change the mode of investment, and to split, merge, and



consolidate enterprises. Recently, there have been several cases of joint ventures being converted into 100% owned FIEs. The three-tier withholding tax on profit transfers was reduced to 3%, 5% and 7%. The approval procedure of new investment proposals was streamlined, with automatic registration of export-oriented FIEs. Foreign investors were allowed to implement so-called “less sensitive” projects (that is, those deemed not to have any implications on national defense, cultural, and historical heritage or the natural environment) without licensing scrutiny of the Ministry of Planning, provided they are export oriented. In April 2003, 100% foreign-owned companies were allowed to become shareholding companies (that is, they were allowed to establish joint ventures). The implementation of a new Enterprise Law in 2000 permitting greater participation of domestic private enterprises in the economy also significantly contributed to improving investor confidence in the reform process.

The 2005 Law on Investment and Law on Enterprises marked a turning point for FDI policy in Viet Nam. For the first time, a unified legal and regulatory framework for all forms of investors and enterprises, regardless of nationality (foreign vs. domestic) and form of ownership (private vs. public) existed. Prior to the introduction of these two laws, foreign investors operated under a special framework both for investment and company laws.

The 2005 Law on Investment widens the permissible forms of investment, which now include (i) 100% foreign- or domestic-owned private companies; (ii) joint ventures between domestic and foreign investors; (iii) business cooperation contracts<sup>30</sup>, build-operate-transfer (BOT), and other contractual forms of investment; (iv) purchase of shares or capital contributions in view of participating in the management of the company; and (v) mergers and acquisitions (M&As). Various forms of FDI entry are thus formally allowed, not just greenfield projects. This is a significant change from the regime that applied under the former Law on Foreign Investment, which allowed only three forms of foreign investment: enterprises with 100% foreign-owned capital, joint ventures and business cooperation contracts.

The decision to allow FDI inflows through M&As under the Law on Investment was another critical reform, and Decree 139–2007 on the Law on Enterprises—issued September 2007—further clarifies and liberalizes the provisions on M&As. Until then, foreign investors (or foreign-owned companies in Viet Nam) were allowed to acquire a maximum of 49% of the capital of companies listed on the stock exchange, and a maximum of 30% of the capital of unlisted Vietnamese companies. The new M&As provisions are thus likely to open a significant new channel for FDI in the coming years (UNCTAD 2008).<sup>1</sup>

One central aspect of policy toward FDI has not changed, however, and this relates to the certification process. All FDI projects must be formally approved by the administration, even if it already satisfies the sector, size, and share of foreign ownership requirements. There remains the need for the administration to judge that the proposed investment is in Viet Nam’s national interest. In this respect, Viet Nam’s certification

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<sup>1</sup> Cross-border M&As are an important channel of FDI in a number of countries, amounting to \$880 billion worldwide in 2006, up from \$151 billion in 1990. Although most of these deals are between developed countries, cross-border M&As in developing Asia reached \$79 billion in 2006.

regime remains influenced by a planned economy approach rather than one that reflects common practice in market economies.

In sum, it is clear that Viet Nam has progressed a long way in terms of opening up its markets to FDI, especially in the aftermath of the Asian financial crisis. The 2005 Law on Investment and Law on Enterprises in particular marked a turning point in terms of FDI policy in Viet Nam. For the first time, a unified legal and regulatory framework for all forms of investors and enterprises, regardless of nationality or form of ownership was introduced. Further reforms to the Law on Investment in 2007 to allow FDI inflows through M&As could open up a significant new channel for FDI in the coming years. Despite these remarkable achievements on the policy front in improving the investment climate, there is still room for improvement. Viet Nam's approach to investment certification in particular illustrates that it still has some way to go before it adopts a full market-economy approach toward investment, whereby investors are free to invest in whatever project they wish, as long as they comply with existing laws and regulations designed to protect the public interest.

### **3. Trends and Patterns of FDI Inflows**

Annual gross FDI inflows to Viet Nam surged from negligible levels in the first half of the 1980s to an annual average of \$780 million in 1990–95 and to \$2.6 billion in 1997 (Table 2). FDI amounted to over a third of gross domestic capital formation (GDCF) and nearly 10% of GDP during 1995–1997. Prior to the turn of the century, FDI reached its peak in 1997 of almost \$2.6 billion, before a precipitous fall as a result of the Asian financial crisis. This downward trend following the Asian financial crisis bottomed out at just below \$1.3 billion in 2002. Since then there has been a notable recovery, with FDI increasing every year.

The years 2007 and 2008 were incredible ones for FDI in Viet Nam. FDI inflows almost tripled in 2007 compared with 2006, reaching \$6.7 billion. There are no official statistics for 2008 as yet, but indications are that total inflow may have even exceeded the 2007 level, despite a slowing in the last quarter as a result of the global financial crisis. The Economist Intelligence Unit (EIU, 2009) estimates that actual inflow may have been above \$7 billion in 2008.

#### **3.1 Country Composition of FDI Inflow**

The source country composition of FDI in Viet Nam is much more diversified than in many developing economies. This reflects a wider range of investment opportunities available in a relatively larger economy (Table 3). Over the years, the relative position of ASEAN as a source of investment has declined while the importance of investors from other East Asian and Organisation for Economic Co-operation and Development (OECD) countries has grown. During 2000–05 for instance, Northeast Asia and the PRC accounted for 44% of total approved investment, with OECD and ASEAN countries accounting for 36% and 20%, respectively.

