

## The Competitiveness of Vietnam on the East Asian Production Ladder

**F. Gerard Adams**

University of Pennsylvania  
United States of America

**Anh Le Tran**

Lasell College  
United States of America  
E-mail: atran@lasell.edu

### Abstract

*Vietnam, a transitional economy, has been successfully making a place for itself on the East Asian development ladder. This article considers the role of various sectors in the Vietnamese economy, their competitiveness, and the influence of Vietnam's participation in AFTA and WTO. Vietnam is not yet at an advanced technological level and its competitive advantage lies in low cost labor in relatively simple industrial operations—apparel, footwear, electronic assembly. While Vietnam has maintained its growth well in comparison to other East Asian countries during the current recession, the next challenge will be moving on to more advanced stages of development.*

### Introduction

Although being a latecomer among the other developing countries of the region and emerging from a socialist economic system, Vietnam appears, nevertheless, to have established a serious place on the East Asian development ladder. As the East Asian economy may be increasingly dominated by China and as markets in the world economy are undergoing cyclical change, it is time to look further into the position of Vietnam in the East Asian production chain and the outstanding issues and their implications for Vietnam's future.

This article seeks to define the competitiveness of Vietnamese industry and place it into the larger context of the rapid evolution of the entire East and Southeast Asian region. In the first section, we outline the dimensions of Vietnamese growth and linkages to other countries in the region. In the next section, we turn to the determinants of Vietnamese growth in the framework of the paradigm of the East Asian development ladder (Adams 1998). We consider where Vietnam fits into this framework, its linkages to other countries in terms of production and export markets, gauging its competitiveness with respect to costs and other forces. Then, we discuss the role of policy in Vietnam's development. Finally we conclude with a discussion of the issues and their implications for Vietnam in today's economic environment.

### *Vietnam as a growth economy*

Since adopting free market reforms in the 1980s, the low-starting-base Vietnamese economy has achieved significant economic growth. Vietnam has frequently been presented by international organizations and foreign experts as an example of success in reducing poverty and achieving growth. Although the Vietnamese economy has experienced difficulties due to the effects of the global economic downturn and its own structural problems, stimulative policy appears to have been successful and Vietnam has the potential to achieve further rapid growth if appropriate policies and technologies are in place.

In terms of international dollars on a PPP basis, Vietnam remains one of the lowest income countries in East Asia, approximately one half the level of China though approximately the same level as India (Table 1). It has also been one of the fastest growing, with annual growth of aggregate real GDP averaging 7.2 percent, not quite as high as China, but considerably higher in recent years than other East and Southeast Asian growth economies. One may note that among the East Asian economies, the highest growth performance has been in countries like Vietnam with low per capita GDP. Somewhat lower rates of growth are apparent for more mature countries that have smaller available agricultural populations and that are closer to the technological frontier.

**Table 1: GDP PPP\$ per capita and real GDP Growth**

	2000	2006	1995-2000	2000-2007
	GDP PPP\$ per capita		Real GDP growth p.a.	
East Asia				
China	2,362	4,658	8.7%	9.2%
Hong Kong	26,417	39,103	1.5%	5.0%
South Korea	15,511	23,050	4.4%	5.1%
Mongolia	1,556	2,881	2.6%	5.3%
Taiwan	20,180	28,021	5.7%	3.8%
Southeast Asia				
Cambodia	910	1,633	6.7%	9.0%
Indonesia	2,421	3,471	1.3%	4.7%
Laos	1,326	2,032	6.2%	6.3%
Malaysia	9,486	12,314	4.8%	5.4%
Myanmar	464		6.9%	
Philippines	2,316	3,127	3.6%	4.5%
Singapore	32,610	47,065	5.8%	5.4%
Thailand	4,952	7,403	1.3%	4.9%
<b>Vietnam</b>	<b>1,416</b>	<b>2,363</b>	<b>7.2%</b>	<b>7.2%</b>
Japan	25,672	32,002	0.8%	1.7%

Source: ADB

Though the share of agriculture in employment and total value added has declined sharply, in comparison with more advanced countries, agriculture remains important in Vietnam. Almost two-thirds of Vietnam's labor force remains in agriculture, that represents a large supply of workers potentially available for other activities. Vietnam is joining the other industrializing countries in East Asia as the share of industrial output has almost doubled since 1990 and, today, represents over 40 percent of total Vietnamese production.

Vietnam's industrialization is closely linked to a high rate of capital formation at 30.8% of GDP, not quite as high as China but higher than in other major countries of the region. Vietnam is a transition economy: from state control toward private enterprise, from war experience to peace. In accord with its socialist government, Vietnam retains a significant state sector, though non-state sector production, domestic and based on foreign investment, accounts for 60 percent of total output (Table 2). Notably, growth has consistently been most rapid, at over 10 percent annually in the foreign investment related sector. The domestic private sector, consisting predominantly of small businesses, has also declined as a share of GDP while activities related to foreign direct investment (FDI) have shown consistent rapid growth though they still account for a small share of the economy.

However, growth in the total private sector, both domestic and foreign, has not been able to penetrate significantly into key industries or service sectors, such as energy and banking. These are still largely in the hands of state-owned enterprises. Over the past 15 years, the number of state-owned enterprises has been reduced more than half, but many of the remaining ones have become very large as a result of mergers. These state conglomerates enjoy various types of government subsidies, ranging from favorable land-use rights to easy access to credit. However, they are less efficient than private enterprises and continue to crowd out private investment. For example, in Ho Chi Minh City, the business hub of Vietnam, state enterprises control 6.3 million square meters of land but let more than half of it sit idle while private companies are having a hard time looking for, (and paying very expensive prices) for expansion space.<sup>1</sup> Restructuring or privatizing these state-owned enterprises will be a significant challenge for Vietnam since there are entrenched political interests keeping them afloat regardless of economic inefficiency. However, if successful, this process will result in more growth potential for the Vietnamese economy in the future.

