

ECONOMIC DEVELOPMENT UNDER REFORM AND WORLD INTEGRATION AND THE MAIN FACTORS INFLUENCING THE ECONOMIC GROWTH IN VIETNAM

Nguyen Thi Canh, Ph.D. Professor of Economics Tran Hung Son, PhD Candidate
Faculty of Finance and Banking, University of Economics and Law Vietnam
National University-Ho Chi Minh City Linh Xuan Ward, Thu Duc District, Ho Chi
Minh City, Vietnam Tel: 848 3724 4555/Fax:848 3724 4500
Email: ntcanh@vnuhcm.edu.vn; canhnt@yahoo.com

The DEPOCEN WORKING PAPER SERIES disseminates research findings and promotes scholar exchanges in all branches of economic studies, with a special emphasis on Vietnam. The views and interpretations expressed in the paper are those of the author(s) and do not necessarily represent the views and policies of the DEPOCEN or its Management Board. The DEPOCEN does not guarantee the accuracy of findings, interpretations, and data associated with the paper, and accepts no responsibility whatsoever for any consequences of their use. The author(s) remains the copyright owner.

DEPOCEN WORKING PAPERS are available online at <http://www.depocenwp.org>

**ECONOMIC DEVELOPMENT UNDER REFORM AND WORLD
INTEGRATION AND THE MAIN FACTORS INFLUENCING THE
ECONOMIC GROWTH IN VIETNAM**

By

Nguyen Thi Canh, Ph.D. Professor of Economics

Tran Hung Son, PhD Candidate

Faculty of Finance and Banking, University of Economics and Law

Vietnam National University-Ho Chi Minh City

Linh Xuan Ward, Thu Duc District, Ho Chi Minh City, Vietnam

Tel: 848 3724 4555/Fax:848 3724 4500

Email: ntcanh@vnuhcm.edu.vn; canhnt@yahoo.com

ABSTRACT

The purpose of this paper was to give an overview of economic development under reform and world integration and to evaluate the main factors influencing the growth of the Vietnamese economy during the reform period (1990-2008 (2009)). Based on statistical data on the Vietnamese economy in the period of 1990-2008 (2009), this study analyzed the factors affecting economic growth. The policy changes, economic development, poverty rates and living standards of Vietnamese population are analyzed over the reform period using qualitative methods. The results of this study show that economic growth under reform and world integration has reduced the poverty rate and increased living standards of population in Vietnam. An evaluation of the factors influencing economic growth is made using a quantitative model of total factor productivity (TFP) and another econometric model. The findings from this quantitative analysis show that the growth of the Vietnamese economy was determined by two factors: (1) capital investments, including foreign direct investment (FDI) and (2) the growth of exports. The results of these qualitative and quantitative analyses lay the foundation for policy recommendations for Vietnam Government to develop economy in the future

Keywords:

Factors

Reform

Capital and Foreign Investment

Imports and Exports

Total factor productivity (TFP)

Cobb-Douglas function

1. AN OVERVIEW OF ECONOMIC REFORM AND TRANSFORMATION PROCESS IN VIETNAM

After the sixth congress of Vietnam Communist Party in 1986, Vietnamese economic policy underwent a complete change. The new economic policy changed from a command, planned economy to a free-market, multi-sectored one. This period of change and new economic policies is called the renovation process (“Doi moi” in Vietnamese), and refers to the transition from a command-planned economy to the current, free-market one. In this process Vietnamese Government had to create:

- ❑ A new legal system;
- ❑ Macro-Economic Policies;
- ❑ Restructuring the state owned enterprises;
- ❑ Developing the private sector;
- ❑ Administrative reform;
- ❑ Preparing the conditions to go into integration process...

The Law on Foreign Investment was promulgated by the Vietnam National Assembly on December 29, 1987, and amended firstly in June 1990, secondly in December 1992 and finally in 1996. It is a legal document stipulating the basic principles concerning direct investments of foreign investors in Vietnam. According to this law, foreign investors can invest in Vietnam in any of the following forms:

- Contract of business cooperation

- Joint-ventures
- 100% foreign invested enterprise

Private Ownership

Since 1988, the Vietnamese government encouraged private enterprises, and this encouragement became official policy when the Private Business and Company Laws were established in 1990. In the private sector, the implementation of regulations provides the basis for private business to develop “without limitation in terms of scope and type in sectors and occupations that are not forbidden by laws.” Private enterprise, limited liability companies, and joint-stock companies, all of which are medium- and small-sized companies operate under these Private Business and Company Laws.

In the private sector, the simplest form of business organization is a business owned by an individual. The second form is a business owned by groups of individuals, which can be called a partnership or collective business. Sole proprietorship and partnership business are useful in helping individuals of limited means to start a business without much property (money). In Vietnam, both such businesses are very small, with usually less than 25 million VND of capital and less than 20 employees. By International standards, these might be called “micro-enterprises.” They are formed and operated by Prime Minister Decision No.66 under the Laws.

The Law on Foreign Investment (promulgated by the SRV National Assembly on December 29, 1987, amended first time in June 1990, second time in December 1992, and third time in 1996, and last time in 2000) is a legal document stipulating the basic principles concerning direct investment of foreign investors in Vietnam. According to the Law on Foreign Investment, foreign investors can invest in Vietnam by the following forms:

- Contract of business cooperation;
- Joint-venture;
- 100% foreign invested enterprise;

- Enterprise in Export Processing Zone (EPZ); and
- Build-Operate-Transfer (BOT) project.

