Centre Emile Bernheim
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The financial storms in Vietnam's transition economy: A reasoning on the 1991-2008 period

André Farber, Nguyen Huu Tu, Tran Tri Dung, and Vuong Quan Hoang

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JEL Classifications: G10, G18, E22, E31, E44
Keywords: Financial system; inflation; economic growth; interest rate; exchange rate; FDI; FPI; banking sector; stock markets; monetary and fiscal policy; Vietnam.

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The financial storms in Vietnam's transition economy: A reasoning on the 1991-2008 period

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Abstract

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Introduction

In its evolution, the economy experienced a turbulence time as starting-point of a new development phase. Vietnam's economic adverse change in 1997-1998 was affected by the spillover from East Asian financial crisis.[1] A decade later, period 2007-2008, economic changes occurred at almost the same time as the global credit crisis. Stemming from the United States, the home sub-prime mortgage quickly affected the international financial system. Economic downturns were inevitable. It is worthy to understand its nature, cause and development, and consequences for lessons and future cautions. The authors choose this approach to be the focus of the study.

Entering 2007, the Vietnamese economy carried with it positive signals from the burgeoning 2006. On January 11, 2007, Vietnam became the 150^{th} member of the World Trade Organization. The nation's nascent stock market celebrated the seventh anniversary in an ever growing trend starting in mid-2006. On March 12, 2007, VN-Index reached its all-time record of 1,171. The registered FDI capital in 2006 jumped to US$10.2bln – the highest level since 1988 – doubling that of the previous year. The national economy expanded 8.17% in 2006, well above the average 7.51% of the period 2001-2005.

Nonetheless, the seeds of anomalous development sprouted in February 2007 when growth indexes of equity and money markets misinterpreted the economy's real capability [18, Vuong, 2007]. In the following months, signals became clearer, especially on stock markets. Total market capitalization went up to 30% of Vietnam's GDP, due largely to an irrational boom in financial asset prices. Meanwhile, many fundamental concepts of stock markets were seriously over-looked, or worse off, even completely ignored by individual investors. The quality of financial information was poor with almost no transparency in place. Investor relations only became hot spot when stocks began to slump, although investors' information services were still grouped with PR and advertising activities [14, Vuong, 2007]. Corporate governance and conflict of interest in public firms have still been unfamiliar with the majority of market players. "Money" mobilized through capital markets were extravagantly and ineffectively spent in expansion plans and green-field projects – mostly in real estate, and banking and finance. The fast growth was doubtless supported by a rampant rent-seeking process over the nascent economy.

In fact, Vietnam started facing massive challenges at the beginning of 2008. Stock markets slumped with its VN-Index retreating to 366 (on June 20, 2008), a comparable level to that of March 2006. Cumulated inflation in the first 3 months of 2008 surpassed 9%, then shortly reached 15% in May. Businesses had tough times when oil and commodities surged, and lending cost hiked to a phenomenal 21% per annum (p.a.). Costs cutting and employment reduction were common. Commercial banks had their own troubles with liquidity and technical solvency. Saving interest rates increased to as much as

[1]Vietnam is a member of ASEAN (July 25, 1995), AFTA (January 1, 1996), APEC (November 1998)

20% p.a. The central bank has increased primary rate to 14%p.a. in June. Daily limit of USD/VND rate was widened to ±2%. Meanwhile, official exchange rate was adjusted to deal with increasing free market rate of up to VND 20,000 for 1 US dollar. Trade deficit mounted to US$ 14 bln. in the first half of 2008.

Those scenarios stoke concerns and analyses over the possibility of a financial crisis in Vietnam in the manner of East Asia financial crisis. Nevertheless, it is necessary to have an in-depth look at macroeconomic scenarios while taking consideration of regional and global situation, together with the country-specific economic mechanism.

The purpose of this study is to make comparative and qualitative analyses of economic features over sub-periods of 1991-92, 1997-98, and 2007-98. There are major distinctions in fundamentals of growth, inflation, monetary policy, financial markets, and foreign investment. The story in Thailand and East Asia in 1997 is unlikely to happen in Vietnam. The study also suggests further research on effects between macro policies and microeconomic implementation, roles of business culture and communications in tough times.

1 An overview of Vietnam's economy in reform

Since the nation's re-unification in 1975, the *per capita* GDP has been triple. From 1975 to 1986, the curve (in Figure 1) slightly went up by 1% p.a. It started taking off in 1988, two years after the implementation of Doi Moi economic policies. The transition process from a central planning to market oriented economy made Vietnamese people happy. In the five years of 1987-1991, per capita GDP grew 3% annually, on average. After that, economic growth spired up to approximately 6-7% p.a. for almost two decades.

The Vietnamese economy remained stable throughout most of the 1990s (see Figure 2). Annual GDP growth rates ranged from 8-9%, except the few last years when the Asian crisis worsened the regional economy. The recovery process took about four years. Vietnam's economic growth was 6.5% in 2004 again. This expansion continued to firm up till present. Although growth expectation of 2008 was reduced from 9% to 7% because of the national chaotic economic conditions, the nation still saw a 6.5% of GDP growth, in the first half.

The plausible economic achievements of Vietnam had its deep roots in early days of the extensive reform. The introduction of the Law on Foreign Investment in 1987 was a milestone in Vietnam's reforming path. This Law encouraged and legitimized foreign direct investments (FDI) into Vietnam. Since 1988, FDI has always been a major driving economic force ([2, World Bank, 1998]). The relative importance of FDI inflows to Vietnam's economy has so far been profound. FDIs brought up the productive capacity of the economy, and generated new income sources. Although the Asian financial crisis impeded developments of FDIs until 2004, the registered FDI capital to Vietnam kept increasing regardless of the decrease in numbers of projects during the period 1997-2005