<sup>1</sup> See "Nam giu hay luu thong," *Saigon Tiep Thi*, July 18, 2009.

**Table 2: State and non State Sectors in Vietnam**

	% of GDP			% Growth p.a.	
	1995	2000	2007	1995-2000	2000-2007
Total				6.7%	7.5%
State Sector	40.1%	40.8%	39.0%	7.1%	6.8%
Non-State Sector	53.2%	48.4%	47.7%	4.8%	7.3%
Foreign Investment Sector	6.7%	10.8%	13.3%	16.2%	10.4%

Source: General Statistics Office of Vietnam

As in other East Asian economies, export and import trade account for a rapidly increasing share of Vietnamese GDP. Exports as a share of GDP, 73.6% in 2006, are in the same range as exports of other major East and Southeast Asian exporters, like Taiwan and Thailand. Export production has gained from both FDI-based export production facilities and from expanding export markets. The geographic fragmentation of the production process in recent years, made possible by declining costs of communication and transportation and increased social integration of the region, has been an important factor (Ando and Kimura, 2007; and Kimura et al, 2005). The high rate of imports (78.6% of Vietnamese GDP) reflects, in part, Vietnam's need to import foreign materials and parts as a basis for its export manufacturing.

The close connection between the development of exports and the foreign investment-based sector of the economy is shown in Table 3. While exports have shown extremely rapid growth in all sectors, growth of exports at over 20 percent per year from plants supported by foreign direct investment (FDI) have allowed this part of the Vietnamese economy to expand rapidly from small beginnings. In recent years the most rapid growth of exports has been in light industrial and handicraft goods, like footwear, clothing, and electronic assembly.

**Table 3: Vietnam Exports by Ownership and Commodity Group**

	1995	2000	2007	2007	1995-2000	2000-2007
	Million US \$			% of Total	% change p.a.	
Total	5448.9	14482.7	48561.4		19.6%	17.3%
<b>By ownership</b>						
Domestic sector	3975.8	7672.4	20785.7	42.8%	13.1%	14.2%
Foreign-invested sector	1473.1	6810.3	27775.7	57.2%	30.6%	20.1%
<b>By commodity group</b>						
Heavy industrial products and minerals	1377.7	5382.1	16000.0	32.9%	27.3%	15.6%
Light industrial and handicraft goods	1549.8	4903.1	21598.0	44.5%	23.0%	21.2%
Agricultural products	1745.8	2563.3	7200.0	14.8%	7.7%	14.8%
Forest products	153.9	155.7			0.2%	
Aquatic products	621.4	1478.5	3763.4	7.7%	17.3%	13.3%

Source: General Statistics Office of Vietnam

The largest category, "Light Industrial and Handicraft Goods" includes "Apparel and Clothing (SIC84), Footwear (SIC83) and "Furniture and Parts"(SIC81), and ICT products, which together account for 57.4% of Total Manufacturing exports (UN Comtrade data, 2005/6).

The resulting trade linkages illustrate the important role of the international fragmentation of the production process for Vietnamese development since processing and assembly represent much of the production involved (Athukorala, 2009). Initially processing activity involved processed foodstuffs and textile goods, but more recently it has extended toward electronics assembly. In effect, international producers can exploit locational advantages, such as low labor cost, by carrying out selected parts of the production process where they can be done most cheaply, so long as the cost of fragmenting and outsourcing parts of the production process do not exceed the advantages. Exports and imports by destination and source are shown in Table 4. Vietnam shows substantial imports of raw material, parts, and cheap consumer goods from other Asian countries like China, Taiwan, and South Korea but exports assembled products heavily to advanced countries, the US and the EU.

It is worth noting that while Vietnam enjoys a huge trade surplus (over 10% of GDP in 2008) with the U.S., it faces a dramatic trade deficit (around 12% of GDP in 2008) with China. In this regard, addressing the trade deficit with China will be the key to lower Vietnam's overall trade deficit, which has grown significantly over the past decade.

**Table 4: Vietnam : Imports and Exports by Key Source and Destination**

Year	Exports (% of total)				Imports (% of total)			
	1995	2000	2006	2007 prelim	1995	2000	2006	2007 prelim
<b>Total (in \$mil)</b>	<b>5,448.9</b>	<b>14,482.7</b>	<b>39,826.2</b>	<b>48,561.4</b>	<b>8,155.4</b>	<b>15,636.5</b>	<b>44,891.1</b>	<b>62,682.2</b>
ASEAN	18.3%	18.1%	14.4%	N/a	27.8%	28.5%	27.9%	n/a
China	6.6%	10.6%	8.1%	6.9%	4%	9%	16.5%	19.9%
Taiwan	8.1%	5.2%	2.4%	2.3%	11.1%	12%	10.7%	11%
S. Korea	4.3%	2.4%	2.1%	2.6%	15.4%	11.2%	8.7%	8.5%
US	3.1%	5.1%	19.7%	20.8%	1.6%	2.3%	2.2%	2.7%
Japan	26.8%	17.8%	13.2%	12.5%	11.2%	14.7%	10.5%	9.9%
EU	12.2%	19.6%	13.9%	N/a	8.7%	8.4%	7%	n/a

Source: Computed by the authors based on the data from the General Statistics Office of Vietnam.