At the individual country level, the relative position of Singapore, which was the largest

investor until 1999, has declined (from 16% during 1988–1999 to 12.5% during 2000–05) and that of Korea and Taipei, China has increased (from 9% to 16%, and 12% to 23%, respectively). The long history of investment of these three countries is reflected in cumulative terms, as depicted in Figure 1. Japan and Hong Kong, China have also had a long-standing interest in Viet Nam. Although investment from mainland China has increased rapidly, it is growing from a low base, and has only reached 4% of total investment during 2000–05. By 2008, it had become the 13<sup>th</sup> largest investor, in cumulative terms, and its significance is likely to only increase in the future.

### 3.2 Sectoral Distribution of FDI Inflow

Crude petroleum and gas extraction, and construction and services were the initial areas of interest to foreign investors, with the manufacturing sector accounting for less than a fifth of total approved projects (Table 4). The relative importance of manufacturing has been increasing over the years, however. By 2005, manufacturing accounted for 42% of cumulative approved investment in realized projects. During the early years, much of FDI in manufacturing was market-seeking, or production catering to the domestic market. During 1988–90 for instance, more than 80% of approved projects had export-output ratios of less than 50%. From the late 1990s onward, there has been a notable compositional shift from domestic market-seeking to efficiency-seeking export-oriented production in manufacturing. By 2000, over 70% of approved FIEs in manufacturing had export-output ratios of 50% or more, with the majority clustering within the 80–100% range. Until recently, most of the export-oriented FDI projects were in garment, footwear, furniture and other wood products industries. Over the past 5 years however, multinational enterprises (MNEs) have begun to invest in assembly activities in the electrical and electronics industries.

The decline in FDI during 1998–2002 was largely confined to non-traded goods sectors (construction, in particular), and import competing (domestic market oriented) manufacturing. FDI flowing to the export-oriented industries has continued to increase, *albeit* at a slower pace than in the early 1990s. The share of export-oriented projects has persistently increased from about 1997. The explanation seems to lie in Viet Nam's strong comparative advantage in international production in labor-intensive production and assembly activities. It may also be that export-oriented FIEs are more resilient to adverse developments in the domestic policy scene, so long as the trade policy regime assures uninterrupted access to imported inputs.

This pattern started to change around 2006–07, when land and real estate speculation started to take hold. An asset bubble was emerging, similar to that in next-door Cambodia. This was further fuelled by a government plan announced in July 2007 to allow Vietnamese living overseas and expatriates to own real estate on a freehold basis, which triggered speculators to buy more property for future resale.

This change in the sectoral composition of FDI is exemplified by the most recent data. Nearly 16% of committed, or registered, FDI in 2008 was related to office and apartment building projects, with a further 8.1% for urban area construction and 15% for hotels and other tourism-related projects. These shares may underestimate the actual amount of FDI being committed to property-related developments, however. For instance, of the

eight mega projects that accounted for 75% of total registered FDI, six of these involve a large component of property investment. These include Brunei Darussalam's new urban area development in Phu Yen, a Malaysian residential and university complex in Ho Chi Minh City, two huge resorts in Ba Ria-Vung Tau and another resort in Kien Giang province (FETP 2008). The inflow of investment commitments into labor-intensive activities, such as light industry, actually fell in 2008 (EIU 2009).

### **3.3 Spatial Distribution of FDI Inflow**

Table 5 presents data on the spatial distribution of approved investment in operational projects in Viet Nam. Even though almost all of Viet Nam's 64 provinces have attracted some level of FDI in the past two decades, the distribution across provinces has been very unequal. There has been a heavy concentration of projects in the South East (mainly the Ho Chi Minh City [HCMC]) and in the Red River Delta (around Hanoi) areas. These are the regions with the most developed infrastructure and highest availability of relatively skilled labor. These two regions accounted for about 64% and 26% respectively of the total cumulative approved investment during 1988–2006. HCMC alone accounted for over a fifth of this investment. There has not been any notable change in the spatial distribution of FDI over the past two decades. Yet again, there is little evidence that the government's incentive schemes have encouraged foreign investors to move to remote regions.

## **4. Direct Impacts of FDI**

FDI has undoubtedly made a significant contribution to the process of economic transition in Viet Nam. The percent of FIEs to GDP increased from 6.3% in 1995 to 15% in 2003, and they accounted for over 20% of the total increment in real GDP between these 2 years (see Menon *et al.* 2006). The share of FIEs in gross industrial production increased from 25% in 1995 to 36% in 2003, accounting for over 30% of the total increment in gross industrial output between these 2 years (Nguyen Phuong Hoa 2002, Le Viet Anh 2002, Pham and Ramstetter 2006, Nguyen Phi Lan 2006, and Vu *et al.* 2006).

The impact of FDI on exports and employment has been widely investigated. Perhaps the most visible contribution of FIEs to the Vietnamese economy is in export expansion. Numerous studies have demonstrated the contribution of FDI to exports (Schaumburg-Muller 2003; Parker *et al.* 2005; Nguyen and Xing 2006) as well as to job creation (CIEM 2004; Mirza and Giroud 2004). The share of FIEs in total non-oil merchandise exports increased from 2.5% in 1991 to 30.2% in 2000 and 43.5% in 2005 (Table 6). The role of FIEs is especially important in some key export industries, such as footwear, where they accounted for over three-quarters of total exports, garments and textiles (35%), and electronics and electrical goods (mostly components) (95%).

### **4.1 Impact on Productivity Growth**

A consideration central to any assessment of national gains to host countries from FDI is the contribution of FIEs to productivity growth in the national economy. FIEs are

expected to contribute to productivity growth both directly, through their role as part of the domestic economy, and through spillover effects on the performance of domestic firms. In the remainder of this section, we undertake a preliminary analysis of the direct productivity implications of FIEs in Vietnamese manufacturing using data at the two-digit industry level for the 4 years from 2000 to 2004, tabulated from unpublished returns to the annual Industrial Census conducted by the Central Statistical Organization (CSO).

