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Viet Nam's Industrial Policy

Designing Policies for Sustainable Development



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Dwight H. Perkins and Vu Thanh Tu Anh

Prepared under UNDP – Harvard Policy Dialogue Papers
“Series on Vietnam’s WTO Accession and International Competitiveness Research”

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Foreword

Viet Nam has made a remarkable transition since 1989 from a centrally planned economy dominated by the administrative allocation of resources to an economy largely governed by market forces. It has accomplished this transition while avoiding the sharp fall in GDP and industrial output that occurred in many other centrally planned economies in Central and Eastern Europe. Much of the success in industrial development to date has been the result of government decisions to remove barriers to entrepreneurial efforts for both foreign direct investors and more recently for domestic private investors.

Looking forward, sustaining rapid industrial growth will involve continuing efforts to remove barriers left over from the centrally planned economy and the occasional new regulatory barriers put up for one reason or another. It will also require reforms in other areas that, directly or indirectly, impinge on Viet Nam's global competitiveness and, therefore, its ability to continue growing in a fast, sustainable and socially inclusive way.

This policy dialogue paper examines areas in which government initiatives can contribute to make this happen by spurring entrepreneurial activity, promoting an enabling business environment and an even playing field and, ultimately, encouraging the development of a strong and globally competitive enterprise sector in Viet Nam. This includes interventions in areas such as investment climate, state-owned enterprise reform, regulation and competition law, financial sector development or infrastructure growth, especially, in this latter case, with regard to the energy and transport sectors.

While the ideas expressed in this paper do not represent the official views of UNDP, we hope that the recommendations presented here will stimulate discussion and debate among researchers and policy makers in Viet Nam and elsewhere on this topic. We also hope that they encourage future research on the many important issues identified in this paper.

Finally, I would like to take this opportunity to thank the research team from Harvard University's John F. Kennedy School of Governance's Vietnam Programme for their insightful analysis and constructive policy recommendations. I would also like to acknowledge the generous support received from the UK's Department for International Development (DfID) and the Spanish Agency for International Cooperation and Development (AECID) to UNDP's policy advisory work in Viet Nam, without which this paper would not have been possible.



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Executive Summary

Vietnam has made a remarkable transition since 1989 from a centrally planned industrial sector dominated by administrative allocation of inputs and outputs to an industrial sector governed mainly by market forces. Furthermore, Vietnam accomplished this transition while avoiding the sharp fall in GDP and industrial output that occurred in so many other centrally planned economies. In the 1980s Vietnamese exports covered less than half of the country's relatively small import requirements and virtually no Vietnamese industries were capable of selling their products in the demanding markets of Europe and North America. Twenty years later Vietnamese exports are twenty fold what they were in the 1980s and industrial products sold around the world are the largest contributors to these export sales.

Much of the success in industrial development to date has been the result of government decisions to remove barriers to entrepreneurial efforts for both foreign direct investors and more recently for domestic private investors. The first barriers to fall were the restrictions on imports and access to foreign exchange. These steps were followed by policies designed to create a favorable environment for foreign direct investment. More recently the most important step has been the passage of two enterprise laws that effectively removed many of the obstacles in the path of domestic private entrepreneurs leading to a boom in private industrial development activity. State owned industries also grew during the past two decades at a fairly rapid pace although one slower than that of FDI industries and, more recently, domestic private industry. In recent years there also has been a large scale move to equitize many state owned firms and in some cases this has led to the creation of corporations truly independent of state control while in other cases the state has retained majority control. From our estimates of the performance of these two corporate types based on a sample of 209 firms equitized in 2002 and 2003, it is clear that the firms where the state retained control performed significantly below the levels achieved by firms that became truly independent of state control.

Looking forward, sustaining rapid industrial growth will involve continuing efforts to remove barriers left over from the centrally planned economy and the occasional new regulatory barriers put up for one reason or another. As the various internationally compiled indicators of how the regulatory environment affects the ease or difficulty of doing business across the globe make clear, Vietnam does not score very high. Generally Vietnam scores in the bottom half of the countries surveyed. China, to be sure, scores at roughly the same level as Vietnam, but China has the advantage of its huge domestic market to attract foreign investors and to provide opportunities for its domestic entrepreneurs. In addition to hampering investment, many of these regulatory barriers contribute materially to the level of corruption in Vietnam (and China) that the government is trying so hard to combat. Also involved in the effort to create a more favorable business environment will be the need to create a legal and regulatory system for resolving commercial disputes that now are largely handled by the discretionary authority of government officials in a non-transparent way.

In the case of infrastructure, Vietnam is far behind China, even the China of 1980, in the quality of its railroad and road infrastructure. Some improvements are being made but much of the investment in transport has been in areas that may strengthen the unity of the country, but which do little for the needs of industry. Going forward the talk is of expensive initiatives to build high speed passenger rail transport while Highway One is still mainly a two lane road. As our estimates of what determines the location of FDI indicate, the quality of transport infrastructure is central. Poor infrastructure in turn has much to do with why most FDI (and most profit oriented industrial investment in general) is concentrated in the Hanoi-Haiphong area and in Ho Chi Minh City and its neighboring provinces. Much government heavy industrial investment, in contrast, appears to be governed more by political considerations of equity between provinces than by what will create an efficient and competitive heavy industry sector.

In the banking sector Vietnam has made important changes. The banking sector was once the exclusive purview of state owned banks and lending by these banks was largely directed to state owned enterprises. Today, however, the output share of the state owned commercial banks has steadily declined from 82.8 percent in 1994 to 63.5 percent in 2007 and will decline further now that foreign banks under the WTO agreement are allowed to operate in Vietnam. Of comparable importance, the share of loans going to the non state sector has risen from 37 percent in 1994 to 70 percent by 2006. The setting of interest rates has also been liberalized. Equitization of the state owned banks, however, has been a slow process with only the Vietcombank actually equitized and not until December 2007. Agribank is also scheduled to be equitized in the future. A possible step backward, however, is the decision to allow the state owned conglomerates (see discussion below) to gain controlling interests in banks inspired apparently by the now largely

discredited *keiretsu* model of Japan. Vietnam's state owned banks are still burdened by large amounts of non-performing loans from past state directed lending to the state owned enterprises and this step would likely contribute to a further increase in bad loans. For a healthy banking system, the goal should be lending solely on the basis of commercial as contrasted to political criteria.

Most of all, however, Vietnam must create a competitive environment for all industries. Economists disagree on many things, but the one thing they agree on is that it is competition that drives industrial growth and rising industrial productivity. Vietnam's current industrial policies, however, often appear to moving in the wrong direction. The major problem, in our view however, is that the government's industrial policies appear to be raising barriers to competition rather than establishing an environment where competition among industrial firms flourishes. It is not much of an overstatement to say that the relevant ministries see the main task of industrial policy as one of protecting and promoting the state owned sector. Promoting the state owned sector by improving its technology and its management skills is all to the good. Protecting inefficient state owned heavy industries for import substitution is quite another matter.

The central industrial policy initiative recently has been the government's decision to create state owned conglomerates mainly in the heavy industry sector. The stated goal is to create large corporations that can become internationally competitive firms with well known brands on the model of say Samsung or Sony. Korea, it is argued, built its large conglomerates with substantial support from the government and Vietnam should try to do the same. But there are at least two fundamental differences between Vietnam's and Korea's efforts to create large well known competitive firms. In Korea most of these firms were private whereas all of the conglomerates in Vietnam are state owned with their boards of directors and top management selected by the government. Second, in Korea all of these large chaebol, in exchange for temporary government support lasting in most cases for only a few years, were expected to become internationally competitive exporters. Vietnam's conglomerates are still largely oriented toward import substitution. Vietnam's compliance with the rules that go with its membership in the World Trade Organization will force the conglomerates to face some foreign competition from imports, but there is suggestive evidence that these conglomerates are designed in part to get around some of the WTO restrictions on protection of domestic firms. If competition is the central way a nation can build internationally competitive firms, setting up conglomerates that have a monopoly of domestic production in key sectors and are partly protected from foreign competition is not a formula for success. There may be justification for the formation of some large conglomerates, but the way that Vietnam is currently going about this effort needs to be rethought.

Introduction

All countries have an industrial policy and Vietnam is no exception. But what countries think of as their industrial policy is often only a part, sometimes even a small part, of the range of policies and institutions that actually shape how industry develops in their country, and Vietnam is no exception in that respect as well. For many countries industrial policy is something that is done by the Ministry of Industry or a planning ministry. The Ministry of Industry in Vietnam, however, is really mainly a ministry for state owned industrial enterprises that today constitute only about a third of all Vietnamese industry as we will show. In reality industrial policy in Vietnam and elsewhere includes everything from macroeconomic policies, notably the setting of the exchange rate, to the creation of institutions in support of markets such as laws protecting property rights or measures designed to encourage or discourage foreign ownership of domestic assets.

Describing and analyzing a country's industrial policy is particularly complex in economies that recently have made the transition from a Soviet type centrally planned command economy to a market economy. In transition economies virtually all of the economic institutions and policies have to be changed and most of these changes influence industrial development even when the primary reason for a given change lies elsewhere. This situation is certainly the case in Vietnam and has also been true of the transitions to market economies in China and Russia. In these economies profound changes in the way industry is guided and developed can arise almost by accident.

This policy paper attempts to analyze Vietnam's industrial policies in this broad context. The main question we are concerned with is whether Vietnam has a consistent and efficient set of policies shaping its industrial development or whether there are inconsistencies and inefficiencies in the way industrial policy is designed and implemented. Where inconsistencies and inefficiencies are identified, we make recommendations for ways of eliminating or reducing these barriers to successful industrial development in Vietnam. We begin with a brief history of how Vietnam's industrial policy evolved over the past two decades. This historical overview is followed by an in depth analysis of the current structure and performance of the country's industry and the policies that currently shape Vietnam's industrial development. We end with a list of recommendations concerning the regulatory environment facing industry, the central importance of providing a supportive environment for the domestic private sector, the desirability of completing the transition from equitization to outright privatization, the need for substantially improved road and railroad infrastructure, and a suggestion that the decision to form conglomerates be rethought.

The Evolution of Vietnam's Industrial Policy, 1986-2006

Under the centrally planned command system, Vietnam had a comprehensive industrial policy that ensured a degree of consistency between industrial inputs and outputs, but did little to promote efficiency in the use of inputs or the quality of output. In important respects this system depended on aid for industry from the Soviet Union and that aid came to an abrupt end after 1989. It was also a system that may have been appropriate for wartime conditions and for a country fully integrated into the Comecon international trading system. But the war was over and the international trading system of Comecon collapsed.

Between 1979 and the Sixth Party Congress in 1986, Vietnam government recognized the weaknesses of industrial SOEs and tried to enhance their efficiency by giving them more autonomy.¹ The limited result of these efforts had convinced the government that more fundamental reforms of the state industrial sector were needed. Indeed, this reformist spirit had triumphed in the 6th Party Congress and helped transform a Soviet-style central planning economy to a more market-oriented economy by launching "Doi Moi". For the very first time, it was officially agreed that the system of central planning based on state subsidies failed to bring about development and prosperity, and therefore needed to be replaced by an indicative planning and macroeconomic management system, and by experimenting with a "multi-sector commodity-producing economy" in which the non-state sector would be allowed to compete with the state in non-strategic economic areas. With regards to industrial policy, there was a critical shift away from heavy industries toward light industries and exports.

From 1989 Vietnam partly by choice and partly out of necessity accelerated the transition to a market system. The first two problems that Vietnam had to deal with were inflation and a large current account deficit. Inflation was primarily caused by a rapid increase in the money supply that was in turn generated to an important degree by the need for government to pump large subsidies into state owned industries many of which were running large losses. Many state owned industries, particularly those "owned" at the provincial level, were closed and others had their production and employment cut back. Industrial output overall fell by 3.3 percent in 1989 according to official statistics with local state owned firms dropping by 13.5 percent and cooperative industries by 36.1 percent.² Central state owned firms increased output but by only 5.9 percent in 1989 and they resumed double digit growth from 1990 on. The goal of bringing a halt to inflation was achieved by 1992 or 1993 when the retail price index rose by 17.5 and then 5.2 percent respectively, down from over 60 percent per year in 1990 and 1991 (and much higher earlier). For a time, state owned industries faced quite hard "budget constraints" after many years when these enterprises were able to draw readily on state funds whenever they felt the need. A hard budget constraint is one precondition for getting industrial enterprises to respond appropriately to market forces. The motive for hardening the constraint, however, was to control inflation, not to improve industrial enterprise performance, and the constraint was relaxed as inflation ceased to be a problem.

In the 1986-1988 period, Vietnam's exports only paid for 34 to 38 percent of the country's imports with the remainder financed by Soviet aid and import subsidies. With the end of aid and subsidies, Vietnam had either to cut back sharply on imports thus inducing a severe recession, or find a way to expand exports.³ In 1989 and 1990 this current account deficit was largely filled by the start in 1989 of large scale petroleum exports from the Bach Ho oil field and by the return to household agriculture that turned the trade deficit in rice into a substantial surplus. Other agricultural products such as coffee also experienced an increase in production and exports. Agricultural products and petroleum, however, were not a long term solution to Vietnam's need for rapidly increasing export earnings required to finance the imports needed for sustained economic growth in general and industrialization in particular. Vietnam early on recognized that it would have to expand the export of manufactures, but most existing state owned firms were ill equipped to play this role. These industries were either oriented toward a captive domestic market or toward a rapidly disappearing planned Comecon market. In either case the quality of most of that output was not remotely up to the international standards required by the markets of Western Europe and North America, and could not

¹ For example, see Decision 25-CP on increasing production autonomy and Decision 26-CP on performance-based wages in the state sector, both dated January 21, 1981 (Decision 25-CP was then modified by Decision 146-HDBT dated August 25, 1982); Resolution 156-HDBT dated November 30, 1984 on improving state-sector's industrial management; (Drafted) Resolution 306-BCT of the Politbureau dated April 8, 1986 and Decision 76-HDBT dated June 26, 1986 on ensuring production and business autonomy of local economic units etc.

² General Statistical Office, *Statistical Yearbook of Vietnam 1994, 1995*, p. 181.

³ Other countries in this situation could also try to raise foreign aid or foreign direct investment, but these options were precluded in these early reform years because of the international embargo.

compete with countries such as China in developing country markets. In fact much of Vietnamese industry could not compete with China in the Vietnamese domestic market where high tariff barriers were undercut by large scale smuggling and an exchange rate for the Vietnamese dong that at the time was probably overvalued.

The challenge for Vietnam in the early to mid 1990s was to come up with an industrial strategy that would lead to sustained growth of industry in general and the export of manufactures in particular. Vietnam did have a model to study that had gone through a transition to a market economy in the 1980s, namely China. The parts of the Chinese model that were particularly relevant to Vietnam were China's conversion to a market economy without privatizing state owned firms and its ability to rapidly expand its export of manufactures. China had been forced to abandon the Soviet economic trading bloc in the early 1960s and thus had begun to expand the export of manufactures notably textiles to advanced market economies in the 1960s well before instituting market reforms after 1978. In the 1980s China went further by opening up to foreign direct investment most of which in this first reform decade came from Overseas and Hong Kong Chinese and was focused on the export of labor intensive manufactures.

Vietnam on its own in the mid-1990s could not compete directly with China for export markets in labor intensive manufactures. The quality of Vietnamese manufactures was below that of the Chinese and its costs were higher partly because of an overvalued exchange rate but mostly because of an industrial sector that had ignored quality, style, and cost considerations up to that point. When the embargo on Vietnam was lifted for all countries other than the United States, however, Vietnam was able to open up to foreign direct investment in these labor intensive manufactures, so as to attract internationally competitive foreign firms and it did precisely that. In 1994 the US embargo on trade with Vietnam was also lifted, further boosting Vietnam's export prospects and its attractiveness to international investors. From the beginning, therefore, the rapid expansion in Vietnam's manufactured exports was based mainly on foreign owned firms. Foreign direct investment actually realized jumped from only US\$575 million in 1992 to US\$2,041 million in 1994 and has not fallen below US\$ 2 billion a year since that time.⁴ Half of this foreign direct investment went into manufacturing and most of that manufacturing was destined for exports. By the year 2004 manufactures constituted 52.6 percent of all Vietnamese exports for a total of US\$13.9 billion, and foreign direct investment firms in 2004 accounted for 54.7 percent of Vietnamese exports for a total in that year of US\$14.5 billion and most of that was manufactured exports (the preliminary figures for 2006 were 57.8 percent and US\$23.0 billion respectively).⁵

When it came to industry producing for the domestic Vietnamese market, however, most firms were domestically owned and most of those were state owned. This experience contrasts sharply with what happened in China's domestic market. In China particularly after 1984 much of the manufacturing destined for China's domestic market was produced by collectively owned enterprises in the cities and in the rural areas not far distant from large towns and cities, enterprises that in China were known as township and village enterprises (TVEs) because ownership rested at the township and village level. By 2005 most of the TVEs had been privatized, but in the early stages these enterprises provided a middle way for China between ownership by the state at the central or provincial level and outright private ownership. TVEs, however, behaved more like private firms than state firms. The local governments did not have the funds needed to subsidize loss making TVEs so these enterprises from the beginning faced hard budget constraints. Governments, in fact, supported the TVEs because they were a major source of revenue for these local governments.

Vietnam, however, never has had anything comparable to China's collectively owned industrial boom. There are several reasons why this has been the case. First, China built up expertise in running businesses and handling simple manufacturing technologies during the People's Commune period of the 1960s and 1970s through what was then called the Rural Small-Scale Industries program.⁶ This program helped make up for what otherwise would have been a shortage in rural areas of agricultural machinery, chemical fertilizers, and cement among other products. The program was also backed strongly by the central government leadership and thus local cadres were under more than a little pressure to show results. Over time, and after many mistakes such as the backyard iron and steel furnaces of the late 1950s, these local cadres learned that their locality could benefit materially if they created a climate that promoted successful businesses. In effect these

⁴ General Statistics Office, *Statistical Yearbook of Vietnam 2006, 2007*: 99-100.

⁵ General Statistics Office, *Statistical Yearbook of Vietnam 2006, 2005*, p. 424-425.

⁶ One of the co-authors of this paper led a team of economists and engineers to study the rural small-scale industry program in China in 1975 (see Rural Small-Scale Industry Delegation, *Rural Small-Scale Industry in the People's Republic of China* (Berkeley: University of California Press, 1977).

local government and Commune officials made the transformation from the traditional local government roles of taxing and regulating business into actually promoting business.

In contrast, rural industrialization had never been a priority in Vietnam industrial policy, even after the war ended in 1975. Instead, the priority was to rebuild the basic infrastructures and facilities which were severely destroyed during the war and then during the so-called “industrial and commercial restructuring”, mostly in and around Hanoi and Ho Chi Minh City.

Vietnam had nothing fully comparable to the Commune structure that was the vehicle used in China to promote rural industry.⁷ In addition, most local government officials, with some notable exceptions, stayed with the more traditional role for government officials of taxing and regulating local industry, particularly private industry which more often than not was looked on with suspicion. Vietnamese officials at the local level thus lacked the experience and the necessary attitude that would have made it possible for them to develop efficient local collectively run industries or to create a favorable climate that would allow private sector entrepreneurs to prosper. That situation has changed in recent years as will be elaborated on below.

Key elements of Vietnam’s industrial structure that existed well into the first decade of the 21st century, thus, were in place by the latter 1990s. Producer goods industry or heavy industry⁸ was almost completely in the hands of state owned enterprises at the central level. These industries, for the most part, operated behind high tariff barriers that reduced pressure on them to lower costs. In fact the cost of such a key input as steel produced by Vietnamese SOEs, even after being heavily subsidized, was 30-40% higher than the cost of other East and South East Asian countries in the 1995-1996 period.

Discussions of building a major oil refinery in Central Vietnam began in the early 1990s, but construction on this refinery did not begin until the late 1990s and early years of the twenty-first century⁹ largely due to opposition to investing so much in a single plant (roughly US\$1 billion) when funds were short and placing that plant far from either its major markets (Hanoi and Ho Chi Minh City and environs) or from the main source of its petroleum input (off the coast near Vung Tau in southern Vietnam). By 2003, however, these objections had been overcome by those in charge of the decision and work resumed in Central Vietnam not only on a major refinery but on a range of producer goods industrial plants. One heavy industry that did have significant foreign participation was automobiles. Vietnam by 1997 had allowed eleven foreign automobile companies to set up plants in the country, but these plants typically produced only a few thousand vehicles a year.¹⁰ Most were assemblers of CKD (Complete Knock Down) kits of imported automobile parts. Enterprises of this sort rarely contribute significantly to domestic value added in the country where they are located. Many in fact actually subtract from domestic value added, that is they actually reduce total GDP.

