

***THE STATE AND THE PRIVATE SECTOR IN VIETNAM***

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## **The State and The Private Sector in Vietnam**

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### **Abstract**

In recent years, the Vietnamese government has emphasized its commitment to create a fair business environment for both the state and non-state sectors in its medium and long-term economic development programs. This paper examines the development of the private sector in Vietnam, focusing in particular on the relationship between the state and the private sector. The first part of the paper reviews the trends in private sector development, the second part discusses obstacles for private sector development, with focus on the role of state-owned enterprises, and the third part discusses future challenges and suggests some policy reforms on the basis of the lessons from the first two decades of economics reforms in Vietnam, as well as international experiences. The paper also considers the pattern of new firm establishment, including the impact of foreign investment on the domestic private sector.

Key Words: Vietnam, economic reforms, private sector development, SOEs

JEL Codes: H20, L50, P31

## Introduction

One of the most remarkable achievements of Vietnam's economic transition – particularly during the past decade – is the emergence of more dynamic and stronger private sector. Since the promulgation of the new Enterprise Law in 2000, over 120,000 new enterprises have been registered, reflecting both the formalization of existing household businesses as well as the creation of new private firms. Private sector development has become an important area for the Vietnamese economy, and the role of the private sector has been acknowledged even by the Vietnamese Communist Party (VCP). In particular, it is recognized that the domestic private sector is essential for job creation, and private firms have been much more successful than state enterprises in generating new employment during the past decade (World Bank 2006).

Yet, despite the increasing prominence of the private sector, there is some evidence indicating that it might not be as dynamic and competitive as the growing number of business registrations suggests. Firstly, the number of newly registered businesses may be a misleading indicator of the expansion of the private sector. The figures do not provide information about whether the registered businesses are in operation, providing jobs for the growing labor force, or if they have already terminated or perhaps not even started their operations. Secondly, the size distribution of enterprises in Vietnam gives some cause for concern. Despite twenty years of economic reforms, the development of the private sector is almost entirely associated with small and medium sized enterprises (SMEs), or more accurately, small and micro sized enterprises. The middle of the size distribution is very narrow or almost missing. The large firms that do exist are mainly state-owned or foreign-owned enterprises.

An enterprise size distribution with a missing middle is not necessarily a problem, as illustrated by the performance of countries like Sweden, which is ranked as one of the world's most competitive economies in spite of a similar size distribution of firms. However, in the case of Vietnam, there is reason to believe that this structure is a symptom of a weakly functioning business environment, where different types of firms meet different rules and regulations. Although the number of wholly state-owned

enterprises has decreased as a result of the on-going equitization process, the SOE sector is still in a dominant and favored position in critical areas (e.g. access to resources). While this is obviously not any great obstacle to the emergence of private SMEs, it inhibits the development of larger private firms.

Hence, although government policies support the development of small private enterprises (for instance, following the introduction of an SME Decree in 2001, a special Agency for SME Development was established in the Ministry of Planning and Investment) there is no official policy supporting the growth of small private firms into larger ones. On the contrary, in the Vietnamese debate, the terms “private sector” and “SMEs” are often considered as synonyms. While it may be politically convenient for the reform-minded to talk about SME promotion rather than private sector promotion (because it is less likely to meet opposition), the terminology also reveals that the private sector is still subordinate to the state sector. Large firms are generally expected to be state-owned. To release the growth potential of the Vietnamese private sector, it will be necessary to change this relation between the state and the private sector. To promote the long-term growth and competitiveness of private firms, the Vietnamese government will have to define the role of the state as complementary rather than competitive to private entrepreneurship. The introduction of a unified enterprise law, draft versions of which are currently discussed, will be an important step in the right direction. A commitment to private sector development requires not only that SOEs and private firms are equal in the eyes of the law, but also that the remaining privileges of SOEs are abolished.

This paper examines the development of the private sector in Vietnam, focusing on the relationship between the state and private sector. Two dimension of the state are discussed: the role of the state as a policy maker, and the role of the state as an actor in the productive sectors, in the guise of state-owned enterprises. The first part of the paper reviews the major milestones of the private sector’s development, and concludes that economic policy reforms have created a business environment where formal rules and regulations are increasingly favorable to private business. Evidently, the relation between the private sector and the state (acting as a policy maker) has improved continuously. The second part discusses the remaining obstacles for private sector development. Many of these obstacles are related to state-owned enterprises, who have privileged access to

markets, capital, and land and tend to crowd out private firms. The third part discusses future challenges and suggests some policy reforms on the basis of the lessons from the first two decades of Doi Moi, as well as international experiences. The paper also looks at the pattern of new firm establishment, including the impact of foreign investment on the domestic private sector.

## **Private Sector Development under Doi Moi**

The past twenty years have witnessed a number of important milestones for Vietnamese private sector development. The Doi Moi (renovation) program was launched at the Sixth Party Congress in 1986, where a program of major reforms to abolish the system of “bureaucratic centralized management based on state subsidies” and to move to “a multi-stakeholder, market oriented” economy, which included a role for the private sector, was adopted. Several changes in the legal framework for the private sector followed during the first half of the 1990s. In 1990, the Private Enterprises Law established a legal basis for the establishment of sole proprietorships and the Company Law opened up for limited liability and joint-stock companies. Tax reforms introduced special sales taxes, turnover taxes, and profit taxes. The role of the private sector was officially recognized soon thereafter, in the Constitution of 1992. In 1993, the Bankruptcy Law was approved, and the Domestic Investment Promotion Law that gave domestic investors access to some of the incentives available to foreigners was promulgated the following year.

In the early 1990s, the Vietnamese economy began to reap the rewards of the reform work: GDP growth averaged almost 8 percent per year during the period 1990-95 and Vietnam was considered one of the most promising markets and investment locations in East Asia. However, the impressive achievements could not completely hide some of the structural and systematic weaknesses of the Vietnamese economy. By 1996, donors and foreign observers had called attention to problems related to the import substituting trade regime and the role of state, in particular the continuing reliance on state-owned enterprises (SOEs) as the main driving force of the development (Kokko and Zejan 1996, Ljunggren 1996, Mallon 1996, UNDP 1996). These two issues were intimately related: SOEs, often together with foreign investors in joint ventures, were the main beneficiaries of the import substituting trade regime. They were also an important interest group, and

their economic strength and close connections with policy makers at various levels were used to protect these privileges. In practice, their influence impeded reforms that would have improved the conditions for the emerging private sector. In 1995, the domestic private sector, excluding farmers and informal household enterprises, produced only 7.5 percent of GDP, while the “modern” private sector, consisting of limited liability companies and shareholding companies, accounted for at most one percent of GDP (Webster 1999). The few larger private firms that did exist were not focused on the domestic market, where they would have been forced to take on the SOEs – instead, they were strongly export oriented (Kokko 2000). The lack of a dynamic private sector was worrying, particularly since it was becoming increasingly clear that the SOE sector would not be able to generate enough jobs for the rapidly growing labor force.

The Vietnamese authorities gradually became aware of the problems caused by these weaknesses in the development strategy. Several of the concerns were addressed in the government’s reform plans of the mid-1990s, including comprehensive measures in the areas of trade and investment, SOE sector, private sector, financial sector and public administration.<sup>1</sup> The measures in the area of private sector development mainly comprised additional legal reform. Revisions of the Commercial Law, Company Law, and Private Enterprise Law aimed at simplifying the regulatory framework for private enterprises. The objectives of the SOE reform plans were more far-reaching, including a clear time-table for restructuring of the SOE sector. However, the ambitious objectives stated at the policy level were contradicted by the slow implementation of the reform resolutions. Moreover, the political rhetoric was also contradictory. For instance, despite the statements recognizing the importance of the private sector, the Eighth Party Congress in 1996 explicitly restated the objective that the state should hold a central position in the country’s economic development. The underlying unwillingness of the government to proceed with the SOE restructuring was demonstrated once again at the Ninth Party Congress in 2001. Although the Congress recognized a long-term role for private sector, the aim to maintain a leading role for the state was reconfirmed. As far as can be judged from the limited achievements related to the restructuring of SOEs until the

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<sup>1</sup> Some of reform plans were summarized in Policy Framework Papers 1994 and 1996 prepared with the assistance of the World Bank and the IMF. A summary is also provided in Van Arkadie and Mallon (2003).

present, this attitude still slows down the reform process.<sup>2</sup> The underlying problem is that it may be impossible to simultaneously achieve both a dynamic and competitive private sector and a leading role for the SOE sector: the interventions needed to maintain the leadership of the SOE sector distort the playing field and inhibit the development of private firms.

It took until the year 2000 before the next important turning-point for private sector development occurred. The Enterprise Law that came into effect that year significantly simplified business registration and resulted during the following years in a dramatic increase in the number of registered private enterprises. The Enterprise Law led to the elimination of over one hundred business license requirements and reduced the time and cost needed to register businesses considerably. In 2001, the “Decree on Supporting the Development of Small and Medium-sized Enterprises” (Decree 91/2001) was adopted by the government, formalizing the official definition of an SME and outlining the government’s support policies for the development of SMEs. In 2002, the Central Committee of the Communist Party of Vietnam convened a Party Plenum focusing on the development of the private economic sector.