The most widely used indicator of factor productivity is labor productivity, measured as valued added per unit of labor input. Growth of labor productivity refers to an increase in the value of goods produced by the average worker (or the increased efficiency of the average worker). In reality, workers may produce more not only because of an increase in efficiency but also because they have more inputs (capital, in particular) to work with. Thus, labor productivity growth (LPG) could spuriously capture changes in capital per worker as part of measured productivity. Total factor productivity growth (TFPG)—the residual output after accounting for growth in all factor inputs—avoids this problem and this is our preferred productivity measure. However, it is important to check the sensitivity of the results to the use of LPG in place of TFPG, because the former is the most widely used indicator of factor productivity.

A number of studies have examined the technological spillover effects of FDI on labor productivity in Viet Nam. Le Thanh Thuy (2005) investigates 29 sectors using industry level data for two periods, 1995–1999 and 2000–2002, and finds that while there is evidence of spillovers to labor productivity during 1995–1999, this effect became weaker during 2000–2002. Nguyen Tue Anh et al (2006) is the first to use firm-level data to investigate the FDI spillover effect, and finds that the presence of FDI significantly improves the labor productivity of domestic enterprises.

In Table 7, we present estimates of LPG and TFPG from Menon *et al* (2006). Interestingly there is a sharp contrast in productivity performance of FIEs during 2000–2003 in terms of the two alternative indicators. LPG of FIEs in total manufacturing contracted at a compound rate of 2.4% during this period in a context where LPG of all firms remained virtually unchanged. By contrast, TFPG of FIE production *increased* at a compound rate of 2.2% compared with a mere 0.6% increase recorded by pure local firms and 1.2% by all firms. At the disaggregate level, FIEs' contribution to productivity improvement is particularly impressive in office, accounting and computing machines (11.1%), electrical machinery (9.8%), and other transport equipment (17.9%)—industries which have become increasingly export oriented over time. By contrast, in most of the domestic-market oriented heavy industries, where FDI participation was encouraged by the government at the initial stage of reform, productivity growth in FIEs is either negative or near zero. Moreover, in these industries there is no notable difference in productivity performance between FIEs and local firms.

In sum, it is clear that FDI has yielded significant benefits to capital-starved but labor-abundant economies such as Viet Nam. These benefits include generating a substantial amount of employment, exports, and improvements in productivity. As a result, it has significantly improved living standards of the current generation. It has also allowed Viet Nam to reduce unemployment, and make significant progress in fighting poverty. These are the direct, and well documented, impacts of FDI. But what of the indirect effects, in

the form of macroeconomic consequences? This is the issue that has been largely ignored, and is the subject of the next section.

## **5. Macroeconomic Consequences of Large Capital Inflow**

Should rapid increases in capital be a cause for concern? The answer to this question depends on how inflows are used, and how the macroeconomic consequences are managed. Both these issues need to be considered in an overall assessment of the costs and benefits of playing host to FDI. How inflows are used will be reflected in the direct impact of FDI on the economy, such as on exports, employment, and productivity. The macroeconomic aspects will not, however, as they are indirect effects, but can be particularly significant in transitional economies like Viet Nam. This is because the instruments of macroeconomic stabilization in the form of fiscal and monetary policy may be blunt or unavailable. So far, such macroeconomic consequences have been largely ignored in cost-benefit assessments of FDI, with studies generally focusing on the direct developmental impacts of FDI.

### **5.1 FDI and the Current Account**

The most direct macroeconomic impact is reflected in the current account. This is essentially balance of payments accounting, but can nevertheless affect macroeconomic stability if changes are perceived to be either excessive or unsustainable. When growth is fuelled by large capital inflows, there is an intertemporal, or inter-generational trade-off involved, from a macroeconomic perspective. That is, by drawing upon the savings of foreigners to finance growth at a rate more rapid than that possible with only domestic savings, Viet Nam has opted for improved living standards for the current generation while leaving future generations to deal with the increased foreign liabilities. As a ratio of GDP, these increased foreign liabilities are reflected in deteriorations in the current account. In 2008, Viet Nam's current account deficit surpassed \$10 billion, representing more than 10% of GDP (see Table 1). Thus, growth in capital inflows implies growth in current account deficits and foreign liabilities.

Current account deficits are not inherently bad, nor are current account surpluses necessarily good. If the growth in the current account deficit as a share of GDP is viewed as unsustainable in the long run, however, then financial markets could respond by triggering a financial crisis. A current account deficit viewed as unsustainable would also increase the country's risk premium, and limit its future access to international capital markets. This is well known. But what are the other macroeconomic effects of large capital inflows? The key factor that we focus on relates to the adjustment process and the role of the real exchange rate in particular.

### **5.2 FDI and the Real Exchange Rate**

The growth in capital inflows will increase the demand for both tradable and non-tradable goods. The demand for non-tradable goods will increase by more than that for tradable goods, however. At the initial or pre-inflow relative price between tradable and non-tradable goods, this increase in demand for non-tradable cannot be fully met. This

excess demand will increase the relative price of non-tradable. This results in a real exchange rate appreciation. The real exchange rate appreciation is the price mechanism at work, and is required to facilitate the transfer of resources from the traded to the non-traded goods sector, which occurs because of the loss in international competitiveness. It also switches consumer expenditure away from non-tradables toward tradables, leaving more to be absorbed by the investment requirements associated with the capital inflows. A real exchange rate appreciation implies a loss in international competitiveness. It can also result in Dutch Disease.