Thus Vietnam’s industry in the late 1990s and during the first years after 2000 was primarily made up of two sectors that had little in common. There was a heavy industry or producer goods sector that was mainly state owned and high cost and thus was not internationally competitive and a foreign direct investment sector that was low cost and highly competitive internationally.¹¹ The gross value of industrial output data in 1994 constant prices are presented in Chart 1. The main trends of note in this chart are that the state sector grew fairly rapidly but that the FDI sector grew even more rapidly. The private sector was virtually nonexistent in 1999 although some private activity was no doubt disguised under other headings, but then the private sector began to grow even more rapidly than any other sector after 1999 but from a very small base. The other category is made up mostly of small household firms and a very tiny collective sector.¹²

⁷ The Rural People’s Communes had a three tier structure, the Commune was made up of Brigades and Teams with most of the industrial development handled at the Brigade level while most of the agricultural activities were handled at the smaller Team level that was a collective unit with 20 to 30 families on average. Thus industrial development became the major function of officials at the Brigade level.

⁸ Producer goods industry includes only industries that produce major inputs into manufacturing and agriculture such as machinery, chemicals, steel, and the like. Heavy industry is a less precise term because it includes some consumer goods that have some features similar to producer goods—e.g. automobiles are composed of machines and steel but are usually classified as consumer goods.

⁹ Dating the beginning of the Dung Quat refinery is complicated by the fact that construction started and then stopped and did not really get going in earnest until 2003.

¹⁰ Sturgeon, 1998, p.2.

¹¹ This dualistic structure has been maintained even until recently but more broadly between the state and non-state (including both FDI and domestic private industrial companies) sectors.

¹² In the 1990s data there was also a “mixed” ownership category that is included here under “other”.

Chart 2 presents the data for exports and imports from or to foreign direct investment firms in Vietnam. It also shows that about 60% of the export growth since 2000 has been accounted for by the FDI sector. Most of this FDI based increase in exports comes from the export of manufactures. Light industrial and handicraft products rose from 28.5 percent of total exports in 1995 to 42.7 percent in 2003 and then leveled off. In US dollar terms light industry and handicraft exports rose from US\$1.55 billion in 1995 to US\$13.07 billion in 2005. The total increase in exports from this sector was US\$11.5 billion as compared to an increase over the same period in total FDI exports of US\$20.0 billion. The remaining FDI exports were made up of processed food and alike.

Chart 1. Gross Industrial Output by Ownership

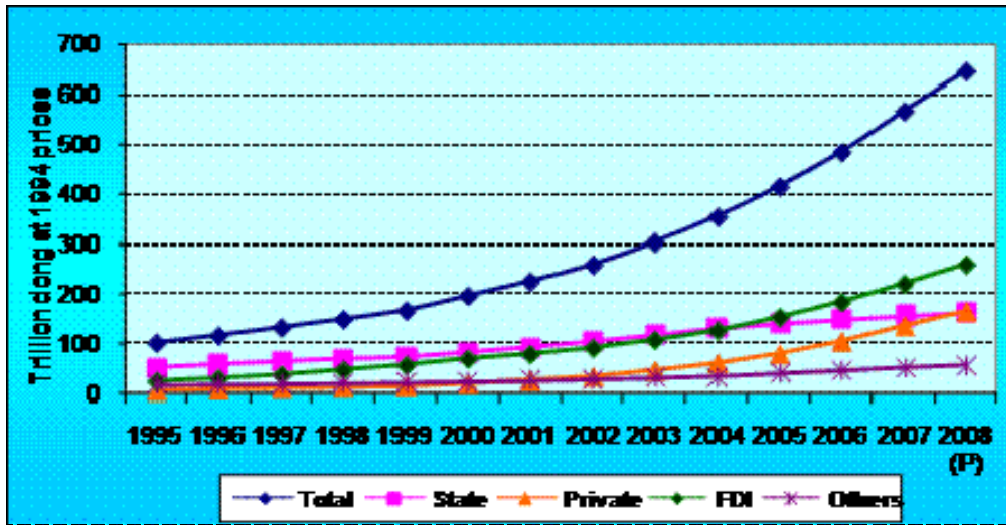
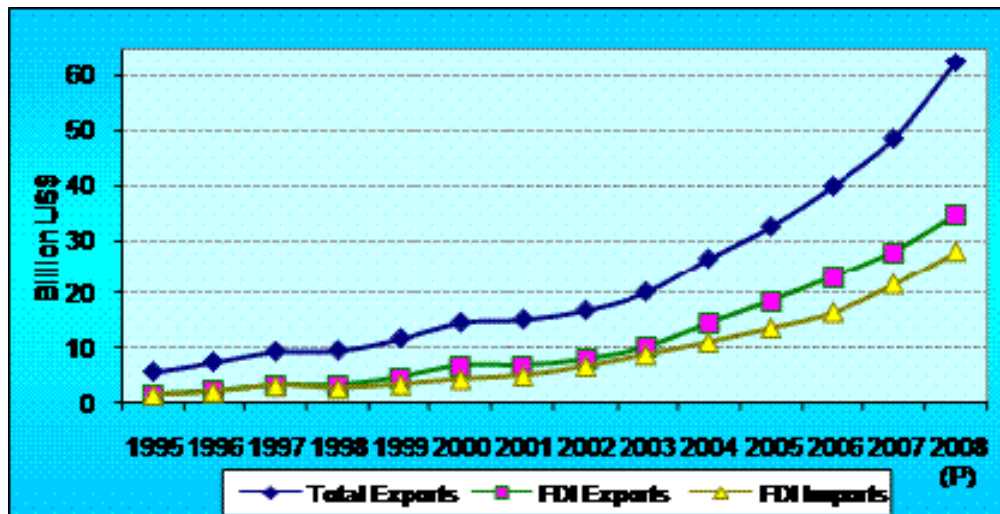


Chart 2. FDI Share in Exports



Source: Various issues of General Statistical Office, Statistical Yearbook of Vietnam. FDI export figures are including crude oil and available for the years prior to 1999 but were estimated using a different definition that understates the exports for the FDI sector for the years 1996-1998. Not all of the FDI imports were used to produce products for export. Some produced output destined for the domestic market so the difference between exports and imports in this table does not represent value added from the FDI sector.

Two major policy changes instituted in the period between 2000 and 2007 led to a significant modification in Vietnam's industrial structure. One policy change was Vietnam's decision to take the steps necessary to become a member of the World Trade Organization (WTO), a process that was not actually completed until

January 2007 when Vietnam formally joined the WTO. A second was the decision by the government and the National Assembly to pass the Enterprise Laws of 2000 and 2005 that formalized the increasing acceptance of private ownership in industry and in the economy more generally.

To get into the WTO Vietnam had first to negotiate a trade agreement with key members, notably the United States. And prior to that Vietnam as a member of AFTA and ASEAN had been cutting tariffs and eliminating other trade restrictions. Subsequently a bilateral trade agreement was signed by the United States and Vietnam in the year 2000 and it formally came into effect in December 2001 after being ratified by both sides. The bilateral agreement with the US required Vietnam to remove a wide range of barriers to trade and investment from abroad, but the negotiations over WTO accession were even tougher in that respect. Vietnam, to gain accession, had to agree to what amounted to something closely approaching a free trade regime.

It is difficult to exaggerate the significance of these trade agreements for Vietnam's industrial policy. Industries in the state sector that had enjoyed development behind high protective barriers were potentially faced with the nearly complete removal of those barriers. In effect the state owned sector was being told by those negotiating the WTO agreement with Vietnam that it had to become internationally competitive and to do so immediately.

China had gone through a similar experience in the late 1990s until the country's formal accession to the WTO in 2001. Prior to entry and before negotiations were completed, China instituted sharp cuts in the workforce of a wide range of state owned enterprises and began slashing tariffs and removing non-tariff barriers to trade. In the Chinese case, the decision to join the WTO was as much an effort to make state owned enterprises internationally competitive (or failing that to force them out of business) as it was an effort to protect China's rapidly growing export markets. In the case of Vietnam, in contrast, there are still those trying to find a way to continue supporting state owned firms that cannot compete internationally.

The Enterprise Law of 2005 had as a major goal the creation of a level playing field for all enterprises regardless of whether they were state or privately owned. Earlier enterprise laws, notably the law of 2000, had greatly simplified the procedures needed to start a new business and this benefited many private firms, but the 2005 law removed at least some of the elements of the privileged position enjoyed up to then by state owned enterprises at least in terms of the law. The boom in private enterprises began with the 2000 law and has accelerated under the 2005 law. For the first time since the reform period in Vietnam began in the late 1980s, Vietnam had three distinct sectors of industry that enjoyed rapid growth, the foreign owned sector, the state owned sector, and private enterprises.

Vietnam's Industrial Competitiveness

There is no single pattern of industrial development that applies to all nations, but most countries that successfully industrialize go through a number of stages that have much in common. The differences across countries over time are due first to the fact that new technologies that did not exist in earlier times are often adopted at an earlier stage of development than was the case with today's high income countries. Thus the modern chemical and electric power industries did not begin to develop anywhere until after the 1880s when the necessary scientific knowledge first became available and nuclear energy and most information technology were not available until well into the second half of the twentieth century. Still the most common industrial development pattern is to begin with labor intensive industries that produce essential consumer goods such as processed food, clothing, and footwear, and then to move on to the assembly of a much wider set of products notably in the electronics area. Countries then move up the technology ladder to start various heavy industries such as machinery and steel and to produce more and more of the components of what up to then had mostly been imported for local assembly. Automobile manufacture tends to become a major industry toward the end of this phase at least in the larger countries or countries that learn to efficiently produce automobiles of high quality as was the case with Japan by the 1970s and Korea by the 1990s. The next stage as a country approaches the frontiers of industrial technology is for that country to produce high technology products increasingly using technology developed in the research laboratories of that country.

Vietnam is still in the early stages of this industrialization process. As the data in Charts 3 and 4 indicate, Vietnam's industry is dominated by food processing, textiles and garments, footwear, and a variety of other labor intensive industries.

Chart 3. International Comparisons of Industrial Structure (sorted by Vietnam's output share)

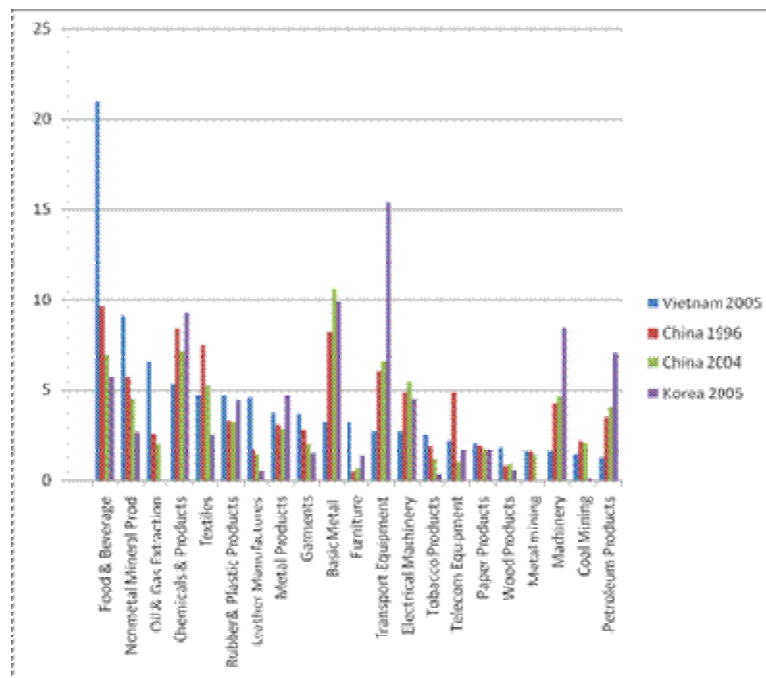
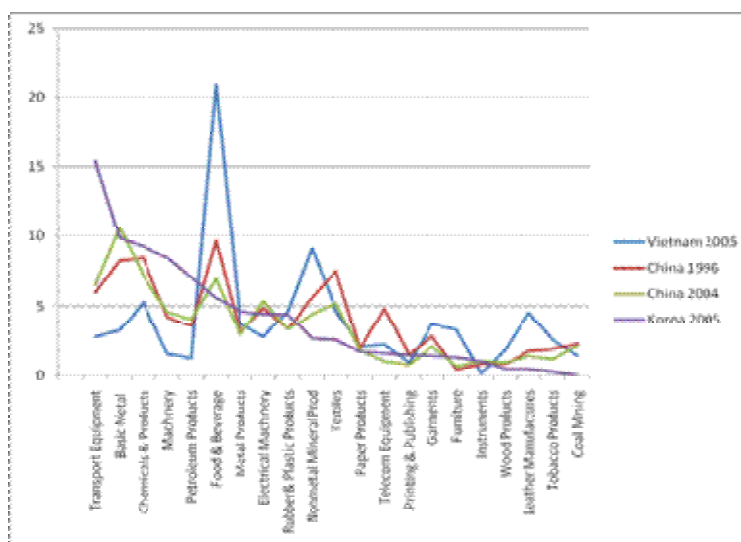


Chart 4. International Comparisons of Industrial Structure (sorted by Korea's output share 2005)



Sources: These figures were derived from gross value output data in the following sources: General Statistics Office, *Statistical Yearbook of Vietnam 2005*, pp. 328-329; National Statistical Office, *Korea Statistical Yearbook 2006*, pp. 323-325; National Bureau of Statistics, *China Statistical Yearbook 2006*, p. 510 and 1997, p. 424.

The major exception to this pattern is the oil and gas industry but that simply reflects another feature of early industrialization—countries with rich natural resources develop those resources before anything else typically with the help of foreign direct investment and foreign technology. Vietnam prior to the 1990s also departed in a small way from the typical industrial pattern by attempting to duplicate the experience of the Soviet Union through developing various heavy industries from the start rather than waiting until a later stage of development. China in the 1950s through the 1970s went much further down this road by building a large number of heavy industry plants most of which proved to be highly inefficient and were a major drag on the economy during the first phases of the post-1978 Chinese reform period.

It is not automatic for countries that begin industrialization to move steadily through these stages of industrial development. Malaysia, for example, has yet to reach a point where it has an internationally competitive automobile industry despite having begun the effort to develop a domestic automobile manufacturing capacity (as contrasted to an assembly capacity) beginning in the early 1980s. Many other countries around the world, notably in Latin America, accomplished rapid industrialization for a time using import substitution accomplished with the assistance of high barriers to imports of competing products. Because the domestic markets of these countries were typically small, however, this kind of industrialization quickly ran up against the limitations of domestic demand. The result was an industrial sector that could not continue to grow domestically and was too inefficient to grow through exports. It took many of the Latin American countries decades to overcome this impasse. The question for Vietnam today is whether it will make a smooth transition up the technology ladder and from dependence on the domestic market to reliance on exports not just in the labor intensive sectors where it now clearly enjoys a comparative advantage world-wide, but in the more complex and higher technology sectors? Much of the rest of this essay is devoted to an analysis of the barriers to this kind of transition that still exist in Vietnam and need to be removed if progress is to continue. First, however, what more can we say about the current state of the competitiveness of Vietnam's industry?

One measure of whether an industry or firm is internationally competitive is whether it is able to export or not. By that standard Vietnam's competitive industries include footwear, garments, simple electronic assembly, wood products such as furniture, and, of course crude oil. Most of Vietnam's heavy industries are not now internationally competitive. The more important question, however, is whether these heavy industries are on the verge of becoming internationally competitive or whether they still have a long way to go? If the latter is the case, Vietnam could be facing a period of a significant slowdown in industrial development.

There are several kinds of data that can be used to reach a judgment about whether a country is competitive in one economic sector or another. Unfortunately the relevant calculations for Vietnam in many cases have

not been done so what follows are data from other countries that give a sense of where Vietnam needs to go over the next decade or two with respect to the international competitiveness of its various industries.

Table 1. Relative Prices (Purchasing Power Parities) by Sector (1997)

| | Japan | Korea | Taiwan |
|------------------------------|-------|--------|--------|
| US dollar exchange rate 1996 | 121 | 844 | 27.5 |
| Food | 292.8 | 1438.9 | 34.23 |
| Textiles | 150.3 | 930.3 | 24.41 |
| Apparel | 168.7 | 1399.2 | 25.02 |
| Wood | 261.2 | 998.9 | 25.98 |
| Furniture | 234.7 | 561.5 | 23.59 |
| Paper | 158.9 | 973.7 | 24.3 |
| Printing Publishing | 158.9 | 973.7 | 24.3 |
| Chemicals | 167.1 | 947.4 | 23.09 |
| Petroleum & Coal | 265.2 | 962 | 23.09 |
| Leather | 213.2 | 927.8 | 19.64 |
| Stone clay glass | 126.7 | 679.3 | 21.02 |
| Primary metal | 129.8 | 985.5 | 24.78 |
| Fabricated metal | 176.8 | 788.8 | 25.88 |
| Machinery (non electric) | 138.2 | 705.1 | 17.66 |
| Electrical machinery | 102.9 | 798.4 | 19.15 |
| Motor Vehicles | 111.2 | 815.6 | 31.35 |
| Transportation equip | 116.2 | 773.9 | 31.35 |
| Instruments | 162.8 | 1295.2 | 24.33 |
| Rubber & plastics | 114.6 | 726.3 | 24.28 |
| Misc. Manufacturing | 202.2 | 1361.7 | 23.59 |

Source: Jorgenson, Kuroda, and Motohashi (2007), pp. 196-197. The overall official exchange rates were taken from various official sources. The rates for 1996 were used because of the distorting impact of the financial crisis in 1997 mainly on the exchange rate of the Korean won.

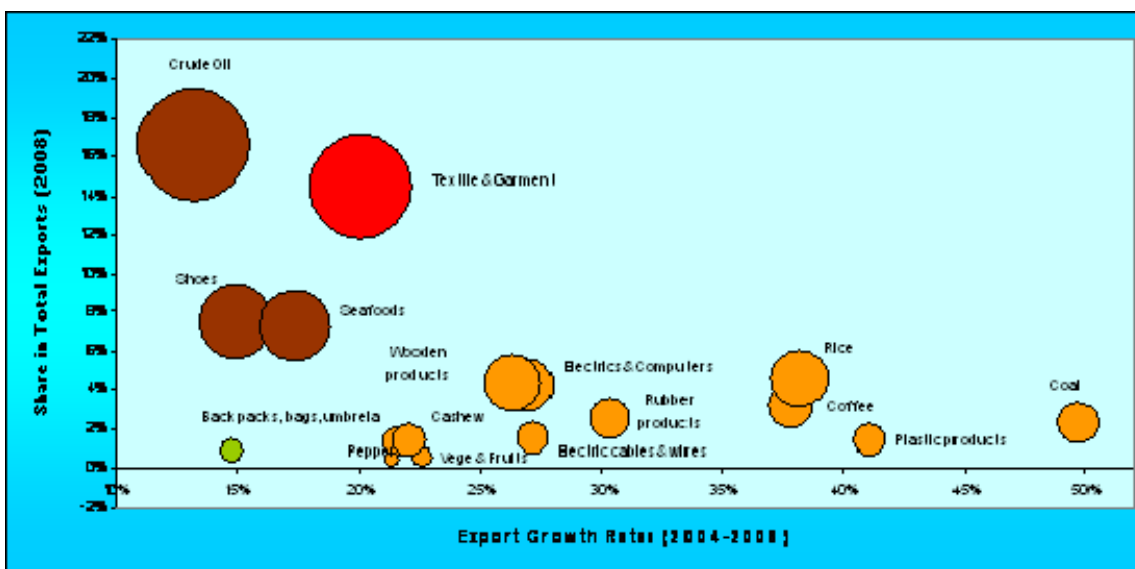
The first set of data that can be used for this purpose are purchasing power parity data for individual economic sectors for three East Asian economies, Japan, South Korea, and Taiwan. These sectors PPP data differ from the figures used to calculate Purchasing Power Parity GDP in the UN's International Comparison Project (ICP) in that the figures in Table 1 are basically factory gate prices that do not include the costs of distribution of the product.¹³ In Table 1, PPP is defined as the ratio of the price of a bundle of products in different sectors between a country and the US, with prices expressed in that country's currency. The relative price level is then defined as the (average) sectoral price of one country's relative to that of the other country. For example, the relative price level of a food in Japan compared to South Korea is obtained by comparing the PPP of the food (i.e., 292.8 yen in Japan to 1438.9 won in South Korea) to the currency exchange rate vis-à-vis \$US (for example, 121 yen for a \$US while 844 won for a \$US). The relative food

¹³ The ICP data are also for categories of expenditure rather than production. Nevertheless, the ICP figures calculated by the Asian Development Bank in its recent study of Purchasing Power Parity GDP for Vietnam and other Asian countries could be used to better understand the state of Vietnam's competitiveness if the prices could be stripped of distribution costs. One would need disaggregated prices (rather than the highly aggregated sectors in the current ADB publication) so that one could identify which sectors were mainly made up of imports and which were mainly made up of domestic producers.

price level of Japan relative to South Korea is then $(292.8/1438.9) / (121/844) = 1.42$. The primary lesson that can be learned from this table is that compared to South Korea and Taiwan, Japan in 1997 was relatively competitive mainly in electrical machinery, motor vehicles, transport equipment, and rubber and plastics.