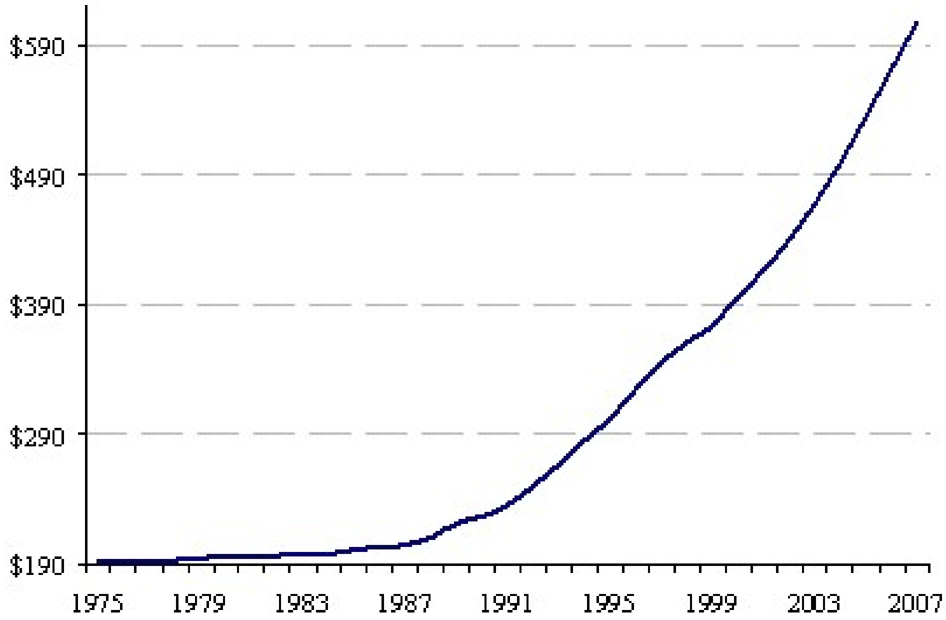

Figure 1: GDP per capita

*S*ource: © www.asset.vn database

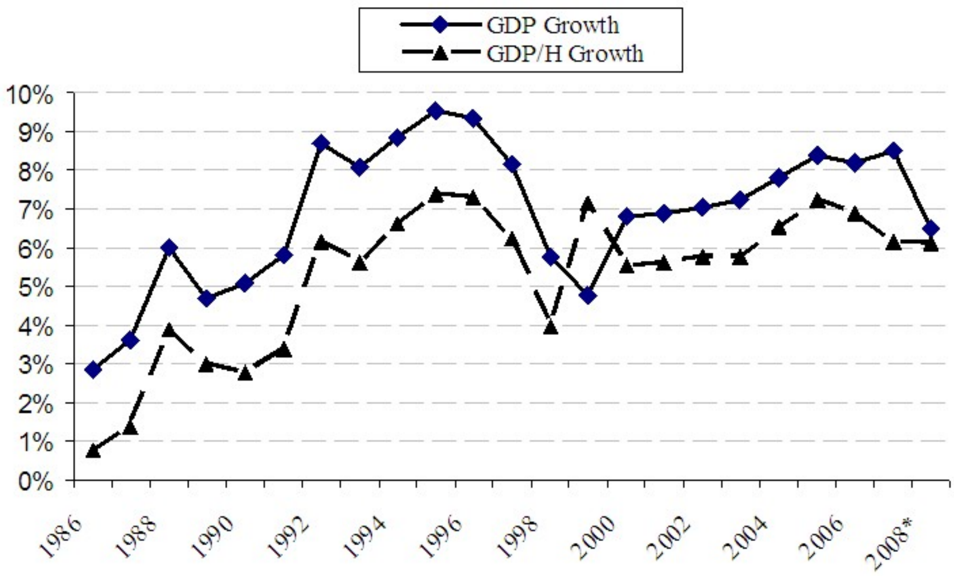

Figure 2: Doi Moi 1986- A period of genuine growth

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(Figure 3). On the other hand, higher level of income and GDP pulled along levels of consumption and reinvestment, whose impacts encouraged foreign investors that seeked to expand markets and growth-oriented opportunities.

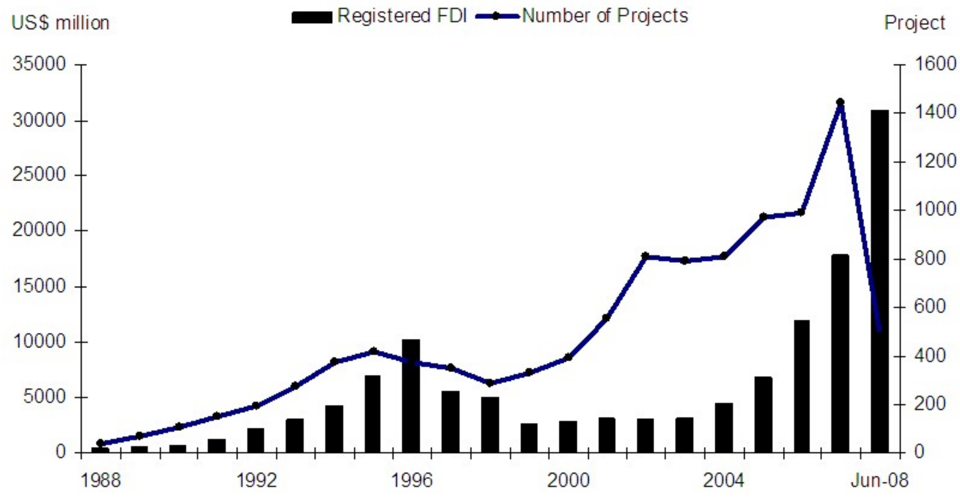

Figure 3: Foreign Direct Investment (FDI): 1988-2008

*S*ource: Ministry of Planning and Investment

Consequently, a substantial proportion of international capital to Vietnam, following the path of FDI, has been *en route* to banking and financial industries. Within 1992-97, 24 foreign bank branches and five joint-venture banks were established. These foreign-invested banking operations became operational in the major urban economic hubs, namely Hanoi and Ho Chi Minh city, and have gradually grown up to be major players in the financial sector of Vietnam. The financial market is thus given more attention as the overall solution for many economic conundrum such as State-Own-Enterprise (SOE) equitization and fund mobilization for large commercial projects.

2 Problems arising in the 1988-2008 period

The primary concerns of macro policies in Vietnam were poverty reduction and competitiveness improvement, in 1990s. After a decade, Vietnamese people's living standards improved significantly. The integration process has been implemented comprehensively. Facing economic challenges, new focuses now shift to: sustainable development and inflation control. The stability of financial system consisting of stock and money markets, and capital flows, was a key concern, together with a primary task of installing relevant market apparatus.

2.1 The Growth and Inflation in Vietnam

In the later half of 20th century, the relations between growth and inflation seen in distinct situations. Rapid growth and low inflation were in 1960s; and, rapid growth and high inflation in 1980s. In 1960s, classical theories, which state that inflation slows growth, became unconvincing with the popularity of the Phillips curve. Investigating the relationship between the rate of inflation and the rate of unemployment, the Finnish economist Alban Phillips statistically proved that in periods of low unemployment, inflation rate was low, and vice versa. In other words, economic growth is proportional to inflation rate. Tobin and Sidrausky even proposed the existence of this relationship in the long-run. When inflation is high, assets will not be stored in form of currencies, instead people tend to buy other physical assets; therefore, social productivity tends to heighten.

Experimental researches in OECD economies, however, did not entirely support the view [20, Harry G. Johnson, 1967]. IMF concluded that there is no specified relationship between economic growth and inflation rate statistically. In 1969, Wallich conducted a field study in 43 countries, looking at economic data over the 1956-1965 with presumption that inflation and growth were proportional. The result was striking. Statistically, a negative relation between growth and inflation was confirmed.