For instance, in relation to Dutch Disease effects, Lartey (2008a and b) analyzes the effects of both the level and share of capital inflows on resource reallocation and real exchange rate movements in a small open economy. He demonstrates the trade-off that exists between resource reallocation and the degree of real exchange rate appreciation required. In particular, the less labor the tradable sector loses to the non-tradable sector, the greater is the required appreciation. This result is driven by the share of investment accounted for by foreign capital, and suggests that an emerging market economy that adopts a production technique that utilizes a greater share of foreign capital relative to domestic capital will be more susceptible to Dutch Disease following an increase in capital inflows. The results also imply that a policy designed to minimize real exchange rate appreciation during episodes of high capital inflow should encompass measures aimed at stabilizing prices of non-tradables.

The extent of the required real exchange rate appreciation is closely related to the underlying factors that produce it. If the real appreciation is brought about by inflation rather than nominal appreciation, then there will be distributional consequences that may run counter to the equity objectives of government. If the required real exchange rate appreciation is large, and the nominal exchange rate is rigid or fixed, then a bout of hyper-inflation may result. Real appreciations can also interfere with the adjustment process in countries that are liberalizing their trade policies, such as Viet Nam, as part of its ASEAN Free Trade Area (AFTA), World Trade Organization (WTO), and other commitments. Such countries usually undergo an initial phase where the real exchange rate depreciates before stabilizing at a rate determined by "fundamentals." A real exchange rate appreciation caused by capital inflows could counteract the adjustment process by delaying the supply-response of export-oriented sectors or increase adjustment pressures on the import-competing sector by increasing competition.

In countries with floating exchange rates, much of the adjustment occurs through nominal appreciations of the exchange rate. In countries with fixed or preannounced nominal exchange rates, the real appreciation occurs through domestic inflation. Most of the real exchange rate appreciation in Viet Nam has occurred through spiraling inflation. In 2008, inflation is believed to have averaged 20%, although it was running at close to 30% during some of the year (Table 1). Even in 2007, inflation averaged almost 15%.

Although Viet Nam is supposed to have a floating exchange rate, it is also a dollarized economy. In such economies, the definition of the exchange rate itself may not be straight-forward. For instance in the absence of dollarization, the dong/US dollar exchange rate would be the benchmark rate, and the most relevant one. The State Bank of Viet Nam (SBV) can intervene to influence this rate. But is this exchange rate policy?

This question is the same as asking, is the dong/dollar rate the relevant definition of the exchange rate in Viet Nam? It would be, without dollarization.

With dollarization, an outcome similar to a fixed-exchange rate case may present itself. Because this rate cannot move, it is like a permanently fixed rate; another way of describing it would be a "no exchange rate" case, as the rate of exchange cannot change. How could such a situation arise? Consider the following. If prices charged by exporters to Viet Nam are set in dollars, and the prices of these goods in the domestic market are also set in dollars, then movements in the value of the dong/US dollar exchange rate will not enter into the pricing decision of imports in the Vietnamese market. Similarly, if prices of Viet Nam's exports are determined in world markets in US dollars, movements in the exchange rates described above will not affect prices. In these situations, even the term "exchange rate" is a misnomer because trade occurs as if without an exchange rate, because there is no exchange of currencies, either notionally or physically.

If the "no exchange rate" definition applies, then adjustment to economic shocks will require changes to prices directly because the nominal exchange rate cannot adjust. In other words, the pass-through of exchange rate changes to prices of imports will be complete, and to prices of exports will be zero.<sup>2</sup> This is the same as assuming that traded goods prices are set in US dollars. In this context, the *real* exchange rate movements required to move the economy back toward equilibrium following an economic shock will have to be induced by price changes rather than nominal exchange rate changes. This will have to involve changes in the rewards paid to factors of production, and it is most likely that wages will have to bear the brunt of this adjustment.

This is very similar to the textbook case of a small open economy. There are some differences however, as a result of widespread dollarization. In dollarized economies, prices of a significant portion of non-traded goods may also be set in dollars, unlike in other economies. The higher the share of non-traded goods that are priced in dollars, the greater will be the rigidity of the real exchange rate to changes in the nominal exchange rate.

In dollarized economies, it is also difficult for the central bank to conduct open market operations. The lack of monetary instruments in the form of dong-denominated interest-bearing assets prevents the SBV from conducting open market operations. Other monetary instruments, such as changes to the reserve requirement, which the SBV had employed aggressively, were also limited in their effectiveness because dollarization allows capital inflows to become part of the money stock while bypassing the financial system. Indeed, the origins of the macroeconomic problems that almost reached boiling point in mid-2008 can be traced to the inability of the SBV to sterilize the surge of capital inflows. As a result, the banking system was flooded with liquidity, fuelling credit growth of almost 50% in 2007, which also spilled over into mid-2008. But just when Viet Nam appeared on the brink of a crisis, with the asset price bubble about to burst, the global financial crisis hit.

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<sup>2</sup> A1.1 Exchange rate pass-through refers to the degree to which exchange rate changes are reflected in the destination currency prices of traded goods. For a detailed discussion on the relationship between exchange rates and the prices of internationally traded goods, see Menon (1995, 1996).



Indeed, a silver lining from the global growth slowdown, and the associated drop in oil and other commodity prices, has been the cooling of an overheated economy, and easing of inflationary pressures in Viet Nam. The negative terms-of-trade shock hitting Viet Nam also shaved off a significant amount in national income, further cooling growth and inflation. Indeed, it was just in June 2008 that the *Economist* (2008) warned that "Vietnam serves as a timely reminder of how quickly inflation can get out of control, and the speed with which that can shatter confidence." What we have learned since is that the opposite can also be true, and the concern can shift very rapidly from controlling inflation to sustaining growth. In fact, the EIU (2009) is forecasting a tremendous drop in inflation, to fall to only about 1% in 2009. Despite tighter credit in a slowing global economy, FDI inflows remained robust in 2008, but may slow in 2009. Thus, it would appear that luck, in the place of macroeconomic policy management, prevented an impending financial crisis in Viet Nam in 2008.