In the late 1990s transport equipment including automobiles plus electrical and non electrical machinery constituted over two-thirds of all Japanese exports. Non electrical machinery included many items that were still competitive even if the overall sector was beginning to price itself out of the international market. There were also numerous enterprises in other sectors that could still export but all of these together accounted for less than a third of all Japanese exports. In South Korea the story for the late 1990s is similar with half of all exports accounted for by the machinery and transport equipment sectors. Korea was priced out of most consumer goods sectors particularly those in the labor intensive category such as garments and shoes. Taiwan's exports are similar to those of Korea despite the fact that the PPP prices in Table 1 suggest that a much wider range of sectors was still internationally competitive. The implication is that the Taiwan dollar was probably undervalued in the late 1990s but that exporters concentrated on sectors where they had the greatest price advantage.

Chart 5. Contents and Size of Vietnamese Export Basket (2004-2008)



Notes: The data source is GSO in various years. It is obvious that except for oil, export performance is better in industries with the more intensive domestic competition. Conversely, trade protection and domestic monopoly reduce export performance.

Vietnam, of course does not export much in any of the sectors where Japan, South Korea and Taiwan are most competitive. Vietnamese exports, as noted above, are dominated by petroleum, agricultural products (rice, coffee, tea, and rubber), fishery products, and labor intensive manufactures (garments, footwear). Vietnamese exports are likely to continue to be dominated by these kinds of products for the immediate future. But both Korea and Taiwan began shifting domestic production toward heavy industries after only one decade (the 1960s) of export growth based on labor intensive manufactures. By the 1980s exports of these two economies were dominated by heavy industry products and labor intensive manufactured exports were on the way out.

Vietnam's more outward oriented industrialization began nearly two decades ago and Vietnam started from a level of per capita income that was similar to that of Korea and Taiwan in the early 1960s. In 1989 Vietnam's per capita PPP GDP in 2000 prices was \$1380 whereas that of South Korea in 1962 was \$1570 and that of Taiwan in 1960 was \$1490 both also in PPP GDP in 2000 prices.¹⁴ Vietnam's per capita income growth was slightly slower than that of Korea and Taiwan in the 1960s, but even taking that into account, Vietnam is at least approaching a point in its development that is similar to where Korea and Taiwan began moving

¹⁴ Heston, Summers and Aten, *Penn World Tables Version 6.2* (2006).

beyond labor intensive light industries to heavy industries such as machinery, petrochemicals, and steel. Korea and Taiwan made this transition without having to abandon their outward orientation. By the 1980s, twenty years after their high growth spurt began, they were both exporting large quantities of heavy industry products.

Will Vietnam be able to duplicate this achievement over the coming two decades? Or will Vietnam try to go through this next phase of industrialization relying on a strategy of import substitution? Answer to the former question seems less affirmative given Vietnam's current low level of development in manufacturing and heavy industries (Table 2 and 3). The latter is certainly not the government's official intent, but are the policies toward heavy industry being pursued by the government consistent with its official intent? Will the prices of domestically produced heavy industry products be internationally competitive? These questions will be taken up in the next sections.

Table 2. Manufacturing Value Added of Vietnam and Other Countries

| Indicator | Year/Period | Viet Nam | China | Thailand | Malaysia | Taiwan | South and East Asia and Oceania | Developing countries |
|---|-------------|----------|-------|----------|----------|--------|---------------------------------|----------------------|
| MVA, average annual real growth rate (in %) | 1995-2000 | 11.0 | 9.2 | 1.8 | 6.0 | 5.6 | 6.6 | 4.8 |
| | 2000-2005 | 12.0 | 10.4 | 7.4 | 5.6 | 4.8 | 8.0 | 5.2 |
| Non-manufacturing GDP, average annual real growth rate (in %) | 1995-2000 | 6.0 | 8.0 | -1.8 | 2.8 | 5.8 | 4.4 | 3.8 |
| | 2000-2005 | 6.2 | 9.0 | 4.2 | 4.4 | 3.0 | 5.8 | 4.6 |
| MVA per capita, in constant 1995 US\$ | 1995 | 43 | 203 | 868 | 1151 | 3247 | 236 | 268 |
| | 2000 | 68 | 305 | 942 | 1517 | 4120 | 310 | 326 |
| | 2005 | 113 | 479 | 1250 | 1755 | 4888 | 561 | 455 |
| MVA as percentage of GDP at constant 1995 prices | 1995 | 15.0 | 33.4 | 29.8 | 26.4 | 25.4 | 21.8 | 21.0 |
| | 2000 | 18.2 | 34.8 | 33.4 | 31.0 | 25.2 | 23.8 | 22.4 |
| | 2005 | 22.8 | 36.0 | 36.6 | 31.8 | 26.4 | 25.2 | 23.8 |

Source: UNIDO (<http://www.unido.org/data/regions.cfm>)

Table 3. Manufacturing Value Added (MVA) Comparison among Vietnam, China, Thailand, and Malaysia

| ISIC Description | Vietnam 1998 | | Vietnam 2000 | | China 1995 | | China 2003 | | Thailand 1996 | | Malaysia 1996 | | Malaysia 2000 | |
|-----------------------------------|--------------|------------------|--------------|------------------|------------|------------------|------------|------------------|---------------|------------------|---------------|------------------|---------------|------------------|
| | MVA | MVA per employee | MVA | MVA per employee | MVA | MVA per employee | MVA | MVA per employee | MVA | MVA per employee | MVA | MVA per employee | MVA | MVA per employee |
| Total manufacturing | 2,532 | 2,841 | 4,379 | 2,841 | 148,059 | 2,542 | 411,846 | 8,433 | 39,386 | 16,320 | 28,434 | 20,119 | 27,915 | 17,886 |
| Food | 335 | 3,867 | 735 | 3,146 | 8,476 | 2,632 | 25,776 | 9,118 | 4,481 | 12,839 | 1,956 | 20,247 | 1,982 | 16,587 |
| Beverages | 259 | 11,954 | 359 | 11,161 | 4,234 | 3,499 | 9,617 | 10,805 | 2,749 | 54,805 | 1,143 | 24,697 | 161 | 29,565 |
| Tobacco | 173 | 18,454 | 228 | 18,821 | 7,335 | 22,228 | 19,010 | 89,671 | 1,210 | 70,564 | 320 | 24,251 | 88 | 8,942 |
| Textiles | 202 | 2,366 | 187 | 1,605 | 10,758 | 1,599 | 23,036 | 4,615 | 1,688 | 7,934 | 1,278 | 11,424 | 530 | 15,374 |
| Leather and apparel | 173 | 1,126 | 410 | 1,701 | 6,570 | 2,398 | 18,217 | 4,008 | 1,218 | 6,034 | 467 | 7,539 | 454 | 5,934 |
| Footwear | 170 | 1,083 | 308 | 1,142 | - | - | - | - | 348 | 5,601 | 24 | 9,050 | 30 | 4,616 |
| Wood products | 28 | 1,271 | 58 | 978 | 1,138 | 1,560 | 3,210 | 5,032 | 591 | 10,092 | 1,542 | 10,410 | 1,075 | 8,478 |
| Furniture | 20 | 1,219 | 45 | 1,093 | 676 | 1,931 | 2,210 | 5,093 | 569 | 6,570 | 392 | 9,805 | 556 | 8,206 |
| Paper, paper products | 54 | 2,270 | 77 | 2,188 | 2,782 | 2,092 | 8,233 | 7,222 | 1,267 | 29,334 | 482 | 20,018 | 560 | 16,890 |
| Printing and publishing | 70 | 4,390 | 97 | 4,538 | 1,475 | 1,520 | 4,041 | 6,803 | 929 | 20,052 | 738 | 20,443 | 545 | 15,906 |
| Chemical excluding drugs | 141 | 5,616 | 202 | 5,138 | 16,888 | 3,010 | 45,727 | 9,919 | 1,934 | 29,115 | 2,146 | 71,767 | 2,114 | 52,303 |
| Drugs and medicines | 34 | 3,203 | 72 | 4,143 | - | - | - | - | 233 | 10,283 | 70 | 18,069 | 101 | 14,591 |
| Petroleum refineries and products | 9 | 18,716 | 18 | 16,287 | 6,721 | 9,335 | 15,554 | 26,054 | 1,301 | 176,074 | 810 | 225,120 | 2,492 | 303,616 |
| Rubber and plastic products | 91 | 2,973 | 150 | 2,943 | 4,352 | 2,340 | 13,691 | 6,741 | 2,489 | 12,948 | 2,239 | 15,571 | 1,972 | 11,716 |
| Non metallic mineral products | 258 | 4,094 | 463 | 3,690 | 13,280 | 1,642 | 21,131 | 5,332 | 2,566 | 16,662 | 1,519 | 25,019 | 1,318 | 22,522 |
| Iron and steel | 68 | 3,186 | 90 | 3,950 | 12,612 | 3,645 | 34,119 | 13,333 | 571 | 18,476 | 727 | 29,790 | 412 | 14,887 |
| Non ferrous metals | 8 | 1,906 | 5 | 875 | 3,617 | 3,581 | 10,899 | 10,224 | 132 | 10,766 | 264 | 25,917 | 364 | 25,630 |

| | | | | | | | | | | | | | | |
|---|----|-------|-----|--------|--------|-------|--------|--------|-------|--------|-------|--------|-------|--------|
| Metal products | 59 | 2,847 | 115 | 2,713 | 4,597 | 2,382 | 11,731 | 6,852 | 1,389 | 10,741 | 1,178 | 17,028 | 895 | 13,440 |
| Non-electrical machinery | 60 | 2,390 | 66 | 2,163 | 13,401 | 1,890 | 31,395 | 6,423 | 1,063 | 9,383 | 1,097 | 33,862 | 947 | 18,235 |
| Electrical machinery (excluding ration TV and communication) | 66 | 3,074 | 143 | 3,824 | 14,834 | 4,764 | 66,521 | 12,351 | 1,581 | 18,634 | 1,092 | 17,089 | 1,012 | 12,965 |
| Radio TV com. | 88 | 6,837 | 110 | 7,104 | - | - | - | - | 1,893 | 16,705 | 7,569 | 20,506 | 7,025 | 21,268 |
| Shipbuilding and repairing | 19 | 1,471 | 70 | 3,969 | - | - | - | - | 67 | 18,503 | 243 | 32,877 | 171 | 14,089 |
| Motor Vehicles | 45 | 5,204 | 132 | 10,615 | - | - | - | - | 5,511 | 51,401 | 1,294 | 34,870 | 745 | 21,462 |

Source: Authors' calculation from UNIDO's INDSTAT4 2006 ISIC Rev.2 and Rev.3

Note: MVA is in current US million dollars, and MVA per employee is in current US dolla

Vietnam's Industrial Policy in 2007

Vietnam's industrial policy today is a mix of policies. The policies that have had the largest impact on the country's industrial development have been those that have provided an overall framework of incentives for individual enterprises irrespective of ownership. The most important of these policies are the enterprise laws of 2000 and 2005 and the laws and rules connected with Vietnam's membership in the WTO. Of comparable importance although not explicitly aimed at industrial development are Vietnam's efforts to expand and upgrade the quality of its education system, its success since the early 1990s in achieving macro-economic stability, and the maintenance of stability in its international political as well as economic relations.

Many industrial policies, however, have been targeted at specific ownership sectors rather than at industry or businesses as a whole. Most notable in this category are the policies that provide special favors to state owned enterprises. In the financial sphere, it is state owned enterprises that receive most of the loans from the large state owned banks together with direct investments from the state budget. State investment in infrastructure in regions such as Central Vietnam has also been carried out to a large degree in support of state owned heavy industries planned for the region. The formation of large state owned conglomerates with near monopoly control over key industrial sectors is a form of government support that is only provided to state owned enterprises. The degree to which the government can favor the state owned sector over the others has been reduced by WTO membership and the 2000 and 2005 enterprise laws but it has by no means been eliminated.

The other set of industrial policies that is directed at a single ownership sector are those laws and regulations that deal with foreign direct investment. At the outset of the reform period, Vietnam opened up its economy to direct investment by foreign firms and since the early reform years has steadily refined the rules governing foreign direct investment. Throughout the 1990s and into the twenty-first century, foreign private investors have in fact been favored over domestic private investors. In this respect Vietnam's experience is also much like that of China. In both countries domestic private investors have had to struggle to get access to capital, have had to pay higher taxes for similar activities, and have had less help in cutting through government red tape. Foreign direct investors also regularly develop joint ventures with state owned firms taking advantage of these state firms' easier access to land among other things. Ironically one effect of joining the WTO may be to begin to level the playing field for domestic private investors vis-à-vis their foreign competitors. This has already happened in China to some degree in areas such as taxation. Overall, however, the domestic private industrial sector in Vietnam still labors under some forms of discrimination and the WTO rules will not end them all.

In the next section of this essay we will describe and analyze the current state of each of these three ownership sectors. We will focus first on the economic performance of each of these sectors and then with that as background, we will analyze specific industrial policies designed to promote industry in general or one or another specific sector. We will pay special attention to the regulatory environment, to the way the various sectors are financed, to supporting infrastructure and to land policies¹⁵, and finally to the efforts to create large scale industrial conglomerates. The major theme of what follows is that there are substantial differences in performance between the three ownership sectors and that government policy discriminates in favor of the sector that has performed least well. This conclusion will come as no surprise to most observers of Vietnamese industrial development. We further conclude that elimination of the discriminatory policies that remain is critical to achieving an overall improvement in industrial performance. More controversially, we will argue that removing discriminatory policies and practices is essential to improving the performance of all three sectors including notably the state owned sector. As numerous studies have shown, competition is at the heart of what drives an industrial enterprise to perform at a superior level. The effect of many of Vietnam government's industrial policies is to remove much of this competitive pressure from the state owned sector.

¹⁵ Van Arkadie and Raymond Mallon (2005)

Vietnam's Industrial Performance and Structure

The first thing to note about Vietnam's industrial performance is that the growth rate of industrial value added was very rapid. Between 1990 and 2005 industrial (and construction) value added grew at an average annual rate of 10.9 percent for a 4.72 fold increase over the fifteen year period. This rate was only marginally lower than the extraordinarily high growth rate of industrial value added (including construction) in China over the 27 years between 1978 and 2005 of 11.3 percent per year.¹⁶

Chart 6. Share of State and Non-State Owned Industry

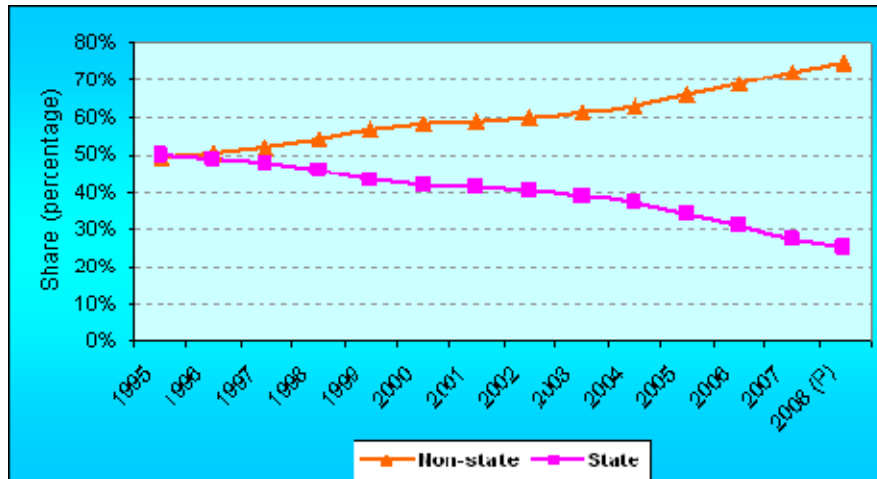
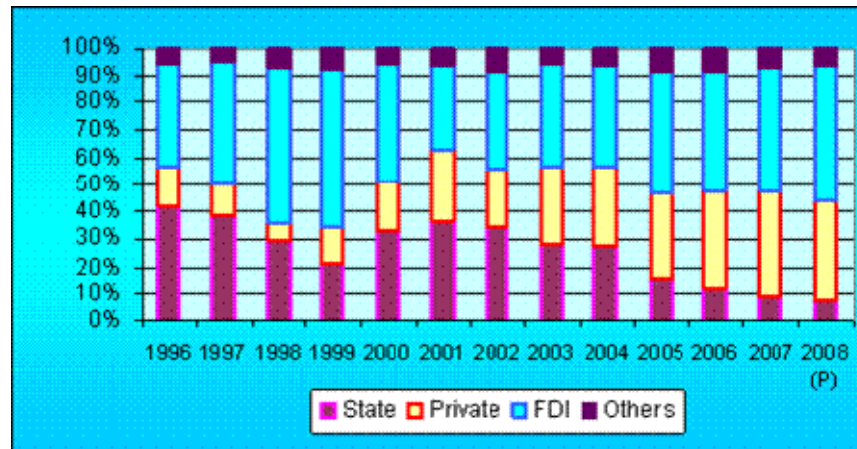


Chart 7. Contribution to Industrial Production Value Growth by Ownership



Sources: General Statistical Office, Statistical Yearbook, 1996 - 2008

The second thing to note is that this high industrial output growth rate has been sustained mainly by industrial firms financed by foreign direct investment, and since the year 2000 by domestic private investors. Central state owned industry grew at 12 percent a year over the past decade and local state industry grew by only 7.7 percent per year while foreign direct investment industrial firms grew at 19.6 percent annually and

¹⁶ National Bureau of Statistics, *China Statistical Yearbook 2006*, p. 60.

the domestic private sector, albeit from a very small base, at 42.8 percent. By 1995 the share of the state sector in total industrial output was down to 50 percent and has continued to fall each year since reaching 25 percent by 2008 (Chart 6). Similarly, the contribution of the state sector to the increase of industrial production value has fell from 42 percent in 1996 to just 9 percent in 2008 (Chart 7), while the contribution of the domestic private sector has increased sharply from 14 percent to 38 percent in the same period.

This pattern is also similar to what has happened in China over the 28 years since market oriented reforms began. In 1980 state owned industry in China accounted for 78.7 percent of the gross value of industrial output and urban and rural collective industry accounted for virtually all of the rest.¹⁷ By 2005 Chinese enterprises formally designated as state owned accounted for just over 10 percent of gross value output, but this is misleading because most “shareholding” enterprises listed on the Shanghai and Shenzhen stock exchanges still have majority state ownership. If these firms and several other minor categories are added in, the state ownership share rises to just above 25 percent of gross value output of industry.¹⁸

This declining state share in both Vietnam and China has occurred despite the fact that the state sector received a much larger share of the available investment than the non-state sector. In Vietnam the state share of investment was consistently at or above 50 percent of total investment until 2004. Much of this investment was plowed into industry by first the government budget and later through state owned bank loans. Private enterprises had no access to the first source and very little access to the second source for funding their fixed assets.

In China the situation has been much like that in Vietnam. The state owned and state majority owned shareholding enterprises held 39.4 percent of all industrial assets but accounted for only 30.1 percent of gross industrial output. The domestic private sector, in contrast, accounted for 32 percent of industrial output but only 20 percent of industrial assets and foreign and Hong Kong invested industrial companies produced 43 percent of gross value output but held only 33.1 percent of assets. The output numbers add up to more than 100 percent because there is some overlap in the different categories of ownership.¹⁹

These figures are not surprising. Prior to the first year of the reform period, industry accounted for a cumulative total of 66.9 percent of state owned fixed assets and state owned transport made up much of the rest (18.4 percent in 1978).²⁰ Investment in fixed assets, except for small amounts coming from the budgets of collective units such as the Rural People’s Communes came entirely from the state budget as grants. In the 1980s China stopped financing industrial investment from the state budget and turned the task over to the state owned banks. These banks took deposits from enterprises and the general public but virtually all of their loans went to state owned enterprises and the conditions on many of these loans were very soft. The result was the well known build up of non-performing loans—in effect many of the loans were little different from grants. After the year 2000, these banks began to increase loans to the non-state sector but the state owned sector continued to get the lion’s share.