The 1970s and 1980s economic turbulence recorded a high inflation. Observers in this period concluded that high–but-stable inflation rates do not significantly affect productivity. Due to vague concerns, inflation control could cause deadly costs to the economies. A popular view in 1980s was a short-run proportional relationship between inflation and economic expansion. The facts of developing countries reinforced the argument that inflation-curbing measures impede growth. Ball's study (1993, [21]) constructed figures showing lower growth pace of OECD economies in an effort to stabilize prices. Inflation when crossing a threshold limit value would accelerate. Then, no economic system can sustain turbulent prices. Thus, stabilizing measures must be introduced and implemented aggressively. As a result, high inflation cannot remain for long time. On the other hand, a study by Dornbusch and Fisher (1993, [9]) concluded that the range of 15 – 30% is generally acceptable for quite long time without causing negative impacts on the economy.

In early 1990s, high rate of inflation was accepted as a result of the transition into a market economy in Vietnam. With government spending and credit contracting, inflation slowed down remarkably in late 1990s while growth remained. In 1997 and 1998, prices index was one digit. CPI in November 1997 was up 3.6% from the previous period. In 1998, the index was 9.2%. Price increases between months of the year were trivial, and moved in one direction either up or down. After Tet holidays,[2] CPI would normally decrease. CPI in March in 1996, 1997 was down 2.3% and 3% from the previous 2

[2] Lunar New Year usually celebrates in February. A high season of consumption starts about three months before the Tet. Economic activities are slow in one to two months after Tet.

months.

Vietnam enjoyed high economic growth – average 9% p.a.– in period 1992-1997 (Figure 4). The main driver of expansion was industrial investment and development, which was supported by foreign investment, mounting to US$ 2 bln. p.a. (5-10% of annual GDP). Agriculture developed at the rate of 4-5% each year. The nation's exports quadrupled from US$ 2 bln. in 1991 to nearly 9.2 bln. in 1997. Nevertheless, the Asian financial crisis put a brake on the economy. *Per capita* GDP growth rate dropped to 4% in 1998-1999. Regional financial difficulties limited the FDI flows from neighboring countries. A number of large industrial projects were left uncompleted.

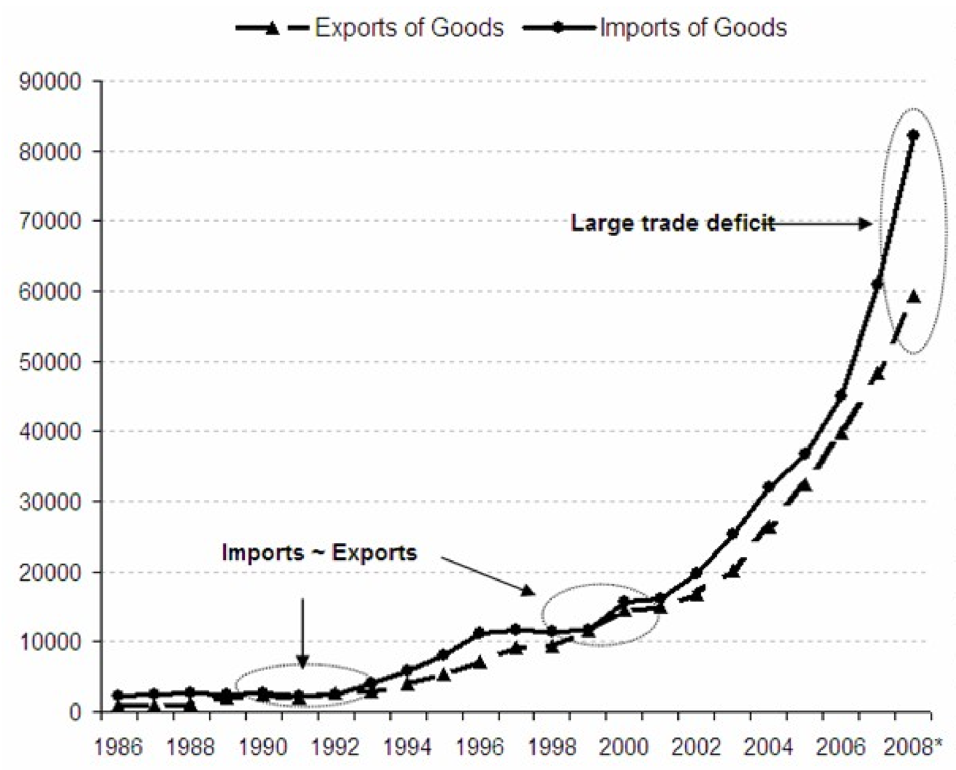

Figure 4: Imports and Exports of Goods, 1986-2008

*S*ource: General Statistics Office. Unit: million US$

Since 2000, Vietnam's economic expansion rate has again been spiraled upwards at 7-8% p.a. (Figure 5). Inflation rate increased in this period, too. At the end of 2007, 2-digit inflation rate recurred. Accumulated inflation exceeded 20% in June 2008. Rocketing inflation challenged Vietnamese policy makers who were set to maintain a stable growth.

In addition, as a WTO member, Vietnam liberalized trade and service activities to the rest of the world. Manufacturing and employment structures have shifted to labor-intensive and export orientation models. The private sector has emerged ever since. The leading role of SOEs now transferred to non-state economic players. Stock markets, commercial banks, and financial institutions brought up the national financial economy. Consequently, real income, exchange rates and interest rates became sensitive to inflation,

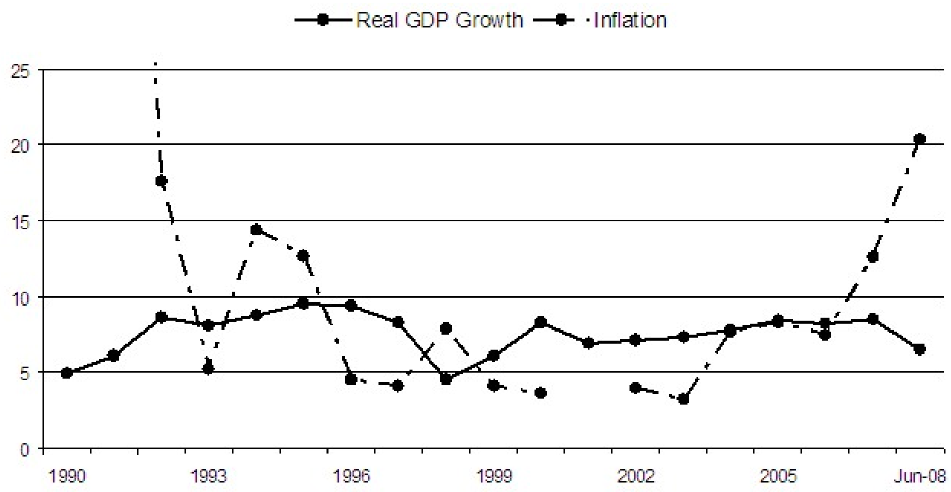

Figure 5: Real GDP Growth vs. Inflation

*S*ource: IMF, and www.asset.vn. [3] Unit: percent

which in turn largely affected the process of resource allocation and overall economic efficiency. Those linkages have made the economy much more complicated than it had been one decade before.