### **5.3 FDI and the Banking System**

Large capital inflows can also cause problems for countries with weak banks (that is, banks with low or negative net worth and a low ratio of capital to risk-adjusted assets) or poor prudential financial system regulation. Viet Nam has a relatively young and inexperienced banking system, coupled with SOEs that appear to be relatively unregulated. A young banking system inexperienced in pricing risks but flush with funds to be intermediated, combined with SOEs eager to expand investments into real estate, financial services, and other non-core activities, was not a healthy combination (Leung 2008).

The recent macro-instability, especially that prior to the onset of the global financial crisis, has increased the importance of the policy response of government authorities in managing the macroeconomic consequences of large capital inflows in Viet Nam (see Table 1). A number of factors have limited the capacity to do so: (i) widespread dollarization, which limits the capacity to conduct discretionary monetary policy as well as using the exchange rate mechanism as a stabilizer; and (ii) the combination of a young and inexperienced banking system and investment-hungry SOEs.

These are long-term challenges that the government will have to address. Given these constraints, how should the authorities go about addressing the macroeconomic consequences of large capital inflows in the short- to medium-term? Given that the effectiveness of monetary policy is curtailed by dollarization, the role that fiscal policy will need to play is enhanced. By cutting back on fiscal expenditure, the government can reduce its reliance on foreign savings to finance investment, and thereby limit the growth in the current account deficit. To reduce the pressure on real exchange rate appreciation associated with large capital inflows, selective liberalization of the capital account to facilitate capital outflows could be pursued. Another medium-term objective would be the strengthening the domestic financial system to avoid typical moral hazard problems associated with deposit insurance—for example, an increase in lending toward risky projects—and consequent financial bubbles. In this respect, we need to look at the extent to which the presence of foreign financial institutions in Viet Nam can help or hinder the adoption of growth-enhancing monetary policy.

## 6. Conclusion

Viet Nam has experienced spectacular economic growth over the past decade, and a lot of this has been a result of massive inflows of FDI. Although much has been written on the impacts of FDI in developing countries, previous studies have focused on the direct developmental impacts and generally ignored macroeconomic consequences in cost-benefit assessments. There are potentially significant macroeconomic consequences of capital inflows that need to be considered, especially if such flows are large and rapid. These macroeconomic aspects can be particularly important in transitional economies like Viet Nam, where at least some of the instruments of macroeconomic stabilization may be blunt or unavailable.

First, growth in capital inflows needs to be accommodated by real exchange rate appreciations to facilitate the transfer of resources from the non-tradable to tradable sector. In dollarized economies like Viet Nam, the nominal exchange rate cannot be relied upon to deliver most of the real exchange rate appreciation required. Thus, inflation is usually the result. In dollarized economies, it is also difficult for the central bank to conduct open market operations. The lack of monetary instruments in the form of dong-denominated interest-bearing assets limits the capacity of the SBV to sterilize large capital inflows, or mop-up excess liquidity. Again, this could add to inflation. The combination of a young and inexperienced banking system and investment-hungry SOEs only exacerbates the situation, and increases the risk of imbalances that can result in crisis. This time, however, it appears that the global financial crisis arrived at a critically important time, to cool down the Vietnamese economy, and prevent a hard-landing associated with a bursting of a speculative asset price bubble. Relying on luck however, is not a good way to go about macroeconomic stabilization.

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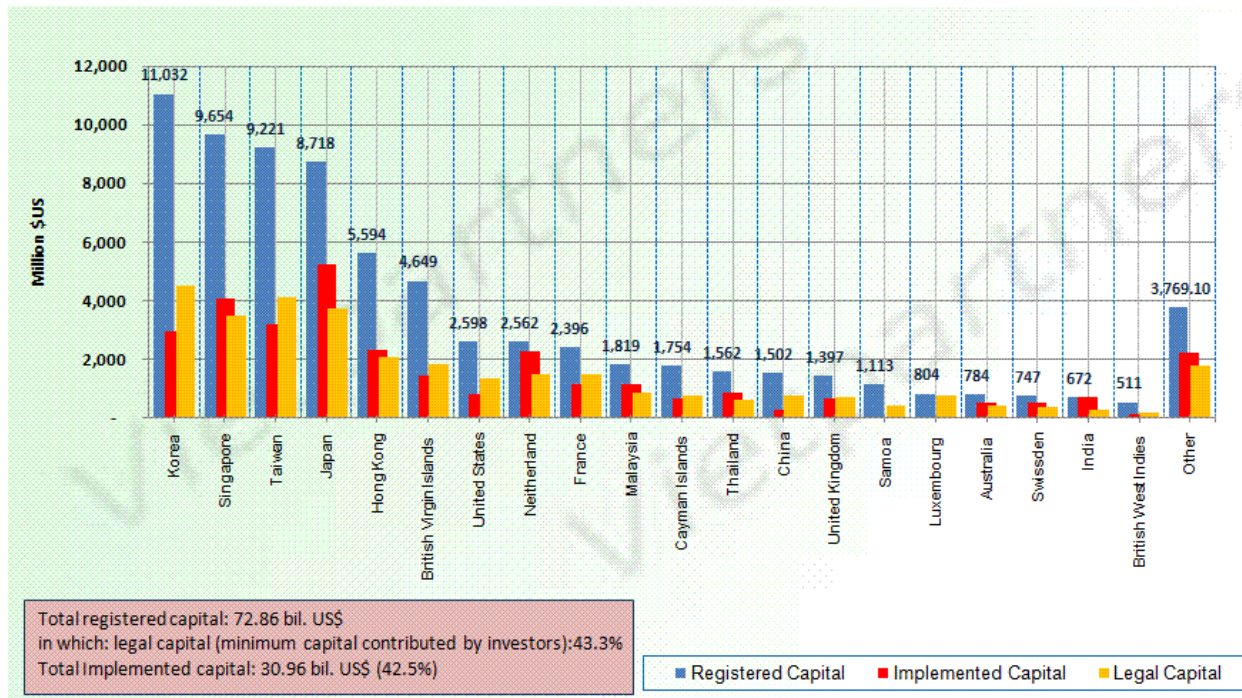
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**Figure 1: FDI in Viet Nam 1998 - September 2007 (Top 20 Investors)**