The rapid growth of FDI, amounting to 25 percent of GDP in 2007, has made important contributions to Vietnamese development (Table 5). But this has fallen drastically in 2008-9. Notable is the shift from the 1990/2000 period, when inflow of FDI into Vietnam increased at a 19.7% annual rate, behind leading countries like China and South Korea, to 2000/2007 when FDI growth in Vietnam was by far the leader among the larger countries.

**Table 5: FDI in East and Southeast Asia**

	Millions of \$			% change p.a.	
	1990	2000	2007	1990-2000	2000-2007
<b>East Asia</b>					
China	3,487	40,715	72,725	24.6%	8.3%
Hong Kong	3,275	61,924	45,145	29.4%	-4.5%
Mongolia		30	290		32.4%
South Korea	759	9,004	2,628	24.7%	-17.6%
Taiwan	1,330	4,928	7,424	13.1%	5.9%
<b>Southeast Asia</b>					
Cambodia		149	567		19.1%
Indonesia	1,092	4,495	4,928	14.1%	1.3%
Laos	6	34	324	17.3%	32.2%
Malaysia	2,611	3,788	8,403	3.7%	11.4%
Myanmar	225	208	428	-0.8%	10.3%
Philippines	580	2,240	2,928	13.5%	3.8%
Singapore	5,575	16,484	24,137	10.8%	5.4%
Thailand	2,575	3,349	9,575	2.6%	15.0%
<b>Vietnam</b>	<b>180</b>	<b>1,289</b>	<b>6,739</b>	<b>19.7%</b>	<b>23.6%</b>

Source: UNCTAD

### Approaches to East Asian Development

Vietnam appears to be following the same export-oriented development path that has been observed elsewhere in East and Southeast Asia, establishing a position for Vietnam as an exporter of light industrial products. Beginning with low per capita incomes at or below the poverty line based on subsistence agriculture, the East and Southeast Asian countries, one after another, have built export-oriented industries and have rapidly raised their living standards.

In less than two generations, some of them, Singapore, Hong Kong, South Korea, and Taiwan, have done what Western Europe and the United States accomplished in two hundred years. Others, like China, have shown a record of growth that may rapidly project them to middle and high-income status. The questions are where does Vietnam stand relative to other East Asian countries and what are its prospects in the future?

The debate about whether East Asian growth reflects high rates of investment or improvements in “total factor productivity” provides some useful background to the discussion of Vietnamese growth. Some economists have argued that East Asian growth is largely the result of rapidly increasing inputs into production (World Bank, 1993; Young, 1994; Lau, 1998); while others have emphasized technological change, improvements in education, economies of scale, and sectoral shifts from agriculture into industry that are captured by total factor productivity (Bosworth and Collins, 2008; Collins and Bosworth, 1996). There can be no question that with an investment share of GDP of over 30 percent, capital formation plays a substantial role in Vietnam’s development. But a computation of the contribution of inputs to output suggests that substantial improvement in productivity remains unexplained by accumulation.

Table 6 shows the results of a simple computation of total factor productivity (TFP) for the Vietnamese economy. Comparable data on employment are available only from 2000, limiting the calculation to a recent period. Estimates of capital stock were derived using the perpetual inventory method assuming a 5% annual rate of depreciation. In common with other recent calculations, we have assumed an output elasticity of 0.4 and 0.6 for capital and labor inputs, respectively.<sup>2</sup> Given the large share of the public sector in Vietnam, the elasticity assumptions may be questioned, but calculations with alternative values show that the results are not highly sensitive to the assumption made. However, the assumptions that underlie the total productivity concept are quite restrictive and, in itself, TFP does not explain why gains in productivity have occurred.

The TFP growth figures for Vietnam approximating 3% per year<sup>3</sup> compare to 3.9% and 2.3% for China and India, respectively, computed by Bosworth and Collins (2008). TFP in Vietnam is considerably higher, however, than the Bosworth and Collins estimate of 0.3% for East Asia other than China. Vietnam, thus, stands out from the rest of East Asia.

**Table 6: Total Factor Productivity**

	<b>GDP</b>	<b>Labor</b>	<b>Capital</b>	<b>TFP</b>
	<b>% change p.a.</b>			
1997-1999	6.2%	2.1%	8.1%	1.7%
2000	6.8%	2.5%	5.6%	3.1%
2001	6.9%	2.5%	6.0%	3.0%
2002	7.1%	2.5%	6.5%	3.0%
2003	7.3%	2.7%	7.2%	2.8%
2004	7.8%	2.5%	7.7%	3.2%
2005	8.4%	2.3%	8.1%	3.9%
2006	8.2%	1.9%	8.4%	3.7%
2007	8.50%	1.90%	8.90%	3.80%

Computed by the authors

Statistics on sectoral productivity and employment shifts enable us to estimate the share of Vietnamese TFP growth that results from movement between the sectors of the economy. The differences between sectoral output per workers are very large, reflecting very different technology among them. A comparison of sectoral outputs with other East and Southeast Asian countries is shown in Table 7 shows that Vietnamese output per capita in all sectors remains low though industrial productivity is very much higher than output per worker in agriculture.

<sup>2</sup> Collins and Bosworth (1996) use a .35 capital weight and .65 for education augmented labor inputs.