As a result of the introduction of the new Enterprise Law, the annual number of new private enterprise registrations has increased every year (from 14,457 new enterprises in 2000, to 27,662 new firms in 2003 and about 36,000 new registrations in 2004). By June 2004, the number of firms registered under the Enterprise Law alone had risen to 95,357. The surge in the number of registered business has spurred a debate on the character of the new firms. In particular, it has been discussed how many of the enterprises registered under the Enterprise Law are actually new. The reason is that much of the private economic activity in Vietnam has taken place in the informal sector, and it is likely that a large share of the newly registered enterprises has been made up of former household enterprises. In fact, a survey conducted by the World Bank showed that about

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<sup>2</sup> It is appropriate to note that the distinction between private and public has not always been clear in Vietnam. For instance, one explanation for the relatively strong growth performance of Vietnamese state enterprises in the early stages of reforms may have been that they actually implemented incentive structures similar to those in private corporations. Each SOE had a designated “owner” within the state – these owning ministries, people’s committees, and other institutions acted as residual claimants, and had strong incentives to generate profits. These ownership links have become weaker over time, with the Ministry of Finance claiming stronger institutional control over the state’s capital assets. Moreover, rumors suggesting that state assets are used to finance private investment ventures are not uncommon.

45 percent of the enterprises registered during the period 2000-2004 were already in existence in 2000 in the form of household businesses.<sup>3</sup> One of the most important reasons for them to register was to obtain invoice books for the Value Added Tax (VAT), without which goods and services cannot be sold to the government and SOEs. The high propensity to register may also be interpreted as an indication of increasing confidence in the government.

Most of the registered enterprises fall in the SME category as defined in Decree 91/2001: 95 percent of the new firms are SMEs, irrespective of whether the enterprise category is defined in terms of employment (less than 300 regular workers) or registered capital (less than VND 10 billion). In fact, the majority of registered enterprises are micro-sized: 80 percent of them employ less than 50 workers. However, the distribution of enterprises in terms of size varies significantly across industries. Nearly 90 percent of all manufacturing enterprises belong to the SME category. The ratio is even higher in the food processing sector (93 percent), but lower in the textile and garment industries (73 percent), and considerably lower in the leather and footwear sector (50 percent). Garments and leather and footwear are the only sectors where large enterprises, with more than one thousand regular workers, are relatively common.

An issue that has been a source of controversy in connection with the Enterprise Law is how many of the registered businesses are actually in operation or even in existence. Data on enterprise registration are collected by the National Business Information Center (NBIC), under the Ministry of Planning and Investment (MPI) while data on firms in operation come mainly from the General Statistics Office's (GSO) enterprise censuses, which have been conducted annually since 2000. The enterprise census uses a business register that is updated through a link with the tax database of the Ministry of Finance (MOF). The information from three consecutive surveys of GSO indicate that a total of 62,915 enterprises were in operation countrywide at the end of 2002 (GSO 2004). This figure is significantly lower than the cumulative number of enterprises that had been registered during 1991-1999 under the Company Law and the Law on Private Enterprise (44,500 during the decade) and the 2000 Enterprise Law

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<sup>3</sup> Another survey conducted in 2001 by the VCCI found that roughly 70 percent of the registered enterprises were truly new (World Bank 2006).



(55,792 by the end of 2002). Hence, the total number enterprises registered between 1991 and end-2002 was about 100,000. There are several ways to reconcile these two numbers. Firstly, it is likely that there are firms that have registered but not started any operations yet. In the World Bank survey mentioned above, about eight percent of the registered firms did not get to the tax code stage, suggesting that they never actually started operations. Secondly, the number of businesses that “exit”, i.e. close down their operations, is likely to be significant.<sup>4</sup> Since there are no incentives to report exit, most of these are not registered. Over the years, the unreported firm exits have accumulated into a sizeable share of all registered enterprises, and are likely to account for most of the gap between the number of registered businesses and operational ones. Hence, the great increase in enterprise registrations since 2000 should be interpreted with caution. It does indicate that Vietnam’s private entrepreneurs and businessmen are prepared to take on a role in the formal sector, as they chose to register their businesses in large numbers when the former licensing procedure was simplified into a registration procedure. It also indicates a substantial increase in economic activity, but not of the order suggested by the number of newly registered firms.

Recently, a draft of a new business law that is at least as important as the 2000 Enterprise Law has been discussed widely. The Unified Enterprise Law (UEL) seeks to establish a uniform legal framework for enterprises of different legal forms, regardless of their ownership. It is anticipated that SOEs in their current form will not be governed by the UEL unless they equitize, i.e. convert into either a limited liability or shareholding company. According to preliminary information, SOEs would be given a three- to four-year adjustment period. However, the exact nature of the future UEL is uncertain, since a draft of the law failed to pass a National Assembly vote in November 2005. The restructuring of the SOE sector is the most critical point of getting the bill through the

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<sup>4</sup> A survey of small and medium enterprises (SMEs) conducted by the Institute for Labor Studies and Social Affairs (ILSSA) and the Stockholm School of Economics found an exit rate of 15 percent in the early 1990s and less than 10 percent in recent years (World Bank 2006). The exit rates since the mid-1990s have, if anything, been lower than what has typically been found for developed countries. A likely reason is that Vietnamese private entrepreneurs have no real alternatives to keeping their business in operation: there may be no outside job opportunities, and the bankruptcy law does not provide any opportunities to clear debts related to unprofitable business. However, although Vietnamese SMEs are more likely to survive than SMEs in developed countries, they are also more likely to change their business lines.

National Assembly. However, if a sizable share of SOEs remains outside the UEL, then the attempt to create a level playing field will be incomplete.

## **Private Sector Development and SOEs**

One of the main development challenges facing the Vietnamese government is to use the limited amount of resources available for public investment efficiently. This does not only entail maintaining a high rate of economic growth by providing the needed infrastructure, but also to promote an efficient investment climate. Efficiency, in this context, assumes a level playing field, where investors from different sectors operate under the same rules and regulations, and where the marginal return of investment in different sectors can be expected to be more or less the same. At present, this is not the case. SOEs still receive favorable treatment, which leads to an inefficient allocation of resources and an under-utilization of the economy's growth potential. To release the growth potential of the private sector, it would therefore be necessary reduce or abolish the various privileges of SOEs.

Apart from returns in the form of profit or growth, the recent debate has also touched on job creation as one of the desired outcomes of investment.<sup>5</sup> Here, it is obvious that there are very substantial differences between the private sector and the state sector. Recent World Bank estimates suggest that the cost of generating employment, measured as capital requirements per worker, is lowest in the domestic private sector and much higher in foreign-invested firms and SOEs (World Bank 2006). More rigorous ways of assessing the cost of job creation, based on measures of changes in capital and labor endowments over time, suggest a similar picture. For instance, the amount of capital needed to create one job in SOEs is nearly five times higher than that in FDI firms and more than eight times higher than that in domestic private firms.

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<sup>5</sup> It may seem somewhat crude to measure the cost of job creation as capital per worker, since SOEs and foreign-invested enterprises operate in much more capital intensive sectors than domestic firms. However, since job creation is one of the main targets of the socio-economic development of Vietnam – not least because of its impact on poverty reduction and income distribution – it is important to recognize the most efficient ways of achieving this objective.

Since SOEs evidently use more capital per worker than other types of firms, it is also relevant to examine their productivity performance. High capital intensity may be motivated provided that the capital is utilized productively, i.e. that it generates a sufficiently high return. Apart from capital requirements, the World Bank has also explored productivity, and their estimates using census data for manufacturing firms show interesting variations in total factor productivity gains across different business categories (World Bank 2006). Regardless of the estimation technique, productivity gains appear to be higher both in foreign-invested firms and equitized SOEs than in regular SOEs. The productivity gains of equitized SOEs are likely to be explained by catching-up effects following the restructuring of the firms, but also by selection: many of the SOEs that have now been equitized performed better than other SOEs already before their equitization. Domestic private firms do not exhibit any lower productivity gains even though they have substantially weaker access to various production resources like capital, land, and technology. In fact, it is very likely that Vietnam could generate considerable gains in terms of job creation and productivity if it was possible to establish a level playing field for all types of enterprises.

Several studies have examined the factors distorting competition and restricting the private sector from reaching its full potential. A recent example is a survey conducted by the Mekong Private Sector Development Facility (MPDF) in cooperation with researchers from the Australian National University and the Central Institute of Economic Management (CIEM) in order to identify the major obstacles encountered by private firms and SOEs.<sup>6</sup> Interestingly, unfair competition is perceived as the most severe constraint by private firms and SOEs. In particular, a large share of the participating private firms (42 percent) experience preferential treatment of SOEs to be a “major” or “severe” constraint. Another cause of unfair competition is the high degree of informality in the business sector, giving an unfair competitive advantage to noncompliant firms. Both sources of unfair competition distort the allocation of resources. Somewhat surprisingly, World Bank (2006) argues that Vietnamese private enterprises generally do not consider corruption as a serious distortion. According to the Bank’s recent Investment Climate Surveys, corruption is ranked as a severe or major constraint to business by less

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<sup>6</sup> 629 answers were received from private firms and 117 from SOEs, the response rates were 16 percent and 30 percent for respective firm types (Tenev et al. 2003).

than 15 percent of Vietnamese enterprises, although Transparency International's Corruption Perception Index ranks Vietnam as one of the most corrupt countries in East Asia.<sup>7</sup> The proposed reason is that the corruption facing Vietnam's private entrepreneurs is relatively predictable and involves relatively small sums of money. The more severe kinds of corruption in Vietnam are likely to be found in SOEs, particularly in connection with public procurement and infrastructure investment, as well as in land transactions (Kokko 2005a). Although these types of corruption do not seem to influence the day-to-day operations of private firms, they may have important indirect effects. For instance, it may be difficult for private enterprises to participate in public procurement or investment projects if their harder budget constraints make it more difficult to pay bribes. The assumed prevalence of graft in the land market is also a likely obstacle to the expansion of private firms.