¹⁷ State Statistical Bureau, *Statistical Yearbook of China 1981*, p. 212.

¹⁸ National Bureau of Statistics, *China Statistical Yearbook 2006*, p. 505.

¹⁹ All of these figures for China are for the year 2004. National Bureau of Statistics, *China Statistical Yearbook 2006*, p. 505.

²⁰ The 1978 asset figures are based on the original value of these assets presumably in current prices and thus give only a rough idea of the true value of the assets of the different categories of ownership. *State Statistical Bureau*, (1981), p. 406.

Equitization and Enterprise Efficiency

Vietnam during the reform period, like China before it, has pursued an industrial policy that clearly favors state owned and foreign direct investment enterprises but Vietnam like China has also taken steps to create a more even playing field for domestic private firms. In recent years, Vietnam has also gone a step further and has begun to vigorously promote changes in the ownership structure of many formerly state owned enterprises. In some cases this process of ownership change can be seen as a form of privatization. In other cases, however, the state retains a high degree of control and the change in ownership is more apparent than real. In what follows, we first describe how this equitization of state owned enterprises has proceeded in Vietnam. We then attempt to estimate the impact of different forms of equitization on enterprise performance.

In Vietnam - like China and unlike other former socialist countries in Eastern Europe - the state has always tried to maintain a large portion of shares in equitized firms. Since 2002, there was even a large increase in the percentage of shares retained by the state. In 2003, state shares accounted for 55.4% of the total shares issued by equitized firms and the number remained high in 2004 (Table 4).

Table 4. Partial and internal equitization²¹

| | Until 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | Total |
|------------------------------------|------------|-------|-------|-------|-------|-------|-------|-------|
| Average chartered capital (VND bn) | 6.21 | 5.21 | 5.79 | 7.09 | 6.95 | 11.32 | 16.13 | 10.69 |
| State | 28.9% | 30.1% | 26.4% | 27.9% | 30.5% | 55.4% | 49.9% | 46.1% |
| Managers, workers | 50.4% | 43.9% | 53.0% | 49.2% | 51.6% | 35.4% | 33.3% | 37.8% |
| Outside domestic investors | 20.7% | 25.0% | 18.1% | 15.8% | 16.7% | 8.1% | 16.8% | 15.1% |
| Foreign investors | 0.0% | 0.0% | 0.0% | 0.4% | 1.2% | 0.1% | 0.0% | 0.1% |

Source: CIEM (2005)

As seen in Table 5, the number of enterprises in which the state holds more than 50% of shares has increased sharply since 2002.²² It goes from 8% of equitized enterprises in 2002 to 42% in 2004.

Table 5. State's Ownership in Equitized Enterprises

| | Until 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|-----------------------------|------------|-------|-------|-------|-------|-------|-------|
| No of equitized enterprises | 123 | 254 | 211 | 215 | 164 | 539 | 715 |
| State ownership = 50% | 12.0% | 10.0% | 7.2% | 8.3% | 8.0% | 50.0% | 42.0% |
| State ownership = 20% ÷ 50% | 50.0% | 46.0% | 28.8% | 31.7% | 33.0% | 18.0% | 28.0% |
| State ownership < 20% | 38.0% | 44.0% | 64.0% | 60.0% | 59.0% | 32.0% | 30.0% |

Source: CIEM (2005)

The main reason for these phenomena is that SOEs equitized since 2002 are larger, more important, and more profitable compared with those equitized earlier. Equitization in Vietnam, however, sometimes failed to

²¹ The share percentages of the three ownership groups do not add up to 100% in 2000 and 2001 because of missing values.

²² In 2002, the government remained the largest shareholder in over 80% of the listed firms in China.

diversify these firms' ownership. The typical underlying philosophy in ownership diversification through equitization is to allow workers to "play the role of the true owners" or through private minority shareholders to "facilitate society's oversight of an enterprise's activities." The latter, it is usually hoped, will ensure an efficient utilization of state assets and encourage further mobilization of new capital from the public.²³

Despite the fact that the equitization program has been internal and partial, it has in general led to an improvement in firm's performance in terms of profitability, operating efficiency, and employment (see Table 6)

Table 6. Privatization and Improvement of Firms' Performance

| Performance Criteria | Sample size | Percentage of firms that has improved their performance |
|------------------------------|--------------------|--|
| PROFITABILITY | | |
| Return On Assets (ROA) | 130 | 70% |
| Return on Sales (ROS) | 130 | 76% |
| Return on Equity (ROE) | 129 | 73% |
| OPERATING EFFICIENCY | | |
| Sales (mil. VND) | 139 | 73% |
| Income before tax (mil. VND) | 131 | 78% |
| EMPLOYMENT | | |
| Total employment | 147 | 68% |
| Labor welfare (mil.VND) | 138 | 83% |

Source: Tran Thi Que Giang and Vu Thanh Tu Anh (2007)

²³ Website of The National Steering Committee for Enterprise Reform and Development (NSCERD), <http://www.nscerd.org.vn/DMDN/tqcs.asp>

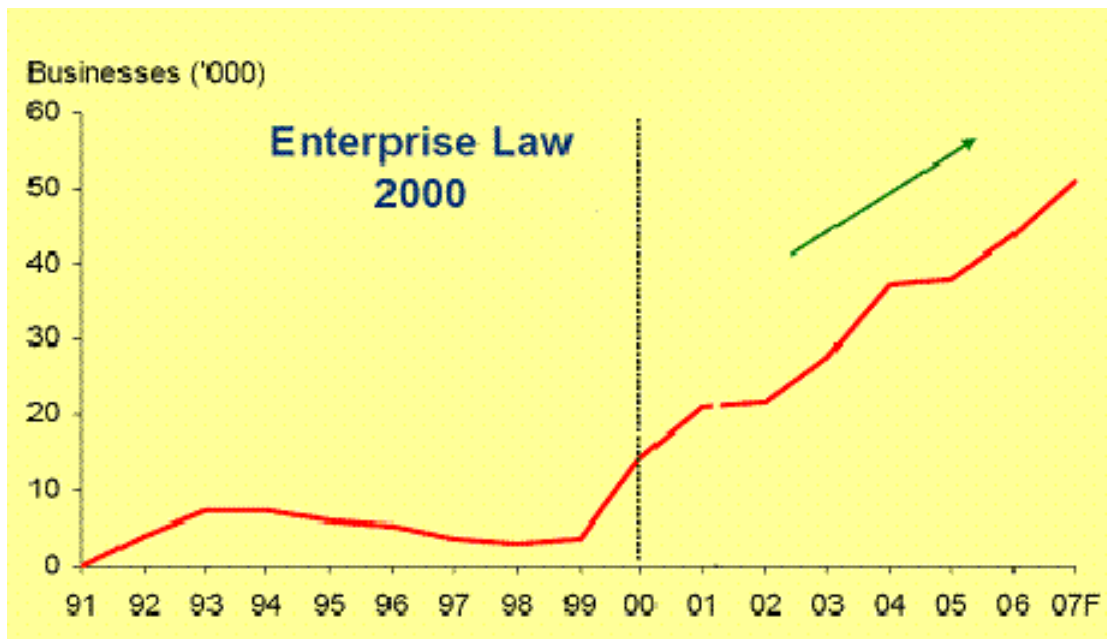
The Regulatory Environment for Industry

Enterprise Laws

The enterprise laws of 2000 and 2005 described above have gone a long way toward creating a positive environment for all industrial development in Vietnam. These laws are the major reason why the privately owned industrial sector has done so well since 2000. Between 2000 and 2005, more than 160,000 new domestic private firms were formed, or nearly five times as many as the total number of enterprises established in the 1990s altogether. Moreover, during the same period, private enterprises created three million new jobs and invested VND 323 trillion, which is more than the total FDI for the same period.²⁴

That said, however, there are still major regulatory barriers to industrial development in Vietnam. In 2007 Vietnam ranked No. 104 out of 175 countries surveyed in the World Bank's rankings that attempt to measure the "ease of doing business" around the world. That is actually worse than in 2006 when Vietnam ranked 98th although one cannot read too much into small changes of this sort given the quality of the data that goes into making up these indexes.

Chart 8. Domestic Private Registration in Vietnam (1991-2006)



Source: VCCI, MPI

²⁴ Pham Chi Lan (2008)

Table 7. Ease of Doing Business

| | 2006 Rank | 2007 Rank |
|--------------------|-----------|-----------|
| Singapore | 2 | 1 |
| USA | 3 | 3 |
| Japan | 12 | 11 |
| Thailand | 19 | 18 |
| South Korea | 23 | 23 |
| Malaysia | 25 | 25 |
| Taiwan | 43 | 47 |
| China | 108 | 93 |
| Vietnam | 98 | 104 |
| Philippines | 121 | 126 |
| India | 138 | 134 |
| Indonesia | 131 | 135 |
| Cambodia | 142 | 143 |
| Laos | 164 | 159 |

Source: WB, *Doing Business 2007*

Among ASEAN nations, Singapore is No. 1 but Thailand (18) and Malaysia (25) are far ahead of Vietnam whereas the Philippines (126), Indonesia (135), Cambodia (143) and Laos (159) are behind. All of the ASEAN countries ranked lower than Vietnam are well known for high levels of corruption (see Table b) and for numerous barriers to doing business efficiently. None of these lower ranked countries have had consistently successful industrial development in recent years. Most of the other countries that rank among the bottom 75 for ease of doing business are poor performers in Africa (37 countries), Central and South America (11 countries), and a number of the republics that made up the former Soviet Union (6 countries). It is true that China (93), India (134), and Russia (96) are close to Vietnam in the rankings or in the case of India well below Vietnam, but foreign investors are willing to put up with more obstacles in the former two cases because of the enormous size of their domestic markets. Russia's recent good economic performance owes much to its enormous oil exports and the high price of oil and other minerals. Vietnam has neither an enormous domestic market nor large reserves of petroleum. According to the World Bank, Vietnam's greatest strength is its relatively well educated, disciplined and easily trained labor force.²⁵

Major problems in Vietnam, according to the World Bank data, are in getting a business started where Vietnam ranks No. 97 and in hiring and firing workers and other labor related issues where Vietnam ranks No. 104. Vietnam also ranks low in enforcing contracts (No. 94), in the regulations involved in closing a business (No. 116), and in the process involved in paying taxes (No. 120). Only in the number of licenses required and in the complexity of getting them and in registering property does Vietnam achieve a relatively high ranking (No. 25 and No. 34 respectively). As we will discuss below, a relatively good ranking with respect to registering property does not mean that the process is efficient and fair, only that it is better than the situation in many other countries.

Crude rankings of the kind presented in the World Bank's *Doing Business 2007: How to Reform* provide a very general guide to where to begin to look if a country wants to substantially improve its business environment for industrial firms among others. The only way to actually improve the business environment is to go systematically through all of the procedures involved and decide which should be eliminated or substantially simplified. In some cases this review will require careful in depth analysis of the regulation and how it is being implemented. In many cases, however, the regulation on its face will make little sense. If Vietnam is like many of its neighbors, there are regulations on the books that were put in place years or even decades ago for situations that no longer exist or in some cases never existed. Many of these can be eliminated without much analysis or discussion. We recommend that the Government of Vietnam set up a

²⁵ However, surveys in Hochiminh City, Binh Duong and Dong Nai – three of the most industrial provinces of the country – reveal that more than 80% of the labor force is unskilled and not so disciplined. Quite a few factories (especially textile, garment, and seafood processing) report 5% to 10% labor lost after Tet (the Vietnamese New Year) without prior notice from the workers.

commission to do precisely that.²⁶ Outside research based on detailed investigations of the regulations involved can help such a commission identify where the greatest gains in simplifying the regulatory environment can be made, but the ultimate decisions must be carried out by duly constituted government authorities.

For the regulations that remain and cannot be eliminated for one reason or another, a major effort should be undertaken to ensure that these regulations and their implementation are as transparent as it is possible to make them. The rules governing various regulations should be available on line as well as in readily accessible printed versions and the progress of individual applications for licenses and the like should also be on line.

If a major effort at deregulation and increasing transparency is made, one of the important side benefits will be a substantial reduction in opportunities for corruption particularly by low and middle level government officials who currently have a great deal of discretion in implementing these regulations. Discretionary government authority over licenses and similar regulatory barriers is a major source of corruption around the world. A major reduction in this source of corruption in Vietnam would have large benefits that go far beyond the gains to industry but industrial development would certainly benefit. As the data in Table 10 indicate, Vietnam also ranks well down on the corruption index published by Transparency International. The decline in rankings from 1998 to 2007 simply reflects the fact that more countries were surveyed in the latter year. The important point, however, is that Vietnam is solidly in the bottom third of countries surveyed. The last thing that Vietnam should want is to be compared with the Ukraine, Zambia, the Philippines, or Paraguay to name a few of the countries that rank near Vietnam in the Transparency International index. Even if these indexes are not completely reliable because of the way they are compiled, they have a major impact on perceptions both world-wide and within the countries surveyed.²⁷

Table 8. Corruption Index

| | 1998 | | 2007 | |
|--------------------|------|-------|------|-------|
| | Rank | Score | Rank | Score |
| Singapore | 7 | 9.1 | 4 | 9.3 |
| Japan | 25 | 5.8 | 17 | 7.5 |
| USA | 17 | 7.5 | 20 | 7.2 |
| Taiwan | 29 | 5.3 | 34 | 5.7 |
| Malaysia | 29 | 5.3 | 43 | 5.1 |
| South Korea | 43 | 4.2 | 43 | 5.1 |
| China | 52 | 3.5 | 72 | 3.5 |
| India | 66 | 2.9 | 72 | 3.5 |
| Thailand | 61 | 3 | 84 | 3.3 |
| Vietnam | 74 | 2.5 | 123 | 2.6 |
| Philippines | 55 | 3.3 | 131 | 2.5 |
| Indonesia | 80 | 2 | 143 | 2.3 |
| Cambodia | Na | Na | 162 | 2 |
| Laos | Na | Na | 168 | 1.9 |

Source: Transparency International, www.transparency.org

²⁶ Indeed, a "Enterprise Law Implementation Task Force" created by the PM Phan Van Khai and headed by the MPI minister Tran Xuan Gia had played an instrumental role in translating the Enterprise Law into reality. For more information, see Pham Chi Lan (pp. 207-15) in Dao Xuan Sam and Vu Quoc Tuan (2008).

²⁷ These surveys are based mainly on interviews of people knowledgeable about the countries involved, but hardly anyone has any real experience in more than a few countries with something as complex as corruption. Thus these indexes are a better reflection of the perceptions of people in the region but are not precise measures of the amount of corruption however measured. For both business and politics, however, perceptions matter.

As a comparison of Tables 9 and 10 makes clear, there is a high degree of correlation between the ease of doing business and the level of corruption. The correlation, of course, is not perfect. There are many areas of corruption around the world, notably in construction, where deregulation and increasing transparency of licenses and permits will have limited impact. There is little question, however, that the removal of unnecessary rules in Vietnam as elsewhere will improve both the business environment and the level of corruption.

Policies Toward Bank Lending

Vietnam's state owned banks historically lent mainly to state owned enterprises. That policy, however, has been changed over the past decade with the share of loans going to the non-state sector rising steadily, from 37 percent in 1994 to more than 50 percent for the first time in 1999 and to nearly 70 percent by 2006. The credit extended by the big-4 state-owned commercial banks (SOCBs) has also decreased relatively, from 82.8 percent in 1994 to 63.5 percent in 2007. More remarkably, the percentage of credit extended by SOCBs to SOEs has been nearly halved during the last decade. However, directed lending and the intimate relationship between SOCBs and SOEs have given rise to a high percentage of accumulated non-performing loans (NPLs). Although accurate data are not disclosed, it is estimated that the ratio can be as high as 20-30 percent (Rosengard and Du, 2008), compared with the official figure of only 5-7 percent, thanks to the frequent rolling over of credits that cannot be repaid, especially by SOEs.

Table 9. Credits to SOEs and Other Sectors in Vietnam (1994-2006)

| | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2002 | 2001 | 2005 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total credit⁽¹⁾ | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| To SOEs | 63.0 | 57.0 | 52.8 | 50.2 | 52.4 | 48.2 | 44.9 | 12.2 | 38.7 | 35.5 | 34.0 | 32.8 |
| To other sectors | 37.0 | 43.0 | 47.2 | 49.8 | 47.6 | 51.8 | 55.1 | 57.8 | 61.3 | 64.5 | 66.0 | 67.2 |
| Credit extended by SOCBs⁽²⁾ | 82.8 | 79.6 | 75.5 | 77.2 | 81.4 | 67.9 | 73.3 | 75.8 | 75.9 | 72.4 | 75.0 | 69.0 |
| To SOEs | 55.8 | 49.3 | 43.4 | 42.8 | 47.1 | - | 39.4 | 38.5 | 35.3 | 32.3 | 30.1 | 28.6 |
| To other sectors | 27.0 | 30.3 | 32.1 | 34.4 | 34.3 | - | 34.0 | 37.3 | 40.6 | 40.1 | 40.3 | 40.4 |
| Credit extended by other banks⁽³⁾ | 17.2 | 20.4 | 24.5 | 22.3 | 18.6 | 32.1 | 26.7 | 24.2 | 24.1 | 27.6 | 25.0 | 31.0 |
| To SOEs | 7.2 | 7.6 | 9.4 | 7.4 | 5.3 | - | 5.6 | 3.6 | 3.4 | 3.3 | 3.9 | 4.2 |
| To other sectors | 10.0 | 12.8 | 15.1 | 15.4 | 13.3 | - | 21.1 | 20.5 | 20.6 | 24.3 | 21.1 | 26.8 |

Source: ADB (for 1994 and 1995), IMF (for all other years)

Note:

- "Other sectors" includes equitized SOEs in which state ownership is less than 50%.
- Beginning in 1999, credit to the economy by ownership is estimated rather than actual data.
- Data from 1999 onwards comprise six state-owned commercial and 83 non-state credit institutions.
- ⁽¹⁾ Excludes net credit to the government.
- ⁽²⁾ Includes only includes four large state-owned commercial banks.
- ⁽³⁾ Includes two small state-owned commercial banks, joint-stock banks, joint-venture banks, branches of foreign banks, and the Central People's Credit Fund. Vietnam Bank for the Poor was established in 1995 and renamed Vietnam Bank for Social Policy (VBSP) in 2002. Another SOCB, Housing Bank of Mekong Delta (MHB) was established in 1997 with the initial function as reflected in its name, but later it has become a pure commercial bank probably due to failures in the Mekong Delta housing development programs.²⁸

Credit rationing used to be a means of conducting monetary policy in Vietnam until it was formally abandoned in 1998 when the Law on the State Bank and the Law on Credit Institutions came into effect. Since then, the government's intervention in commercial banks' lending decisions has been reduced. This explains why the directed credit and credit to SOEs have fallen significantly from about 90% in the early 1990s to a little more than 30% by 2006. It is however important to remember that the non-state sector also includes SOEs with substantial (although not major) state ownership and domestic private firms considered being the "backyard" of SOEs, especially the state conglomerates. Moreover, the existence of local investment funds and the creation of Vietnam Development Bank (VDB), which is the successor to the

²⁸ See: http://www.mhb.com.vn/?p=qioi_thieu_mhb.asp&r=0, 28/12/2006.

Development Assistance Fund (DAF), give the government a way to get around the binding constraints of WTO commitments with respect to direct government financial subsidies to SOEs.

Four recent developments have important consequences for bank lending especially as to the extent to which the government can intervene in the credit markets. The first is interest rate liberalization. In the early 1990s, State Bank of Vietnam (SBV) used to have a differentiated interest rates ceiling policy with respect to the economic sectors (i.e., agriculture, manufacturing, or services), depositors (i.e., households or firms), currencies (VND or foreign currencies), and uses of capital (i.e., working capital or fixed asset investment). These policies were relaxed gradually. In 1995, SBV required that the monthly interest spread set by commercial banks not exceed 0.35 percent. The increasing competition among commercial banks made this regulation obsolete and it was finally abolished. In 2000, a more flexible interest rate mechanism was adopted by which the SBV set the reference rate, and commercial banks can set their VND interest rates up to the reference rate plus some margin (which was 0.3 percent per month for short term loan and 0.5 percent per month for long term loan.) In reality, however, the reference interest rates have been largely ignored, once again because of competition among commercial banks on the one hand and ineffective enforcement by the SBV on the other hand. Finally, the interest rate liberalization was completed in June 2001 for foreign currency and in June 2002 for VND when regulations on reference interest rates were removed.