<sup>3</sup> Other estimates for the 5-year period before 2000 show very similar TFP growth results. (Naziruddin, 2005) but some recent computations show TFP accounting for a significant but somewhat lower share of growth (Nguyen and Giang, 2008)

**Table 7: Estimated Sectoral GDP per Employee (PPP \$)**

	Agriculture		Industry		Services	
	2000	2006	2000	2006	2000	2006
East Asia						
China	1,519		8,287		7,253	
Hong Kong	15,080	22,288	29,864	37,479	49,287	72,510
South Korea	12,007	16,691	38,404	55,624	23,569	34,303
Mongolia	1,553	2,253	4,028	11,657	3,416	4,263
Taiwan	11,649	12,931	34,784	39,506	39,297	61,195
Southeast Asia						
Indonesia	1,417	1,741	9,917	15,263	3,925	6,057
Laos						
Malaysia	6,745	11,727	18,993	32,585	13,564	15,676
Myanmar						
Philippines	1,698	2,001	8,113	10,835	4,494	6,006
Singapore		14,991	53,654	100,692	53,811	67,392
Thailand	1,325	2,633	15,882	22,546	10,264	12,570
<b>Vietnam</b>	<b>1,096</b>	<b>1,668</b>	<b>8,648</b>	<b>11,289</b>	<b>5,071</b>	<b>7,301</b>

Computed by the authors on the basis of ADB data.

A shift-share computation, assuming fixed sector incomes and varying sectoral employment, shows that between 2.3 and 2.5 percent per year of TFP can be explained in terms of shifts of workers between low productivity sectors (agriculture) and higher income sectors (industry and services).<sup>4</sup> The available time series for TFP is too short to permit statistical linkage to other underlying variables. Other comparisons would provide some insights to help explain high levels of TFP, for example, growing levels of education and the implications for introduction of technical and managerial skill in part as a result of rapid growth of FDI. In any case, it appears that a significant share of output growth represents shifts to more productive sectors and improvement in production technology, much of it associated with movement of workers into industrial activities that are more productive than agriculture.

### Technology and the East Asian Development Process

Behind the record of East Asian growth, stands a *linked sequential* process of development that is known as the Flying Geese Pattern (Akamatsu, 1962) or as the East Asian Growth Ladder (Adams, 1998): *sequential* because each country moves sequentially from production using simple technologies like those employed in agriculture and processing to more complex methods required in more advanced industries; *linked* because as one country “outgrows” a stage of development, labor costs rise, its industries reappear in other countries standing “behind” at lower rungs of the ladder. Akamatsu’s work already pointed to a fundamental rationale based on changing patterns of comparative advantage as countries advance along the development path. In effect, as countries gain superior competitiveness in export markets in one class of commodities, their costs rise, they begin to lose competitiveness, and they are forced to focus their attention on the next higher more sophisticated class of goods. Newcomer countries join this process because they have advantages in terms of production costs (at prevailing nominal exchange rates) though they may still be lagging in technological advancement. Ohno (2009) reminds us that a country’s stage of skill and technology are essential for advancement up the ladder. Higher level, more complex goods require higher levels of technical competence.

We may rank goods in export markets in terms of resource and technical requirements, as shown in Table 8. Note the broad division between primary, secondary tertiary products, and, within the categories, the sequence of more narrowly defined sectors, for example, production of basic textiles like cloth, simple clothing, athletic shoes, leather goods, toys, assembly and inspection of simple electronics, and then on to more sophisticated products like televisions, computers, and cameras, and finally on to capital goods and sophisticated services.

<sup>4</sup> The calculation, using 2000 sectoral per capita output, yields productivity gains of 2.5% per year and the use of 2006 sectoral output shows productivity gains attributable to employment shifts of 2.3% per year.

**Table 8: The Stages of the Technical Development Ladder**

	<b>Product Category</b>	<b>Resource Requirements</b>
<b>Stage 1</b>	Primary Products Raw foodstuffs Processed foodstuffs Minerals + fuels	Abundant cheap land and labor Mineral and energy resources
<b>Stage 2</b>	<b>Labor-intensive manufactures</b> Basic textiles Garments Athletic shoes Leather goods Toys Electronics assembly	Low cost labor Transport facilities Management
<b>Stage 3</b>	<b>Advanced mass production manufactures</b> Motor vehicles Televisions Cell phones Computers Pharmaceuticals Capital Goods	Technically skilled labor, capital, and management
<b>Stage 4</b>	<b>High-level products and services</b> Programming Movies and entertainment Finance Management	Educated labor force, foreign language Communications network

From a beginning in agriculture and processed foods (Stage 1), the takeoff into export manufacturing of labor-intensive products, assembly and processing (Stage 2) calls for organizational skill and entrepreneurship. A production network that links the market for finished products with various levels of production and assembly is required. It is typically sponsored or managed by foreign contractors or FDI-related firms. The more advanced mass production manufacturing stage (Stage 3) depends on increasing technical skill, more complicated equipment, more advanced processing, and improved management and marketing control. These are frequently the contribution of FDI-related companies. Techniques introduced by FDI-based companies are quickly adopted by locally-based producers. Finally, (Stage 4) more technically advanced production of innovative products and services depends on high tech, cultural and educational development, knowledge of foreign languages and international intellectual ties. High speed communications are an essential ingredients of off-shored services.

Vietnam is now solidly a part of the East Asian growth process, albeit at an early level of Stage Two. It remains one of the lowest income and, consequently, low labor cost countries in the region. Much of Vietnam's export production has been in relatively simple labor-intensive products, where Vietnam has its competitive advantage, as we will see below. Technological capability and labor cost are important considerations determining a country's potential to participate in world export markets. Vietnam owes a large part of its progress to production methods introduced and organized by the rapidly growing FDI-related sector.