2.2 Monetary and fiscal policies

Monetary and fiscal policies are two instruments of government in stabilizing growth in correlation with inflation [8, Dornbush and Fisher, 1992]. Although direct objects of these two policies are commodities and asset markets, they are closely linked via macroeconomic transmission mechanism.

The influences of monetary policies on economy have two notable extremes. Liquidity trap is the situation in which the public is prepared to hold the entire money supply at a fixed level of interest rate. In this case, adjustments on open market operations have no effect on interest rates. For some reason, the rate in market is zero or the positive real interest rate is very low, so monetary policies will not work. In Vietnam, the CPI for first three months of 2008 went up 16% against the same period of 2007, while the primary rate was just 8.75% (see Table 1). This could probably explain why State Bank of Vietnam's movements of both injecting and withdrawing money in circulation in February and March 2008 did not affect interest rate as expected.

When interest rate lowers, investment increases. Businesses plan new projects financed by loans from commercial banks. However, at low real interest rate, commercial banks are reluctant to provide credit, or they even refuse to finance. This can be a result of high level of non-performing loans accumulated in previous periods. Bernanke and Lown (1991, [3]) concluded that banks opted to refuse to provide the private sector with credit in such situation. On the other hand, it was argued that more active open market

Table 1: CPI and Primary Interest Rate in 2008

	CPI (in comparison to same period of 2007)	**Primary interest rate** (p.a.)
First three-month of 2008	16.38%	8.75%
First six-month of 2008	20.34%	14.00%/

Source: General Office of Statistics, and State Bank of Vietnam, 2008

operations would lower interest rates, which in turn should make the economy move again. In other words, when rates cut have not taken full effect, it should be done more aggressively.

The money supply of an economy is illustrated by Dornbush and Fisher as equation (1).

$$M = \frac{1+cu}{re+cu}H = mm(i, i_D, i_R, cu, \delta)H \tag{1}$$

In which, mm is the money multiplier, a function of interest rate (i)¸ discounted rate (i_D), required reserve ratio (i_R), money/deposits ratio (cu), and rate of change in deposits (δ). Given a particular level of money base H, the money supply depends on the so-called money multiplier. Central banks normally intervene in money supply using three main instruments: money base (H) by open market operations, discount rates, and reserve requirement. The State Bank of Vietnam (SBV) can adjust monthly primary rate and fluctuation limit.

An expansionary monetary policy lifts full-employment output and raises the level of interest rate. At a given interest rate, more government spending increases aggregate demand. To meet such demand, productivity has to catch up with expectation of profit generation. Commodities market however is unable to accommodate as quick as money market; it usually takes some time to adjust the output level. A distinctive effect of fiscal policies is the overwhelming of public investments as apposed to private ones, the "crowding-out" effect. Due to limit of time and data, this study is not going to make any in-depth analysis of government spending and public investment efficiency.

2.2.1 Interest rates

Vietnam's interest rate moved gradually from a centrally planned regime to a more flexibly adjusted, and systematically liberalized one. Transformation in the banking system took place on March 26, 1988 with the separation of the central bank from commercial banks, establishing a *de jure* two-tiered system since October 1, 1990, under the Ordinance for the state bank and Ordinance for commercial banks, credit co-operatives and financial firms.

A process of interest rate liberalization started in 1996. Positive interest rate was kept for 5 years from 1996 to 2000 (see Table 2). It was explained by high ratio of positive interest rate to inflation rate [22, Ly, 2008]. Except in 1998, one year after the Asian

Table 2: Positive real interest rate in conjunction with Inflation: 1996-2000

	1996	**1997**	**1998**	**1999**	**2000**	**6/2008 (*)**
Positive interest rate	5.40	6.30	1.00	5.35	5.05	- 6.00
Positive interest rate per inflation	120	175	12	5350	6000	-30

Source: Department of Finance and Monetary, Ministry of Planning and Investment

(*): Estimation. Unit: in percent

crisis, the ratio was 11.6%, and 5,000% and 6,000% in 1999 and 2000, respectively.

A mechanism consisting of a prime rate with daily fluctuation limit has been used since August 2000 replacing the upper-limit control mechanism applied before. Key rates are announced every month by the central bank and/or when deemed necessary. In case of foreign currencies lending, commercial banks and credit organizations calculated lending rates in line with international markets and the balance between domestic supply and demand. This is the foundation for identifying an equilibrium exchange rate under PPP theory, which in turn forms a self adjustment mechanism [16, Vuong, 2003]. As of May 2001, SBV started to provide loans in foreign currencies. Since May 2002, negotiable interest rates have been applied in credit activities.

Facing chaotic conditions on stock markets and a rocketing inflation in early 2008, SBV tightened its money supply. Since mid January, reserve requirement has increased by 1% for the Vietnamese Dong and foreign currency deposits with demand and up to twelve-month deposits. Refinanced rate doubled from January to June (15% p.a. on June 10, 2008). The central bank's discount rate was raised to 8.5% as at end of 2007, to 13% since June 10. In the middle of 2008, SBV adjusted prime rate to 14%p.a.. Credit institutions were then allowed to provide loan at interest rate of up to 150% of prime rate causing the highest lending rate to 21% p.a.. It is noted that in this period, short-term rates were as high as or even higher than longer term rates.

Table 3: State Bank of Vietnam's monetary adjustment:
First half of 2008

Date	Instrument	Adjustment	Legal document
16^{th} Jan., 2008	Reserve requirement	Less than 12-month deposits: An increase from 10 to 11%	187/2008/QĐ-NHNN
30^{th} Jan., 2008	Refinancing rate Discount rate	7.5%p.a. (+ 1%) 6%p.a. (+ 1.5%)	306/2008/QĐ-NHNN
1^{st} Feb., 2008	Ratio of securities lending Basic interest rate	Outstanding of commercial paper discount and securities lending is not allowed to exceed 20% of chartered capital of credit institution 8.75%p.a. (+ 0.5%)	03/2008/QĐ-NHNN 305/2008/QĐ-NHNN
13^{th} Feb., 2008	Treasury bill	Commercial banks have to buy VND 20,300 bln. of Treasury bill. Interest rate: 7.8%p.a.. Issue date: 17^{th} Mar., 2008	346/QĐ-NHNN
21^{st} Mar., 2008	Open market operations	Inject VND 33,000 bln. into circulation within one week	Vietnam Economic Times
16^{th} May, 2008	Rules on interest rate management mechanism	Credit institutions are able to set their own deposit and lending rates in VND within the limits of 150% of the basic interest rate	16/2008/QĐ-NHNN
10^{th} Jun., 2008	Basic interest rate Refinancing interest rate Discount rate	14/%p.a. 15%p.a. 13%p.a.	1317/QĐ-NHNN 1316/QĐ-NHNN
26^{th} Jun., 2008	Treasury bill	Increase the interest rate of 17^{th} Mar. Treasury bill to 13%p.a. (+ 5.5%)	1435/QĐ-NHNN