The second recent development is the opening of the banking sector to foreign competition. Since April 1, 2007 foreign banks have been allowed to established their fully-owned branches and accept VND deposits from all legal entities²⁹. Like China and unlike other transitional economies in Eastern Europe, it is very likely that the market share of foreign banks in Vietnam will become significant in the near future.

Table 10. Market structure (in deposit) of China and Vietnam's banking sector

| | China (2004) | | Vietnam (2004) | | Vietnam (2007) | |
|-----------------------------|--------------|-----------|----------------|-----------|----------------|-----------|
| | Number | Share (%) | Number | Share (%) | Number | Share (%) |
| SOCBs | 4 | 62% | 5 | 75.2% | 5 | 59.3% |
| Policy banks | 3 | - | 1 | - | 1 | - |
| Joint-stock and local banks | 123 | 21.5% | 33 | 13.3% | 34 | 30.4% |
| Foreign branches | 157 | 1.2% | 30 | 9.7% | 37 | 8.8% |
| 100% foreign-owned banks | 7 | - | 0 | - | 0 | 0 |
| Joint-venture banks | 7 | - | 4 | - | 5 | - |
| Credit cooperatives | 36,000 | 11.4% | 982 | 1.1% | 963 | 1.0% |
| Asset management companies | 4 | - | 7 | - | 12 | - |

Notes: The data for China is taken from Rosengard and Du (2008). The data for Vietnam is taken from Thanh and Quang (2007), SBV, and authors' calculation.

The third recent important development is the equitization program of SOCBs by which four SOCBs, namely Vietcombank (VCB), Mekong Housing Bank (MHB), Bank for Investment and Development of Vietnam (BIDV), and Industrial and Commercial Bank (ICB) were supposed to be equitized in 2007. Instead, only Vietcombank was equitized at the end of December 2007 after a long delay. The last SOCB - Vietnam Bank for Agriculture and Rural Development (Agribank) – will also be subject to equitization. The equitization of SOCBs will help soften the intrinsic relationship between SOEs and SOCBs and reduce the intervention of the government via directed lending since SOCBs now become more profit oriented and less dependent on the government's recapitalization.

The fourth recent important development is the upgrading of rural banks into urban banks and the establishment of banks or the acquisition of controlling stakes in banks by state conglomerates, a classic feature of the now discredited Japanese *keiretsu* system and a practice that gave rise to endemic insider lending in Southeast Asia in the 1990s. In the absence of robust controls, conglomerates will use their banks

²⁹ In addition to the establishment of foreign branches before April 1, 2007, foreign banks (e.g., ANZ, UOB, HSBC, Standard Chartered) already participated by buying shares of Vietnamese banks.

to finance intra-group expansion plans and to over-invest in risky projects and thus spread the risk. Conglomerates are also taking advantage of implicit or explicit state guarantees to borrow large amounts of foreign capital on fickle international capital markets. For all of these reasons, the state conglomerates' participation and/or creation of banks should follow the most stringent procedures.

Policies Toward the Industrial Use of Land

The government still controls virtually all of the land available for industrial use but land use is in fact tied to a variety of restrictions due both to the demands of society in general as well as to government interests in particular. The favored method for dealing with land allocation to date has been the creation of industrial zones. As of August 2007, there were 114 established industrial zones (IZs) in Vietnam (and 71 more IZs are under construction), 3 export processing zones (EPZs), two high-technology zones (HTZs), and 9 economic zones (EZs). Together the IZs, EPZs, and HTZs zones have an area of 34,000 hectares³⁰, and the 9 EZs have an area of 190,000 ha. These zones are geared to making the land acquisition process easier for foreign direct investors. These industrial zones, of course, supply infrastructure as well as land and this is also a clear benefit to foreign investors. Domestic private firms for the most part do not get such support and state owned enterprises do not need it. The total land area in Vietnam, by way of comparison, amounts to 33 million hectares so the industrial zones take up a total of .67% of the total land area, a miniscule fraction.

Even for foreign direct investors industrial and export processing zones are a second best solution to overcoming bureaucratic red tape and other barriers to access to land and infrastructure. Elsewhere in East Asia they have typically played an important role in the early stages of opening up of the economy but have become steadily less important over time. These zones play their most valuable role when they serve as a model for handling industrial investors whose practices then spread to the rest of the country. In effect success is achieved when the whole economy becomes an industrial or export processing zone and investors can locate their enterprises near their markets, their sources of supply of labor, or near their sources of intermediate inputs, rather than being confined to these zones. Success in this sense characterizes the economies of Taiwan, South Korea, and much of coastal China.

Domestic private enterprises do not, for the most part, make use of the industrial zones. On the one hand, the small size of these firms makes them un-attractive to industrial zone developers. On the other hand, small domestic private businesses in Vietnam, as in many developing countries, could always find ways to deal with local authority to get a hold of the small units of land that they require.

State firms often have effective use rights over very valuable urban land and it has been a common practice for state enterprises to use these properties to negotiate arrangements with foreign investors in joint venture deals that have direct if informal benefits for the state enterprise managers. That said, this is one way that valuable urban land gets transferred to more productive uses than would be the case if it remained in the hands of a weak or failing state enterprises.

It is not clear just what in the short run should be done about this problem. Clearly the methods of transferring land are not very efficient and there are wide disparities in who can access what land. The long run solution would be to establish clear and registered land use rights that could be readily traded on a transparent market. Following de Soto³¹ among others, this would, among other things provide small private businesses with secure property rights that could be used to raise capital and that would provide security for the investments on that land. But in the short run it is far from clear that a government-run system of land regulation and land transfer would be an improvement over the informal system. When the government does get involved today, the main impact appears to be to raise transaction costs substantially. We, therefore, note that Vietnam has a property rights problem when it comes to the use of land, but we are not in a position to propose a particular solution to the problem that would take effect within the next decade.

³⁰ Vietnam Economic Times, <http://www.vneconomy.com.vn/eng>

³¹ Hernando de Soto, 2000.

The Regional Concentration of Vietnamese Industry

A further major feature of industry in Vietnam is that it is concentrated in specific locations with large parts of the country receiving little industrial investment of any kind. The figures for the location of industry are presented in Tables 13 and 14. Most industry, as these data make clear is concentrated in and around the Hanoi-Haiphong area and Ho Chi Minh City and its neighboring provinces. Two-thirds of all Vietnamese industry in 2005 was concentrated in these two regions as the data in Table 14 indicate. The one-third of industrial output that is not in these two regions is produced predominantly in state owned enterprises that presumably paid less attention to the rate of return on their investments than would have been the case with foreign and domestic private investors.

Table 11. Gross Industrial Output by Region

| | Output Value (billion dong in 1994 prices) | | | | Output Index | | |
|-----------------------|--|-----------------|-----------------|-----------------|--------------|-------------|-------------|
| | 1995 | 2000 | 2004 | 2005 | 2000/1995 | 2005/2000 | 2005/1995 |
| Hanoi/Haiphong region | 15509.5 | 35866.8 | 70305.1 | 84312.7 | 2.31 | 2.35 | 5.44 |
| HCMC region | 49808.1 | 97175 | 167912.7 | 195524.9 | 1.95 | 2.01 | 3.93 |
| Central Vietnam | 8677.2 | 16934.7 | 32084.3 | 37516.4 | 1.95 | 2.22 | 4.32 |
| Other regions | 29379.9 | 48349.6 | 85322 | 99509.2 | 1.66 | 2.06 | 3.39 |
| Total | 103374.7 | 198326.1 | 355624.1 | 416863.2 | 1.92 | 2.11 | 4.03 |

Table 12. Industrial Output by Ownership in 2005 (billion 1994 dong)

| | State | Non-State | Foreign | Total |
|----------------------------|-----------------|---------------|-----------------|-----------------|
| Hanoi/Haiphong region | 24672.9 | 23798.3 | 35841.5 | 84312.7 |
| HCMC region | 47993.3 | 44541.1 | 102990.7 | 19525.1 |
| Central Vietnam | 16609.3 | 13654.6 | 7252.5 | 37516.4 |
| Other regions | 53794.6 | 36873 | 8841.4 | 99509 |
| Total | 143070.0 | 118867 | 154926.1 | 416863.2 |
| Share by Region (%) | | | | |
| Hanoi/Haiphong region | 29.3 | 28.2 | 42.5 | 100 |
| HCMC region | 29.5 | 22.8 | 52.7 | 100 |
| Central Vietnam | 44.3 | 36.4 | 19.3 | 100 |
| Other regions | 54.1 | 37.1 | 8.9 | 100 |
| Share by Region (%) | | | | |
| Hanoi/Haiphong region | 17.2 | 20 | 23.1 | |
| HCMC region | 33.5 | 37.5 | 66.5 | |
| Central Vietnam | 11.6 | 11.5 | 4.7 | |
| Other regions | 37.6 | 31 | 5.4 | |
| Total | 100 | 100 | 100 | |

Sources: General Statistical Office, Statistical Yearbook 2006

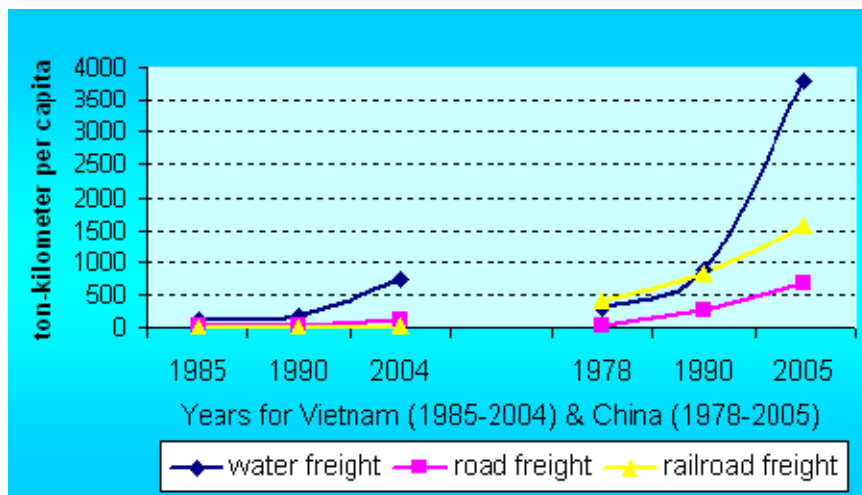
To formally test why firms prefer one location over another, we have focused on the location of foreign direct investment in Vietnam. Foreign direct investors are profit oriented and thus their decisions will reflect how they believe their location decisions will impact their profits. These location decisions give guidance to what

would have to be changed if currently neglected regions were to be able to attract more profit oriented industry, domestic as well as foreign. The regression estimates are presented in Table 15.

Weak Transport Infrastructure

Vietnam's transport infrastructure, in addition to fostering concentration of industry in a few limited locations as the estimates above make clear, has been far from adequate to meet the needs of a rapidly growing economy in ways that affect industrial performance wherever it is located. Data comparing freight transport per capita in Vietnam and China are presented in Chart 9. As the data in the chart make clear, both Vietnam and China began their respective reform periods with very little freight transport by road but China had a more developed railroad network. The water transport figures are dominated by international freight sent by sea and hence are less relevant to understanding the level of infrastructure within the two countries. Some of Vietnam's infrastructure problems date to the war when transport infrastructure was under constant bombardment, but it is also the case that efforts to change the inherited transport system have been modest. This neglect of transport would not be unusual for a Soviet type command economy. The Soviet Union regularly minimized transport investment until the economic system would hit major bottlenecks because of a system that was being used way above capacity. China even in the 1970s into the 1980s faced a similar overextended road and railroad network. Vietnam's policies in the 1990s would appear to be continuing in this tradition. Where China in recent years has been building transport capacity much of it well ahead of demand, Vietnam has done comparatively little to expand and upgrade those transport routes of most significance to economic activity. China, for example, has nearly completed a nationwide network of multi-lane limited access high speed highways. Vietnam has only recently completed the filling in of potholes on Route 1, the main national highway (and that highway remains a narrow two lane highway). Much of the new construction of roads is going to the Central Highlands Ho Chi Minh highway that meets strategic and even income distribution needs, but does not contribute significantly to the requirements of industry. China has been steadily expanding and upgrading its rail system, while Vietnam's rail system today has not begun to catch up to the level of rail transport achieved in China even before the reform period.

Chart 9. Freight Transport in Vietnam and China



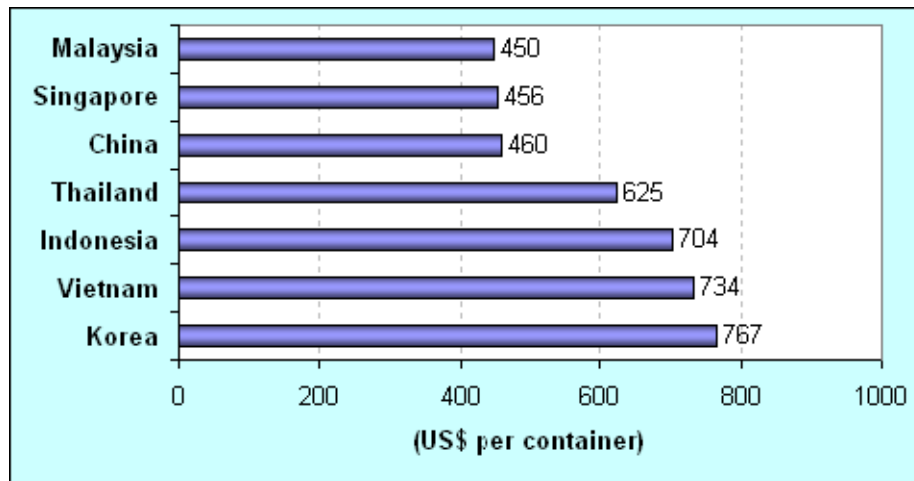
Sources: Vietnam General Statistical Office and China Statistical Office

In general, Vietnam has sought to achieve regional equity by investing heavily in underdeveloped areas. This is an understandable objective. However, too often these initiatives have proven wasteful and unproductive. Provinces with slow population growth receive “gold plated” infrastructure—broad high speed roads and bridges—while infrastructure in the Southeast focal economic zone is stretched to the breaking point. This trend is harmful and short-sighted: should infrastructure bottlenecks lead to an economic slowdown in the Southeast region, the repercussions for the national economy and to workers from central and northern Vietnam migrating to the Southeast could be severe.

Wasteful and costly infrastructure usually leads to inefficient and costly services. According to the World Bank, and as illustrated in Chart 10, exporters have to pay US\$734 including costs of documents, administrative fees, terminal handling and inland transport costs to ship a 20-foot container from Vietnam to Europe, while it only costs Chinese exporters US\$460 and Singaporeans US\$456. At present Vietnamese

exports are not shipped directly to North America and Europe, but instead are shipped to transshipment ports in Hong Kong and Singapore, where they are loaded on larger “mother ships” for transport to the final destination, therefore adding more to shipping costs.

Chart 10. Costs to Export



Source: Doing Business 2009, World Bank

It is likely that within a few years, however, the “mother ships” that carry goods to Europe and North American will begin to call on Ho Chi Minh City. As can be seen in Chart 11, the Southeast is very well positioned to take advantage of the major international shipping routes. In fact, it has been put on the map by major shipping lines. A new port complex at Cai Mep/Thi Vai in Ba Ria Vung Tau is planned and foreign investors have expressed interest. Development of new port facilities for the Southeast should be a national priority, yet, inexplicably, construction has yet to begin. At the same time ambitious plans have been announced to build “deepwater ports” in no fewer than six central provinces: Khanh Hoa, Binh Dinh, Quang Ngai, Quang Nam, Da Nang, and Thua Thien Hue. There is no valid economic rationale for these plans. Because modern port facilities are highly automated, they cannot be expected to create many jobs. A country of Vietnam’s size needs at most three ports, one each in the north, center, and south; a modern rail system would arguably obviate the need for a major port in central Vietnam. The entire west coast of the United States (more than 1900 kilometers long) features three major international ports. Decisions regarding expensive infrastructure projects like ports must be informed by an understanding of the flows of international commerce. Ho Chi Minh City is the only port in Vietnam that is likely to attract “mother ships” in the foreseeable future. Investing in world class port facilities for the Southeast, while upgrading road and rail links to the center and north is a far more intelligent strategy than that being followed at present.³²

³² A standard width and normal speed rail link is all that is needed. Such a link costs little more than a few million dollars per kilometer to construct. It would link the poor central provinces to the world economy more efficiently and effectively than deep water ports spread along the coast.

Chart 11. Strategic Trade Routes: Asia to Europe³³



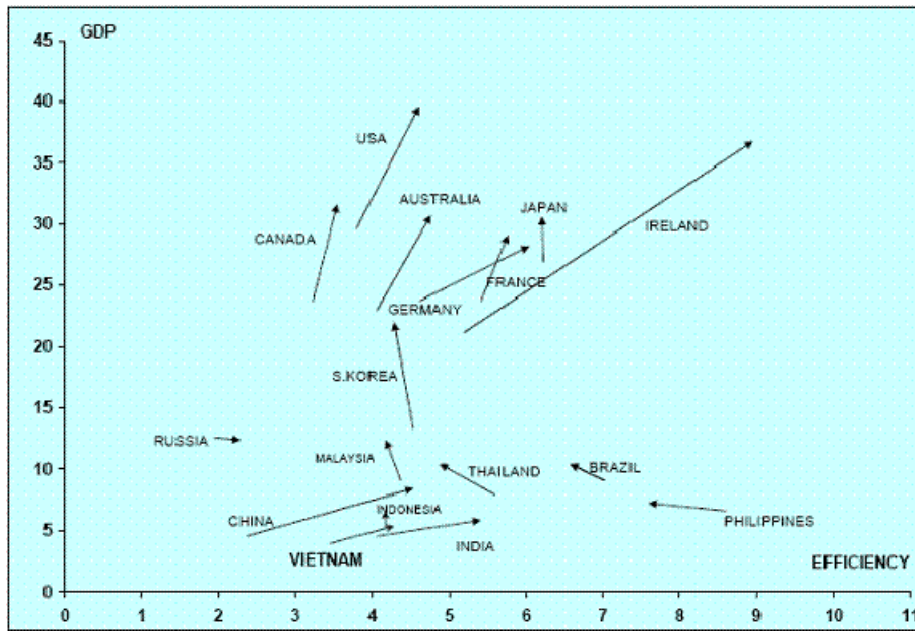
Electric Power Infrastructure³⁴

Electricity power infrastructure is critical for industrial development. In certain respects Vietnam has done well in building an electric generating capacity capable of supporting a major industrial effort. In terms of energy efficiency (measured by the GDP per kilogram of oil equivalent), Vietnam has improved its efficiency relatively well compared to other ASEAN countries (see Chart 12). The percentage increase in GDP per kg of oil of Vietnam during the period 1990-2004 is 27% compared with -14% of Thailand, -13% of the Philippines, -5% of Malaysia, and -0.1% of Indonesia. However, compared to other more energy efficient countries, Vietnam still has a long way to go. During the same period, the percentage increase in energy efficiency is 28% in Russia, 37% in India, and 108% in China.

³³ Source: *Financial Times* (10/12/2007).

³⁴ This section drawn heavily on the report titled “Choosing Success: The Lessons of East and Southeast Asia and Vietnam’s Future for a Policy Framework for Vietnam’s Socioeconomic Development, 2011-2020” by Vietnam Program (Harvard Kennedy School) and Fulbright Economics Teaching Program.

Chart 12. Comparison of Energy Efficiency (1990 – 2004)



Notes: This chart is constructed based on the data provided in Dapice (2008B). In this chart, each country is represented by an arrow in which the arrow tail represents 1994’s data and the arrow head represents 2004’s data for that country. The north-east direction implies improvement in both energy efficiency and GDP over the period 1990-2004.

However, Vietnam’s energy policy is severely flawed. By over-investing in hydroelectricity, which accounts for 40% of capacity and 25% of output, Vietnam now faces potentially crippling power shortages during the dry season, when reservoir levels are low. This situation was predictable—that warnings were ignored suggests a lack of long-term strategic vision or the undue influence of special interest groups. Vietnam’s inability to control water flow upstream heightens the risk of over-reliance on hydro power. Electricity shortages are not only a phenomenon of the dry season. By mid-December 2007, Ho Chi Minh City was already experiencing unannounced, rolling black outs. The government’s decision to reject EVN’s proposal to establish a for-profit monopolistic power trading company was correct, and it appears increasingly that EVN’s priorities are misplaced. In addition to its over-investment in hydroelectricity, EVN’s expansion into telecommunications, financial services, and real estate development cannot help but divert its limited human and financial resources from its core responsibility, to “play the principal role in supplying stable, safe electricity for socioeconomic development, execute investments to develop integrated electrical grid to increase efficiency of investment, [and] invest in power generation projects as assigned.”³⁵ A regulated monopoly such as EVN should work best not if it is large and complicated with many side businesses, but if it focuses on its main task and does it effectively and profitably at a reasonable cost.