## Economic Development Policy

Development policy is another focus of discussion about the sources of East Asian progress. Wade (2003) has placed much responsibility for economic development on focused industrial policy, promoting specific industries, like steel and shipbuilding. But others, World Bank (1993), have argued that while general export promotion and exchange rate policies have been helpful, it is not clear that industrial policy is an essential ingredient of promoting economic development. In the case of Vietnam, while the state sector has played an important role, industry-specific industrial policy has not played a significant role.<sup>5</sup>

After the end of the Vietnam War and unification in 1975, the communist government introduced economic central planning to the whole country, where state ownership and centralized decision-making were the hallmark. This system led to disastrous economic performance, characterized by chronic shortages of most goods and services due to inefficiency and the lack of incentives. Modern development policies of Vietnam can be traced back to the introduction of *Doi Moi* policy of innovation by the Sixth Party Congress in 1986. Faced with the increasing economic and social problems, *Doi Moi* was intended to unleash the productive capacity of the country. The government started to loosen its hand on the economy, especially in the agricultural sector. Private sector development was allowed, though the state sector was, and is still today, expected to play the leading role in the economy. The characteristics of a market economy were gradually introduced while the economy began to open itself to the outside world.

The effects of *Doi Moi* kicked in rather quickly. This was largely due to the abandonment of agricultural collectives, giving incentives for farmers to be more productive. The country began to enjoy, first, a surplus of rice production, at the time its key comparative advantage product, and began to export to the world market. Vietnam became one of the biggest exporters of several agricultural commodities. Rice was followed by other agricultural products such as coffee, and black pepper. Industrial growth came later largely in the form of light manufacturing: garments, footwear, and furniture and, most recently, electronic assembly, part of the increasing geographic fragmentation of the production process that we have noted above. GDP increased more than 2 times within 10 years between 1991-2000, and continued to rise over 7% on average after that.

Vietnam has aimed to become a modern industrialized country by the year 2020 by continuously building a foundation for industrialization under the leading role of the state sector. In its social and economic development strategy<sup>6</sup> for the 2001-2010 period, Vietnam sets out to achieve some important objectives: (1) at least doubling its GDP by 2010 as compared to 2000, (2) an export growth rate more than twice the GDP growth rate, (3) enhancing the competitiveness of the economy, (3) providing the infrastructure (both physical and human) suitable for growth, (4) enhancing Vietnam's Human Development Index significantly, (5) and ensuring the leading role of the state sector in the economy by controlling key industries with efficient performance. While state conglomerates have been active in developing or acquiring industrial and financial enterprises, there have only been marginal efforts to develop an comprehensive industry-specific industrial development policy (Ohno, 2009).

At this point, it can be said that Vietnam has been achieving its objectives with respect to growth, though it may be difficult to continue in the face of the global economic downturn.<sup>7</sup> However, the prospect of achieving the remaining objectives is not clear. For one thing, the still extensive but inefficient role of state enterprises, especially the large conglomerates, has been an obstacle to enhancing the competitiveness of the economy. These organizations have relatively easy access to credit lines but engage in many wasteful investment projects that impose real economic costs on the economy. The country's physical infrastructure and educational system are still lagging behind its growth ambitions. Traffic congestion in Hanoi and Ho Chi Minh City (Saigon) is a daily matter. Although Vietnam has a high literacy rate, its education system has not been able to produce the quality that would effectively support economic development. For instance, when, recently, Intel announced its \$1 billion investment and started looking for around 3,000 employees, it could find few people who were qualified.

<sup>5</sup> Ohno (2008) makes a strong, though not necessarily persuasive, case for establishing an industrially-detailed industrial development plan and policy.

<sup>6</sup> Vietnamese Communist Party. "Strategy for Socio-economic Development 2001-2010." April 2001.

<sup>7</sup> It has been forecasted by the Economist Intelligence Unit that the country's GDP growth rate for 2009 will dip to 5.3% but will recover to 6.1% in 2010 Economist Intelligence Unit. "Country Report: Vietnam." October 2008. As we have noted above, the ADB has similar numbers.



Income inequality is also on the rise. The income gap between the rich and the poor has widened, and the poverty rate among ethnic minorities remains very high even in the face of Vietnam's general trend of increasing poverty reduction.<sup>8</sup> According to the 2008 Human Development Report of the United Nations Development Program, Vietnam's Human Development Index (HDI) was 0.718 for 2006, ranked 114<sup>th</sup> out of 179 countries surveyed. Although this was a small improvement in comparison to the HDI of 0.688 for the year 2000, Vietnam still lagged far behind relatively comparable countries in the region, such as Thailand (ranked 81<sup>st</sup>) and Philippines (ranked 102<sup>nd</sup>). The government has focused on achieving a target growth rate instead of sustainable development. As a result, there are some negative consequences. To spur investment in order to achieve high growth rates, the money supply was allowed to grow dramatically for many years, peaking at over 49% in 2007. High growth rates of the money supply and credit expansion together with rising import prices boosted inflation rate to a shockingly high rate of 23% in 2008. This problem made it especially very difficult for workers and the poor as their income has not kept up with inflation.

Environmental problems associated with economic activities have also been playing out dramatically. The public was outraged by recent scandals revealing some businesses discharging wastes into rivers and killing them slowly for years. Polluting industries, such as shipbuilding, have been shifted to Vietnam to flee the rising environmental concerns in more advanced countries. The government is now in the process of launching a grand project to mine bauxite in the Central Highlands that experts and the public overwhelmingly oppose due to potential negative environmental effects and economic inefficiency. If this project moves ahead as planned, many coffee and tea farmers who depend on the land for their livelihood will face hardship. The public is increasingly aware of the destructive environmental costs associated with unsustainable economic activities. Sustainable development will be the key challenge for Vietnam as it seeks rapid industrialization.