Taking measures against unfairness caused by informality is difficult, since a consequence of informality is that it weakens the efficacy of the government's instruments for improving the business environment. Similarly, reducing corruption is a challenging task that will take a long time to achieve. Reducing unfairness due to preferential treatment of SOEs, on the other hand, is more straightforward, since SOEs are directly under the jurisdiction of the government. Moreover, reforming regulations and laws concerning SOEs may be a powerful tool against informality as well, since more equal rules reduce the incentives of private firms to conduct their economic activities outside prescribed regulations. Hence, one of the most important measures to create a level playing field for all types of firms is to commit to a faster restructuring of the SOE sector.

Strictly speaking, economic theory recognizes only market imperfections, such as the existence of a natural monopoly or externalities, as motives for state ownership. When choosing between private or public provision of goods and services, there are basically two types of investment incentives to consider: those aiming to reduce costs and those intended to improve quality or to innovate. The evidence on privatization suggests that private firms have better incentives with respect to both cost and quality innovation

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<sup>7</sup> A larger share of entrepreneurs in Cambodia, China, Indonesia, Malaysia, Philippines, and Thailand reported that corruption was a severe or major constraint, according to World Bank (2006).

(World Bank 1995). Government ownership is likely to be superior only under specific circumstances. Shleifer (1998) defines these circumstances rather narrowly as situations in which: 1) opportunities for cost reduction that lead to deterioration of quality are significant and non-contractible; 2) innovation is relatively unimportant; 3) competition is weak and consumer choice is ineffective; and 4) mechanisms for reputation-building that bring customers back in the future are also weak. If these conditions are not in place – and the a priori case for state ownership is weak – it is appropriate to be very specific regarding the arguments for keeping firms under state ownership. In addition, it is necessary to determine what privileges the SOE needs in order to reach its objectives, and to ascertain that the managers of SOEs act according to the public interest. In this context, it may also be useful to ask whether the same objectives could be reached through appropriate regulation of private enterprise or other means, such as fiscal policy. For instance, a common concern by governments is that state ownership is needed in order to reach certain “social goals” that are not automatically realized in a free market context. However, these concerns can often be achieved more efficiently through a combination of market oriented industrial policy in combination with fiscal policies targeted to meet the social objectives in question.

It is clear that the scope of activities of the Vietnamese SOE sector has not been determined on the basis of such arguments. Instead, the structure of the SOE sector is largely inherited from the pre-Doi Moi period, when state ownership was an ideological obligation. There are numerous reasons why the SOE reform process has been slow, although the Vietnamese authorities have stressed the need to proceed with the equitization of a large number of SOEs (see e.g. Sjöholm 2006). Yet, at the same time as the equitization program has been debated, the SOE sector has continued growing, with new state enterprises established in several industries, including hotels, restaurants, and entertainment, where it is difficult to find any good reasons to prefer public rather than private ownership. Moreover, it is important to note the distinction between equitization and privatization. The public sector remains the largest individual owner of most equitized firms – the average state share is 46 percent (World Bank 2006) – and the behavior of SOEs is not likely to change much unless equitization is combined with far-reaching reforms of management and governance.

Hence, equitization and reform of state-owned enterprises are important determinants of private sector development. This notwithstanding, the experience to date suggests that the process of equitization is likely to remain slow, which means that it is important to identify other measures that improve the conditions for private entrepreneurship in the short term. Most studies on private sector development in Vietnam identify access to resources, such as land and capital, and access to markets as the major constraints for the private business. In the following, we discuss how these constraints are related to the preferential treatment of SOEs.

### ***Access to Markets***

For the private sector to expand and for small private firms to grow larger, firms need access to larger markets. Enterprise surveys suggest that low market potential together with too much competition and unfair competition are some of the most important obstacles for private sector development.<sup>8</sup> The largest market for private firms today is the domestic consumer market. As income levels and domestic demand have increased in a mutually reinforcing way, markets for consumer goods and services have expanded, providing new business opportunities for the private sector. However, the purchasing power of domestic consumers is still small. In nominal terms, Vietnam's GDP barely exceeds the aggregate income of a medium-sized European city like Stockholm (with less than one million inhabitants). Given the limited effective consumer demand in domestic markets, export markets provide an attractive alternative for private firms. Yet, the fixed costs of reaching foreign customers are high, and few private firms, in particular few small and medium-sized private enterprises, are able to penetrate highly competitive foreign export markets at a major scale. In fact, Kokko and Sjöholm (2005) argue that only a few percent of Vietnam's private SMEs are involved in direct exports, and that most SMEs do not have any strategies to take advantage of the opportunities opening up as Vietnam is deepening its integration with the global economy. In the short run, it is therefore likely that a third alternative – the state sector – offers more realistic opportunities: the government is the biggest single purchaser of goods and services in many markets.

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<sup>8</sup> See e.g. Nguyen and Stromseth (2002) and Carlier and Son (2004) for enterprise survey results.

It is not uncommon that Vietnamese private firms supply goods and services indirectly to the state sector, as subcontractors to SOEs. However, the opportunities to obtain a direct contract with the state still remain far from equal for private firms and SOEs. Firms interviewed in a mini-survey conducted by the World Bank felt that the way the eligibility criteria in the public bidding process are structured is deliberately biased in favor of SOEs (Carlier and Son 2004a). An example is that bidding documents require the candidate firms to have many years of past experience, which effectively excludes the majority of private firms, given the short history of the private sector in Vietnam. As noted earlier, it is also possible that the softer budget constraints of SOEs make it easier to channel funds for bribes or “bonuses” in connection with public investment and procurement. These kinds of practices create inefficiency and unfair competition that favor SOEs to the detriment of both private firms and the government. For private firms, the consequence is a combination of a lower growth rate (if they are not able to participate as subcontractors) or lower profits (if they act as subcontractors to SOEs that capture a share of the profits thanks to their position as middlemen). For the government, the outcome is higher costs, as it is forced to pay excessive prices to SOEs that are protected from competition from private firms.

Earlier studies indicate that well-functioning public procurement practices may be very profitable for the government. For instance, the Australian Industry Commission surveyed 203 studies on competitive tendering and public procurement in the mid 1990s and found cost savings of about 10-30 percent in almost half of the studies (Industry Commission 1996). Among the remaining studies, the cost savings were larger in one half and smaller in the other half of the cases. The potential for costs savings seemed to be about 30 percent in transport and technical services and about 10 percent in services as health care and geriatric care. In Vietnam, the role of the state reaches much further and the preferences given to SOEs are much more comprehensive than in non-socialist industrialized countries, which implies that the potential cost savings from more efficient public procurement practices are even larger.

Although cost savings make up an important motive for efficient public procurement, an equally important motive in Vietnam should be leveling the playing field for all types of firms and supporting private sector development. A prerequisite for public

procurement to play an important role in this respect is that the prevailing close ties between SOEs and the government are managed appropriately, so that non-government actors can confidently expect equal treatment and equal opportunities in the bidding process. Corruption and lobbying are well-known problems of public procurement also outside Vietnam, and the fact that SOEs are well connected with public decision makers does not make these concerns less serious. Through its connections to government officials, the management of SOEs may for instance have access to non-public information about procurement contracts that can be used to win the bidding. Martin (1999) specifies several ways how governments can, deliberately or not, distort the competition in public procurement and make it difficult for private firms to participate. These include: 1) pooling of several services into one contract making it impossible for small firms to participate; 2) leaving too short time for private firms to submit their bids; 3) asking private firms to hand in detailed and sensitive information that is not relevant for the procurement; and 4) allowing the own entities (government or SOEs) to change their bids after the private firms have submitted theirs. It is also common that Vietnamese firms dealing with procurement or construction related to government and SOEs are obligated to pay kickbacks, which are typically proportional to the value of the transaction (Vu and Haughton 2004). All these problems related to public procurement constitute disadvantages for private firms, depriving them of market opportunities, and cause waste of public resources. The government can play an important role in improving market access by targeting these problems and widening the opportunities of private firms to supply goods and services to the public sector.

### ***Access to Capital***

Considering that Vietnam has one of the highest investment rates in the world at present – about 37 percent of the country’s GDP is devoted to investment (World Bank 2006) – it may appear paradoxical that restricted access to investment capital is often reported as one of the main constraints for private sector development.<sup>9</sup> However, the problem in Vietnam is not one of capital shortage, but rather one of unequal distribution of capital. The state sector accounted for 56 percent of total investment in 2004, but only 39 percent

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<sup>9</sup> See e.g. Tenev et al. (2003), Hansen et al. (2004) and Carlier and Son (2004a)



of GDP; meanwhile, the private sector accounted for about 26 percent of investments, with a GDP share of 46 percent. Another illustration of the uneven access to capital is that SOEs accounted for 3.8 percent of the total employment in 2003, but received about 38 percent of the total credit to the economy and 35 percent of the credit extended by state-owned commercial banks.<sup>10</sup>

It should be recognized that private entrepreneurs in most countries complain about limited access to reasonably priced investment capital, which may be natural considering that the relation between entrepreneurs and creditors is typically characterized both by asymmetric information and differences in risk preferences. While entrepreneurs are inherently prepared to take risks and have all the relevant information about their investment venture, banks and other creditors have less information and are more risk averse, since they typically manage other people's money. Still, the share of firms that find insufficient access to finance a "severe" or "major" constraint to their development is larger in Vietnam than in other countries in the region and worldwide (World Bank 2006).