Source: © *www.asset.vn database*

In this period, open market operations were conducted in two opposite directions, representing a mix of tightening and loosening monetary policies, but did not change the interest rates. In the third week of Feb. 2008, SBV pumped VND 33,000 bln.(equivalent to more than USD 1.9 bln.) to circulation. However, commercial banks continued raising borrowing rates. An issuance of VND 20,300 bln. treasury bill was announced in mid-February and implemented a month later. Since interest rates kept increasing, it was really difficult to measure any effect of such withdrawal. In June 2008, borrowing rates of commercial banks headed for maximal lending rate (detail in Table 3). Effects of open market operations in time of inflation suggested a hypothesis of existence of liquidity trap in the credit system. If it is ever proved, further increase of interest rate tools is a rational solution in stabilizing currency market.

2.2.2 Foreign exchange

Positive growth rate resulted in higher demand for money, and with exogenous supply, excessive demand pressure is only released when prices lower and foreign exchange rates increase [23, Mac Donald, 2000]. Contribution of exchange rate to growth can be determined by Mundell-Fleming model as in equation 2.

$$Y_t^d = \alpha(s_t - p_t) - \beta r_t \tag{2}$$

In which, Y_t^d is aggregate demand, s_t is nominal exchange rate, p_t is price level, and r_t is real interest rate expectation. Expanding monetary policy in this model could bring about long-term production expansion.

The real foreign exchange rate is considered one of the best tools to facilitate the economic growth while maintaining the economy's competitiveness and avoiding unexpected effects [11, Eichengreen, 2008]. The first and foremost lesson for fast-growing East Asian economies is to keep foreign exchange rate competitive. Turbulence of foreign exchange rate negatively affects export and investment. Although, foreign exchange policies cannot replace disciplinary labor force, high savings rate, or favored investment environment, a stable foreign exchange rate encourages effective reallocation of production resources at higher productivity.

The SBV has, *de facto*, pegged the Vietnamese Dong to US dollar at an annual proactive depreciation rate of 1- 2% (mainly to handle the difference in inflation between the two economies). In 2006 and 2007, the rate VND/USD tended to increase moderately. Within 24 months, commercial banks' average rate increased from 15,900 to 16,200 VND/USD, which was a favorable condition for macro economic environment. In the first 4 months of 2008, the rate decreased by more than 150 VND/USD to 15,959 in April. This unexpected appreciation of VND against USD triggered subsequent chaos in the forex market. The rate went up to 16,000 VND/USD in May, and later increased by 300 VND/USD, equivalent to 2%, in the following month.

In free markets,[4] the sign of USD appreciation appeared in March 2008 when difference between official rate (introduced and governed by the SBV) and free rate ranged from 150 to 250 VND/USD. On March 18, commercial banks proposed negotiable foreign exchange rate mechanism to the Foreign Exchange Department of SBV in order to deal with such widening gap.

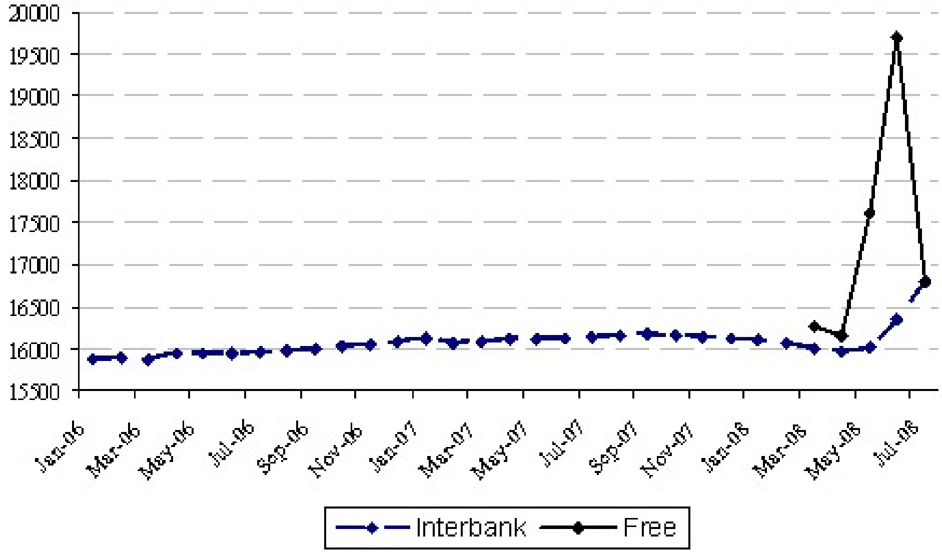

Figure 6: Inter-bank vs. Free market exchange rates

*S*ource: www.asset.vn. Unit: VND/USD

The USD/VND exchange rate in free markets kept going wild. In May 2008, the VND depreciated to almost VND18,000 against one dollar. In early June, dollar hit its high record of VND19,700 in Vietnam, before retreating to VND18,000 at the end of the month. The dramatic change in such a short time created scarcity of US dollar and difficulty in exchanging from VND to USD. In free market, exchange rates vary in every transaction. The difference between buying and selling price is quite large, from VND 200 to 300 for one dollar. Notably, a survey by www.asset.vn on June 19, 2008 showed the spread even jumped to VND 1,000 (see Figure 6). Wide spread suggests that market participants lose sight on what is happening next and no clear expection is formed.

In a stabilizing effort, SBV raised inter-bank exchange rate by 2%, from 16,139 VND/USD to 16,461 VND/USD on June 11, 2008. Prior to that day, on June 6, 2008 aggressive administration measure had been applied aiming at halting free exchanging activities between VND and USD (see Table 4). Under exchange rate pressure, on June 27, 2008, the Governor of SBV widened fluctuation limit to ±2%. Foreign exchange

[4] Free foreign exchange market sometimes is called "black market." It consists of privately-run foreign exchange transaction tables, jewelry shops, and the likes. According to SBV's statistics, in June 2008, there were 3,591 foreign exchange tables in Vietnam. Of which 921 were in Hanoi, and 1,219 in Ho Chi Minh city.