### **Trade, Exchange Rate, and Foreign Investment Policy**

Until 1989 foreign trade was handled by a state monopoly. Conditions for entering foreign trade were gradually relaxed to allow substantially free trade without non-tariff barriers from the late 1990s. The opening of the economy was enhanced with entry into ASEAN in 1995.<sup>9</sup> Under its participation in AFTA, tariff levels have gradually been reduced to the common external preferential tariff (CEPT) of 0.5% applying to the ASEAN countries plus China. The normalization of trade relations with the US under the Clinton Administration in 1994 represented another important step. In 2001, the two countries signed a historical bilateral trade agreement (BTA) paving the way for Vietnam to join the WTO in 2007. Under the requirements of the BTA, Vietnam has made several economic and legal reforms, such as a new investment law, to move its economy closer to market principles. These, in turn, have increasingly made the country an attractive destination for FDI. Vietnam maintains a loose peg (crawling peg) of its currency (dong) relative to the U.S. dollar. The State Bank of Vietnam (SBV) sets and adjusts the trading band to reflect policy goals and market conditions. The SBV has sought to depreciate the dong since 2008, adjusting it from 16.0 thousand to the US\$ at the beginning of 2008 to 17.5 thousand at mid 2009. However, because of Vietnam's high inflation rates, especially in 2008, the dong is still overvalued compared to its past history. The pressure is on the SBV to further depreciate the currency this year to reflect realities and to give a boost to exports (and a reduction in imports) during this period of global economic turmoil, which has begun to put Vietnam's export-dependent economy under stress.

Foreign direct investment has been encouraged. Foreign investors are pouring into Vietnam for several reasons. First, although the government still has a long way to go in terms of adopting policies in accordance with market principles, it has maintained a degree of political stability that has become very desirable when compared with other ASEAN countries like Thailand and the Philippines. Second with a young and educated population, Vietnam offers both a source of good workers and a potential market for goods and services. Third, the country provides easy access to the sea, which is essential for shipping goods across the world, and serves as a bridge between Southern China and the ASEAN countries. Perhaps most important, however, is the relatively low level of wages, as we will consider further below. Vietnam has recently become an important FDI destination although, as we have noted, FDI dropped sharply with the world recession. It is also become increasingly a part of the "China-plus-one strategy" as foreign investors seek to diversify from their production bases in China, where labor costs have been on the rise and incentives for labor-intensive manufacturing have diminished as the Chinese government seeks to move up the production ladder into more sophisticated goods.

<sup>8</sup> Oxford Analytica. "Vietnam: Income Gaps are Growing." July 3, 2008.

<sup>9</sup> For discussions of the impact of AFTA on Vietnam's economy see Vo (2001) and Vo and Nguyen (2009).

The amount of FDI has increased dramatically since Vietnam joined the WTO in January of 2007. WTO accession not only provides more opportunities for exports but also secures Vietnam's commitment to further liberalize its economy in accordance to the hope of foreign investors.

### Vietnamese Competitiveness in the Context of East Asian Development

The critical issue for Vietnamese development is its competitive position relative to other countries close to its development stage. We begin this section with an overview of Vietnam's output in comparison to other East Asian economies. For purposes of international comparison, it can be measured in terms of US dollars, translating local currency into dollars on the basis of exchange rates or on the basis of purchasing power parity (PPP). The exchange rate conversion is relevant to international trade, while the purchasing power data allow comparisons between real outputs. The relevant data, in Table 9, show GDP per capita for 2000 and 2006 measured in US\$ on a purchasing power parity basis (PPP) and on an exchange rate basis.

If we compare on the basis of purchasing power parity (PPP), most of the developing countries show a significantly higher level of per capita output than on an exchange rate basis. This phenomenon, known as the Penn effect (Samuelson, 1994), is the systematic undervaluation of nominal exchange rates from their purchasing power parity equivalents of poor countries relative to those at a more advanced stage of development. It is a critical consideration in international comparisons between countries determining their international competitiveness. Since international trade takes place on an exchange rate basis, labor-intensive products can be produced in the low-income countries and sold at prices abroad that are significantly less than their output cost on a purchasing power equivalent basis. From the perspective of the international producer, competitiveness can be measured by the real PPP output per capita for each exchange rate basis dollar, in other words approximately what each international \$ will buy on the local market.

In terms of exchange rate based dollar conversion, in 2006 Vietnam had a per capita output of \$700, but in terms of a PPP based comparison its per capita output amounted to \$2,363 (Table 9). Real output in Vietnam amounts to 3.38 times its cost on an exchange rate basis. Vietnam ranks No.1 with respect to this measure in East and Southeast Asia. Similar disparities, though smaller, are apparent for the other East and Southeast Asian countries. Based on the PPP and the exchange rate method comparison, the countries considered fall into four groups:

1. Mature countries, Japan, whose local costs are high, currency is fully valued or overvalued.
2. The “Tigers” who fall in to the range of real PPP output of 1.3-1.7 times its value in exchange rate based dollars.
3. The midrange countries, including China, whose output is highly competitive in labor-intensive products.
4. The low- income new competitor countries like Vietnam.