Chart 13. Electric Generating Plant Situation in 2007

| | Number of Plants | MW Capacity | Percentage of Total |
|--------------|------------------|---------------|---------------------|
| Hydro | 14 | 4,487 | 33.6% |
| Coal | 6 | 1,630 | 13.3% |
| Gas | 4 | 4,746 | 38.7% |
| Oil | 2 | 575 | 4.7% |
| Others | NA | 832 | 6.8% |
| Total | 27 | 12,270 | 100% |

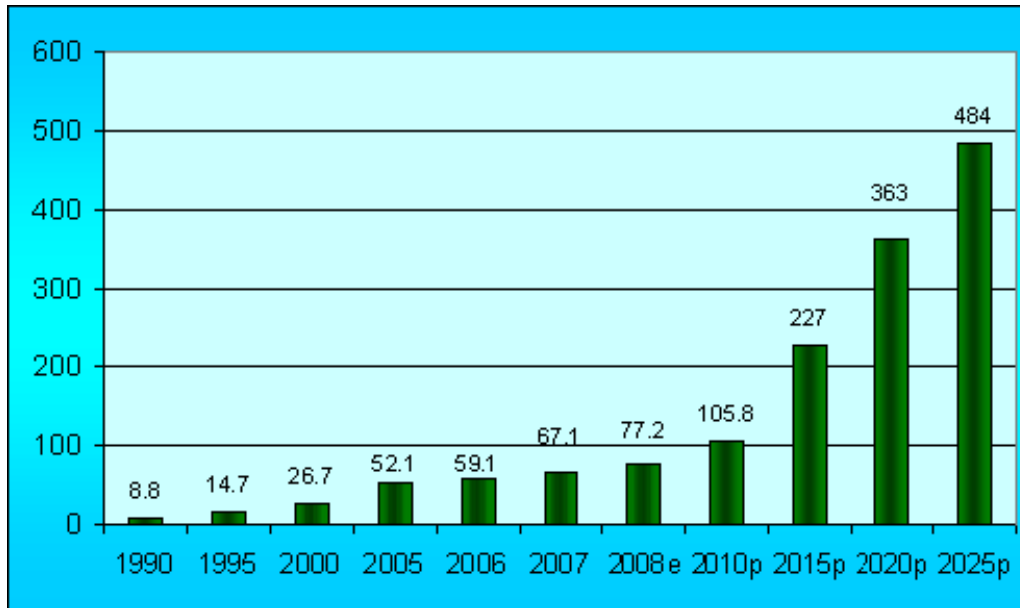
Source: Dapice, David O. (2008A)

According to the government’s energy strategy for the period 2006-2015, Vietnam must increase electricity supply by 17-20 percent per year. Many existing projects have fallen seriously behind schedule, just when

³⁵ “Electricity shortages not only EVN’s fault?” <http://www.tuotire.com.vn/Tianyan/Index.aspx?ArticleID=234125&ChannelID=3>

they are needed most. Of the five projects tasked to EVN in 2007, only one has come online.³⁶ This trend suggests that the government must improve the regulatory regime in order to provide sufficient incentives and conditions for private and foreign participation in generation.

Chart 14. Supply of Electricity in Vietnam (in billions of Kilowatt-hours)



Source: Dapice, David O. (2008A)

Chart 15. Planned Energy Investments in Vietnam 2007 - 2015

| Planned Investment in Vietnam from 2007 – 2010 (in Megawatts) | | | | |
|---|--------|--------|-------|--------|
| | Hydro | Coal | Gas | Total |
| Capacity | 5,726 | 4,490 | 3,404 | 13,620 |
| % | 42% | 33% | 25% | 100.0% |
| Planned Investments from 2007 to 2015 in Vietnam (in Megawatts) | | | | |
| Capacity | 15,389 | 25,890 | 6,404 | 47,683 |
| % | 32.3% | 54.3% | 13.4% | 100.0% |
| <i>Of which</i> | | | | |
| North | 5,911 | 11,090 | 0 | 17,001 |
| Central | 6,479 | 2,400 | 104 | 8,983 |
| South | 954 | 12,400 | 6,300 | 19,654 |

Source: EVN. This list includes both 51 EVN and 76 IPP projects. There are 2045 MW not allocated by region.

³⁶ Ibid.

The Formation of Conglomerates since 2006

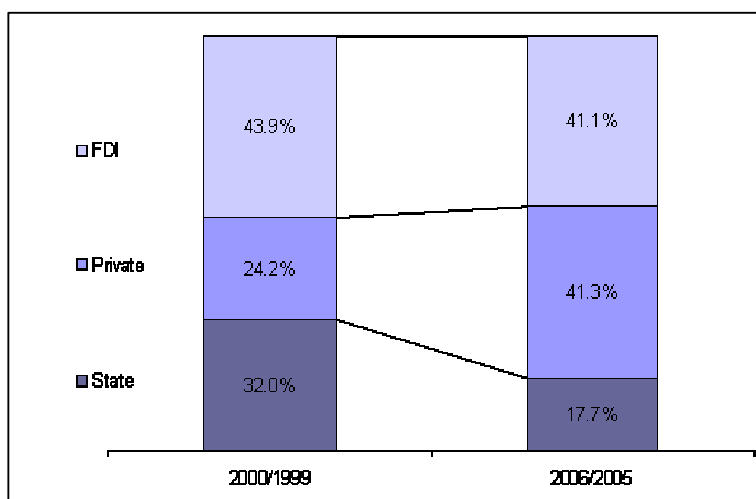
As we have pointed out, for the core economic ministries of the central government, the main focus of targeted industrial policies is the state owned enterprises. Since state owned enterprises dominate most heavy industries, one can also say that the core focus of targeted industrial policies is on these heavy industries. The method described above to support these state owned heavy industries have ranged from privileged access to bank funds to high levels of protection from imports, but, as demonstrated in the previous section none of these measures has led these state owned industrial enterprises to become dynamic contributors to economic growth. As the data in Table 16 and Chart 16 indicate, state owned industrial enterprises have lagged behind the private and FDI industrial sectors in terms of their overall growth rate, their level of productivity, and their financial performance (many have been chronic losers of money).

Table 13. Capital, Turnover and Workers in Vietnam Enterprises by Ownership (2005)

| | State | Non-State | Foreign | Total |
|--------------------------------|-------|-----------|---------|-------|
| Employees (thousand) | 2041 | 2982 | 1221 | 6244 |
| Capital (Trillion Dong) | 1451 | 705 | 528 | 2684 |
| Turnover (Trillion Dong) | 838 | 853 | 502 | 2159 |
| Capital/worker* | 711 | 236 | 432 | 430 |
| Turnover/woker* | 411 | 286 | 411 | 346 |
| Turnover/Capital | 0.58 | 1.21 | 0.95 | 0.80 |
| Annual Growth, 2001-05: | | | | |
| Employees | -1% | 22.4% | 25.7% | 12.2% |
| Capital | 15.3% | 44.4% | 18.5% | 21.0% |
| Turnover | 16.2% | 34.5% | 29.7% | 24.5% |

Source: 2003 and 2005 Enterprise Surveys. * Capital and turnover per worker are in million dong per worker. The number of state enterprises in the survey has dropped from 5355 on 12/31/2001 to 4086 on 12/31/2005.

Chart 16. Share of Real Industrial Growth by Ownership in Vietnam



Source: Vietnam Statistical Yearbook, 2006.

This lagging performance has in turn led the government to try to find a way to make the state owned industrial sector more dynamic, and the general approach to this objective beginning in 1994 has been to try to consolidate many of these enterprises into larger firms. In the 1994 regulations these were referred to as general corporations. The idea was that these larger firms could develop their own recognizable brand

names, would enjoy greater economies of scale, and other advantages. Basically the government created a general corporation with a head office that took over some of the key functions of the individual enterprises that were members but did not fully consolidate these enterprises into one large firm. Instead these subordinate enterprises within the corporation retained some degree of independence in such areas as, for example, the timing of when and whether they would be equitized.

The model or ultimate goal of this exercise was based on the Japanese keiretsu (Mitsubishi, Mitsui, etc.) and the South Korean chaebol (Samsung, Daewoo, Kumho, etc.). For the government officials that cited this model as the basis for their actions in this area, they appear to have held (and still hold) the view that these giant Japanese and Korean firms were to an important degree the creation of their governments and that, once created, they went on to sustained success in business. For Vietnam, therefore, the task for government was to set up such firms and support them until they became internationally competitive.

While it is certainly the case that the Japanese and Korean governments had close ties to the keiretsu and the chaebol, in neither case were these large conglomerates primarily state owned and directly controlled. Most were in fact private firms that were willing to do the bidding of the government if appropriately rewarded. Even when the firms were state owned, as with POSCO in Korea, however, they had a high degree of independence from the government ministries. Even the state owned firms in Korea, therefore, acted to an important degree like large private corporations. Furthermore, all of the chaebol were expected to become internationally competitive within a few years and then to export a substantial share of their output. They were heavily subsidized at the outset, but the subsidies began to disappear after a few years.

The Vietnamese general corporations, in contrast, were built more on an import substitution model that received protection from foreign imports and other subsidies on a continuing basis. Furthermore, these corporations were directly under the control of the various government ministries. The ministries appointed their boards of directors and the Prime Minister appointed their general manager. The general corporation was in many respects simply a new form of government bureau overseeing its subordinate enterprises. The underlying model was closer to the previous centrally planned command system where enterprises had almost no autonomy than it was to a genuinely independent conglomerate.

By 2006 and 2007, the government was certainly aware that the general corporations had not achieved what had been hoped for. The major initiative to deal with the weak performance of the general corporation was to form these corporations and various other enterprises into large conglomerates that effectively have a near monopoly over many of the heavy industry sectors. What is different about these conglomerates and why, given the lackluster performance of the general corporations, would further consolidating these enterprises solve anything?

The main difference is that these conglomerates are larger than the previous general corporations. Being larger they also have a greater degree of control over the heavy industry sectors involved. One problem, from the point of view of some government officials, was that the general corporations were losing control over their subordinate enterprises as these subordinate enterprises equitized and formed joint ventures not only with foreign firms but with other Vietnamese enterprises. The new conglomerates pull all of the firms under one roof. But the form of the conglomerate is much like that of the general corporation. The Prime Minister appoints the general manager, and the boards of directors are made up of representatives of the ministries and related agencies that have some supervisory role over these enterprises (the Ministry of Industry, the Ministry of Finance, etc.). In short these conglomerates' head offices and boards of directors still have many of the features of a government supervisory bureau rather than profit oriented bodies dedicated to promoting the performance and interests of the company. It is not easy to see how leadership of that sort is going to produce a Samsung or a Toyota.

A more important explanation for pursuing the creation of large conglomerates at this time has to do with the fact that the agreements connected with Vietnam's entrance into the World Trade Organization are now coming into effect. There is a very real fear among many of the state owned industrial enterprises that they will not be able to compete under the new rules. Most of the earlier methods of supporting local industries (high tariffs, local content requirements, and various other government subsidies) are no longer allowed under the WTO rules. These state owned industries often see themselves as "infant industries" that in other countries including Korea enjoyed protection until they had matured and become competitive, but Vietnam can no longer use many of these traditional infant industry support measures.

It appears, however, that some in the government believe that these new conglomerates can provide some of the required support for "infant" enterprises. The Vietnamese government cannot now order a firm to buy from a Vietnamese company as contrasted to a foreign competitor, for example, but the manager of a

conglomerate can so order its subordinate enterprises. The new conglomerates also have or are going to have a special relationship with a state owned bank. The analogy is with the Japanese keiretsu that typically have a bank at the center of the organization and that bank is presumed to feel a responsibility to help the other components of the keiretsu where possible. Vietnamese conglomerates, therefore, are presumably going to get more favorable treatment from their associated state bank than they would from a bank with more of an arms length relationship.

Seen as a combination of a control and a defensive mechanism, the decision to create the conglomerates has a certain logic. The conglomerates will increase the government's control of certain state dominated heavy industry sectors. These organizations also may be a way of continuing support to weak enterprises that would otherwise have to be liquidated because of strong competition from abroad. What does not seem likely to us is that these conglomerates as currently organized are going to be able to transform themselves into internationally competitive companies. The central reason why we feel this is the case is because the current structure of these conglomerates is very much like the previous general corporations and these corporations had a dozen years to show that they could improve performance and, for the most part, they have not done so. There is little evidence anywhere in the world, with the possible exception of Singapore, where state owned enterprises have ever been the primary vehicle for the creation of strong international corporations, and Vietnam, for a variety of reasons, is not likely to be able to duplicate Singapore's performance.

But even when state enterprises are not involved, there are reasons to be skeptical about whether forming diversified conglomerates out of existing not very dynamic enterprises is the way to create strong companies. To an important degree, those who advocate this approach are misreading the experience with conglomerates elsewhere. For example,

- (1) Forming large conglomerates is not a universal formula for industrial enterprise success anywhere in the world. Mergers and acquisitions have been a major part of business life in the United States for a long time and some of the mergers and acquisitions create an entity that is stronger than its component parts. Others end up as failures and are broken up or go out of business. In the United States, however, these decisions are made by the private corporations themselves and handled according to laws that are enforced by independent courts. The government other than the courts plays no significant role in the process except in cases where a merger seems to be creating a monopoly or a firm large enough in its market to limit competition. The competition laws are then applied and the merger is disallowed. It should also be noted that most of America's largest and most successful firms were not primarily the products of mergers. Microsoft, Oracle, and Google in recent years and The Ford Motor Company in the past were firms that started out very small and grew large because they developed products and marketing strategies that led to their very rapid growth.
- (2) In the Korean case, to be sure, many of the large conglomerates were the creatures of government led industrial policy particularly in the 1970s. President Park basically used government resources and government's control of the banks in support of mostly private firms that he believed were likely to be the most successful in carrying out his heavy industry policies. Many of these large firms were for a time very successful, but it should also be noted that many of them have since gone bankrupt and have been liquidated. Daewoo is the best known case, but only one of many. Samsung, arguably the most successful of these large Korean conglomerates (chaebol), was significantly less dependent on government for its success than firms like Daewoo and Hyundai. Korea today, in fact, is vigorously trying to move away from this large conglomerate model. Part of the reason for this is that many feel that the chaebol led to too large a concentration of political power, but there is also a widespread view that management of the chaebol was more often than not seriously flawed.
- (3) We are not arguing that all mergers and acquisitions undertaken by government to form conglomerates are a bad idea for Vietnam. Vietnam, like China, had an industrial organization designed for a centrally planned command economy. In that system, an enterprise was typically little more than an individual factory. That enterprise was nominally independent but in reality was tightly controlled by higher level industrial bureaus and the state planning commission. When Vietnam abolished central planning and the command system, like China it mainly started with the existing enterprise structure. In the case of China even some years after market reforms had begun, as the data in Table 17 indicate, the result was that China had one of the least concentrated industrial organization structures in the world. It was inevitable, therefore, that there would be a great deal of change in the industrial organization structure to make that structure more appropriate for a market economy. In the case of China, that has led to the formation of hundreds or even thousands of business groups (*jituan*), some formed under government leadership, others handled by the

enterprises themselves. It is not unreasonable to think that Vietnam could also benefit from some kinds of mergers and acquisitions provided they are carried out for the explicit purpose of creating a commercially stronger company and those implementing the merger are business people who know their industry, not government regulators.

- (4) In China, it should also be noted, the formation of business groups still leaves a highly decentralized industrial organization with lots of competition. Only in one or two sectors, notably petroleum and petro-chemicals, do only three or four firms have the lion's share of the market. Even in industries with large economies of scale (steel, automobiles) there are six or more large firms that compete vigorously with each other. This situation, of course, is to an important degree a product of China's enormous size. In Vietnam, however, with the formation of the conglomerates, there will be a significant number of heavy industries where one firm will dominate the market. Competition with other domestic firms in these industries will cease to exist. What competition these conglomerates will face will have to come entirely from imports.

Table 14. Industrial Concentration Ratio

| | China | United States | | Japan | Korea, Rep. Of | Malaysia * | Philippines | | Taiwan, China |
|---|------------|---------------|-------|-------|----------------|------------|-------------|-------|---------------|
| Year | 1988 | 1963 | 1972 | 1963 | 1974 | 1990 | 1983 | 1995 | 1976 |
| Share of Industry controlled by the largest firms | Top 18–100 | Top 4 | Top 4 | Top 4 | Top 5 | Top 4 | Top 4 | Top 4 | Top 4 |
| Number of sectors | 39 | 417 | 183 | 512 | 205 | 22 | 31 | 31 | 131 |
| Concentration ratio | | | | | | | | | |
| 80–100 percent | 7.7 | 12.2 | 6 | 5.6 | 26.9 | 18.2 | 25.8 | 9.7 | 10.7 |
| 60–80 percent | 5.1 | 9.1 | 13.7 | 7.8 | 17.9 | 40.9 | 41.9 | 16.1 | 12.2 |
| 40–60 percent | 12.8 | 19.6 | 26.8 | 27.9 | 27.3 | 31.8 | 16.1 | 29 | 24.4 |
| 20–40 percent | 17.9 | 39.3 | 34.9 | 25.4 | 21.9 | 4.5 | 16.1 | 35.5 | 35.2 |
| 0–20 percent | 56.4 | 19.8 | 18.6 | 33.3 | 6.0 | 4.5 | 0 | 9.7 | 17.5 |
| Total (percent) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Note: The concentration percentages are based on the value of shipments by the top four firms as a percentage of total shipments in each industry for the Japan, Korea, the United States, and probably Taiwan, China. The Philippine data refer to the share of output in each industry. The Chinese data are derived by the author from data published by the National Bureau of and refer to the output produced by firms with over 100 million yuan of gross value output, a number that varies by sector from 0 to 293 firms. The number of firms in the most concentrated sectors (with over 60 percent of the output in that sector) ranges from 18 to 100 firms.

Source: Perkins, 2004, p. 314.

Some comments on the role of the state conglomerates and general corporations in the current macroeconomic instability during 2007-08 are in order here.³⁷ As obvious from earlier discussion, Vietnam's current economic difficulties are due to structural inefficiencies in the economy. The state conglomerates and general corporations continue to receive a great deal of the credit in the economy and executes the lion's share of major public investment projects, despite their inefficiency. At the same time, the private sector, which is doing a far better job than the state of creating jobs and exports, is in danger of being strangled by current economic conditions. This is the fundamental contradiction in the Vietnamese dualist economy, which arguably the core reason for the current inflation, fiscal and trade deficit problems.

³⁷ Vietnam's economy has been overheating recently. Inflation in 2007 jumped to 12.6% from a sustainable level of 6.7% in 2006. Trade deficit also jumped from less than 5% of GDP in 2006 to nearly 20% in 2007. This situation persists and becomes even worse in the first half of 2008 when inflation reaches 25% and trade deficit is more than 30% of GDP yoy basis.

The current situation of Vietnam's conglomerates appears to be even more perilous than that of South Korean *chaebols* in 1997. The *chaebol* in South Korea that survived the Asian Crisis were accurately criticized in 1997-98 when their debt to equity ratios rose to three, four, or five and they were forced to cut these ratios in half. In Vietnam, the very rapid growth of debt – 42 times equity in the case of Cienco 5 and 22 times equity in the case of Vinashin – indicates an inability to raise funds from profits or by issuing stock. In addition, SOE's investment (mostly carried out by conglomerates and general corporations) increased abruptly by nearly 60 percent, resulting in a surge of fiscal deficit in 2007. This problem lies at the heart of the current troubles, and is a crucial impediment to continued growth.

Inflation will be impossible to control as long as cheap capital is directed to the state conglomerates. There is no monetary solution to this fiscal problem. Tighter credit conditions will squeeze the private sector, because these small and medium sized firms do not have access to subsidized credit. These firms are efficient because they are subject to market discipline. By the same logic, the only way to make sure that state conglomerates and general corporations are not investing in bad projects is to force them to pay market rates for their capital and to deprive them of the central government guarantees that they have enjoyed until now.