Source: Vietpartner's FDI statistics, <http://www.vietpartners.com/Statistic-FDI.htm>

**Table 1: Macroeconomic Indicators**

	Annual data and forecast						
	2004 <sup>a</sup>	2005 <sup>a</sup>	2006 <sup>a</sup>	2007 <sup>a</sup>	2008 <sup>b</sup>	2009 <sup>c</sup>	2010 <sup>c</sup>
<b>GDP</b>							
Nominal GDP (US\$ bn)	45.4	52.9	60.9	71.0	90.4	89.6	99.3
Nominal GDP (D trn)	715.3	839.2	974.3	1,144.0	1,564.1 <sup>c</sup>	1,760.2	1,944.3
Real GDP growth (%)	7.8	8.4	8.2	8.5	6.2 <sup>a</sup>	3.0	4.0
<b>Expenditure on GDP (% real change)</b>							
Private consumption	7.1	7.3	8.3	9.6 <sup>b</sup>	3.3	4.0	3.8
Government consumption	7.8	7.9	8.8	8.9 <sup>b</sup>	8.0	7.8	7.0
Gross fixed investment	10.4	9.8	9.9	23.0 <sup>b</sup>	14.0	4.7	4.5
Exports of goods & services	25.7	20.5	17.2 <sup>b</sup>	15.3 <sup>b</sup>	10.1	-1.7	0.5
Imports of goods & services	21.9	15.9	15.6 <sup>b</sup>	21.4 <sup>b</sup>	15.2	-0.8	0.8
<b>Origin of GDP (% real change)</b>							
Agriculture	4.4	4.0	3.4	3.7	3.8 <sup>a</sup>	3.0	3.0
Industry	10.3	10.7	10.4	10.6	6.3 <sup>a</sup>	2.5	4.5
Services	7.3	8.5	8.3	8.7	7.2 <sup>a</sup>	3.6	4.0
<b>Population and income</b>							
Population (m)	82.7	83.5	84.4 <sup>b</sup>	85.3 <sup>b</sup>	86.1	87.0	87.8
GDP per head (US\$ at PPP)	1,932 <sup>b</sup>	2,132 <sup>b</sup>	2,357 <sup>b</sup>	2,599 <sup>b</sup>	2,835	2,934	3,058
Recorded unemployment (av; %)	5.6	5.3	4.8	4.6 <sup>b</sup>	4.7	6.0	5.8
<b>Fiscal indicators (% of GDP)</b>							
Central government balance	-3.3	-4.1	-2.9	-5.4 <sup>b</sup>	-5.1	-7.3	-7.1
Net public debt	42.7	44.0	45.9 <sup>b</sup>	48.1 <sup>b</sup>	45.0	52.4	55.9
<b>Prices and financial indicators</b>							
Exchange rate D:US\$ (end-period)	15,777	15,916	16,054	16,114	17,332	17,702	17,545
Exchange rate D:€ (end-period)	21,359	18,775	21,186	23,531	22,185	23,013	22,896
Consumer prices (end-period; %)	9.7	8.6	6.6	14.4	20.0 <sup>a</sup>	1.2	5.3
Stock of money M1 (% change)	26.1	22.2	20.7	48.9	-16.7	-8.0	-4.0
Stock of money M2 (% change)	31.1	30.9	29.7	49.1	12.7	-10.4	6.1
Lending interest rate (av; %)	9.7	11.0	11.2	11.2	16.4	12.6	10.0
<b>Current account (US\$ m)</b>							
Trade balance	-2,287	-2,439	-2,776	-10,360	-14,185	-11,430	-9,289
Goods: exports fob	26,485	32,447	39,826	48,561	62,870	40,512	45,284
Goods: imports fob	-28,772	-34,887	-42,602	-58,921	-77,055	-51,942	-54,573
Services balance	-872	-296	-8	-894	-1,378	-1,374	-1,205
Income balance	-891	-1,205	-1,429	-2,168	-2,700	-1,466	-1,597
Current transfers balance	3,093	3,380	4,049	6,430	8,002	6,496	6,855
Current-account balance	-957	-560	-164	-6,993	-10,261	-7,774	-5,235
<b>External debt (US\$ m)</b>							
Debt stock	18,049	19,212	20,202	21,850 <sup>b</sup>	23,169	22,278	22,939
Debt service paid	787	957	918	944 <sup>b</sup>	1,029	1,026	1,065
Principal repayments	430	519	464	533 <sup>b</sup>	570	666	676
Interest	357	438	454	411 <sup>b</sup>	459	360	389
<b>International reserves (US\$ m)</b>							
Total international reserves	7,186	9,217	13,591	23,748	22,021	16,734	16,639

<sup>a</sup> Actual.<sup>b</sup> Economist Intelligence Unit estimates.<sup>c</sup> Economist Intelligence Unit forecasts.Source : IMF, *International Financial Statistics*.

**Table 2: FDI Inflows—Viet Nam**

	1985–89	1990–94	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Value, \$ million	3	780	1780	1803	2587	1700	1484	1289	1300	1200	1450	1610	2021	2360	6739
FDI inflows as a percentage of gross fixed capital formation	0.3	33.5	33.8	27.8	36.1	23.1	20.1	15.0	13.6	11.0	11.0	10.6	11.6	11.6	25.4
FDI inflows in percent of GDP	0.0	6.3	8.6	7.3	9.6	6.2	5.2	4.1	4.0	3.4	3.7	3.5	3.8	4.1	10.0

Source: Compiled from UNCTAD, *World Investment Report* (various years); UNCTAD FDI/TNC database ([www.unctad.org/fdistatistics](http://www.unctad.org/fdistatistics)).