Since 1992, the Vietnamese Government began projects for converting state owned enterprises (SOEs), including the privatization, incorporation, or liquidation of a number of SOEs. This program is a part of the government's overall program to shift the Vietnamese economy from a command system to a free-market system. The Law on State Enterprises issued in April 1995 sharply distinguishes between enterprises with public service functions and those operating on a commercial basis in a market economy. It also provides the legal framework for establishing state corporations. Today, we can see the initial results from the implementation of such pilot corporatization and equalization, which establish the institution and create the other necessary conditions for this work's execution on a large scale.

Since 2005, all kinds of business organizations in Vietnam (State Owned Enterprise, Private Domestic Company and foreign companies) are operating under one law—Business Law. With this new law, the Vietnamese Government created equality among different economic entities.

The transformation process has changed the ownership, management style, income distribution, and the role of Government in Vietnam's economy. In its former command economy, ownership was based only on State and cooperative. Now, it is based on the multi-sectored economy of state, cooperatives, private ownership, and foreign ownership. In the past the economy was closed, the Government had control of everything (e.g., establishing the prices of goods; the salaries paid to workers; production and trading decisions, subsidized capital from budget, etc. Today, like other countries, the Government manages the economy by laws; the prices of goods are established by market forces; entrepreneurship is encouraged; trade is slowly being liberalized; the economy is open to world markets; the real estate market is open and financial and labor markets have been established.

In Vietnam there are now seven kinds of business organizations: state-owned, cooperative, private, limited, joint-stock, foreign companies and small family business. All these are operating under laws. With these new policies, the government gives state enterprises autonomy and establishing market relations; implementing the state owned enterprises reform program, including the privatization, incorporation, or liquidation of a number of SOEs; establishing Private Business and Company Laws (now combined into Business Law and Investment Law); attracting foreign investment by establishing a new industrial zone, infrastructure fund and ‘exchanging land by infrastructure’; reducing administrative formalities ; and creating new programs to eradicate hunger and poverty.

Land Rights

State policies gave autonomy to farm and household business to make their own production and consumption decisions. Combined with policies transferring long-term rights to use land to each farm and household, these have had a positive impact on living and production standards. As a result, for example, agriculture productivity has increased and the living standards of farmers have improved. They have also promoted a renovation of the operations of agricultural co-operatives and the development of new types of co-operatives. Since 1993, a new law on land was established, enabling Vietnamese people to buy and can sell their land use rights (land continues to be owned by the federal government, people only own land use right, and before Vietnamese people couldn’t buy or sell a land).

Membership in International Organizations

After 20 years of interruption, Vietnam resumed its relationship with such multilateral credit organizations as the International Monetary Fund (IMF), the World Bank (WB), and the Asian Development Bank (ADB) in October 1993. Consequently, Vietnam applied for membership in the Association of South-East Asian Nations (ASEAN) and became an official member in July 28, 1995. As an ASEAN member, Vietnam is

committed to implement Common Effective Preferential Tariff Scheme (CEPT) for the realization of the ASEAN Free Trade Area (AFTA).

Vietnam applied for membership in the World Trade Organization (WTO) in January 1995 and became a full WTO member in the end of 2006. Vietnam has also been an official member of Asia – Europe Meeting (ASEM) since 1996 and member of Asia Pacific Economic Corporation (APEC) since 1998. Although the ASEM and APEC commitments and obligations are not binding, they all conform to WTO principles and thus, more or less, pressure Vietnam to make economic reforms. As a result of these associations, Vietnam now maintains trade links with 178 countries and territories, including all the world powers. Vietnam has also signed a bilateral trade agreement with 81 countries, of which the Vietnam–U.S. bilateral trade agreement (BTA) is the most comprehensive. It was negotiated on the basis of WTO principles and standards.

2. ECONOMIC DEVELOPMENT UNDER ECONOMIC REFORM AND WORLD INTEGRATION OVER 20 YEARS IN VIETNAM

Economic reform in Vietnam means transforming public sector and developing private sector and free-market. One way to measure this transformation process is to examine the ownership of both large and small business enterprises (Table 1). The number of SOEs has decreased about 75% in the transition period, from more than 15,000 units at the end 1991 to around 3,700 now. In contrast, business organizations in the private sector have increased from 26,091 companies (accounting for about 78% of total number companies in 1995) to 123,392 companies in 2006 (accounting for about 93.96 % of total companies). Similarly, foreign direct-investment projects have increased from more than 1,000 companies in 1995 to 4,220 now. Starting with a few thousand household businesses at the beginning period of renovation process, there are now hundreds of thousands of non-agricultural productive household businesses and micro-enterprises.

A second way to measure the impact of this transformation process is to measure Vietnam's gross domestic product (Chart 1). Economic reform and the transition to a market economy

have led to strong economic growth. The Vietnamese economy has enjoyed growth and stability for more than 20 years during this time of transition. For example, gross domestic product (GDP) of Vietnam was only growing by 2.44% in 1985 before reform, but this has now increased to 4.45% per year in the period at the beginning of renovation (1986-1990), and has enjoyed an average growth rate of 7.44% per year in the period from 1991 to 2009. GDP per capita also has also increased after economic reform (from 105 USD in 1990 to 1,109USD in 2009)—see Chart 1 below. Similarly, the industrial and construction sector has achieved a high and stable growth rate, averaging 11.3% per year in the period 1990-2009. The average growth rate of the service sector was 7.16% per year and the average growth rate of agriculture sector was 4.2% per year during 1990 to 2009.