To conclude, we believe that the formation of conglomerates of the kind now being created will not give Vietnam a strong and internationally competitive heavy industry sector. For a time the dynamism of the private and FDI sectors may keep Vietnamese industry growing rapidly, but sometime in the not too distant future, Vietnam will also have to have a dynamic heavy industry sector and the current strategy is not likely to be the vehicle to get the country there. In order to achieve this goal (and also to reestablish economic stability) the Vietnamese government should address core structural flaws – namely the dualist economy. Vietnam cannot both integrate into the global economy and continue to make policy as if the hard-learned lessons of other economies or the "laws of gravity" do not apply.

Education³⁸

Vietnam's education system is in crisis. While its primary and secondary enrollment ratios are good, there are serious concerns about quality. The high failure rates recorded in the most recent national high school graduation exam reveals that many students are not acquiring the basic level of knowledge the Vietnamese government has determined that its citizens require.

The percentage of Vietnamese people who have university degrees is relatively low, and the number of new graduates is growing quite slowly. In 2000, the ratio of university educated workers to population in Vietnam was about 2 percent, compared to 5 percent in China and 8 percent in India. The 2005 enrollment ratio of university students was 16 percent in Vietnam compared to 17 percent in China, 19 percent in Indonesia, and 43 percent in Thailand. On top of this, the quality of Vietnamese universities and education are sub-standard. Professors and lecturers at Vietnam's best universities publish few articles in international, peer-reviewed journals. In 2006, the 2,830 faculty members at Thailand's Chulalongkorn University published 744 articles in international scientific journals. During the same period the 3,360 faculty members at Vietnam National University in Hanoi and Ho Chi Minh City published 36 articles.³⁹ Half of university graduates in an active job market were reported to be without a job related to their main area of study only one year after graduation.⁴⁰ Even more worrying, a recent study by Ho Chi Minh Normal University in 2007 reports that 50 percents of graduates are incapable of fulfilling the job in areas they have been trained and therefore need to be retrained.

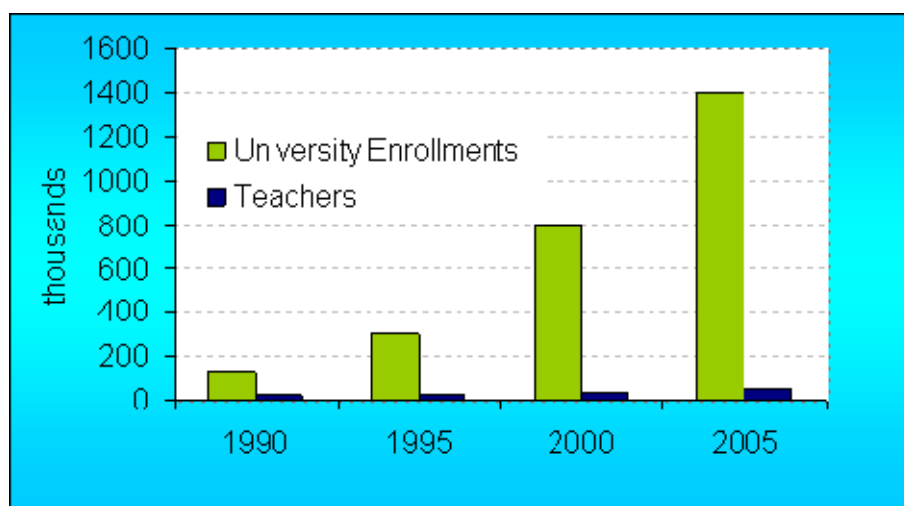
There has been a huge expansion in student numbers since 1990 but only a modest growth in faculty, with the result that the system is under increasing stress (see Chart 17). The student/teacher ratio has increased sharply from 6:1 in 1990 to nearly 30:1 in 2005.

³⁸ This part is written based greatly on the "Choosing Success: The Lessons of East and Southeast Asia and Vietnam's Future" by Vietnam Program at Harvard University and The Fulbright Economics Teaching Program.

³⁹ Source: Scientific Citation Index Expanded, Web of Science, Thomson Corporation.

⁴⁰ See http://www.hce.edu.vn/print.php?type=A&item_id=126

Chart 17. Education: A System Under Strain



Source: Vietnam's Statistical Yearbooks

The unsatisfactory results achieved by the existing system are not merely due to a lack of money. In fact, as a percentage of GDP, Vietnam spends more on education than most countries in the region.⁴¹ The problem is how these resources are used, and in particular the governance structures of educational institutions at all levels. The current educational expenditure system is not transparent financially. As one Vietnamese commentator recently noted, if official figures regarding spending on teacher salaries are to be believed, then average salaries would be almost double their current actual levels.⁴² The inefficiency of the current system is the reason why simply increasing spending through current institutional structures is unlikely to improve quality or access.⁴³ In higher education, universities need more autonomy to enable them to specialize and compete on the basis of quality, relevance and graduates' job prospects. Personnel systems must shift from seniority to performance as the main criterion on which recruitment, remuneration and promotion decisions are made. University funding should make use of the full range of potential sources including tuition and fees, contracted research, private donations and government subsidies.⁴⁴

Vietnamese science and technology are falling behind other countries in the region and therefore imposing a major constraint on economic growth. In 2002, Vietnamese in Vietnam filed for a total of two patents with the World International Property Organization. Chart 18 provides further evidence of the extent to which the Vietnamese economy is technology deficient. The track record of Vietnam's research institutes has been as poor as its universities: in 2006, researchers at the Vietnamese Academy of Science and Technology (VAST) published 41 articles in international journals. In comparison, faculty at a single Chinese university, Fudan University in Shanghai, published 2,286 articles during the same period.⁴⁵ Despite VAST's poor performance to date, the Vietnamese government has announced plans to make VAST researchers the

⁴¹ Vietnam is said to spend \$1 billion a year on overseas education, much of it financed by families. This is one indication of the level of popular dissatisfaction with the domestic university system. While foreign graduate education is arguably a good investment, overseas undergraduate education is expensive and better quality programs in Vietnam would reduce the need for going abroad.

⁴² See "Questions surrounding the financial report of the Ministry of Education and Training." <http://www.tuotire.com.vn/Tianyon/Index.aspx?ArticleID=230489&ChannelID=13>

⁴³ Most recently, the government is considering a plan to allocate one billion dollars to the Ho Chi Minh Communist Youth League for vocational training and job creation. Although this initiative stems from a laudable desire, its success is far from assured. Training is not the Youth League's primary institutional focus or core competency; moreover, it is unlikely that the Youth League possesses a sophisticated understanding of the needs of employers and workers in the labor market.

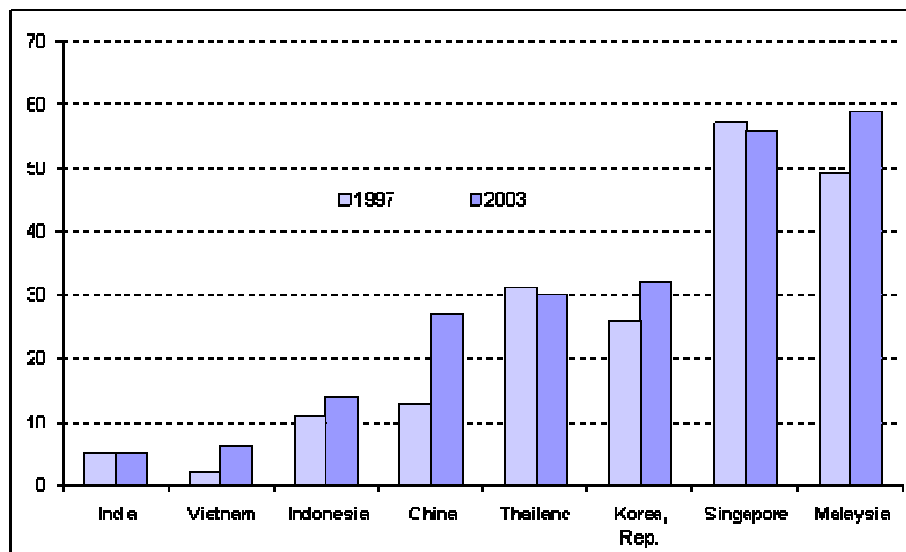
⁴⁴ Professor Hoang Tuy argues persuasively that governance, not material resources, is the root cause of the failure of Vietnamese higher education and science. See "New Year, Old Story." Available at <http://www.tiasang.com.vn/print?id=1307>. One dramatic example of Vietnamese universities' lack of autonomy is their inability to promote faculty to the rank of assistant or full professor. China granted its universities this authority more than a decade ago.

⁴⁵ Source: Scientific Citation Index Expanded, Web of Science, Thomson Corporation. Ignorance of the English language has been offered as an explanation for this abysmal performance. If Vietnamese researchers indeed lack English proficiency it is further evidence of the failure of Vietnamese science. Modern scientific research is a global enterprise, and English is its common language. Scientists unable to connect to global trends in their fields are almost certainly not engaged in relevant research.

nucleus of a new science and technology university. This is another example of an attempt to impose a state-centric solution to education while avoiding the core weaknesses in Vietnamese higher education. A better option would be to relax controls on research institutes and universities, and allow them to compete for students and research grants on the basis of their performance.

In order to improve the quality of higher education and science, Vietnamese institutions must be able to offer attractive incentives to attract top-talent. Today, elite Chinese universities are competing in the global market for scientific talent; their internationally competitive salaries and generous research support are beginning to lure leading Chinese scientists resident abroad from the US and elsewhere. Vietnam, by contrast, has yet to adopt incentives that are attractive to young, foreign educated scientists and scholars from Vietnam.⁴⁶ Indeed, there appears to be some reluctance to accept the need to reward a select cohort with special incentives to which others are not entitled. The market for scientific talent is international, and the best young Vietnamese scientists have many career options. It is unlikely that more than a handful will be willing to accept the professional conditions now existing in Vietnamese universities. Few will find appeals to their patriotism sufficient incentive.⁴⁷

Chart 18. High-Tech as a Percentage of Manufactured Exports⁴⁸



⁴⁶ See Hoang Tuy, "Education and Science Before the Challenge of Integration." Available at <http://www.saigontimes.com.vn/tbktsg/detail.asp?muc=3&sobao=880&sott=8>.

⁴⁷ See <http://vietnamnet.vn/giaoduc/2007/01/649367/>

⁴⁸ Source: World Development Indicators.

Policy Recommendations

- (1) Vietnam's industrial policy has been focused domestically and is defensive in nature. It needs to convert to a confident outward oriented policy where all industrial firms should see themselves as internationally competitive.
- (2) Vietnam's greatest resource is its human capital and limitations on existing human capital are the largest binding constraint on moving up the industrial supply chain and technology ladder. Vietnam's universities currently are not in a position to meet this need at the level that is required. There is also a disconnect between the training that does occur and what the labor market requires.
- (3) There is a serious misallocation of resources that takes the form of overemphasis on state owned conglomerates and low priority infrastructure. There is need to invest more resources immediately in high use road and rail infrastructure and in non-hydroelectric power.
- (4) Progress has been made for creating a more favorable environment for private domestic business, notably the enterprise laws of 2000 and 2005, but there is still a long way to go. Vietnam's low rank in international measures of the business environment needs to be raised significantly. This can only be done by removing a wide variety of unnecessary regulatory interventions and making those that remain much more transparent. Removal of unnecessary regulations and increasing the transparency of those that remain will also reduce opportunities for corruption.
- (5) As the business environment for the private domestic sector improves, the current more favorable environment for foreign direct investment should gradually be replaced with less unequal environment for both sectors. Among other things, this will facilitate greater spillover affects from the FDI sector to the domestic private sector than is currently the case.
- (6) The creation of conglomerates appears to us as primarily a strategy to preserve a favored environment for the state sector. It is not a strategy that will create large internationally competitive firms. The current approach to the creation of these conglomerates furthers the close ties between politicians and business that also gives rise to corruption and enterprise capture of the state decision making process. It is more a perpetuation of a highly protected import substitution policy than it is a strategy that is confidently outward oriented.
- (7) Equitization by itself does not create new entrepreneurs or better corporate governance. To be effective, equitization needs to lead to enterprise control that is in the hands of non-state shareholders. In additions, the current equitization process needs to be much more transparent than is currently the case.
- (8) Real progress has been made in getting the banking sector to lend on a strictly commercial basis to all borrowers. However, the placement of banks within the conglomerates is a step backward in this regard. This backward step makes macro economic stabilization more difficult and even has the potential of creating the kinds of financial problems that led to the 1997-1998 international financial crisis.
- (9) The way to correct the regional imbalance in industrial location is to strengthen physical and regulatory infrastructure throughout the country. In this regard, infrastructure investment should take a regional approach as contrasted to an ad hoc way of rewarding a particular province. The current policy toward construction of unnecessary seaports and airports, and the placement of a large heavy industry complex in a major typhoon area are illustrations of the latter undesirable approach to these kinds of investments.
- (10) Vietnam's local government officials, in particular, need to see themselves as promoters of industrial development including private sector industry rather than being just regulators and tax collectors. Today the problem of inadequate local development in many regions has more to do with these attitudinal and governance problems than it does to a lack financial incentives.
- (11) There is a long term need to substitute current informal procedures for the purchase of land use rights with formal legal rules that are both simpler and more transparent, but we do not believe that

a greater involvement of local officials or a state regulatory body would contribute to the more efficient use of land at present. To the contrary, greater local government involvement in these decisions would mainly add a new set of barriers to starting a business.

- (12) In the absence of critical market supporting institutions, large numbers of business decisions from bankruptcies to mergers and acquisitions require frequent intervention by the executive branch of the government, a process that is both inefficient and a source of corruption. The long term goal, therefore, should be to greatly strengthen critical market supporting institutions such as a strong independent legal system and a well-defined ownership system.

Appendix 1. A measure of Chinese industrial concentration (in 1988)

| | Chinese Industrial Enterprises | | | |
|------------------------|--------------------------------|-------------------|---------|---------|
| | Total # Ent | #over 100 million | No. (%) | GVIO(%) |
| All Industry | 420929 | 1558 | 0.37 | 29.55 |
| Coal Mining | 9230 | 55 | 0.60 | 53.99 |
| Petrol & Gas | 30 | 17 | 56.67 | 99.87 |
| Iron Mining | 1264 | 4 | 0.32 | 25.74 |
| Non Ferrous Metals | 2233 | 6 | 0.27 | 16.01 |
| Construction | 9971 | 0 | 0 | 0 |
| Salt | 605 | 605 | 100 | 19.45 |
| Other Mining | 24 | 0 | 0 | 0 |
| Wood & Bamboo | 2981 | 16 | 0.54 | 25.56 |
| Food Manufactures | 42755 | 43 | 0.10 | 5.10 |
| Beverages | 14406 | 17 | 0.12 | 6.81 |
| Tobacco | 298 | 92 | 30.87 | 89.20 |
| Fodder | 3878 | 5 | 0.13 | 5.67 |
| Textiles | 24017 | 236 | 0.98 | 21.86 |
| Sewn Products | 18017 | 4 | 0.02 | 2.75 |
| Leather Shoes etc | 7929 | 1 | 0.01 | 0.37 |
| Wood Products | 11000 | 1 | 0.01 | 1.12 |
| Furniture | 10891 | 0 | 0 | 0 |
| Paper Products | 10182 | 23 | 0.23 | 10.62 |
| Printing | 10732 | 2 | 0.02 | 2.11 |
| Education Products | 3897 | 1 | 0.03 | 1.76 |
| Arts & Crafts | 10671 | 2 | 0.02 | 1.81 |
| Electricity Supply etc | 11293 | 101 | 0.89 | 52.53 |
| Petroleum Products | 690 | 38 | 5.51 | 95.26 |
| Coke Gas Products | 2235 | 5 | 0.22 | 25.52 |
| Chemicals | 17864 | 118 | 0.66 | 29.02 |
| Pharmaceuticals | 2802 | 27 | 0.96 | 16.58 |
| Chemical Fibers | 494 | 26 | 5.26 | 59.97 |
| Rubber Products | 3740 | 34 | 0.91 | 29.72 |
| Plastics | 14065 | 7 | 0.05 | 2.76 |
| Construction Materials | 55859 | 17 | 0.03 | 3.12 |
| Ferrous Metal Products | 3015 | 134 | 4.44 | 79.15 |
| Non Ferrous Products | 2158 | 68 | 3.15 | 59.03 |
| Metal Manufactures | 29841 | 7 | 0.02 | 2.38 |
| Machinery | 43059 | 161 | 0.37 | 18.81 |
| Transport Equipment | 10368 | 79 | 0.76 | 43.20 |
| Electrical Machinery | 14118 | 102 | 0.72 | 30.57 |
| Communication Equip | 4159 | 96 | 2.31 | 48.96 |
| Instruments | 3460 | 4 | 0.12 | 6.18 |
| Other Industries | 5544 | 1 | 0.02 | 1.51 |

Appendix 2. International Comparisons of Industrial Structure

| | Vietnam 2005 | China 1996 | China 2004 | Korea 2005 |
|-----------------------------|-----------------|---------------|---------------|---------------|
| Food & Beverage | 20.95 | 9.64 | 7 | 5.67 |
| Nonmetal Mineral Prod | 9.13 | 5.67 | 4.48 | 2.71 |
| Oil & Gas Extraction | 6.5 | 2.61 | 2.08 | 0 |
| Chemicals & Products | 5.32 | 8.41 | 7.2 | 9.31 |
| Textiles | 4.71 | 7.53 | 5.24 | 2.57 |
| Rubber& Plastic Products | 4.7 | 3.33 | 3.28 | 4.43 |
| Leather Manufactures | 4.58 | 1.77 | 1.41 | 0.49 |
| Metal Products | 3.75 | 3.1 | 2.86 | 4.69 |
| Garments | 3.72 | 2.83 | 2.1 | 1.45 |
| Basic Metal | 3.27 | 8.26 | 10.59 | 9.89 |
| Furniture | 3.26 | 0.45 | 0.67 | 1.35 |
| Transport Equipment | 2.77 | 6.03 | 6.54 | 15.4 |
| Electrical Machinery | 2.76 | 4.88 | 5.41 | 4.47 |
| Tobacco Products | 2.57 | 1.92 | 1.17 | 0.33 |
| Telecom Equipment | 2.26 | 4.86 | 1.02 | 1.64 |
| Paper Products | 2.11 | 1.94 | 1.79 | 1.73 |
| Wood Products | 1.87 | 0.82 | 0.9 | 0.52 |
| Metal mining | 1.56 | 1.53 | 1.37 | 0 |
| Machinery | 1.54 | 4.27 | 4.62 | 8.48 |
| Coal Mining | 1.43 | 2.28 | 2.13 | 0.07 |
| Petroleum Products | 1.25 | 3.53 | 4.09 | 7.1 |
| Stone quarrying other | 1.01 | | | |
| Printing & Publishing | 0.93 | 1.53 | 0.78 | 1.49 |
| Other Equipment | 0.56 | 3.17 | 2.62 | |
| Instruments | 0.2 | 0.84 | 1.08 | 1.02 |
| Pharmaceuticals | | 1.83 | 1.51 | |
| Electricity & Gas | 5.59 | 4.6 | 6.9 | |
| Water Purification | 0.39 | 0.37 | 0.27 | |
| Other | 1.31 | 2 | 10.89 | 15.19 |

Sources: These figures were derived from gross value output data in the following sources: General Statistics Office, Statistical Yearbook of Vietnam 2005, pp. 328-329; National Statistical Office, Korea Statistical Yearbook 2006, pp. 323-325; National Bureau of Statistics, China Statistical Yearbook 2006, p. 510 and 1997, p. 424.