Table 4: Fluctuation of exchange rate (VND/US$)

Date	Bank (negotiable)		Free market	
	Buy	Sell	Buye	Sell
28^{th} Mar., 2008			16,165	16,260
25^{th} May, 2008				17,150
27^{th} May, 2008 (morning)				17,2
27^{th} May, 2008 (lunch)			17,300	17,600
4^{th} Jun., 2008 (morning)				17,600
4^{th} Jun., 2008 (lunch)				17,700
4^{th} Jun., 2008 (afternoon)				17,800
4^{th} Jun., 2008 (evening)			17,800	18,000
6^{th} Jun., 2008	**Prohibition against free market forex transaction**			
12^{th} Jun., 2008		17,600		18,000
16^{th} Jun., 2008			17,700	18,000
19^{th} Jun., 2008		19,500	18,700	19,700
20^{th} Jun., 2008	17,500	18,500	18,250	
24^{th} Jun., 2008		18,500		
17^{th} Jul., 2008		16,800		16,805

Source: © *www.asset.vn*

markets calmed down in July 2008 when rates were converging. On July 17, free-market even was less than official rate.

2.3 The stock markets

Since its debut in July 2000, the Vietnamese stock market made its biggest leap in the period 2007-08. The role of stock markets in macroeconomic settings is different from financial system. Stock market reflects business investment decisions. On the contrary, macro policies and models don't take investment decisions in stock market seriously; rather they notice its ability to reflect business cycle [12, Fisher and Merton, 1984].

Nevertheless, the development of stock markets is considered the engine for the whole financial system and economy [4, Caporale *et.al.*, 2004]. In stock markets, investors are able to diversify liquidity risks by investing in a number of projects. When an investor has trouble with liquidity, he can sell shares to other investors who are in strong financial condition. As a result, investment capital does not leave project/business for individual financial needs.

In a developing country, commercial banks loans are just for a handful of businesses and individual with specific requirements. Therefore, it is important to prioritize developing stock markets over banking liberalization in the first stage of transition to market economy [26, McKinnon, 1989]. Arestis, Demetriades, and Luintel (2001, [1]) conducted a survey in 5 developing economies on the relationship between stock market development and economic expansion. They concluded that efficiency of stock markets contributes to economic growth, but less than banking system does. In monetary aspect, development of stock markets provides effective instruments to implement monetary policies by issuing and buying back government's securities in liquid markets.

In the first 5 years, Vietnamese stock markets grew modestly. After the establishment of Hanoi Securities Trading Centre, number of listed companies in both markets has increased very fast since 2005. The year 2006 alone witnessed 146 new stocks, three times of the accumulated number of the previous 5 years. At the end of June 2008, there are 299 stocks and fund stocks traded on stock exchanges. Financial intermediaries have mushroomed since then. As of July 2007 there were 92 securities firms, 30 funds management firms, and 298,000 individual securities trading accounts, of which 7,000 were of foreigners.

The upward trend of Vn-Index was preserved from second half of 2006 to first half of 2007. Vn-Index was recorded with 4 digits on January 17. Then it recorded 1,171 on March 12 (see Figure 7).

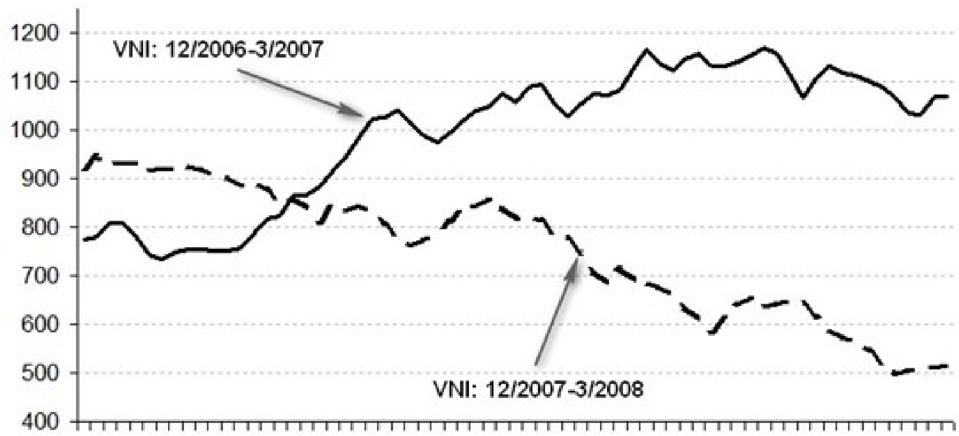

Figure 7: Fluctuation of VN-Index, 2007-08

*S*ource: www.asset.vn

Achievements in 2006-2007 were wiped out by the downturn in 2008. The market composite was at bottom of 395 on June 4, 2008. The reverse trend of stock markets in the first month of 2008 made investors, especially individual, panic. When the markets were glorious, many borrowed to buy stocks with an expectation of making quick profit. People try to raise sufficient funds from friends, relatives, and banks. As a result, when stocks went down, financial obligations burdened an unaccountable number of people. Pessimistic and even extreme behaviors were understandable. But, the appearances of instability of the nation's financial system as well as massive conflicts of interest were being clearer with a great concern [6, Pham and Vuong, 2008].

The market turbulence affected not only financial asset market but also real estates and credit ones [28, Nguyen and Vuong, 2008]. The boom of stock markets in 2006 brought investors huge profits. These profits went to real properties. In the first quarter of 2007, the demand for real estates surged. Housing prices rocketed in the second quarter of 2007. Even when stock markets loomed in later half of 2007, real estates still opted as favorite alternative of investors. Big losses appeared in early 2008 when both markets drowned in troubles, facing serious liquidity and solvency problems.

Growth of stock markets encouraged commercial banks to provide more loans to financial investors. Financial assets, later, were mortgaged in commercial banks for further bet on the game. To guarantee safety and stability of the banking system, on May 28, 2007, SBV requested that loans for stock investment not exceed 3% of total lending. Although, markets responded differently with tight credit condition, its effect on slowing over excitement in stock trading activities was recognized.

2.4 Foreign capital flows

The economic liberalization has brought fruitful results in foreign trade activities with increasing import and export turnovers. Nevertheless, trade deficits have been increasing since 1999. Foreign currency reserve has been built up mainly on flows of FDI and FPI in recent years.

Table 5: Balance of Payment 2004-2007

	2004	**2005**	**2006**	**2007**	**2007 (*)**
Current Account	**- 1.6**	**0.2**	**0.2**	**- 6.4**	**- 9.0**
Goods & Services Balance	- 3.2	- 2.0	- 2.8	- 9.0	- 12.6
Investment Income Balance	- 0.9	- 1.2	- 1.4	- 1.6	- 2.3
Net transfers	2.5	3.4	4.4	4.2	5.9
Capital Account	**2.6**	**1.9**	**4.1**	**15.2**	**21.4**
Net FDI	1.9	2.0	2.4	4.0	5.6
Other financial flows (net)	0.7	- 0.1	1.7	11.2	15.8
Change in Reserves	**+ 1.0**	**+ 2.1**	**+ 4.3**	**+ 8.8**	**+12.4**

Source: IMF, www.asset.vn; (*) percent of GDP; Unit: VND bln.