Table 1: Number of Enterprises by Ownership Sector

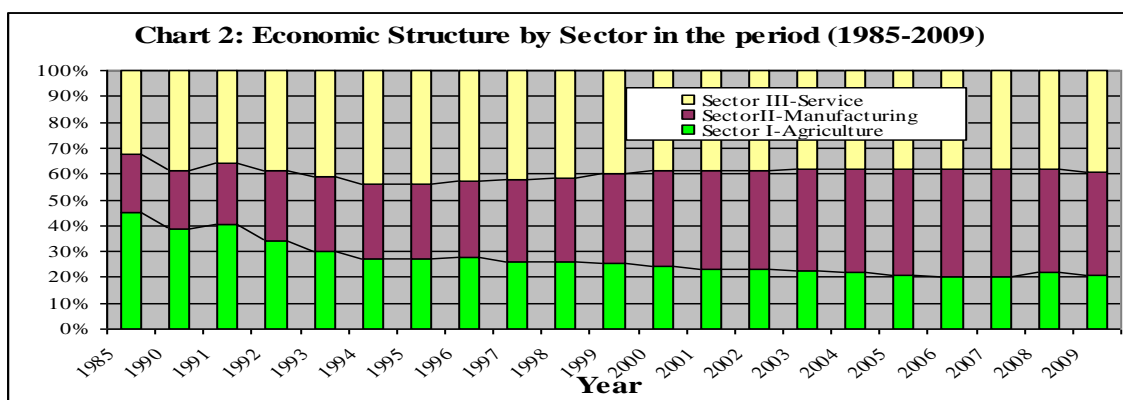
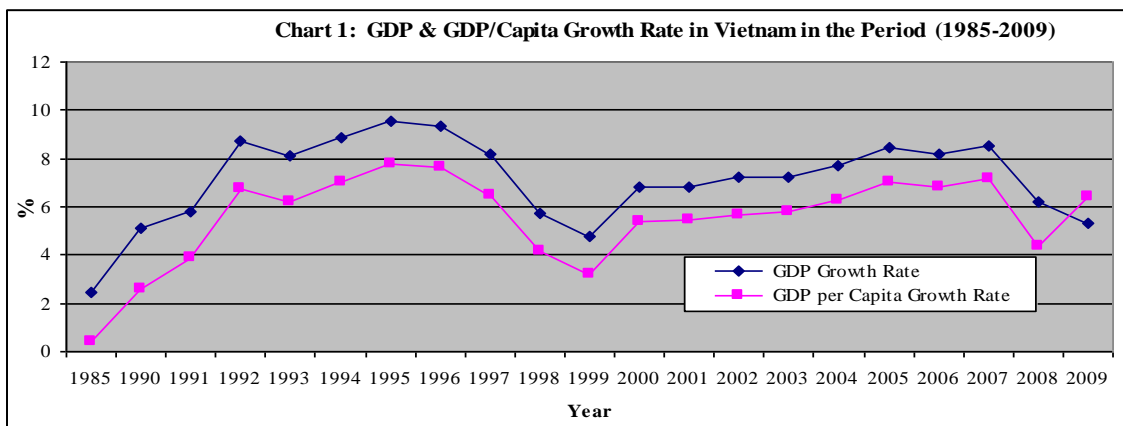
Ownership \ Years	1995	2000	2004	2005	2006
Totals	33,448	42,288	91,755	112,952	131,318
Number of SOEs	6,310	5,759	4,596	4,086	3,706
% of SOEs	18.87	13.62	5.01	3.62	2.82
Numbers of Domestic Private companies	26,091	35,004	84,003	105,169	123,392
% of Domestic Private Companies	78.00	82.77	91.55	93.11	93.96
Number of FDI Companies	1,047	1,525	3,156	3,697	4,220
% of FDI Companies	3.13	3.61	3.44	3.27	3.22
Small establishments, households	612,977	NA	2,913,907	3,053,011	3,748,138

Source: Vietnam Government Statistic Office (GSO) 1995, 2000-2007

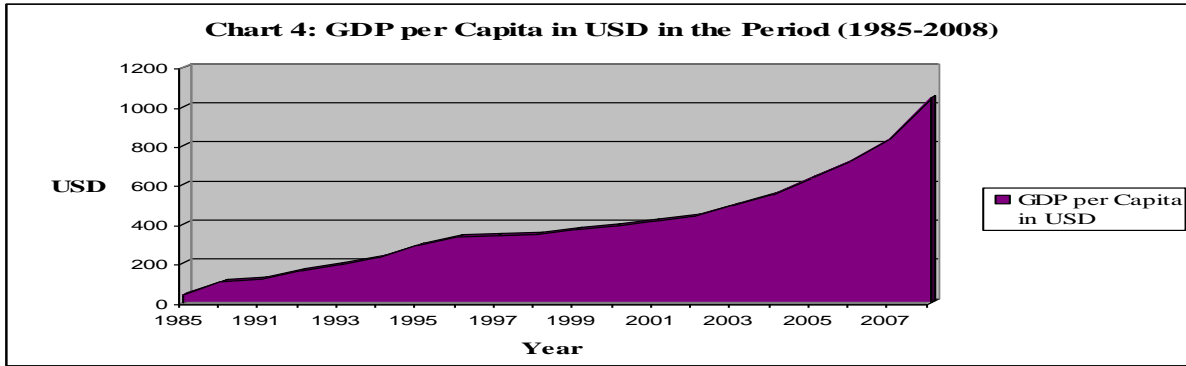
As result of these forces, the economic structure of Vietnam is shifting from an agrarian society to a modern, industrialized economy. For example, (1) the share of the industrial and construction sector was 22 % of the GDP in 1985 and this has increased to about 41% in 2009, (2) the share of the service sector was 32% in 1985, and has increased to 38% in 2009, and (3) the share of agriculture is down from 45% in 1985 to 21% in 2009 (see Chart 2 below). This shift of economic activity from an agriculture economy to manufacturing and service highlights Vietnam promise for the future.