**Table 9: Real (PPP) Value versus International Trade Value of GDP (per capita)**

	GDP PPP\$ per capita %pa			GDP Atlas per capita %pa			Ratio: PPP\$/Xr\$		
	2000	2006	2000-2006	2000	2006	2000-2006	2000	2006	Ranking 2006
<b>East Asia</b>									
China	2362	4658	11.32	930	2000	12.76	2.54	2.33	6
Hong Kong	26417	39103	6.54	27000	29040	1.21	0.98	1.35	11
South Korea	15511	23050	6.60	9800	17690	9.84	1.58	1.30	12
Mongolia	1556	2881	10.27	410	1000	14.86	3.80	2.88	3
Taiwan	20180	28021	5.47	14723	16495	1.89	1.37	1.70	9
<b>Southeast Asia</b>									
Cambodia	910	1633	9.75	280	490	9.33	3.25	3.33	2
Indonesia	2421	3471	6.00	590	1420	14.64	4.10	2.44	5
Laos	1326	2032	7.11	290	800	16.91	4.57	2.54	4
Malaysia	9486	12314	4.35	3360	5620	8.57	2.82	2.19	8
Myanmar	464			150	281	10.46	3.09		
Philippines	2316	3127	5.00	1060	1390	4.52	2.18	2.25	7
Singapore	32610	47065	6.12	22970	28730	3.73	1.42	1.64	10
Thailand	4952	7403	6.70	2010	3050	6.95	2.46	2.43	6
Vietnam	1416	2363	8.53	390	700	9.75	3.63	3.38	1
Japan	25672	32002	3.67	34620	38630	1.83	0.74	0.83	13

A more focused calculation, providing a measure of product per worker by sector, can be made for many of the East and Southeast Asian countries<sup>10</sup> (Table 10). Not surprisingly, per capita GDP originating in industry in PPP \$ is very much higher in all cases than the value of per capita output in agriculture. Between countries, one may want to compare the output figures within the industry category as a measure of the productivity of industrial workers in real terms, though these figures will be affected by the composition of output as well as by worker productivity. Alternatively, if one views these data from the perspective of economies in the process of development, one may want to consider agricultural output per worker as a measure of the opportunity cost of employing a worker in industry. From this perspective, as well, Vietnam is at the low end of the range, with 2006 agricultural GDP per worker of \$1,668 (PPP\$) and industrial GDP per worker of \$11,289.<sup>11</sup> These figures are close to the corresponding number in some other low income East and Southeast Asian economies, Mongolia, Philippines, and Indonesia. Translated to an exchange rate basis rather than PPP basis (Table 10), Vietnam's agricultural workers produce \$494 per capita of product in 2006. As the opportunity cost of labor, essentially what the unskilled worker could make in agricultural employment, this suggests that exporters find Vietnam an extremely low cost source of labor, since agricultural output per worker in terms of international exchange rate based dollars is the lowest of the countries considered. The output of industrial workers in Vietnam is also low, but, given the technology, capital, and management provided by foreign investors, it may not be significantly different in FDI-related enterprises located in Vietnam from that in competing East and Southeast Asian countries.

**Table 10: Estimated Sectoral GDP per employee  
(\$ exchange rate basis)**

	Agriculture		Industry		Services	
	2000	2006	2000	2006	2000	2006
East Asia						
China	103		834		966	
Hong Kong	15,413	16,553	30,523	27,834	50,374	53,850
South Korea	7,586	12,810	24,264	42,690	14,891	26,326
Mongolia	409	782	1,061	4,046	900	1,480
Taiwan	8,499	7,612	25,378	23,256	28,670	36,024
Southeast Asia						
Indonesia	345	712	2,417	6,244	957	2,478
Malaysia	2,389	5,352	6,728	14,871	4,804	7,154
Philippines	777	889	3,713	4,817	2,057	2,670
Singapore		9,151	37,793	61,466	37,903	41,138
Thailand	538	1,085	6,446	9,289	4,166	5,179
<b>Vietnam</b>	<b>302</b>	<b>494</b>	<b>2,382</b>	<b>3,344</b>	<b>1,397</b>	<b>2,163</b>

Computed from ADB data

Finally, we can compare minimum wages on the basis of data assembled by the Philippine National Wages and Productivity Commission (shown in Table 11). Minimum monthly wages in Hanoi and Ho Chi Minh City are 810,000 VND and 710,000 VND elsewhere, figures that translate into \$39-45 on an exchange rate basis. These wage rates compare to minimum wages of \$45-50 in Cambodia, \$49-91 in Indonesia \$81-240 in the Philippines and \$109-124 in China. Other East and Southeast Asian countries set very much higher minimum wages. Again, Vietnam ranks No.1 in terms of minimum wage competitiveness.

<sup>10</sup> This estimate is based on data for employment and output by sector from the ADB.

<sup>11</sup> The fact that industrial GDP per worker is higher in 2000 than in 2006 may reflect differences in composition.

**Table 11: Minimum Wages in East Asia**

Country/City	Daily Minimum Wages		Competitiveness Ranking
	In Country Currency	In US\$	
Cambodia (Cambodian Riel)	6,300.00 - 7,000.00 a/	1.51 – 1.67	2
Vietnam (Dong)	23,667.67 - 29,000.00 a/	1.31 – 1.61	1
Indonesia/Jakarta (Rupiah)	18,233.33 - 34,000.00 a/	1.64- 3.06	3
China/Beijing (Yuan Renminbi)	25.00 - 28.33 a/	3.65 – 4.14	5
Thailand/Bangkok (Baht)	143.00 -191.00 5/	4.03 – 5.38	5
Philippines/Metro Manila (Peso)	130.00 - 382.00 6/	2.73 – 8.01	4
Malaysia (Ringgit)	24.43 - 52.33 a/	6.83-14.62	7
Taiwan (Taiwan Dollar)	576 8/	17.43	8
South Korea (Won)	30,160.00 9/	22.16	10
Singapore (Singapore Dollar)	29.33 - 121.67 a/	19.93-82.66	9
Japan (Japan Yen)	5,456.00 - 5,752.00 10/	59.85- 63.10	11