**Table 3: Source of Country Composition of FDI Inflows, 1988–2005**

Source country/region	1988–1999		2000–05	
	Number of realized projects	Approved Investment (%)	Number of realized projects	Approved Investment (%)
OECD countries <sup>1</sup>	848	30.6	741	36.1
Australia	92	3.0	23	4.8
Belgium	12	0.1	13	0.2
Canada	34	0.6	20	0.4
Denmark	6	0.1	27	0.9
France	149	5.8	15	0.3
Germany	35	0.6	36	0.9
Italy	...	0.0	21	0.4
Japan	270	9.1	330	19.6
Luxembourg	...	0.0	15	5.8
Netherlands	39	1.6	23	10.2
Norway	7	0.1	7	0.1
Sweden	9	1.0	2	0.2
Switzerland	30	1.7	3	0.4
United Kingdom	37	3.2	31	0.5
United States	108	3.5	157	1.0
Other	20	0.3	18	1.5
European Transition economies	79	4.4	...	...
Russia	62	4.1	...	...
Czech Rep.	5	0.1	...	...
ASEAN	495	23.2	309	19.8
Lao PDR	4	0.0	3	0.1
Thailand	126	2.9	4	2.8
Brunei Darussalam			15	0.2
Indonesia	18	0.9	13	0.9
Malaysia	80	3.0	104	3.2
Philippines	27	0.6	3	0.0
Singapore	238	15.8	165	12.5
Northeast Asia and People's Republic of China (PRC)	1118	31.0	2085	43.7
PRC	88	0.4	269	4.4
Taipei, China	458	12.4	964	22.8
Korea, Rep. of	266	8.5	798	15.7
Hong Kong, China	306	9.7	54	0.8



**Table 3 continued**

Source country/region	1988–1999		2000–05	
	Number of realized projects	Approved Investment (%)	Number of realized projects	Approved Investment (%)
Other countries <sup>2</sup>	260	10.7	95	0.4
TOTAL	2800	100.0	3230	100.0
\$ million		37088		13930

Notes:

<sup>1</sup> OECD, Europe, Australia, New Zealand, and Japan.<sup>2</sup> Predominantly tax-haven islands.

... Data not available.

Source: Compiled from data provided by the Ministry of Planning and Investment, Hanoi.

**Table 4: Sectoral Distribution of Cumulative Approved Investment<sup>1</sup> (%)**

Accumulatively Implemented FDI in Viet Nam by industry (effective projects only)				
	1991	1995	2000	2005
<b>Primary production</b>	50.64	27.93	16.36	25.74
Crude oil	45.21	24.10	10.51	19.80
Agriculture and forestry	5.43	3.82	5.85	5.93
<b>Manufacturing Industry</b>	15.66	33.66	49.01	41.93
Food stuff	3.41	18.17	23.85	6.77
Seafood	1.77	10.21	14.90	0.56
Textile, clothing, and footwear	2.18	0.52	0.74	11.23
Other	8.30	4.77	9.53	23.38
<b>Construction</b>	...	3.26	4.69	16.74
New residential parks	...	...	...	8.31
New cities	...	...	...	0.18
Office-buildings	...	...	...	6.36
Export processing zone & Industrial Zone infrastructure construction	...	...	...	1.88

**Table 4 continued**

<b>Accumulatively Implemented FDI in Viet Nam by industry (effective projects only)</b>				
	<b>1991</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>
<b>Service</b>	20.99	26.44	18.86	15.59
Transportation & Telecommunication	10.12	7.10	4.67	2.65
Hotels/tourism	7.60	12.18	9.69	8.37
Finance-banking	2.77	4.93	2.48	2.30
Cultural-health-education	0.03	0.03	0.15	1.02
Others	0.46	2.21	1.87	1.27
<b>Total</b>	100	100	100	100
\$ million	361	6,269	14,954	27,986

Notes:

<sup>1</sup> Figures for a given year show the cumulative approved investment since 1988. The data cover realized projects only.  
... Data not available.

Source: Compiled from data provided by the Ministry of Planning and Investment, Hanoi.

**Table 5: Provincial Distribution of FDI Projects, 1988-2006**

Province	Number of Projects	Percentage of Total	Registered Capital (US\$mil)	Percentage of Total	Registered capital per capita (US\$)
Red River Delta	1781	21.5	20241	25.9	1.11
Hanoi	(949)	(11.5)	(12561)	(16.1)	(3.90)
Hai Phong	(266)	(3.2)	(2648)	(3.4)	(1.47)
Other	(566)	(6.9)	(5031)	(6.4)	(0.38)
North-East	358	4.3	2445	3.1	0.26
North-West	27	0.3	115	0.2	0.04
North Central Coast	125	1.5	1473	1.9	0.14
South Central Coast	349	4.2	5276	6.7	0.74
Central Highlands	113	1.4	1041	1.3	0.21
South-East	5126	62.0	42337	54.1	3.07
Binh Duong	(1315)	(15.9)	(6700)	(8.6)	(6.95)
Dong Nai	(870)	(10.5)	(10410)	(13.3)	(4.70)
Ho Chi Minh City	(2504)	(30.3)	(17896)	(22.9)	(2.93)
Other	(437)	(5.3)	(7332)	(9.4)	(1.62)
Mekong River Delta	334	4.0	2315	3.0	0.13

Source: General Statistics Office.