Economic reform also changed the ownership structure of the Vietnamese economy. In 1985, before economic reform, there were only three sectors: state, cooperative, and

individual household. There was no private or foreign sector. Since changing policy in 1988, Vietnam's 1990 share of domestic private sector (domestic private, limited companies) and share of foreign sector in GDP have been increasing (Chart 3). At the same time, the total share of state and cooperative sector have been decreasing in the transition period



Economic development and poverty-reduction programs have had a positive impact on the living standards of the population. For example, there are now a million new jobs created every year, living standards now are more stable, and these standards are gradually improving. Average income-GDP per capita per year has increased about 10 times, from less than 40 US dollars per capita in 1985, to about 105 US dollars per capita in 1990, and to about 1,047 US dollars per capita in 2008 (see Chart 4 below).

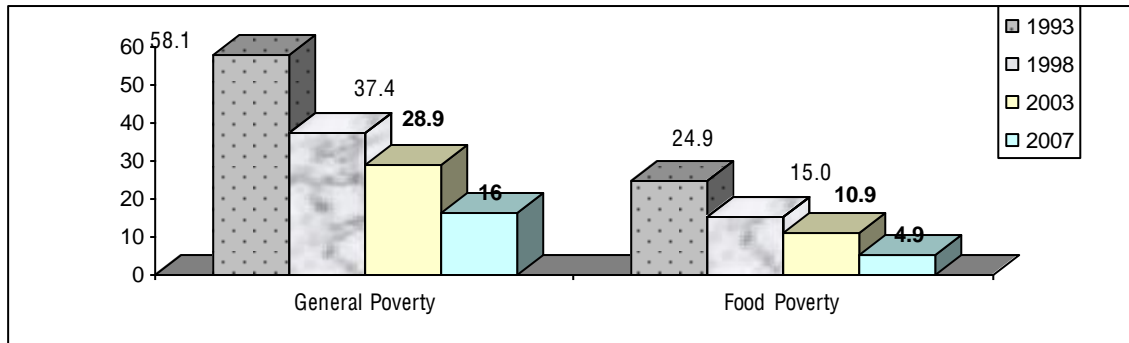


The World Bank uses gross national income per capita (GNI) to classify national economies into one of four income groups: The low-income group includes countries having GNI or GDP per capita, of 935 US dollars or less. The lower-middle income group includes countries with GNI or GDP per capita from 936 US dollars to \$3,705. The upper-middle income group includes countries having GNI or GDP per capita from \$3,706 to \$11,455. The high-income group includes countries with GNI or GDP per capita is \$11,456 or more. With GDP per capita of 1,047 US dollars, 2008 was the first year that Vietnam got out of the low-income country group and joined those countries in the lower-middle group.

The Vietnamese General Statistics Office uses two measures of poverty: (1) the general poverty line and (2) the food poverty line. The food poverty line is calculated according to the expenditure required to purchase 2100 calories of food per person per day. The general poverty line is calculated on the basis of a “basket of goods essential for well-being”, combined with expenditures sufficient to meet the standard of the food poverty line.

In 1993 the food poverty line was 62,477 VND per person-month, and the general poverty line was 96,700 VND per person-month. In 1998, the food poverty line was 107,236 VND per person-month and general poverty line was 149,156 VND per person-month. According to the results of the government’s Living Standards Surveys, the poverty rate of the population by general poverty line has been reduced from 58.1% in 1993 to 37.4% in 1998, 28.9% in 2002, and 16% in 2007. The poverty rate using the food poverty line has been reduced from 24.9% in 1993 to 15% in 1998, 10.9% in 2002 and 4.9 % in 2007 (see Chart 5 below).

Chart 5: The Vietnamese Poverty Rates, 1993 to 2007



3. THE MAIN FACTORS INFLUENCING THE ECONOMIC GROWTH

Capital and Foreign Investment

Economic growth has been high in Vietnam over the last 20 years due to several major factors. One is investment capital, which has been increasing from different sources and is concentrated in developing specific economic industries. Another is social investment outlays, which have increased about 28.5 times in the last 18 years from 7,581 billions VND at current price (\$USD 1.35 billions) in 1990, 72,447 billions VND (\$USD 6.9 billions) in 1995 to 637,300 billions VND (about \$USD 38.6 billions) in 2008.

Investment capital has increased strongly as the Vietnamese economy has opened its economy to the world during its integration process. As result, foreign direct investment (FDI) has been increasing (see Chart 6). The foreign investment law was issued in 1987 and since 1988 foreign companies have established in Vietnam. There are 12,206 foreign investment projects licensed in the period of 1988-2009, accounting for 192.8 US\$ billions of the total registered capital, including 67.4 US\$ billions of implementation capital.