The ratio of total credit to GDP has increased steadily and is now over 50 percent, suggesting that credits are gradually becoming more accessible throughout the economy. Still, retained earnings appear to be the main source of finance for private firms in Vietnam, accounting for 70 percent of total financing of the 629 private businesses participating in a survey conducted by the MPDF (Tenev et al. 2003).<sup>11</sup> Commercial banks, the second largest source, provided 11 percent of total financing at the start of the business and 15 percent at the time of the survey. The remaining funding came in the form of loans from family and other informal lenders. SOEs clearly had better access to bank credits as they were able to rely on bank finance to a larger extent. The MPDF survey found that 36 percent of the SOEs' financing came from bank loans, 38 percent were equity finance, and the remaining 22 percent came from other sources.

Numerous studies have tried to identify the factors explaining the limited access of private firms to bank loans. These relate both to the banking community's ability and willingness to lend to the private sector and private firms' ability to meet the various

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<sup>10</sup> See IMF (2003) and World Bank (2006), Table 7.1.

<sup>11</sup> Kokko (2004) records even lower shares of bank financing among Vietnamese SMEs.

lending requirements. Constraints that are directly related to the privileged position of SOEs are, for instance the persistence of “policy lending” by state-owned commercial banks (SOCB) to SOEs, crowding out credit available for private firms, and the preference of SOCBs to lend to SOEs due to long-standing relationships. Statistics on bank credits show that the four largest SOCBs extended 45 percent of their credit to SOEs, while other banks, including joint-stock banks, joint-venture banks, branches of foreign banks, two small state-owned commercial banks, and the Central People’ Credit Fund extended only 14 percent of their credit to SOEs.<sup>12</sup>

One obvious explanation for the biased allocation of credits to SOEs is that 99 percent of domestic private firms are small and medium sized enterprises (SMEs) that generally have more difficulties to get credits than large firms with longer credit history. Moreover, SOEs stand out as rather secure investment objects due to implicit government guarantees for their debt and the very low risk of bankruptcy. The perception that SOEs are low-risk customers has probably influenced the lending structure of many banks since the late 1990s, when the Asian crisis focused attention on health of the banks’ balance sheets. Although published data did not indicate any severe risks related to problem credits, it is likely that the condition of the banking system was weaker than suggested by official reports. To reduce their risk exposure, most banks tightened their collateral requirements, which created a substantial bias against private firms. In some cases, it is also likely that banks turned away from private lenders, under the assumption that the SOEs were automatically better credit risks since their debts were implicitly guaranteed by the state: no SOE had ever been forced into bankruptcy because of unpaid debt.

The bias against the private sector created by the strict collateral requirements is due to the fact that certificates of land-user rights (CLURs) serve as the most common type of collateral. The importance of possessing CLURs for access to bank credits has recently been stressed e.g. by Malesky and Taussig (2004). Using data from an Asian Development Bank study of private enterprise formalization, they found, in particular, the possession of CLURs and “connectedness” (in the form of a former job in the state sector) to have a significant positive impact on ease of credit. Since the Vietnamese land market is very underdeveloped, few private firms have been able to reinforce their land

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<sup>12</sup> Computed from estimates in IMF (2003).

holdings through formal CLURs, which puts them in a very weak position in the competition for credits: most SOEs have large holdings of land for commercial and industrial activities, and are easily able to muster all the required.

Aside from the banks' need to buttress their balance sheets, Malesky and Taussig (2004) interpret the bankers' focus on collateral rather than business prospects as a response to an insecure legal environment, which does not adequately protect lenders and debtors. Several weaknesses in the Vietnamese institutional framework, such as poor quality of statements of accounts, underdeveloped bankruptcy procedures, and an inefficient legal system, discourage banks to adopt more open-minded attitudes towards private firms. The US-based Milken Institute points to the institutional environment as one of the major shortcomings of the Vietnamese banking and finance system.<sup>13</sup> The institutional framework includes factors such as contract enforcement, property rights, corruption, costs of creating and registering collateral, bankruptcy procedures, the efficiency of legal system, and the burden of local government regulation: Vietnam has obvious weaknesses in many of these areas.

The unwillingness of banks to accept other types of collateral may partly be explained by prudent lending behavior under a weak legal system, but also by the lack of knowledge or capacity to evaluate and administer liquidation of other relatively secure collaterals such as machinery. The fact that other banks than the four largest SOCBs extend a larger share of their credit to private firms suggests that increased competition in the banking sector could improve private firms' access to capital. In 2004, Vietnam adopted some major amendments to the Law on Credit Institutions, which established for the first time equal opportunities for all commercial banking activities in Vietnam. This reform will hopefully bring about more competition in the banking sector. Further reform will be necessary as Vietnam joins the WTO. Increased competition in the banking sector backed up by efficient enforcement of bankruptcy laws could encourage banks to increase their competence in risk assessment and screening, resulting in increased lending to the private sector, where the average return to invested capital is likely to be higher.

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<sup>13</sup> Milken Institute computes a capital access index consisting of seven different components: financial and banking institutions; equity market; bond market; economic institutions; alternative capital; international access; and macroeconomic environment. In terms of institutional environment Vietnam is ranked 91th place among 121 countries.

The gradual increase in the private sector's share of total credit could be interpreted as an indication that these reforms have begun to improve the structure of the financial market – the private sector share of bank lending grew from 43 percent in 1998 to 55 percent in 2003 (IMF 2003). To some extent, this is indeed correct, but it should be noted that there is also another reason for the shift in the bank lending shares. To put it crudely, SOEs have in recent years gained access to some funding sources that may be considered less “intrusive” than bank credits, which require not only collateral but also some transparency regarding accounts and business plans. Although detailed data are unavailable – illustrating the lack of transparency related to these funding sources – it seems that many of the larger SOEs are increasingly turning to other sources of credits. These include the Development Assistance Fund (DAF), provincial development funds, the Social Insurance Fund, and government guaranteed bond issues.

In particular, the DAF has become a major source of finance for SOEs (Dapice 2004). It channels ODA credits to various users, but it lacks both the more careful scrutiny related to formal banking operations and effective budget control, which makes it very difficult to assess the quality of its loans. Moreover, many of the DAF projects are still in a “grace period” when neither interest nor principal repayments are required. Similarly, albeit at a smaller scale, there are several provincial development funds that support both infrastructure and industrial investment. Most of the credits from these funds are directed to SOEs, but detailed data on the breakdown of borrowers or the quality of loans are not available. The Social Insurance Fund (SIF) is a relatively new actor in this field, but can be expected to grow exponentially in importance. Fifteen percent of the wage sum for all employees in the formal sector will be paid to the SIF to cover health insurance and social insurance fees, and the bulk of these funds will be invested in industry and infrastructure projects. The outflow of funds from the SIF (in the form of retirement pensions) will not accelerate until about 2015, since the only beneficiaries before this time are employees in SOEs – for private sector beneficiaries, the system requires at least 15 years of contributions, counting from the year 2000 (see Kokko and Tingvall 2007). Hence, the fund will continue growing for the coming decade, and it is likely that the total capital stock of the SIF will exceed the size of the government budget by 2015, making it by far the largest individual investor in the

Vietnamese market. Again, not much is known about how the existing SIF funds are invested, and what degree of transparency and accountability can be expected for the future. Finally, the Vietnamese government bond issued in the US market in November 2005 illustrates another new but non-transparent source of SOE funding. The entire bond issue, amounting to USD 750 million at a cost of 7.25 percent per year, was allocated to Vinashin, Vietnam's state-owned shipbuilding company, at unclear terms. While it can be questioned whether Vinashin will be able to invest these funds in a profitable manner, it is clear that other SOEs have noted the transaction, and many would certainly be eager to participate in similar government-guaranteed bond issues in the future. It is also quite clear that no private firms will be able to compete with Vinashin in the short to medium term, given the enormous subsidy provided through the bond issue.<sup>14</sup> The implicit conclusion related to the emergence of these new funding sources is that reforms of the banking system are not likely to be sufficient to give the private sector equal access to capital: to achieve a level playing field, it is necessary to reduce or abolish the various privileges of SOEs.

### ***Access to Land***

As mentioned earlier, the allocation of land-user rights is a factor that indirectly hinders private sector development by restricting private firms' access to capital. Lack of land, and, in particular, uneven allocation of land and underdeveloped markets for land, also directly impede the growth of private enterprises. Private firms experience the issue of finding suitable premises and land as one of the most difficult aspects of both the start-up phase and the subsequent operational phase (Carlier and Son 2004b). The limited access to land is partly explained by the physical shortage of available land, since most existing industrial land is already allocated (mainly to SOEs) and the "creation" of new industrial land through conversion of agricultural land to industrial land has proven very difficult and controversial due to problems related to land compensation. While the nominal price of agricultural land is very low, industrial land has a very high potential value, and it has not been easy to determine how much farmers should be paid when land is converted.

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<sup>14</sup> It would be interesting to explore what price a private Vietnamese company would have had to pay for a long-term credit of USD 750 million. The difference between this amount and the cost for Vinashin could provide one approximation of the size of the implicit subsidy provided by the bond issue.

However, another important explanation for the constrained land access is that the land market does not function efficiently. A large share of the land that is occupied by SOEs is either under-used or unused, and could therefore be more efficiently used by private enterprises. The problem is that SOEs have weak incentives and no legal means to sell or legally sub-lease land to the private sector.

Despite the legal restrictions, many SOEs do rent their land to private enterprises, but this is done informally and at a rate that is several times higher than the official leasing rate from the state. The problem with this kind of informal land market is not only the high rental, but also the insecurity that is connected to the informal contracts. In practice, SOEs can recall the rented land whenever they need to (e.g. due to official controls) or whenever they want to (e.g. if another private firm offers a higher rental), which discourages the temporary tenant from making any long-term investments or business plans. Another problem with such informal contracts is that private firms cannot declare the costs related to property use, such as the rental and electricity, as tax-deductible expenses. Thus, access to land provides yet another example of how the advantaged position of SOEs hinders the development of private sector.