In 2007, Vietnam's trade deficit went up three times that of 2006 or equalled to 13% of GDP. About 40% of capital inflows (accounted for more than 21% of GDP) were used to offset the deficit of current account. In previous years of 2005 and 2006, most of capital account balance was transferred to foreign reserve. When capital account surplus doubled from US$ 1.9 to 4.1 bln., the nation's foreign currency reserve moved up in a possitive correlation, from US$ 2.1 to 4.3 bln.. By the end of 2007, the SBV bought US$ 8.8 bln. surplus to build up the national reserve.

It is noted that in the 1980s, grants of Soviet Union played important role in Vietnamese economy. However, this source reduced sharply in 1990s and was replaced by ODA form Northern European countries namely Sweden, Denmark, and Finland. International political reasons prevented development organization such as World Bank, UNDP, and IMF from directly financing Vietnam's economy until 1993. International donors focused on technical assistances and capacity building not financial aids during 1989-1992. In this period, annual ODA was less than 1% of GDP.

3 A comparative analysis on 1991-92, 1997-98, and 2007-08 sub-periods

Since the kick off of its extensive economic reform, Vietnam experienced trouble times in periods of 1991-92, 1997-98, and 2007-08, when similar signals of lower growth, smaller investment and consumption, higher inflation, and lack of employment were observed. However, macroeconomic fundamentals unvailed distinctions over the periods in terms of source of problem, degree of complicatedness and effects of macro policies [5, Pham and Vuong, 2008].

3.1 Vietnam's macroeconomic traits

Each period of development has its own distinct features (details provided in Table 6). Macro remedies therefore vary. In 1997, financial disorder led to unexpected movement in confidence of economic growth in East Asian countries (Radelet and Sachs, 1998, [27]; Marshall, 1998, [7]; Chang and Velasco, 1999, [25]). Misaligned macro policies and economic structures (Corsetti, Pesenti and Roubini, 1998, [13]; Dooley, 1999, [24]) were considered two direct causes. To deal with financial difficulties, the Vietnamese government expanded the national money supply. Interest rate cut helped promote investment and consumption. The local currency (VND) depreciated by 17% within 12 months. A weak currency supported exports of Vietnamese goods.

Table 6: Vietnam's macroeconomic traits
over the subperiods of 1991-92, 1997-98, and 2007-08

Criteria	**Content**		
	1991-92	**1997-98**	**2007-08**
Growth	7% (average)	1993-1997: 9% (average) 1998-2000: 7-8%	2002-2007: 7.9% (average) 6/2008: 6.5%
Inflation	High: 67.5% (1991) Sliding trend	1996-2000: deflation Positive interest rate: 4.6%p.a. (1996-2000)	Increasing. 2007: 12.6%. First five months of 2008: 19%
Interest rate	Maintaining positive interest rate to control inflation	Reducing discount rate: 0.05%/month lower than re-finance rate Reducing re-finance rate by 0.4% (Sep. 4, 1999) Difference between borrowing and lending rates: 4.2%p.a.	Increase re-finance rate by 1% (Jan. 30, 2008) Increase discount rate: 1.5% (Jan. 30, 2008) Increase primary rate: 14%p.a. (Jun. 10, 2008) Interest rate limit: ± 150% primary rate
Exchange rate	Start settling in hard currencies (USD. . .)	Vietnamese dong devaluated 17% within 12 month by three adjustments	Exchange rate reduced in 2006-07 then Vietnamese dong sharply devaluated in first half of 2008. Gap between bank and free market exchange rates reached 20 percent.
Foreign investment	Small FDI	FDI played important role	Foreign inflows boomed.

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continue			
	Small ODA Soviet Union grants stopped	Sharply reduction of foreign inflows due to Asian financial crisis.	FPI exceeded FDI in 2007 (three times higher)
Stock market	Not available	Not available	Important market in the financial system. Inter-connection with monetary and real estate markets (Vuong, 2008,[28]) Large socio-economic effects
Integration	Soviet bloc	Region: ASEAN (1995), AFTA (1996), APEC (1998)	Global: US-BTA (2001), WTO (2007)

The situation has in reality been very different in 2008. The red-hot stick price index forced SBV to watch out for possible credit crisis, and to exercise a tight monetary policy with all its weapons. The fight against inflation turned out to be more challenging than what people had thought at the beginning of the problem. Primary, discount, and re-finance rates were all set higher. The central bank also tried to be active on open market operations. But these attempts were mostly in vain. International financial turmoil, rocketing oil price, and dynamic variation of gold exacerbated the situation in Vietnam.

The 1997 Asian financial crisis caused a sudden stop of FDI capital flows. A large number of projects and serious project leads had to settle tardily or never happened later. However, the majority of Vietnamese partners contributed land, buildings or labors to business pursuits. Therefore, delays in projects just meant that those assets had not come into value creation process rather than putting businesses under financial distress.

Nonetheless, Stock market turmoil in the first half of 2008 shutdown an important fund raising channel. Unlike 1998, now many firms in Vietnam having enjoyed 2006-07 handsome capital surplus, started moing in more capital intensive projects/industries; which should never have been their strength. They faced insolvency as most of their “money” stayed with under-construction projects. Moreover, most investment decisions had been made well before any real consideration of feasibility, and in many circumstances seasoned equity offering meant to build up the business founders’ wealth, and they had nothing to do with the concept of feasibility. Thus such projects were very low feasible and commercial. Commercial banks became the only funding source for short-term liabilities. But they themselves were facing liquidity troubles. Second quarter of 2008 experienced a fiercer interest rate competition among commercial banks.

In 1997-98, company sizes were modest. A survey on 12 leading small and medium-sized companies in different industries showed that capital needs and asset just stopped at some millions US dollars [15, Vuong, 1997] (see Table 7). The average need for capital was $1.3 million; asset was $2.1 million. After 10 years, the existence of companies with VND hundreds-of-bln.s-asset worth and bln.s-dollars projects was not astonishing. What made this difference? With greater sizes, have competitiveness and value creation capabilities increased correspondingly? (Vuong, 2007, pp. 42-43, [17]).

3.2 A plausible reasoning on causes and effects of the financial storms

There have not many studies on inflation-growth relationship in Vietnam. In May 2008, The Central Institute for Economic Management (CIEM) released Vietnam Economic Report 2007 and forecast 3 scenarios for 2008. In April, Asian Development Bank also predicted the growth rate and inflation of 2008. The World Bank, IMF, JETRO... also made their own forecasts and expressed confidence about Vietnams potential growth in the long run. These considerations however did not place the focus on the relationship

Table 7: Capital needs and asset base of SMEs, 1997

Industry	Asset	Capital needs
Electric utility	1.1	0.4
Plastic	2.0	1.0
Jewelry	4.0	1.5
Fan production	1.2	1.2
Wood furniture	5.0	4.0
Paint/Chemistry	0.5	0.4
Seafood	0.8	0.8
Average	2.1	1.3

Source: Vuong, 1997, [15]. Unit: million US$

between growth and inflation. Lack of capabilities of foreseeing near-term changes has lately led to these policy-advisory agencies' migraines.