**Table 6: Export Performance of Foreign-Invested Enterprises**

Year	Exports of FIEs, \$ million			FIE share in...	
	Total	Crude oil	Others	Total exports	Share in non-oil exports
1991	52	0	52	2.5	2.5
1992	112	0	112	4.3	4.3
1993	269	0	269	9.0	9.0
1994	352	0	352	8.7	8.7
1995	1473	1033	440	27.0	10.0
1996	2132	1346	786	29.4	13.3
1997	3203	1413	1790	34.9	23.0
1998	3215	1233	1982	34.3	24.4
1999	4682	2092	2590	40.6	27.4
2000	6811	3491	3320	47.0	30.2
2001	6796	3123	3673	45.2	30.9
2002	7877	3275	4602	47.2	34.3
2003	10161	3821	6340	50.4	38.8
2004	14487	5671	8816	54.7	42.3
2005	17300	7000	10300	56.4	43.5

Source: Compiled from data provided by the Central Statistical Organization, Hanoi.

**Table 7: Manufacturing—Estimates of Viet Nam Productivity Growth and Related Data, 2000–2003**

	FIE share in Output (%)		Composition output (%)		Growth of capital intensity (%)		Labor productivity growth (LPG) (%)		Total factor productivity growth (TFPG) (%)				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Total	FIEs	Local	Total	FIEs	Local	Total	FIEs	Local	Total	FIEs	Local	Total
D: Manufacturing	38.9	70.4	54.1	85.5	0.01	-5.12	2.86	0.3	-2.4	1.0	1.2	2.2	0.6
15: Food product and beverages	34.5	20.1	13.5	26.2	-0.06	-3.24	1.65	8.5	4.0	10.5	2.3	1.7	2.6
16: Tobacco products	0.5	4.4	0.0	8.5	1.98	-22.80	2.92	6.5	2.2	6.4	-2.1	3.4	-2.1
17: Manufacture of textiles	33.8	3.0	2.2	3.7	0.55	-1.87	1.53	3.6	12.4	-0.6	5.3	6.9	4.1
19: Footwear and leather products	60.1	3.7	5.0	2.5	0.09	-3.36	2.12	-5.1	-6.6	-5.7	-0.6	-1.2	-0.1
20: Wood and wood products	21.2	1.1	0.4	1.8	1.43	1.96	1.64	-16.5	-14.5	-16.9	-5.8	-8.1	-5.2
21: Paper and paper products	15.0	1.4	0.5	2.3	0.78	-7.46	2.70	-11.2	-3.7	-12.5	-0.8	-1.0	-0.9
22: Publishing and printing	2.0	1.4	0.0	2.6	2.43	4.48	2.40	2.2	-6.4	2.5	2.2	0.5	2.3
24: Chemicals and chemical products	44.3	5.2	4.4	5.9	2.57	-1.84	3.63	-4.4	-4.6	-6.6	-3.4	-2.2	-4.5
25: Rubber and plastic product	33.4	2.8	1.8	3.7	-0.47	-4.43	2.01	-5.0	-7.5	-3.9	-0.5	1.2	-1.6
26: Non-metallic mineral products	27.2	8.6	4.2	12.7	-2.56	-9.35	1.59	-0.6	-1.5	-0.9	0.6	1.2	0.1

Table 7 continued

	FIE share in Output (%)			Composition output (%)			Growth of capital intensity (%)			Labor productivity growth (LPG) (%)			Total factor productivity growth (TFPG) (%)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)		
	Total	FIEs	Local	Total	FIEs	Local	Total	FIEs	Local	Total	FIEs	Local	Total		
27: Basic metal products	31.8	2.2	1.7	2.7	7.55	-3.06	14.38	1.1	-6.6	3.6	1.9	-1.8	4.2		
28: Fabricated metal products	40.3	2.1	1.7	2.5	-1.26	-5.78	2.40	-18.3	-17.2	-20.1	-14.3	-10.2	-17.6		
29: Machinery and equipment n.e.c	33.8	1.3	0.8	1.8	2.37	-4.41	5.08	1.2	-2.4	2.1	2.3	2.2	2.2		
30: Office, accounting and computing machineries	99.0	0.4	0.8	0.0	-7.45	-6.82	1.10	-3.4	-2.7	2.3	10.8	11.1	-3.0		
31: Electrical machinery and apparatus n.e.c	63.4	2.4	3.2	1.7	-0.06	-2.46	4.43	23.2	18.9	31.3	9.8	9.1	10.8		
32: Radio, television and communication equipment	68.9	1.7	2.5	1.0	-1.78	-4.23	0.46	-3.1	-1.4	-9.5	0.3	0.3	-0.4		
34: Motor vehicles, trailers and semi-trailers	80.6	2.6	4.3	1.1	4.42	1.05	8.53	-17.8	-18.8	-21.7	-5.1	-6.4	-0.7		
35: Other transport equipment	61.5	3.4	4.3	2.5	2.11	-5.73	6.47	17.0	2.6	1.6	17.9	18.6	16.5		
36: Furniture, manufacturing n.e.c	44.9	2.0	1.9	2.1	2.90	-1.04	5.84	-5.6	-7.4	-4.6	1.1	-0.4	2.1		

Notes:

$LPG = G_o - G_L$ , where  $G_o$  and  $G_L$  denote annual compound growth of output (value added), and labor (number of production workers).  $TFPG = G_o - S_L G_L - S_K G_K$  where,  $G_o$ ,  $G_L$ ,  $G_K$  denote annual compound growth of output (value added), labor and the stock of capital; and  $S_L$ , and  $S_K$  denote the average value shares of labor, capital, and materials in output.

Source: Menon et al (2006).

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ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries substantially reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two thirds of the world's poor: 1.8 billion people who live on less than \$2 a day, with 903 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

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