Another alternative for private firms that need land is to try to get provincial authorities' approval to lease land, mainly in industrial zones. This option is perhaps even more troublesome, since the process of converting agricultural land to industrial zones has proven to be very slow and problematic. The main problem typically been that the households holding the original user rights to the agricultural land have not been properly compensated for their user rights, but the process of receiving an authorization to "lease" a piece of land in the zoned areas is sometimes a very complex and lengthy procedure as well. The procedures vary largely from province to province, but typically private enterprises have to negotiate with state agencies such as the Provincial Department of Planning and Investment (under Ministry of Planning and Investment), Department of Finance, Cadastral Office (under People's Committee), Department of Natural Resources and Environment, and local (municipal authorities). This process often takes two to three years, involves extensive informal costs, and has an uncertain outcome. The only exceptions seem to be found in some of the export processing zones, where special regulations have reduced the transactions costs connected with land rental agreements.

However, these zones are rarely an alternative for domestic Vietnamese firms, who are much too small to be attractive as tenants.

An obvious remedy to the land issue would be to recall unused and idle land from SOEs. The new Land Law mandates SOEs to return any unused land to the state, but in practice the option has not been enforced. A plausible explanation is that it is rather difficult to recover idle land. Moreover, the authorities may be unwilling to enforce the process of recovering unused SOE land due to the on-going equitization of SOEs. For many SOEs, land makes up their most valuable asset, and it might be difficult to attract outside investors in case of equitization or privatization if this asset is withdrawn. A more feasible, market-based option is to allow SOEs to legally rent, lease or even sell (the user right of) land to private enterprises in the same way as the new Land Law entitles households possessing CLURs to do. Although this option is not an ideal solution to the land issue, it could rapidly increase the supply of industrial land and thus bring down the rental now prevailing on the informal markets.

## **Strengthening the Competitiveness of Private Firms**

As discussed above, the uneven playing field for private firms and SOEs makes up a serious constraint on private sector development. However, even if large-scale measures to level the playing field would be undertaken, Vietnam's young private sector, which is largely based on small and medium sized enterprises, would not be able to compete in many of the skill and capital intensive industries that still are dominated by SOEs, foreign-invested enterprises, and foreign products. Therefore, to fully utilize the growth potential of private sector and to achieve the country's ambitious development objectives, it is necessary to strengthen the competitiveness of private enterprises. The focus in this section will be on two domains that are important for improving competitiveness of the private sector and where state institutions can play an important role: export promotion and innovation and technology. In relation to the discussion of these domains, we draw on some of the lessons from Swedish experiences.

### ***Export Promotion at the Micro Level***

As Vietnam is gradually opening its borders for trade and turning away from import-substitution as a development strategy, the contribution of export-led growth becomes increasingly important. Since 1995, when Vietnam joined ASEAN's free trade agreement AFTA, trade liberalization has been established as a vital element of the long-term development plan. The ambition to become a member in the WTO has also been an effective driving force for trade reform in recent years; the same can be said about the bilateral trade agreement with the US from 2001. Consequently, trade policy is one of the reform areas where progress has been most satisfactory during the past decade.

Significant improvements in the legal framework for the private sector's participation in foreign trade were introduced already in 1998, when Decree 57 stated that all enterprises with a business license were also allowed to engage in foreign trade in the goods specified in their business license without any separate import/export permit.<sup>15</sup> The number of enterprises registered for foreign trade increased from 2,400 in early 1998 to over 5,500 in 2002, corresponding to 55 percent of the total number of trading companies (Athukorala2006). However, anecdotal evidence suggests that the bulk of Vietnam's exports originate from a small number of larger companies. For instance, in their survey of the internationalization of Vietnam's small and medium-sized enterprises, Kokko and Sjöholm (2005) found that very few are involved in direct exports, and that the share of indirect SME exporters – who act as suppliers and subcontractors to larger exporting firms – is also very low. The fact that firms are still allowed to trade only in commodities registered in the business licenses is an obstacle for trading private firms.

Another major difficulty for private firms is to ensure duty-free access to the imported intermediate inputs needed for export production, since Vietnam still attempts to protect a number of import-competing industries alongside its overall policy, which is largely geared towards exports and increasing outward orientation. SOEs often have some influence in deciding about the export/import conditions required for the goods in their area of operations, which creates much uncertainty for private firms and may discourage their export/import activities, although in theory the foreign trade entry conditions should be the same for SOEs and private firms. There is evidence, for

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<sup>15</sup> See Decree 57/1998/NPCP.



instance, that regulatory requirement demanded by line ministries prevent private firms from participating in rice exports and fertilizer imports (Auffret 2003).

While continuing trade reform is a necessary condition for promoting export oriented activities, it is not sufficient for enterprises to become export-oriented. There is a rather large academic literature identifying the factors that determine which firms start exporting. The probability of exporting has been found to be increasing in e.g. firm size, productivity, and skill intensity (e.g. Roberts and Tybout 1997, Aitken et al. 1997, Clerides et al. 1998, Bernard and Jensen 2004). These firm-specific factors are out of reach of the direct influence of the government, but can be fostered in a generally favorable business environment supported by sound government policies. In the preceding section, we discussed some of the most urgent problems distorting the emergence of such a favorable business environment in Vietnam.

In addition to creating a policy environment that is fair and supportive for private enterprises, export promotion could embrace more direct measures at the micro-level. The Swedish experience illustrates the role the state may play in export promotion at micro-level (see Box 1). Of the three main organizations for export promotion, the Swedish state owns one wholly (the Swedish Export Credits Guarantee Board, EKN) and the two others jointly with the business community (Swedish Trade Council and Svensk Exportkredit, SEK). The mandate of these organizations is to provide information and guidance, including tailor-made business development advice and market studies of foreign countries (Swedish Trade Council); to provide export credits (SEK); and to guarantee and to insure export credit risks (EKN) for export firms. The Swedish Trade Council also has special programs, including education and guidance, directed to SMEs that need support to enter foreign markets. Initially, all the three organizations were established in response to requests from the Swedish business community.

At present, Vietnamese private firms can expect to find very little support in terms of information about trade policies and export procedures and assistance in accessing export markets. The main player representing the interests of business community, Vietnam Chamber of Commerce (VCCI), has the function of promoting trade and investment. According to a study on business associations, only few associations (other than VCCI) are able to conduct trade promotion very effectively and all of the

associations feel that they lack the capacity and resources to be able offer quality consulting services and /or technical advice to their members (Nguyen and Stromseth 2002). Roberts and Tybout (1997) and others maintain that new exporters face significant start-up costs as they gather information on foreign markets, develop marketing channels, adapt products and packaging to foreign tastes, and learn bureaucratic procedures. In this respect, the Vietnamese state could play a more active role either by increasing the skill level and the capacity of the existing organizations, such as VCCI or the National Business Information Center, or to establish a separate organization to provide information and guidance to firms willing to export.

It may be argued that Vietnam's private sector is still too young to require a government organization for export credit guarantees and therefore it should not be a priority of the government. However, several transition economies and developing countries, such as China and Kazakhstan, have recently established state export credit guarantee organizations. The China Export & Credit Insurance Corporation (SINOSURE) was established in 2001 and registered capital of RMB 4 billion which came from the state fiscal budget. SINOSURE is mandated to promote Chinese exports and foreign investments by means of export credit insurance, export financing facilitation, information, and receivables management services. In Kazakhstan, the State Insurance Corporation for the Insurance of Export Credits and Investments (JSC) was established in 2003 as one of the new institutions to promote a shift from the raw material orientation of the country and to develop export-oriented enterprises in other sectors of the economy. Similar organizations emerged in Japan, South Korea, and Taiwan during the 1960s and 1970s, when these countries launched their export oriented development strategies (see Kokko 2006). Export credit guarantee organizations and other trade promotion agencies similar to those elsewhere in the region would certainly serve an important purpose in Vietnam, given that they were given a clearly defined mandate to support private sector development with focus on SMEs and to avoid allocating additional state support to SOEs.

### ***Human Resources and Technology Development***

Vietnam's revealed comparative advantages at present are in labor and resource intensive industries, such as light manufacturing and food products. Therefore, a major focus of

industrial policies should be to support the development of these industries. However, it is also important to create a foundation for Vietnam's future transition to a more modern, knowledge-based and globally competitive economy. The Swedish experience from the 19<sup>th</sup> and the early 20<sup>th</sup> century illustrates the importance of effective education and technology policies during early phases of industrial development (see Box 2). Policy played particularly important role for the Swedish industrial success by establishing good conditions for the development of human resources and an innovation system that, combined with institutional reforms, proved very efficient in exploiting the opportunities opened up as a result of foreign innovations and foreign demand.

The Vietnamese government has traditionally accorded a high priority to education. The efforts during the past decade have given Vietnam an international recognition for achieving the highest level of literacy and best access to basic education of all low-income countries (see Kokko and Tingvall 2007). Since access to primary education is largely assured, the current focus in national policies, as reflected in the Socio-Economic Strategy 2001-2010 and the Education Development Strategic Plan for 2001-2010, is to concentrate resources on improving the quality of education. In particular, the quality of higher education requires improvements to better meet the demands of a more sophisticated market-oriented economy.