While the excessive money supply generated inflation in Vietnam, exogenous price turbulence also contributed to the surge in prices. It is useful to separate effects of money supply expansion on the demand side and those of exogenous price shock on the supply side in order to identify causes and effects of inflation. But this approach faces difficulties in obtaining reliable economic data in Vietnam.

In comparison with period 1997-1998, monetary policies in 2008 was supposed by and conducted intensively. From 1997 to 1999, in order to help businesses get out of difficulties caused by the regional financial crisis, monetary policies were loosened with positive real interest rate. In 2008, higher costs of capital and manufacturing inputs pressed on businesses. Commercial banks raised interest rates on deposits partly because of liquidity troubles. This can be resulted from previous low-quality loans, mostly in housing and financial investments. Limited statistics prevents the study from investigating commercial bank performances further, at this point in time.

Period 1997-1998 witnessed three corrections of exchange rate in July 1997 (average 11,690 VND/USD), February 1998 (average 12,664 VND/USD), and August 1998 (average 13,175 VND/USD), and the result was a 17-percent decrease in VND/USD rate (World Bank, 1998). Although, Vietnamese dong was also devalued, the target of these corrections was different from 2007-08 devaluation. In 1997, a weak VND aimed at enhancing competitiveness of Vietnamese exports. In 2008, the efforts were to strengthen the public and corporate confidence in the sustainability of banking and credit system, satisfying demand for foreign currencies of the economy.

Capital mobilized through stock markets and large capital surplus are sources for businesses to expand their production capacity, and even to move to other industries, including banking, finance, securities, and real properties. The optimism, expressed by purchase action of stock investors, over economic prospects allowed issuers to mobilize equity capital and even seek for subtaintial capital surplus in greenfield (risky) projects. Yet then there were higher risks as a larger volume of stocks was traded on OTC market.

This featured the difference between 2007-08 turmoil and economic situation in 1997-1998.

When there was no existence of stock market, foreign capital mainly flowed into Vietnam through FDIs. In period 1992-1997, FDI made up from 5 to 10 percent of annual GDP. Another way of investment has been made possible recently through foreign portfolio investment (FPI). About US$ 700 million of FPI managed by 8 investment funds was palced on Vietnam's nascent capital markets in early 1990s. However, lack of investment opportunities, small scale of markets, low liquidity, and financial crisis in 1997, had strayed the capital flows away from Vietnam. Not until 2005 when stock markets sent out good signals, did international investors get back in Vietnam [10, Tran and Vuong, 2008].

Increasing FDI capital flows and strong portfolio investment are major differences between period 2007-08 and 1997-98. The financial crisis in 1997 attacked banking-credit systems and created massive capital-flight in East Asian nations. Big FDI investors to Vietnam came from neighboring countries. And they also suffered immediate shortage of cash. Thus, investment processes were stagnant.

4 A note on further research needs

The complexity of economic downturn in 2007-2008 increased as Vietnam upgraded from regional to a global game. The US. sub-prime mortgage crisis sent a far-reaching signal to Vietnam, but commitments to trade, and investment liberalization caused direct effects. The present situation has been far more complicated due to not only the increasing number of economic players but also greatly different structures and sophistication of transactions. New concepts were introduced such as public company, portfolio investment, merger & acquisition etc. The global integration game also gave rise to the public's awareness of branding, intellectual property right, business communications, and corporate governance. Most of these had not been in place before the turn of the century.

4.1 Cautious observation

The world economic machine is running at high speed. Vietnamese economic agents and indices move incessantly. Cautious observation and focus on core factors of the economic system should be of great importance.

In the period 1995-96, China- the fastest growing economy in the world with institutional similarity to Vietnam- faced macro problems namely the depreciation of Yuan, accelerating inflation... which had been settled by the Chinese government's bold and decisive steps of removing non-profitable small banks and cutting inefficient governmental spending. To this end, China built up its financial strength and competitiveness, a bold move before its entry into WTO in 2005. It should be noted that the economy has grown up incredibly since the abandonment of the centrally-planned model and moving closer to macro management of well-developed economy.

Vietnam is now facing similar problems of increasing interest rates, price-inflated manufacturing inputs, and limited capabilities of managing resources efficiently. Consequently, a number of non-profitable businesses will disappear. A well-designed bankruptcy law should accelerate the filtering process and facilitate start-up of new businesses. Negative perception of business people should be changed while policy makers and economists continued their search for a sustainable economic model. Freedom to business doing and value added creativity should play a pivotal role in such process.

4.2 Super power of the banking system

The history of Vietnam acknowledges super power of the banking system, now mainly comprising of state-run and joint-stock commerical banks. Even when stock markets were the most bullish, this position still remained. Bank credit is apparently an important factor that drove the nation's stock markets up significantly. But that factor also exposed the financial system to a much higher volatility and vulnerability. Naively, tight credit policies on securities lending were strongly opposed by stock market players. A healthy banking system ensures stable corporate financial performances.

Performance and operation of the banking system should be managed highly carefully. Upgrading risk control, building credit rating system, applying modern technology and seeking for optimal banking operations are encouraged. However, in present days, the first and foremost task of banks is to exist and get over the credit crunch. Authorities are responsible for difficult jobs of supporting commercial banks operate properly and prevent the system from a spill-over effect. Moreover, Vietnamese people and government should well understand that although the banking system follows market rules of supply-demand-price, it should run for the benefits of society not small group of people (Song, 2007,[19]).

4.3 Roles of information and communication

Technology and communication infrastructure of 2007-08 outruns period 1997-98 not to mention period 1988-92. It provides people with wonderful and plentiful information at reasonable costs. The quality of information becomes critically important when quantity booms. Lack of research capability, and existance of asymmetric information are negative taxes. People have to pay such taxes but money goes into vault of speculators, not the government. Ensuring information accessibility, accuracy, and credibility is a must to communication systems and the media.

A strong economic research and forecast capability provides reliable information and knowledge. In Vietnam, the voices of government institutions are the most important signals to markets. However, publishing research results and providing reliable information have not been major functions of Vietnamese top management institutions such as the State Bank of Vietnam, the State Securities Commission, and the Ministry of Finance. In the current course of transition, authorities prefer to order and to supervise implementation of central government decisions.But there has been apparent motivation for the government to shift this *modus operandi* to engaging market participants and facilitating trustworthy information at all levels. Governance should shift from controlling to a research-information-communication-promotion market forces mechanism.

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