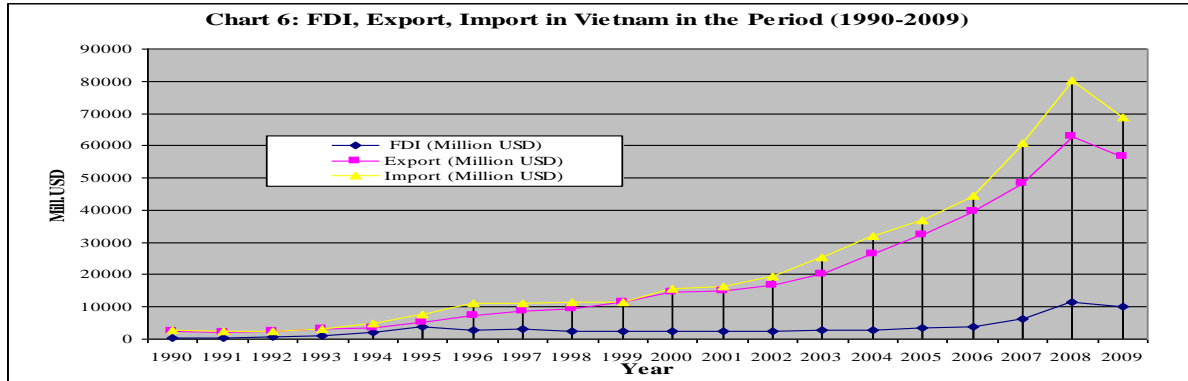
Foreign investment projects have been increasing year by year from different countries, including some from developing countries. The main countries with large foreign investment projects are the Asian Countries—e.g., Taiwan, Hong Kong, Korea, Japan, Singapore and Thailand. The developed countries with the most foreign projects and investments are France and United States. Chart 7 shows that, with integration policy, the

investment capital source has been changing by ownership. Investment capital share of state sector was 40.2% of total investment capital in 1990 has decreased to 28.9% in 2008; investment capital share of non-state invested (domestic private sector) was 46.7% of total investment capital in 1990 and has decreased to 29.39% in 1995 but is now up again to 41.3% in 2008. In the meantime the investment capital share of foreign sector (FDI) was 13.1% of total investment capital in 1990 has increased in 29.8% in 2008. Increase in FDI has been speeding up export and import strongly in past years (see Chart 6 below)

Imports and Exports

Vietnam's integration policy also impacted Vietnamese exports and imports. Chart 8 shows that the value of exports has grown at an average annual rate of 19.9% per year during last 18 years (1990-2008). During the same period, the value of imports has grown at an average rate of 20.62% per year. The main products for export are petroleum, crude, rice, coffee, rubber, shoes and sandals, textiles, sewing products, vegetables and fruit, and marine products.

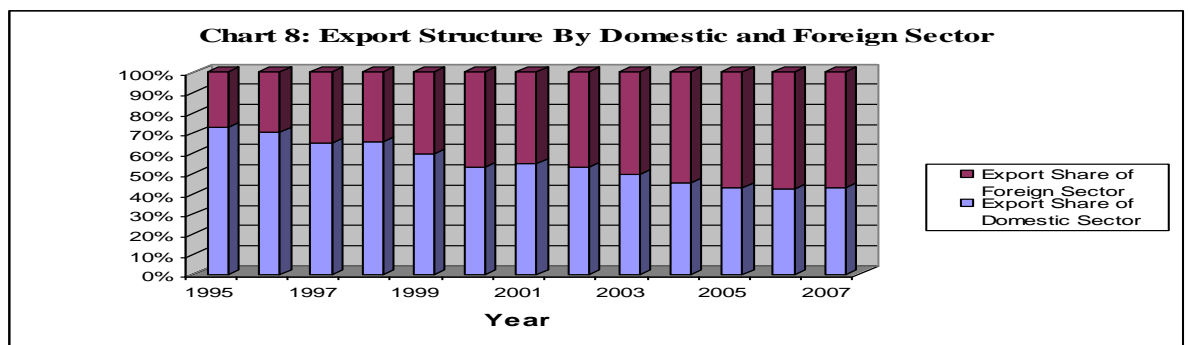
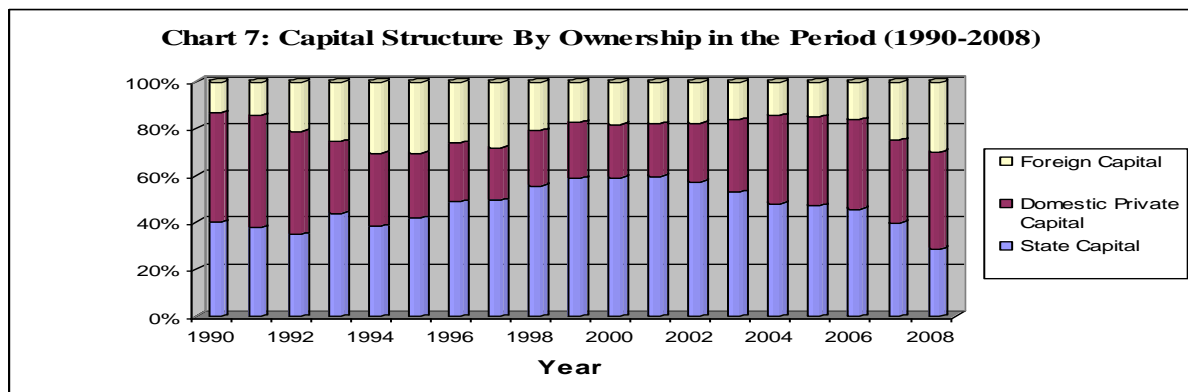
The main import goods are machines, oils and some industrial inputs, and high-quality consumption goods. In 1990, the state's sector played a leading role in exportation and importation but its role has decreased steadily in the past 10 years. Export value structure of the domestic sector was down from 70.73% in 1990 to 42.8% in 2008 and import value structure was down from 82.0% in 1990 to 63.3% in 2008. The foreign sector of the economy plays an important role in the export and import in last few years. For example the share of foreign sector accounted for 57.2% of export value and 36.7% import value in 2008 (see chart 8).