Higher education in Vietnam has been similar to that of the former Soviet Union, with a multiplicity of small mono-disciplinary institutions with limited linkages between teaching and research. The structures and procedures of the system are inherited from the era of central planning, when higher education was segmented by economic sector, with many specialized institutions, each with little autonomy of its own, reporting to a particular line ministry. Analysis undertaken jointly by the Vietnamese government and the World Bank in 1998 concluded that the higher education system suffered from low efficiency and quality and was unable to respond to the demands of the market economy. Low efficiency in higher education resulted from the small size of higher education institutions. There are currently over 200 higher education institutions nationwide (Bekkevold et al. 2003). The issue of low quality stems from the perception that graduates are not well-equipped for demands of the market economy. Typically, teaching at the universities emphasizes the importance of facts over the use of knowledge for

problem solving, and aims to provide skills tailored to a particular segment of the labor market. The government's recognition of the inadequacies of higher education has led to reforms in tertiary education policy including: 1) introduction of semi-public and non-public tertiary education; 2) tuition fees and charges for students coupled with scholarships; and 3) encouragement of entrepreneurial activity by institutions to raise additional non-government revenues. While these measures have gone some way in providing a better environment for higher learning, they have also caused some problems related to access to education: with increasing out-of-pocket costs, higher education is largely out of reach of students from the poorer segments of the population, irrespective of the personal qualities of the students. Hence, there is an ongoing debate regarding the balance between what can be left to the market and what should be provided by the public sector.

In addition to improving the quality of higher education, there is also a need to develop vocational training. The area of vocational training is underdeveloped partly due to traditional thinking in terms of preferring universities instead of vocational schools. The vocational training system in Vietnam consists of over 220 vocational schools, about 150 job service centers and over 130 universities, colleges and high schools involved in teaching vocations as well as thousands of private vocational training classes in enterprises and villages having traditional handicrafts (Bekkevold et al. 2003). Despite the large number of vocational training institutes, labor with vocational training is in short supply and has weak quality. This picture is confirmed by the respondents of an enterprise survey assessing the competitiveness in Ho Chi Minh City, Hanoi and Haiphong conducted by the MPDF. The participating business leaders stated that improving quality of vocational education is an urgent priority of the government (Vu and Haughton 2004).

In many crucial areas, e.g. mechanics, automation, and high-tech industries, vocational training is not yet provided (Bekkevold et al. 2003). Furthermore, many vocational schools have insufficient materials and facilities due to the low priority given to these schools. As a consequence, there is shortage of skilled labor in various sectors such as metal cutting, milling, industrial garment making, cooking, metallurgy, mining, and so forth. The private sector also faces major constraints in finding experienced and

well-trained managers. While many can run small-scale businesses, they often lack the formal business knowledge and experience that is needed to manage a medium or large enterprise facing international competition.

At the same time, Vietnam is considered by many investors as having a flexible and easily trainable work force with a high working moral. Given improvements in skills training, Vietnam can potentially transform its current comparative advantages within semi-skilled and unskilled labor intensive industries to sectors which require labor with higher skill levels. Improving vocational training is certainly an area of priority for private sector development.

Human resources are a prerequisite for science and technology development. Skilled labor is required for both adoption of technologies within firms and for science and technology development at universities and research institutes. In a recent enterprise survey of one hundred garment/textile and chemical enterprises, most of the interviewed enterprises stated that in the current context of international economic integration, they are required to renew their technology if they wish to improve competitiveness.<sup>16</sup> The survey results indicate, however, that most of the enterprises have neither any clear business strategy nor any long term investment plan for technological innovation. This is more prevalent in SOEs and private enterprises than in foreign-invested firms. The survey indicated that the size of the technical workforce in most enterprises was limited in comparison with the overall size of the enterprise. Lack of skilled labor and necessary professional skills was perceived by the majority of enterprises as a major obstacle for technological innovation. The limited capacity implies that enterprises are passively absorbing imported technology and not being able to promote creativity and technological innovation.

At present, the links between firms and universities and research institutes are not particularly strong. A plausible explanation is that most firms are still in businesses or sectors where it is not necessary to be at the technology-frontier and to develop new technologies in collaboration with universities. The type of technological innovation used most by the surveyed enterprises was purchasing technology from foreign sources (56 of

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<sup>16</sup> Survey on technological innovation in industrial firms in Vietnam by CIEM and UNDP (2005). The survey results show that the share of enterprises ranking different technological innovation activities as “necessary” and “entirely necessary” is around 90 percent.

100 surveyed enterprises) and design copying and reverse engineering (52 enterprises). However, the survey also showed that enterprises were keen on cooperating with domestic research centers (31 of the surveyed enterprises).

Some private enterprises stated that an improvement in technology and human resources would result in increasing production costs whereas a rearrangement of production organization would help reduce production costs. For them, having competitive prices was perceived as the most important requirement for survival, which explains their priorities. This view is supported by the results of other surveys (Tenev et al. 2003). The perception of many Vietnamese firms, both private and SOEs, is that price is the main tool for gaining competitive advantages. Advanced technology is not viewed as important, although a larger share of SOEs recognized it as the main strength of their competitors.<sup>17</sup> An obvious explanation is that many SOEs are active in sectors with a larger presence of foreign firms: the competitive advantages of foreign multinational enterprises are often related to technology and productivity.

Apart from the clear need for improvements in education and domestic research capacity, it should be noted that foreign direct investment (FDI) may also play an important role for human resource and technology development. The entry and presence of foreign multinational corporations (MNCs) lead to imports of new technology, and it is often recognized as a potentially important source of technology and productivity gains for local firms as well. The technologies and productivity advantages of multinational firms may spill over to local enterprises through demonstration effects, labor mobility (as workers trained in foreign firms move to local firms), and various forms of linkages between local and foreign firms. The increase in competition that typically occurs when foreign multinationals enter a new market provides an additional push for local productivity gains, since it motivates incumbent firms to reduce slack and search for other ways to improve efficiency in order to maintain their market shares (Blomström and Kokko 1998). These gains that may occur in domestic enterprises are not factored into the foreign MNCs' cost calculations, and the amount of inward FDI (which is determined on the basis of the foreign MNCs' private costs and benefits) may therefore fall short of the socially optimal amount. This gap between private and social costs and

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<sup>17</sup> 39 percent of the responding SOEs compared to 26 percent of responding private firms.

benefits provides a motive to subsidize inward FDI (Blomström and Kokko 2003). In addition, efforts to promote FDI may, of course, be motivated by expected positive effects on capital formation, employment, exports, foreign currency earnings, and other indicators of economic development. However, for most of these indicators, there are no strong theoretical arguments to expect that FDI will generate vastly better outcomes than domestic investment.

Like most other countries, Vietnam has therefore encouraged inward FDI. In fact, promotion of FDI has been an important part of Vietnam's economic policies ever since the introduction of Doi Moi in 1986. The first Law on Foreign Investment came into force in 1987, and the first foreign investors entered Vietnam in 1988, although the investment inflows during the first years were disappointingly small. As a reaction to the feeble investment response, the Law on Foreign Investment was revised and amended both in 1990 and 1992, providing more favorable treatment of foreign investment, including tax holidays and provision of land and infrastructure. New amendments, relaxing various investment restrictions and providing further incentives to foreign investors, were introduced in 1996 and 2000. Over time, Vietnam has also entered into a number of bilateral investment treaties that provide additional guarantees to foreign investors. Comparing these provisions with the conditions for private enterprise in general before 2000, there is no doubt that Vietnam's formal regulatory framework was much more favorable for foreigners than domestic firms. This may actually have been one reason for the relative weakness of the domestic private sector during the 1990s: Vietnamese private firms were at a disadvantage even if they were able to overcome the challenges related to technology, brand names, and other areas where MNCs have inherent competitive assets.

The gradually more favorable investment conditions, together with low labor costs and a rapidly growing economy, have resulted in high inflows of FDI. Official statistics state that Vietnam attracted over 6,100 FDI projects between 1987 and 2004, with total committed investment capital amounting to nearly USD 60 billion (World Bank 2006).<sup>18</sup>

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<sup>18</sup> Not all investment plans are realized, and it is likely that the actual inflows of foreign direct investment are somewhere in the vicinity of 60 percent of the committed funds. However, for several reasons, there are

These large inflows of FDI have gradually given foreign investors an important role in the Vietnamese economy. In the mid-1990s, FDI accounted for around 30 percent of gross national investment, but in recent years, the FDI share has stabilized at 15-20 percent of GDP. The GDP share of the FDI sector has grown continuously and reached over 15 percent in 2004. The role of FDI in manufacturing and exports is even more dominant. Foreign-invested enterprises have accounted for well over 40 percent of total industrial output and about one-third of Vietnam's total exports. However, due to their relatively high capital-intensity, they are not as dominant when it comes to job creation. Total employment in the FDI sector was estimated at less than 700,000 workers in 2004, which corresponded to about 1.5 percent of the labor force.