Appendix 3. Provincial Competiveness Index

| | Province | Entry Costs | Land Access & Security of Tenure | Transparency and Access to Information | Time Costs & Regulatory Compliance | Informal Charges | SOE Bias (Competition Environment) | Pro-activity of Provincial Leadership | Private Sector Development Services | Labor Training | Legal Institutions | Weighted PCI 2006 |
|----|------------|-------------|----------------------------------|--|------------------------------------|------------------|------------------------------------|---------------------------------------|-------------------------------------|----------------|--------------------|-------------------|
| 1 | Binh Duong | 8.49 | 6.21 | 8.50 | 7.12 | 6.46 | 7.24 | 9.08 | 8.86 | 6.52 | 5.46 | 76.23 |
| 2 | Da Nang | 9.17 | 4.70 | 7.68 | 5.83 | 6.18 | 6.47 | 6.38 | 9.62 | 9.60 | 6.38 | 75.39 |
| 3 | Binh Dinh | 7.16 | 6.86 | 7.97 | 4.93 | 6.88 | 7.50 | 6.64 | 8.15 | 6.18 | 3.95 | 66.49 |
| 4 | Vinh Long | 8.44 | 6.80 | 6.25 | 4.91 | 6.80 | 7.33 | 5.10 | 7.50 | 7.96 | 4.86 | 64.67 |
| 5 | Dong Nai | 7.02 | 6.27 | 6.18 | 4.95 | 6.99 | 6.31 | 6.00 | 7.76 | 8.45 | 3.79 | 64.64 |
| 6 | Lao Cai | 7.78 | 5.93 | 7.80 | 4.33 | 6.78 | 8.40 | 6.59 | 7.01 | 6.46 | 3.52 | 64.11 |
| 7 | HCMC | 7.07 | 5.07 | 6.97 | 5.12 | 6.02 | 6.35 | 6.18 | 7.63 | 7.35 | 3.81 | 63.39 |
| 8 | Vinh Phuc | 7.31 | 6.30 | 6.27 | 3.25 | 6.13 | 6.36 | 7.74 | 6.31 | 6.98 | 4.03 | 61.27 |
| 9 | An Giang | 7.64 | 6.37 | 6.64 | 4.57 | 7.00 | 6.43 | 7.59 | 7.06 | 4.55 | 3.38 | 60.45 |
| 10 | Can Tho | 6.55 | 6.70 | 6.83 | 4.87 | 5.70 | 6.57 | 3.52 | 8.68 | 5.56 | 3.80 | 58.30 |
| 11 | Dong Thap | 7.92 | 6.38 | 5.81 | 3.87 | 7.44 | 7.43 | 6.06 | 6.30 | 6.14 | 3.20 | 58.13 |
| 12 | Yen Bai | 7.20 | 6.32 | 5.99 | 5.70 | 6.90 | 8.30 | 6.38 | 4.49 | 5.12 | 3.81 | 56.85 |
| 13 | Tra Vinh | 6.85 | 6.35 | 5.79 | 3.81 | 6.86 | 6.46 | 6.31 | 6.14 | 5.85 | 3.63 | 56.83 |
| 14 | Quang Nam | 7.76 | 5.55 | 4.44 | 4.32 | 5.27 | 6.96 | 6.61 | 5.26 | 5.70 | 6.31 | 56.42 |
| 15 | Bac Giang | 8.18 | 6.01 | 5.81 | 4.78 | 6.32 | 6.66 | 4.89 | 5.31 | 6.41 | 4.00 | 55.99 |
| 16 | Hung Yen | 6.65 | 6.91 | 6.49 | 5.36 | 7.64 | 7.82 | 5.82 | 5.53 | 3.89 | 3.52 | 55.97 |
| 17 | BRVT | 7.49 | 5.38 | 5.43 | 5.59 | 5.85 | 5.70 | 5.46 | 5.82 | 5.56 | 4.73 | 55.95 |
| 18 | Ninh Binh | 7.87 | 5.92 | 5.11 | 5.87 | 6.29 | 6.17 | 5.64 | 4.78 | 6.60 | 3.63 | 55.82 |
| 19 | Soc Trang | 7.82 | 7.98 | 5.78 | 4.00 | 6.30 | 7.20 | 7.31 | 4.50 | 4.16 | 4.06 | 55.34 |
| 20 | Khanh Hoa | 8.23 | 5.30 | 6.02 | 5.37 | 6.51 | 6.36 | 5.11 | 6.12 | 5.08 | 3.27 | 55.33 |
| 21 | Phu Yen | 8.83 | 7.03 | 6.09 | 2.64 | 5.35 | 6.58 | 5.09 | 6.49 | 5.44 | 3.73 | 54.93 |
| 22 | Bac Ninh | 7.25 | 6.06 | 6.09 | 3.04 | 6.24 | 6.76 | 5.75 | 4.60 | 6.53 | 4.14 | 54.79 |
| 23 | Nghe An | 7.85 | 5.56 | 5.78 | 5.06 | 6.29 | 6.15 | 4.69 | 4.28 | 6.53 | 4.53 | 54.43 |
| 24 | Phu Tho | 8.32 | 6.50 | 5.35 | 4.73 | 6.61 | 6.96 | 4.59 | 5.70 | 5.56 | 3.70 | 54.42 |

| | | | | | | | | | | | | |
|----|-------------|------|------|------|------|------|------|------|------|------|------|--------------|
| 25 | Quang Ninh | 6.81 | 6.31 | 4.77 | 4.74 | 6.47 | 6.46 | 6.03 | 5.25 | 4.74 | 4.30 | 53.25 |
| 26 | Ben Tre | 7.65 | 6.20 | 4.90 | 3.73 | 8.35 | 5.99 | 6.38 | 4.42 | 5.47 | 3.54 | 53.11 |
| 27 | Gia Lai | 7.08 | 6.16 | 6.03 | 3.26 | 7.32 | 6.36 | 4.91 | 5.77 | 5.06 | 3.68 | 53.06 |
| 28 | Thai Nguyen | 7.02 | 5.66 | 6.08 | 3.66 | 6.18 | 6.66 | 3.53 | 5.25 | 6.64 | 4.05 | 52.71 |
| 29 | Hai Duong | 6.19 | 6.15 | 5.81 | 4.23 | 5.70 | 7.28 | 5.84 | 5.09 | 4.52 | 3.91 | 52.70 |
| 30 | Binh Thuan | 6.39 | 5.92 | 6.71 | 4.22 | 7.27 | 7.06 | 4.47 | 4.58 | 5.64 | 3.02 | 52.66 |
| 31 | Hau Giang | 7.67 | 6.01 | 5.12 | 3.97 | 7.74 | 6.08 | 6.79 | 3.98 | 4.67 | 4.06 | 52.61 |
| 32 | Lam Dong | 7.20 | 6.97 | 5.54 | 4.83 | 6.56 | 6.37 | 3.82 | 6.39 | 4.19 | 3.93 | 52.25 |
| 33 | Tien Giang | 5.85 | 6.43 | 4.48 | 4.59 | 7.25 | 6.65 | 5.31 | 5.76 | 5.05 | 3.60 | 52.18 |
| 34 | Quang Tri | 8.83 | 5.67 | 4.93 | 4.79 | 6.52 | 6.85 | 4.26 | 4.12 | 6.78 | 3.32 | 52.18 |
| 35 | Dak Lak | 6.48 | 5.95 | 4.99 | 4.83 | 6.03 | 6.74 | 5.87 | 5.27 | 4.19 | 3.74 | 51.65 |
| 36 | Kien Giang | 7.87 | 7.72 | 4.86 | 4.42 | 6.63 | 6.01 | 5.60 | 4.88 | 3.89 | 3.89 | 51.27 |
| 37 | Thai Binh | 6.89 | 5.46 | 5.27 | 6.13 | 6.62 | 7.17 | 4.81 | 3.73 | 5.13 | 2.92 | 50.54 |
| 38 | TT-Hue | 7.52 | 4.99 | 5.43 | 4.40 | 5.98 | 6.23 | 4.63 | 4.68 | 5.79 | 2.98 | 50.53 |
| 39 | Long An | 7.88 | 7.07 | 3.62 | 3.88 | 5.68 | 7.02 | 5.59 | 5.63 | 4.85 | 3.16 | 50.40 |
| 40 | Ha Noi | 5.73 | 4.19 | 5.60 | 5.25 | 5.21 | 4.70 | 4.23 | 6.12 | 5.24 | 3.39 | 50.34 |
| 41 | Hoa Binh | 6.62 | 6.57 | 5.13 | 5.02 | 7.39 | 7.30 | 4.61 | 3.51 | 5.16 | 3.62 | 50.17 |
| 42 | Hai Phong | 7.38 | 4.48 | 6.07 | 4.41 | 5.54 | 5.85 | 3.76 | 4.98 | 5.83 | 2.98 | 49.98 |
| 43 | Lang Son | 6.87 | 4.39 | 5.65 | 5.17 | 6.21 | 6.50 | 3.30 | 5.20 | 5.07 | 3.65 | 49.64 |
| 44 | Nam Dinh | 7.40 | 5.71 | 3.63 | 4.84 | 6.65 | 7.54 | 5.16 | 4.75 | 4.48 | 3.37 | 48.89 |
| 45 | Bac Kan | 7.21 | 4.34 | 3.18 | 4.60 | 6.47 | 7.04 | 4.02 | 3.28 | 6.21 | 6.55 | 48.73 |
| 46 | Ha Giang | 7.39 | 6.19 | 5.03 | 3.44 | 6.01 | 6.44 | 4.92 | 4.87 | 4.52 | 3.04 | 48.49 |
| 47 | Tay Ninh | 8.49 | 6.26 | 4.56 | 3.70 | 6.12 | 6.06 | 4.11 | 4.42 | 4.30 | 5.09 | 48.35 |
| 48 | Quang Binh | 8.02 | 6.07 | 5.46 | 4.05 | 7.22 | 6.17 | 3.55 | 3.84 | 4.92 | 3.46 | 47.90 |
| 49 | Ha Nam | 6.58 | 5.58 | 6.48 | 3.90 | 6.51 | 6.29 | 4.79 | 4.39 | 2.87 | 3.09 | 47.27 |
| 50 | Tuyen Quang | 8.59 | 5.13 | 4.04 | 4.09 | 6.47 | 7.02 | 4.57 | 5.30 | 3.43 | 3.50 | 47.21 |
| 51 | Cao Bang | 7.65 | 4.83 | 4.62 | 4.70 | 6.30 | 7.44 | 4.38 | 3.07 | 5.10 | 3.07 | 46.63 |

| | | | | | | | | | | | | |
|----|------------|------|------|------|------|------|------|------|------|------|------|--------------|
| 52 | Binh Phuoc | 4.96 | 6.82 | 4.36 | 5.28 | 6.12 | 6.37 | 4.72 | 4.36 | 4.13 | 2.52 | 46.29 |
| 53 | Ninh Thuan | 7.50 | 6.66 | 5.39 | 3.48 | 6.08 | 5.52 | 2.60 | 3.84 | 5.50 | 3.47 | 45.82 |
| 54 | Thanh Hoa | 7.83 | 5.95 | 4.63 | 4.73 | 5.24 | 6.79 | 3.11 | 4.61 | 3.73 | 3.53 | 45.30 |
| 55 | Son La | 7.78 | 5.94 | 3.95 | 3.50 | 5.82 | 7.40 | 4.37 | 4.65 | 3.44 | 3.63 | 45.22 |
| 56 | Quang Ngai | 6.73 | 5.99 | 5.24 | 4.42 | 5.44 | 5.79 | 2.36 | 4.57 | 4.94 | 2.13 | 44.20 |
| 57 | Ca Mau | 5.99 | 5.74 | 5.07 | 4.33 | 6.97 | 5.73 | 4.10 | 3.47 | 3.65 | 3.00 | 43.99 |
| 58 | Bac Lieu | 5.67 | 6.91 | 2.53 | 4.24 | 6.34 | 5.60 | 4.17 | 4.32 | 4.30 | 3.41 | 42.89 |
| 59 | Ha Tinh | 7.36 | 5.93 | 2.86 | 4.93 | 5.05 | 6.22 | 3.09 | 3.99 | 5.10 | 2.59 | 42.35 |
| 60 | Dien Bien | 8.82 | 5.72 | 4.38 | 4.19 | 6.45 | 5.60 | 3.24 | 3.42 | 3.50 | 2.99 | 42.28 |
| 61 | Kon Tum | 8.73 | 4.95 | 4.28 | 3.22 | 5.17 | 6.09 | 3.43 | 3.33 | 3.60 | 3.74 | 41.38 |
| 62 | Ha Tay | 6.12 | 4.92 | 5.56 | 4.28 | 5.07 | 6.70 | 2.53 | 3.60 | 2.92 | 3.13 | 40.73 |
| 63 | Dak Nong | 5.56 | 4.82 | 2.15 | 3.81 | 6.66 | 5.07 | 4.15 | 2.40 | 4.11 | 4.83 | 38.91 |
| 64 | Lai Chau | 7.99 | 3.84 | 2.46 | 3.06 | 5.20 | 7.10 | 4.32 | 2.96 | 1.99 | 4.05 | 36.76 |
| | MIN | 4.96 | 3.84 | 2.15 | 2.64 | 5.05 | 4.70 | 2.36 | 2.40 | 1.99 | 2.13 | 36.76 |
| | MAX | 9.17 | 7.98 | 8.50 | 7.12 | 8.35 | 8.40 | 9.08 | 9.62 | 9.60 | 6.55 | 76.23 |
| | AVERAGE | 7.36 | 5.92 | 5.34 | 4.47 | 6.36 | 6.59 | 5.00 | 5.19 | 5.20 | 3.77 | 52.45 |

Source: VNCI and VNCI

Appendix 4. Market Shares of State General Corporations in 1999 and 2003

| Industries | Market Share (1999, %) | Market Share (2003, %) |
|------------------------|------------------------|------------------------|
| Electricity | 94% | 92% |
| Coal | 97% | 98% |
| Paper | 50% | 70% |
| Cigarettes | 63% | N/A |
| Cements | 59% | 55% |
| Steel | 64% | 52% |
| Chemical fertilizers | N/A | 90% |
| Rubber | N/A | 69% |
| Petroleum products | N/A | 100% |
| Basic chemicals | N/A | 99% |
| Gasoline | N/A | 50% |
| Rail transportation | N/A | 100% |
| Air transportation | N/A | 90% |
| Commercial bank credit | 70% | N/A |
| Exports | 30% | 25,1% |

Source: Nguyen Van Dang et al. (2005). "State General Corporations toward International Economic Integration." Transportation Publishing House, p. 63.

Appendix 5. Status of General Corporations 91 in 2002 and 2003

| | Item | Unit | 2002 | 2003 |
|---|--|--------------|-------------|-------------|
| 1 | No. of firms under Corporations' management | | 600 | 586 |
| | - Manufacturing and trading firms | Firm | 557 | 544 |
| | - Profitable firms | | 475 | 516 |
| 2 | Sources of capital | Million dong | 187,080,612 | 201,922,707 |
| | - State capital | | 61,642,301 | 62,149,913 |
| | - Accumulated capital | | 30,742,758 | 38,240,199 |
| | - Liabilities | | 88,134,484 | 101,576,849 |
| | - Other sources | | 6,561,069 | 6,465,926 |
| 3 | Labor | Person | 679,725 | 694,604 |
| | In which, not in work | | 7,983 | 9,581 |
| 4 | Business performance | Million dong | | |
| | - Revenue | | 210,694,930 | 202,652,006 |
| | - Earnings before tax (EBT) | | 16,785,983 | 14,528,197 |
| | - Losses | | 386,811 | 259,205 |
| | - EBT to the state capital ratio | | 17.75% | 14.21% |
| 5 | Import-export value | Million USD | 6,167 | 4,701 |
| | - Export value | | 5,117 | 4,143 |
| | - Import value | | 1,049 | 558 |
| 6 | Contribution to the state budget | Million dong | 44,156,001 | 36,916,510 |
| 7 | Payables | Million dong | 125,813,892 | 126,867,610 |
| | - Payables to the state budget | | 6,557,741 | 1,728,322 |
| | - Payables to banks | | 84,225,061 | 90,374,472 |
| 8 | Receivables | Million dong | 37,260,138 | 34,102,429 |
| | In which, bad debt | | 1,067,880 | 596,510 |

Source: Steering Committee for Enterprise Renovation and Development

Appendix 6. Performance of General Corporations 91 in 2003

| Name of corporation | No. of subordinate enterprises | Total capital (mil dong) | Labors (persons) | Revenue (mil dong) | Profit before tax (mil dong) | Contribution to State Budget (mil dong) |
|--|--------------------------------|--------------------------|------------------|--------------------|------------------------------|---|
| 1. PetroVietnam | 18 | 33,321,264 | 15,177 | 57,379,800 | 1,850,064 | 25,050,760 |
| 2. Vietnam Posts and Telecommunications | 94 | 26,772,274 | 96,320 | 22,990,768 | 7,525,051 | 6,215,000 |
| 3. Vietnam Tobacco Corporation | 15 | 2,328,085 | 11,302 | 10,300,000 | 177,000 | 2,433,744 |
| 4. Vietnam Electricity | 53 | 64,986,081 | 76,000 | 19,912,000 | 1,800,000 | 2,020,000 |
| 5. Vietnam Cement Industry Corporation | 15 | 14,333,000 | 16,650 | 8,980,097 | 664,661 | 824,526 |
| 6. Vietnam Steel Corporation | 12 | 5,709,286 | 17,591 | 9,125,084 | 162,367 | 487,057 |
| 7. Vietnam Coal Corporation | 43 | 5,760,057 | 86,615 | 8,700,000 | 350,000 | 400,122 |
| 8. Vietnam Rubber Corporation | 36 | 6,793,329 | 80,100 | 2,970,196 | 916,427 | 370,750 |
| 9. Vietnam Airlines | 20 | 5,306,511 | 15,054 | 11,484,642 | 382,759 | 332,871 |
| 10. Vietnam Chemical Corporation | 39 | 3,877,689 | 34,200 | 8,399,203 | 228,976 | 305,415 |
| 11. Vietnam Railways | 48 | 3,180,302 | 44,288 | 4,308,735 | 69,126 | 278,664 |
| 12. Vietnam National Shipping Lines | 18 | 5,375,565 | 30,500 | 3,831,000 | 144,000 | 260,000 |
| 13. Vietnam National Textile and Garment Group | 40 | 8,680,000 | 100,890 | 11,613,907 | 83,425 | 132,724 |
| 14. Vinashin Business Group | 32 | 2,281,573 | 14,474 | 3,179,500 | 34,817 | 86,571 |
| 15. Vietnam Paper Corporation | 13 | 4,621,525 | 12,800 | 2,087,000 | (23,801) | 71,438 |
| 16. Vinafood II | 19 | 5,292,950 | 10,573 | 9,926,000 | 83,275 | 61,482 |
| 17. Vinafood I | 15 | 939,216 | 5,070 | 4,964,074 | 56,249 | 45,587 |
| 18. Vinacafe | 56 | 2,364,000 | 27,000 | 2,500,000 | | 42,000 |

Source: Steering Committee for Enterprise Renovation and Development

Appendix 7. The size and capital accumulation of General Corporations 91 in 2003

| Name of corporation | Capital Sources (million dong) | | | | |
|---|--------------------------------|---------------|---------------------|-------------|---------------|
| | Total capital (total assets) | State Capital | Accumulated capital | Liabilities | Other sources |
| 1. Vietnam Posts and Telecommunications | 26,772,274 | 6,818,225 | 14,701,231 | 5,252,818 | - |
| 2. PetroVietnam | 33,321,264 | 11,856,683 | 6,630,000 | 11,251,182 | 3,583,399 |
| 3. Vietnam Electricity (EVN) | 64,986,081 | 26,486,081 | 3,500,000 | 35,000,000 | - |
| 4. Vietnam Airlines | 5,306,511 | 321,112 | 3,435,908 | 1,507,986 | 41,505 |
| 5. Vietnam Cement Industry Corporation | 14,333,000 | 2,333,000 | 2,200,000 | 7,500,000 | 2,300,000 |
| 6. Vietnam Rubber Corporation | 6,793,329 | 2,531,672 | 2,071,408 | 2,065,922 | 124,327 |
| 7. Vietnam National Shipping Lines | 5,375,565 | 1,025,565 | 1,650,000 | 2,700,000 | - |
| 8. Vietnam National Textile and Garment Group | 8,680,000 | 1,499,965 | 880,035 | 6,300,000 | - |
| 9. Vietnam Chemical Corporation | 3,877,689 | 1,179,000 | 695,689 | 2,003,000 | - |
| 10. Vinafood I | 939,216 | 365,729 | 573,487 | - | - |
| 11. Vietnam Tobacco Corporation | 2,328,085 | 665,657 | 502,476 | 1,113,935 | 46,017 |
| 12. Vietnam Coal Corporation | 5,760,057 | 1,267,010 | 448,203 | 4,037,744 | 7,100 |
| 13. Vinafood II | 5,292,950 | 673,197 | 337,275 | 4,282,478 | - |
| 14. Vietnam Steel Corporation | 5,709,286 | 1,320,176 | 273,204 | 2,626,076 | - |
| 15. Vietnam Paper Corporation | 4,621,525 | 962,061 | 159,464 | 3,500,000 | - |
| 16. Vietnam Railways | 3,180,302 | 1,486,895 | 103,934 | 1,246,463 | 343,010 |
| 17. Vinashin Business Group | 2,281,573 | 793,885 | 77,885 | 1,389,235 | 20,568 |
| 18. Vinacafe | 2,364,000 | 564,000 | - | 1,800,000 | - |

Source: Steering Committee for Enterprise Renovation and Development

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