The relationship between export and GDP growth can be analyzed to determine the influence of export to economic growth using the following formula:

$$\text{Export contributes in 1\% economic growth} = \frac{\text{Export Growth Rate (\%)}}{\text{GDP Growth Rate (\%)}} \times \frac{\text{Export}}{\text{GDP}}$$

Based on the above formula, the author calculated the contribution of export to 1% economic growth in Vietnam last years is about of 24%.



An Empirical Models

The author analyzed the relationship between capital and economic growth using the Cobb-Douglas production function:

$$Y = AK^{\alpha}L^{\beta},$$

Where Y is output (GDP), K is capital, L is labor and A is “knowledge” or the “effectiveness of labor” or total factor productivity (TFP) [2, p 7] and [1, p. 7, 8...]. The data sources used to calculate these indicators and this econometric model (Cobb-Douglas function) are based on statistic data (GDP, capital and labor for whole economy and for 3 sectors from 1990 to 2008)

The translog Cobb-Douglas production function is given by:

$$\text{Log}Y = \text{Log}A + \beta_K \text{Log}K + \beta_L \text{Log}L \quad (\alpha = \beta_K, \beta = \beta_L).$$

The outputs from this model using SPSS program may be found in Appendix. Table 2 shows the results of this model with $\alpha = \beta_K$, and $\beta = \beta_L$.

Table 2: Model Result-Coefficients (a)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Significance
	B	Std. Error	Beta	B	Std. Error
1 (Constant)	1.566	.094		16.585	.000
LogK	.546	.015	.870	35.223	.000
LogL	.235	.019	.304	12.330	.000

a Dependent Variable: LogGDP

From above result we have the following estimates:

$$\mathbf{GDP = 1.566 K^{0.87} L^{0.304}}$$

and from Total Factor Productivity Model we know

$$G_{GDP} = G_A + \beta_K G_K + \beta_L G_L, [3, p. 38]$$

where G_{GDP} is GDP growth rate, G_A is contribution of total factor productivity to economic growth; G_K is capital (K) growth rate, β_K is regression coefficient of capital (K); G_L is growth rate of labor and β_L is the regression coefficient of labor (L).

The capital growth rate is defined by calculating the average growth rate of capital investment and subtracting the depreciation rate. The depreciation rate in Vietnam ranges from 10% to 30% for machinery, and ranges from 2%-3% for buildings. A reasonable average is 8% (to define this 8% is based on weight and depreciation rate of each group fixed asset). Capital investment growth rate in the past 20 year is about 14.17% per year. So G_K in the model TFP (Total Factor Productivity) is Capital Growth Rate - Depreciation Rate = 14.17% - 8% = 6.17%

The growth of GDP in Vietnam for the period 1990 to 2007 is 7.64%. From the results of the regression model we have $\beta_K = 0.87$, which means that the contribution of Capital Factor to the economic growth is 6.17% x 0.87 = 5.38%. Average growth rate of labor in the period (1990-2007) in Vietnam is 2.63%, β_L from regression model is 0.304, so contribution of labor factor to the economic growth is 0.304 x 2.63% = 0.8%, the rest is contribution of total factor productivity (technology, management changing) is 7.64% - (5.38% + 0.8%) = 1.46%. Thus, relatively, “capital” contributed about 70.42% (5.38/7.64) to economic growth in Vietnam in the past 20 years, “labor” contributed about 10.47% (0.8/7.64), and “total factor productivity” contributed about 19.11% (1.46/7.64) to economic growth in Vietnam in past two decades.

The results of regression equations indicate that capital plays an important role of economic growth of Vietnam. As mentioned above, the reform process has resulted in attracting significant foreign capital inflows into Vietnam. The foreign capital inflow is about 30% of total capital in Vietnam. Foreign capital inflows into Vietnam include FDI, ODA, Oversea national currency exchange and FII. These capital investments are important factor for the growth of the Vietnam’s economy. The regression equations of

the relation between FDI and growth show that FDI Foreign direct investment (FDI) has contributed to impressive economic growth in Vietnam

Based on the existing literature, it can be argued that economic growth and FDI depend on a number of factors. Some of the main determinants are discussed below. The discussion is used to develop an empirical model.

Determinants of economic growth

Human capital

Human capital is long regarded as a determinant of economic growth (Mankiw (1992), Barro and Sala-i-Martin (2004), and Benhabib and Spiegel (1994)). Human capital also affects growth through its interaction with FDI. A number of proxies have been used to measure human capital. This study uses the number of university and college enrolment per thousand persons as a proxy for human capital in Vietnam.