Yet, it is often complained that FDI has not had any strong impact on Vietnamese industry, and that there are no clear signs of technology spillovers to local firms. This is somewhat surprising, considering that FDI earlier studies have found positive spillovers in many developing countries, including Southeast Asian countries like Indonesia and Thailand. One reason for the weak impact may be that the early Vietnamese FDI strategies probably neutralized some of the competition effects of FDI. Much of the FDI inflows that occurred until the mid-1990s were directed to joint ventures with SOEs, often in industries benefiting from import protection, and it is reasonable to assume that these arrangements reduced the competitive pressure bearing on the SOE sector as a whole. Hence, while the SOEs receiving FDI benefited noticeably, they may have refrained from competing too strongly with other SOEs. Moreover, Kokko and Tran (2005) examined the pattern of technology spillovers from FDI in some more detail, and found substantial differences between the effects on SOEs and private firms. While SOEs did not seem to be strongly affected by the presence of foreign MNCs in their industry, there were stronger signs of productivity gains in private firms. Their explanations for the weak effect on SOEs centered on the softer budget constraints and more inflexible management practices in SOEs, which may have obstructed sound responses to the competitive pressure exerted by foreign investors. They also noted that many SOEs were

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no reliable data on the exact FDI inflows. One problem is that much of the FDI inflow is in the form of technology and machinery, which is valued by the investor. Another complication is that foreign MNCs often aim to finance their foreign ventures by borrowing in the host country market, to make sure that their costs and revenues are in the same currency. Moreover, much of capital that enters Vietnam in the form of private transfers is actually invested, and should be counted as FDI.



more vulnerable to competition from foreign-invested firms, since they manufactured the same kinds of relatively advanced and capital-intensive products as foreign MNCs. Since Vietnam does not possess any clear competitive advantages in capital-intensive high-tech industries, these SOEs often lost market shares, which may have led to a diminished ability to exploit economies of scale. Hence, a stronger private sector and fundamental reforms of management and strategy in the SOE sector would be needed to fully benefit from the potential technology spillovers from FDI.

## **Conclusions**

This paper has discussed the development of the Vietnamese private sector since Doi Moi, with particular focus on the relations between the state and the private sector. Although the paper covers developments over a period of two decades, most of the emphasis has been on the period from the late 1990s to the present. Before that time, the modern private sector was simply too small to play any distinctive role in Vietnamese economic development. In the last few years, and in particular since the introduction of the Enterprise Law in 2000, the situation has changed, and the private sector has emerged as a vital part of the economy. It has played a particularly important role for employment creation, accounting for the at least 90 percent of the more than five million new jobs that have been added in the labor market since 2000. It is also increasingly important in terms of investment, output, exports, and tax revenue. These achievements have arguably been the results of a distinct shift in the relation between the state and the private sector. Before 2000, the private sector was looked upon with some caution and all new enterprises were required to apply for a license before starting their operations – a process that took months, involved massive documentation, and a discretionary decision to permit the establishment of the firm. Since 2000, the role of the private sector has been strengthened, policies promoting the development of SMEs have been established, and the cumbersome licensing procedure has been changed to a much simpler registration process.

However, the private sector still struggles to compete against the privileges afforded to state-owned enterprises. The clearest symptom of the lack of a level playing field is probably the skewed size distribution of private firms. The private sector is

strongly dominated by small firms that operate in sectors and niches where they are not in direct competition with SOEs. The few large firms that do exist are often strongly export oriented, preferring to face the competition in the global market before the competition with privileged SOEs on the domestic market. Apparently, Vietnamese private firms are able to establish operations and may relatively easily grow to employ several tens of people, but reaching the ranks of medium sized and large firms is difficult for those enterprises that are not successful exporters.

The main obstacles for the development of private sector are arguably the unfair competition from SOEs, which is mainly manifested in problems with market access, financing, and access to land. Regarding market access, the main obstacles are found in the area of public procurement, where SOEs are favored both by the formal procurement regulations and by their contacts with public authorities. With regard to financing, it is clear that the public sector appropriates the bulk of Vietnam's available investment resources, crowding out the private sector. The increase in the private sector's share of formal bank credits during the last years does not provide any accurate picture of the underlying distribution of investment capital. The SOE share of formal bank lending is diminishing largely because SOEs have privileged access to softer financing sources: funds from the Development Assistance Fund and regional development funds, the Social Insurance Fund, and government guaranteed bonds. However, the allocation of funds from these sources is not transparent, and it is not possible at this time to make any assessment of what risks are involved in these operations. Finally, the land market makes up another serious obstacle for private firms. The continuing high price of land, linked to a weakly functioning market and an artificially restricted supply of land, is one of the factors restricting private firms from taking the step from small and medium sized to large. It is clear that these obstacles should be removed to promote the continuing development of the private sector, which is a precondition for Vietnam to reach its ambitious long term development goals. The promulgation of a Unified Enterprise Law, which has recently been drafted but was rejected by the National Assembly in November 2005, would be an important next step to clearly announce the intention to reduce the privileges of SOEs and to promote private sector development.

In addition to leveling the playing field for the private sector, it would also be desirable to introduce stronger active policies to promote and strengthen the development and competitiveness of the private sector. Two areas have been highlighted in this paper. On the one hand, there is solid evidence from the region and other countries that government can support to internationalization of industry, in particular small and medium sized firms, without distorting competition. One of the limiting factors in the internationalization process is information, both regarding the risks of exports and the issues related to product characteristics, such as design and quality. Since information is largely a public good, it is easy to argue that publicly funded institutions focusing on e.g. credit guarantees, export market information, and quality guarantees could be justifiable. The other hand, it is also clear that Vietnam will face an increasing need to upgrade its production structure from simple raw material and labor intensive commodities to more advanced products. This requires technology, knowledge, and skills, which are presently in short supply. Measures to improve the research and education systems, including not only higher education but also vocational training, will be needed to provide these goods. It is also important to recognize the potential of FDI inflows as an instrument for technology and productivity upgrading. So far, Vietnam has arguably not benefited to any great extent from spillovers of technology from FDI. The likely reason is the dominance of SOEs in the recent past: state enterprises simply seem less able than private firms to benefit from positive FDI externalities. Strengthening the private sector would therefore bring added gains related to the possibilities to absorb the potential technology spillovers from FDI.

## References

- Aitken, Brian, Gordon Hanson and Ann Harrison (1997), "Spillover, Foreign Investment, and Export Behavior" *Journal of International Economics*, 43, 1-2, pp.103-32.
- Athukorala, Prema-Chandra, (2006), "Trade Policy Reforms and the Structure of Protection in Vietnam", *The World Economy*, 29, 2, pp. 161-187.
- Auffret, Philippe (2003), "Trade Reform in Vietnam: Opportunities with Emerging Challenges", *World Bank Policy Research Paper* no 3076, World Bank, Washington, D.C.
- Bekkeveld, Jo Inge, Benjamin Brubakken, , Dag Larsson, and Erlend Sigvaldsen, (2003), "Study on Private Sector Development (PSD) and Prospects for Norwegian Trade and Investment Interests in Vietnam", NORAD report 6/2003, Norwegian Agency for Development Cooperation, Oslo.
- Bernard, Andrew B. and J. Bradford Jensen (2004), "Why Some Firms Export", *Review of Economics and Statistics*, 86, 2, pp. 561-69.
- Blomström, Magnus and Ari Kokko (1998), "Multinational Corporations and Spillovers", *Journal of Economic Surveys*, 12, 3, pp. 247-277.
- Blomström, Magnus and Ari Kokko (2003), "The Economics of Foreign Direct Investment Incentives", in H. Herrmann and R.E. Lipsey, eds., *Foreign Direct Investment in the Real and Financial Sector of Industrial Countries*, Springer Verlag, Hamburg, pp. 37-56.
- Carrier, Amanda and Son Tran Thanh (2004a), "Firm Dynamism: Beyond Registration, How are the new domestic private firms faring?", *Private Sector Development Policy Note* 30434, World Bank, Hanoi.
- Carrier, Amanda and Son Tran Thanh (2004b), "Private sector and Land: Availability, affordability and Administration", *Private Sector Development Policy Note* 30224, World Bank, Hanoi.
- Clerides, Sofronis K., Saul Lach, and James R. Tybout, (1998), "Is Learning by Exporting Important? Micro-dynamic Evidence from Colombia, Mexico, and Morocco", *Quarterly Journal of Economics*, 113, 3, pp. 903-47.

- GSO (2004), *The Real Situation of Enterprises through the Results of Surveys Conducted in 2001, 2002, 2003*, General Statistics Office, Statistics Publishing House, Hanoi.
- Hansen, Henrik, John Rand, and Finn Tarp (2004), “SME Growth and Survival in Vietnam: Did Direct Government Support Matter?”, Discussion Papers 04-13, Institute of Economics, University of Copenhagen, Copenhagen. .
- Industry Commission (1996), “Competitive Tendering and Contracting out by Public Sector Agencies”, Report 48, Australian Government Publishing Service, Canberra.
- IMF (2003), “Vietnam: Statistical Appendix”, IMF Staff Country Report No. 03/382, International Monetary Fund, Washington, D.C.
- Ljunggren, Börje (1996), “Doi Moi in the Year of the Eight Party Congress: Emerging Contradictions in the Reform Process”, mimeo, Hanoi.
- Kokko, Ari (2000), “Structure, Performance and Reform Requirements in the Vietnamese Private Sector”, *Studies on Private Sector Development* 2000:1, Swedish International Development Cooperation Agency, Stockholm.
- Kokko, Ari (2004), “Finance and Vietnamese SMEs”, mimeo, paper presented at *ILSSA-SSE Seminar on SME Development*, June 21-22, Hanoi.
- Kokko, Ari (2005a), “The Vietnamese Anticorruption Program”, mimeo, paper prepared for Sida/Hanoi, January.
- Kokko, Ari (2005b), “Excess Capacity in Swedish Industrial Development”, *International Journal of Learning and Change*, 1, 1, pp 122-140.
- Kokko, Ari (2006), “Export-Led Growth in East Asia: Lessons for Europe’s Transition Economies” in S. Söderman, ed, *Emerging Multiplicity—Integration and Responsiveness in Asian Business Development*, Palgrave Macmillan, Basingstoke, pp 33-52.
- Kokko, Ari and Fredrik Sjöholm (2005), “The Globalization of Vietnamese SMEs”, *Asian Economic Papers*, 4, 1, pp. 152-177.
- Kokko, Ari and Tran Toan Thang (2005), “Productivity Spillovers from Foreign Direct Investment in Vietnam: Evidence from the 2001 Enterprise Survey”, paper presented at 2005 Singapore Economic Review Conference, Singapore, August 3-6.