- 1/ 870,000 VND minimum wage applicable to foreign-invested located inside Hanoi & ho chi minh & 710,000 for remaining localities, February 1, 2006
- 2/ US\$45 per month for the garment and footwear industries: it may vary regionally. 2005
- 3/ Minimum Wage in Bekasi City (Group1) 1,020,000 Rupiah (highest) and central Java 547,000 (lowes) 2008
- 4/ The minimum wage in Shenzhen Special Economic Zone ranged from Y750-850/month, effective October 1, 2007
- 5/ Daily Minimum Wage Rates in Bangkok and other Provinces, 2007
- 6/ Highest daily minimum wage is P382.00 in NCR, effective June 14, 2008 and the lowest minimum wage is P130.00 in RB-IVB, effective June 19, 2008.
- 7/ Average basic monthly salary ranged from RM733 (unskilled workers) to RM1570 (skilled workers/craftsmen) of selected Non-Executive position in the Manufacturing Sectors, 2007
- 8/ NT\$17.280 a month, effective July 01, 2007
- 9/ South Korea Minimum wage level per day is 30,160, 2008
- 10/ Ranges from 682yen to 719yen per hour, set on a regional (prefectural) and industry basis, with the input of tripartite advisory councils, as of October 1, 2006
- 11/ Median monthly commencing basic wages of selected occupations in all industries, June 2006

Source: Philippine National Wages and Productivity Commission  
[http://www.nwpc.dole.gov.ph/pages?statistics/stat\\_comparative.html](http://www.nwpc.dole.gov.ph/pages?statistics/stat_comparative.html) accessed 1/17/2009

The statistics suggest that Vietnam retains an important labor cost advantage over other East and Southeast Asian economies, even over China. Low labor costs are an important reason for the flow of FDI into Vietnam and for the development of labor-intensive export production. If conditions in the world market do not change too drastically as a result of current cyclical difficulties, drawing on its large rural labor force, Vietnam may be able to continue to expand its role as a processor and exporter of labor-intensive products. On the other hand, given its low starting point, Vietnam's economic growth over the last two decades, although impressive, is not a miracle. It is the result of the unlocking of Vietnam's potentials as the country begins its movement toward a market-oriented economy. Vietnam could achieve higher and more sustainable growth if it had removed certain chronic obstacles.

First, although the state sector has become less important in terms of GDP contribution and employment generation, it still enjoys many benefits, such as preferred access to credit and land use (Pincus, 2009). These benefits have allowed many state-owned enterprises to survive and grow despite a lack of efficiency. The more dynamic and efficient private sector remains at a disadvantage as it seeks to compete for resources with the state sector. Foreign resources, through FDI, help to overcome this disadvantage.

Second, although it has been able to increase exports dramatically, Vietnam lacks many supporting industries and technologies to help spur efficient industrialization and to capture the benefits associated with linkages in the economy. For instance, most of the components for assembling cars in Vietnam are imported as local producers cannot supply most of the parts required. Even with the textile industry, where Vietnam is considered to have a competitive advantage, 80% of the inputs are imported. The lack of supporting industries not only makes industrialization difficult but also contributes to the chronic trade deficit of the country even as its export rate has increased dramatically.

Third, corruption and administrative red tape are rampant in Vietnam. According to Transparency International's Corruption Perception Index, Vietnam ranked 121<sup>st</sup> in 2008, which is much worse than Thailand (80th) and China (72nd).<sup>12</sup> Also, a recent survey conducted by Ernst & Young indicated that 96% of Vietnamese businesses interviewed revealed that they were linked to bribery and corruption of government officials. These problems have been impediments to efficient economic transactions in the whole economy.

### **Where Does Vietnam Fit on the East Asian Development Ladder?**

Vietnam's economic transition toward a market-oriented economy and its competitive low labor cost position have given rise to important sources of growth impressively related to FDI and exports. In 2008, the value of total exports was equal to 70% of GDP, while FDI commitments reached over \$64 billion an increase of over 220% over the previous year. The fragmentation of the production process and transportation links with trading partners in the region will continue to facilitate expansion of low technology exporting industries. As we have noted, Vietnam remains a low income Stage Two economy still lacking the technologies required for advanced automated production processes. A large labor supply, presently in agriculture, remains to be utilized. That will allow expansion of labor-intensive production and assembly without exercising significant upward pressure on labor costs. FDI provides much of the technology and management needed to become competitive producers in the broader world economy

As income levels rise, it will also be important to expand the domestically-oriented sectors. The economic reforms that fuel economic growth and generate much employment has applied in the domestic private sector. While the domestic private sector played a negligible role prior to economic reform, it has become the biggest source of employment and contributes importantly to GDP growth currently. Although most of these businesses are relatively small, they have potential to help sustain economic growth if supported by appropriate policies, particularly, the introduction of more advanced management structures and higher levels of technology. Fortunately, the FDI industries often introduce developments that are usefully applied in domestic enterprises facilitating the process of technology advancement economy-wide. The potentials for moving up the ladder with more sophisticated products depend on acquiring the increasing levels of technical and managerial competence required to compete successfully at Stage Three. It may take much investment in physical and human capital to move a low income economy like Vietnam to competitiveness in higher level technology industries.

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<sup>12</sup> [http://www.transparency.org/policy\\_research/surveys\\_indices/cpi](http://www.transparency.org/policy_research/surveys_indices/cpi) accessed 1/30/2009

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