Exports

The endogenous growth theory pioneered by Romer (1986) and Lucas (1988) has provided persuasive evidence for the proposition that an increase in exports as a percentage of GDP has a positive effect on economic growth. Grossman and Helpman (1991) and Barro and Sala-i-Martin (2004) have argued that a more open trade regime leads to a greater ability to absorb technological progress and export goods that stimulates economic growth. Grossman and Helpman (1991) and Rodrik (1992) have pointed out that exports can potentially create growth-accelerating forces.

Government Consumption

Government Consumption has a significant positive impact on economic growth, because this consumption can create more social capital and then has positive impact on economic growth. Blankenau and Simpson (2004), Glomm and Ravikumar (1992, 1997, 1998), Eckstein and Zilcha (1994), Kaganovich and Zilcha (1999), Cassou and Lansing (2001) and Blankeanu (2003) have suggested that Government Consumption are positively related to economic growth in long-term. This study uses the annual government consumption as a percentage of GDP as a measure of government consumption in Vietnam.

Other determinants

The other well-known determinants of economic growth are domestic investment, labor force growth rate and FDI, both of which have been included as determinants of economic growth in Vietnam.

Based on the existing literature, the linkage between FDI and GDP growth in Vietnam is empirically examined by making use of the following equation.

$$\mathbf{GDP = f (FDI; DI ; HC; EX; GC; LA; FDI*HC ; FDI*EX)} \quad (5)$$

Based on theoretical and empirical research on the impact of FDI on economic growth, a system of equation is formed in which the real economic growth rate (GDP) are determined by FDI inflow (FDI), domestic investment (M), human capital (HC), level of export (EX), government consumption (GC), growth rate of labor force (LA), interaction of FDI and human capital (FDI*HC) to show the role human capital in the contribution of FDI to economic growth, interaction of FDI and export (FDI*EX) to show the role FDI in the contribution of export to economic growth.

Table 3. Variable definitions

Abbreviations	Variable definition
GDP	economic growth rate (annual %)
FDI	The ratio of realized FDI to GDP
DI	The ratio of realized domestic investment to GDP
HC	Number of university and college students
EX	Ratio of exports to GDP
GC	The ratio of government consumption to GDP
LA	Growth rate of labor force

The results of the regression models are presented in Table 4. Table 4 suggests that FDI is an important determinant of economic growth in Vietnam. The estimated coefficient of FDI in Table 6 is significant at 5% level. In other words, one can argue with 95% confidence that increase in FDI in Vietnam increases economic growth. Specifically, it is possible to argue that, other things remaining constant, an increase 1% in the ratio of

realized FDI to GDP in Vietnam would contribute to an approximate 0.55% increase in economic growth.

The estimated coefficient of DI in Table 6 is significant at 1% level, implying that an increase 1% in the ratio of realized DI to GDP in Vietnam would contribute to an approximate 3% increase in economic growth.

The estimated coefficient of EX is significant at 5% level. It is possible to argue that, other things remaining constant, an increase 1% in the ratio of export to GDP in Vietnam would contribute to an approximate 0.168% increase in economic growth.

Human capital has a positive and statistically significant impact on economic growth in Vietnam, but the effect is poor. This result can be explained that the quality of human capital in Vietnam is poor. Therefore it is necessary to improve the education to increase the quality of human capital in the future.

The interaction of export and FDI has a positive and statistically significant impact on economic growth in Vietnam. Once again, the result indicates the important role of FDI in export of Vietnam.

The interaction of FDI and human capital has a positive and statistically significant impact on economic growth in Vietnam, but the effect is poor. This result can be explained that the quality of Vietnamese labor force is low and this constraints the benefitting from knowledge spillovers from FDI.

The estimated coefficient of government consumption and growth rate of labor force is not statistically significant.

Table 4. Estimated results for Equation (5).

Dependent Variable: GDP

Method: Least Squares

Sample(adjusted): 1990- 2008

Included observations: 19 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.709762	1.281228	2.114972	0.0605
FDI	0.194100	0.044354	4.376157	0.0009
HC	0.007213	0.002305	3.129220	0.0107
SHEX	0.277916	0.069735	3.985327	0.0016
GC	-0.182146	0.532168	-0.342272	0.7392
LA	0.1283362	0.535022	2.398708	0.0374
DI	0.208600	0.091362	2.283217	0.0399
R-squared	0.848062	Mean dependent var		6.581176
Adjusted R-squared	0.729889	S.D. dependent var		2.003815
S.E. of regression	1.041427	Akaike info criterion		3.316000
Sum squared resid	9.761138	Schwarz criterion		3.659088
Log likelihood	-19.40612	F-statistic		7.230322
Durbin-Watson stat	2.366616	Prob(F-statistic)		0.003453

*Note: Robust standard errors in parentheses. ***Significant at 10%; **significant at 5%; *significant at 1%.*

The above results show that capital and exports have been very important to Vietnamese economic growth in the past two decades. Without reform and integration mentioned earlier, Vietnam couldn't have such impressive economic growth rate and success in reducing its poverty rate.

4. CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE ECONOMIC DEVELOPMENT

Vietnam is in the process of world and regional economic integration. In the context of openness and integration, Vietnam is making major progress in economic development and improving the living standard of its population. As a full WTO member, Vietnam will have a lot of opportunities to expand its exports and attract foreign investment. From the above results of empirical models show that both these factors are expected to encourage economic growth. However, Vietnam also has some major challenges in improving investment environment, including:

- (1) The process of restructuring SOEs goes slowly. This is to reduce a faith from investors
- (2) The investment environment is not comprehensive (tax policy is complex, land policy is limited, and there is not an equal "playing field" for all kinds of enterprise).
- (3) Administrative reform moves very slowly- this is also to limit investment.

To overcome these challenges, the Vietnamese government might consider several changes in its policies. Some possibilities are:

(1) *Speed up the process of restructuring SOEs, encouraging and creating conditions for private sector to participate in producing, processing and trading industries.* The state sector still dominates a lot of the product-processing enterprises. Meanwhile SOEs are now facing more pressures in the process of competition and integration. To overcome these current constraints of SOEs, the Government should speed the process of restructuring and reorganizing the state sector through equalization, business contracts, or perfecting the general company model in order to create conditions for enterprises to have more active rights in business activities. Removing subsidy factors would be especially helpful in helping private enterprises and enhancing their competitiveness.

(2) *Perfecting tax policy.* In general, tax policy at present is complex and contains too many time-consuming procedures. Granting tax credits could considerably improve cash flows for businesses when high tax rates in the industry have greatly affected enterprise profit. To help enterprises in all processing and trading industries improve their competitiveness, the government should simplify the tax code, applying the same fair tax rate to both SOEs and private ones in order to create an equal and explicit, sound competition business environment for all kinds of enterprise; and speed up the process of awarding tax credits.

(3) *Modify land policies:* Although many amendments have made to the legal system and land regulations, accessibility as well as the transfer of land-use rights is still limited. The registration and procedures involved in land transactions are still in the building process. This hampers private enterprises in expanding business sizes or changing location to a more convenient one.

(4) *Improve investment opportunities, the business environment, and the “playing field” for all kinds of enterprise.* According to the results of enterprise surveys, investment and business environment at the present is still unsound and risky due to unstable policies, unequal application of federal laws, and internal corruption. The government needs to create an equal “playing field” for enterprises in all economic sectors by rapidly setting

up competition and anti-monopoly laws that apply to all economic sectors, control and prevent unsound competition behaviors like price control or market manipulations.

(5) Reform administrative procedures rapidly and thoroughly in all fields, particularly in the areas of customs and tax. Simplifying procedures for investment licensing, loan borrowing, exporting and importing of goods, and land will increase incentives to improve production and business efficiency of all economic sectors

(6) Develop sustainable economic growth to benefit the poor. Economic indicators show that living standards are improving and that the poverty rates are decreasing in the reform period. However, the differential gap among alternate population groups is still high as measured by income or assets. There is also a differential gap in the poverty rates among the different provinces. This means that, although most of society has benefited from the country's economic growth, such disadvantaged groups as the landless, migrant workers, ethnic minority groups, elderly, women, and children have benefited less and the rich have benefited more. Regions with large ethnic minority groups also have high levels of poverty compared to other regions. To address this problem, the government should develop strategies for sustainable economic growth that will (1) benefit the poor, (2) further develop the country's economic infrastructure, (3) support job creation, and (4) develop non-farm employment opportunities in the rural areas of the country.

REFERENCES

- (1) Charles R Hulten, Edwin R Dean and Michael J Harper (2001), *New Developments in Productivity Analysis*, The University of Chicago Press
- (2) David Romer (1996), *Advanced Macroeconomics*, The MCGraw-Hill Companies, Inc
- (3) Nguyen Thi Canh (2004), *Economic Growth Models: Theory and Application (in Vietnamese)*, Vietnam National University-Ho Chi Minh City Press
- (4) Vietnam Government Statistic Office 1985-2008;
- (5) IMF, World Bank and UNDP Websites
- (6) Adeolu B. Ayanwale; *FDI and economic growth : Evidence from Nigieria*, AERC Research Paper 165, April 2007

- (7) Kevin H. Zhang; FDI and economic growth in China: A panel data study for 1992 – 2004, Working paper 2006.
- (8) Marta Bengoa Calvo; Foreign Direct Investment, Economic Freedom And Growth: New Evidence From Latin-America, Workshop on Economic Freedom, held in Groningen in November 2001.
- (9) Edward M. Graham, Erika Wada; FDI in China: Effect on growth and economic performance, Oxford University Press 2001.
- (10) S.R.Keshava ;The effect of FDI on India and Chinese Economy; A comparative analysis, Working paper 2006.
- (11) N. Balamurali and C. Bogahawatte; Foreign Direct Investment and Economic Growth in Sri Lanka, Sri Lankan Journal of Agricultural Economics. Vol. 6, No. 1, 2004

5. APPENDIX

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.980(a)	.960	.959	.05827

a Predictors: (Constant), LogL, LogK

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.594	2	2.797	823.746	.000(a)
	Residual	.234	69	.003		
	Total	5.828	71			

a Predictors: (Constant), LogL, LogK b Dependent Variable: LogGDP

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.
		B	Std. Error	Beta	B		
1	(Constant)	1.566	.094			16.585	.000
	LogK	.546	.015	.870		35.223	.000
	LogL	.235	.019	.304		12.330	.000

a Dependent Variable: LogGDP