- Kokko, Ari and Patrik Gustavsson Tingvall (2007), “The Welfare State: Vietnamese Development and Swedish Experiences”, mimeo, Stockholm School of Economics, June.
- Kokko, Ari and Mario Zejan (1996), “Vietnam 1996: Approaching the Next Stage of Reforms”, *Macroeconomic Reports* 1996:9, Swedish International Development Cooperation Agency, Stockholm.
- Malesky, Edmund J. and Markus Taussig (2005) “Where is Credit Due? Companies, Banks, and Locally Differentiated Investment Growth in Vietnam”, paper presented at International Conference of Asian Scholars, Shanghai, China, August 19-23.
- Martin, Lawrence (1999), “Determining a Level Playing Field for Public-Private Competition”, Grant Report, PriceWaterhouseCoopers.
- Mallon, Raymond (1996), “Mapping the Playing Field: Options for Reducing Private Sector Disincentives in Vietnam”, report prepared for the Asian Development Bank, Hanoi.
- Milken Institute (2005), “2005 Capital Access Index: Best Markets for Entrepreneurial Finance”, Milken Institute, Santa Monica, CA.
- Nguyen Phoung Quynh Trang and Jonathan R. Stromseth, (2002) “Business Associations in Vietnam”, *Private Sector Discussion Paper*, No 13, MPDF, Hanoi.
- Roberts, Mark and James Tybout (1997), “An Empirical Model of Sunk Costs and the Decision to Export”, *American Economic Review*, 87, 4, pp. 545-64.
- Shleifer, Andrei (1998), “State versus Private Ownership”, *The Journal of Economic Perspectives*, 12, 4, pp.133-150.
- Sjöholm, Fredrik (2006), “State-Owned Enterprises and Equitization in Vietnam”, EIJ Working Paper Series, No. 228, August.
- Tenev, Stoyan, Amanda Carlier, , Omar Chaudry, and Nguyen Quynh Trang (2003), *Informality and the Playing Field in Vietnam’s Business Sector*, World Bank and IFC, Washington, D.C.
- UNDP (1996), *Catching-up: Capacity Development for Poverty Elimination in Vietnam*, UNDP and UNICEF, Hanoi.
- Van Arkadie, Brian and Raymond Mallon (2003), *Vietnam: a transition tiger?* Asia Pacific Press at the Australian National University, Canberra.

Vu Minh Khuong and Jonathan Haughton (2004), “The Competitiveness of Vietnam’s Three Largest Cities: A Survey of Cities in Hanoi, Haiphong and Ho Chi Minh City” *Private Sector Discussion Paper*, No 17, MPDF, Hanoi.

Webster, Leila (1999), “SMEs in Vietnam: On the Road of Prosperity”, *Private Sector Discussion Paper*, No 10, MPDF, Hanoi.

World Bank (1995), *Bureaucrats in Business*, Oxford University Press, London.

World Bank (2006), *Vietnam Development Report 2006: Business*, World Bank, Hanoi.

**Box 1****Export promotion in Sweden**

The Swedish economy is largely dependent on export markets. In 2004, total accounted for 46 percent of GDP and percent of all goods manufactured in Sweden are exported. Behind the export success of Sweden are a number of large corporations such as Volvo, Ericsson, Electrolux, Scania, SCA, Sandvik, Atlas Copco, SKF, AstraZeneca and Gambro producing engineering goods, pulp and paper and pharmaceuticals. These firms would not have become as large and successful without foreign markets, since expansion possibilities on domestic markets are limited in a small country like Sweden. More recently, an increasing number of small and medium-sized firms have started harvesting at foreign markets. One factor explaining the success of the large established corporations historically, and of the small and medium sized firms today is the support these firms have received from export promoting institutions with state commitment. The main actors are the Swedish Trade Council, the Swedish Export Credits Guarantee Board (EKN) and Svensk Exportkredit (SEK).

EKN promotes Swedish exports by offering guarantees that protect against the risk of credit loss in transactions abroad. EKN was established in 1933 in a time of unemployment and problems for our Swedish export companies. During EKN's first years of activity it was especially exports to Russia and the Baltic states that were in need of government support in the form of guarantees. A very important motive for the establishment of EKN was that guarantee systems had been introduced in several of the most important competitor countries and that Swedish companies, it was argued, should have the equivalent support. This motive is still as valid, although private credit insurers provide risk coverage for a growing share of the world's export credits. Official guarantee systems are now established in some fifty countries.

The EKN guarantee, which is free of charge, covers exports of goods, services and construction works. The most common guarantee covers the risk of non-payment but also risks during production, i.e. that the buyer cancels the contract in part or in full, or that the contract has been interrupted for a longer period, can be insured. EKN insures also e.g. against losses caused by political and/or commercial events related to the importing country. In practice, it performs the functions of an insurance company and charges a premium that reflects the risks of the specific transaction.

During the post-war period the competition on export markets tightened and the buyers of Swedish goods started demanding more generous credit conditions. The demand became burdensome for exporters and also for the Swedish banking sector. In the end of 1950s commercial banks suggested an establishment of a jointly owned export finance institution with state guarantees. In 1962, an institution with 50 percent state ownership, Svensk Exportkredit (SEK), was founded as a result. SEK's rather long experience of international markets, particularly from markets such as China and Soviet Union has been an important resource for Swedish export firms.

The Swedish Trade Council was established in 1972 and is owned by the Swedish state and the Swedish business community jointly. The main assignment of the organization is to provide information and advice to export firm including tailor-made business development advice and market studies of foreign countries. The Swedish Trade Council has also special programs, including education and guidance, directed to SMEs which need support to enter foreign markets. Since the 1990s the state subsidy has constantly decreased and incomes from consulting have increased. It has a turnover of 400 million SEK (50 million USD), 400 employees and 48 offices in 40 countries.



**Box 2****Technology development during industrialization in Sweden: the case of forestry industry**

In the early 19<sup>th</sup> century Sweden was still one of the poorest parts of Western Europe. After a slow start, industrialization took off in the 1870s and by the early 20<sup>th</sup> century, manufacturing industry had developed into a driving force of the Swedish economy. The rapid development of Sweden is impressive even compared to the performance of today's newly industrialized countries, and raises questions about how Sweden managed to move to the international technology frontier so quickly.

Interpreting the Swedish economic history in the light of innovations and knowledge management, it can be argued that the necessary foundation for development was created in the early 19<sup>th</sup> century. This foundation was partly created through conscious policies in agriculture and education, but also through exogenous technical changes. Policies establishing human capital and an innovation system played particularly important role for the subsequent industrial success by facilitating the development and diffusion of new technology.

Important developments that increased the level of education and human capital had started well before Sweden entered the industrial revolution. The literacy rate of nearly 100 percent was reached within one generation after an introduction of mandatory school system in 1842. This proved crucial for the creation of a skilled human capital base and the dissemination of new technology. Concurrently, there were important changes in the higher education. The old universities in Uppsala and Lund already established in the 15<sup>th</sup> and 17<sup>th</sup> centuries expanded throughout the 19<sup>th</sup> century, with a greater emphasis on the natural sciences than formerly. Several institutions for advanced technical education were also founded during first half of the 19<sup>th</sup> century; e.g. the Royal Institute of Technology in 1826 and the Chalmers Technical School in 1829. Technical colleges were also established in several Swedish cities during the 1850s and numerous vocational training schools were set up. Most of the vocational schools depended on private initiatives, although some were financed by the state. The state's engagement increased in this area from the early 20<sup>th</sup> century, and vocational schools have been important tools for the upgrading of labor skills ever since that time.

Parallel to the development of formal education, there also appeared other institutions that were involved in the development of technology and industry. The Royal Swedish Academy dates back to 1739 and the Swedish Ironmasters' Association was established in 1747. The latter was partly state financed and became particularly important for the transfer of foreign technology to Sweden. The association started the publication of the mining science journal *Annalerna* in 1817, and financed a very large number of foreign study trips made by Swedish engineers and scientists, requiring detailed written reports that were made available to the rest of Swedish industry. Several new organizations emerged during the 1860s and in the early 20<sup>th</sup> century. These institutions were closely in touch with scientific research and technical education and important for the diffusion and dissemination of technical skills then and are still important today.

Before the industrial breakthrough, the supply of skilled workers could not be fully exploited in Sweden, but they proved to be a strong competitive advantage when other conditions for industrialization were on place. Moreover, technical skills often translated in entrepreneurial success. The founders and leaders of several of the most successful Swedish companies such as AlfaLaval, AGA, SFK and Ericsson, were educated at the technical institutes and had received foreign training that was paid by the state or some of technical institutions. It has been argued that successful innovators and entrepreneurs illustrate that a network between the technical institutions, industry and the government already existed from the middle of the 19<sup>th</sup> century, and that this contributed significantly to the success of Swedish industrialization.

In addition to the development of education and research, there were a number of other institutional changes that preceded the industrial take-off. One was the restructuring of the state's forest holdings in the mid-19<sup>th</sup> century, which meant distribution of large amounts of forest land to private owners and definition of property rights. Another notable event was the introduction of Limited Company laws in 1848. Moreover, the financial system started developing from the 1830s, with commercial banks, savings banks, mortgage institutes and other actors taking over large shares of lending from Riksbanken, the state bank. In combination with the advances in education and skills, these institutional founded a system that proved very efficient in exploiting the opportunities opened up some years later as a result of foreign innovations and demand.

Reference: Kokko (2005b).