# The Economic Growth and Policy Implications in Vietnam

# Bui Trinh<sup>1</sup>, Nguyen Viet Phong<sup>2</sup> and Binh Phan<sup>3</sup>

#### Abstract

After a long period of high and stable economic growth, the Vietnam's economy is experiencing difficult time that the inflation is considered as the main reason for. To solve the situation, the Vietnam's government has continuously introduced series of aggregate demand management policies relating restraining the inflation or boosting the economic growth. This paper uses the quantitative methodology to analyze the relationship between the growth and the inflation in Vietnam and the input - output system by W. Leontief to analyze the periodical structure of the economy. Hence it would be possible to identify the cause for the economic growth and raise some implications to the policymakers.

#### JEL classification numbers: C13, C32, C51, G10.

**Keywords**: Economic growth, inflation, economic structure, consumption price index (CPI), GDP, input-output system.

# **1** Introduction

At the end of the 80<sup>s</sup> of the twentieth century, when the government conducted "Doi Moi" reforms, Vietnam made a shift from highly centralized planned mechanism to the socialist-oriented market economy. Thanks to such transformation, the economy has gained significant achievements, particularly the high growth and improved living standards. Especially, many reforms during the period of 2000 - 2006 in the spirit of supply side management such as the allowance for direct export, the passage of the Vietnam Business Law 2000, the release of barriers on the establishment of enterprises, the privatization of state owned enterprises, etc. During the period of 2000 - 2006, the average economic growth rate was about 7.7% and the inflation was nearly 5%. From 2007 to 2012, they changed to 6.2% and 13% respectively.

<sup>&</sup>lt;sup>1</sup>Corresponding author, private consultant.

<sup>&</sup>lt;sup>2</sup>Vietnam General statistic Office.

<sup>&</sup>lt;sup>3</sup>Deposit Insurance of Vietnam.

Article Info: *Received* : June 11, 2013. *Revised* : July 6, 2013. *Published online* : September 1, 2013

One of the important reasons for such decline is the adjustment from supply side management policy to the aggregate demand management policy. This change, together with the booming of the resources after the reforms, the potential risks of imbalanced economic structure in the past, the increasing trend of ineffective investment and the participation in the World Trade Organization (WTO) has expose a more and more deviant economic structure.

In recent years, the slowing down growth and inflation has been regarded as the barrier against the growth. The issue of growth and inflation has always troubled policymakers, but is the price the main reason for such situation?

This paper attempts to use the quantitative method to analyze the relationship between economic growth and inflation. Besides, some theories by Keynes and Leontief are also used to find the answer to some extents for the problems. This research will base on the analysis of the production factors and the efficiency of investment to identify the effects on the growth and deliver some recommendations to policymakers.

# 2 Methodology

#### 2.1 The Relationship between Economic Growth and Price

In theory, the change of price affects the growth both positively and negativelyand the increase of price will promote the growth to some extents. According to Keynesian economics, the relationship between growth and inflation is directly proportional and the Tobin's experimental research (1965) also proved the same. However, a sharp change of price will lead to inflation, then the inflation would be considered as the "inflation tax". Considering the appearance of the problem, we can see the imbalance of money and commodity. When there is a rapid GDP growth that depends mainly on capital, it may lead to inflation and the relationship between inflation and growth may be proportional or inverse due to the conditions of each country. Some recent research by Fisher (1993), Bruno and Easterly have shown that in some countries the relationship between growth and inflation is inversed. Thus, we can see that in a nation the impacts can be different due to the sudden change of policies in both supply and demand sides.

There are several researches on the relationship between GDP and inflation, recently the Variance Decomposition Method basing on Vector Autoregressive Model (VAR) is often used to analyze the relationship between GDP and inflation. This method shows that inflation and GDP are in inverse directions.

Whether GDP and inflation are in proportional or inverse directions depends on the real situation of each nation. In Vietnam, where the socialist oriented market economy is applied with no precedents, many market disciplines are not fully followed, the competition is incomplete and policies are mainly administrative commands.

#### 2.2 Causes of the Changes of Price

The increase of price in the economy depends on 3 factors as follows.

1. Increase of price due to the monetary factor: the relationship between money and commodity in an economy is balance. If there is an imbalance in the relationship (the over-amount of money in the economy exceeds its absorbing capacity, which means exceeding the value creating capacity of the economy), this will lead to the increase in price. This is called inflation.

Cost-push inflation: the production expenses of the economy depend on many input factors. The rises of input prices (e.g. petroleum, electricity, labor cost will lead to the increase of the general price of the economy.

The change in the import factors: for a nation where imports incur due to the impossibility of the domestic production, when the import price increases (because the exporters raise their prices or the domestic money value decreases) the price of domestic productions will increase too. The increase of general price is usually caused by the increase of import price but import sometimes does restrain the increase of price.

2. Increase of price due to the economic and investment effectiveness: when the inflation occurs in Vietnam, the monetary factors are claimed to be the reason, the monetary instruments are therefore the first thought of and fully applied by Vietnam's economic experts and policymakers. However, it seems to be effective only in short term as the basic reason for that is the low effectiveness of the production and investment. In the period of 2000 - 2005, 10 dong investment created approximately 5 dong value added, it was only 3.5 dong in the period of 2006 - 2011 and an amount of money got into the market due to the ineffectiveness and it in turn destroyed the money – commodity balance and the inflation occurred.

3. Increase of price due to the structure of the economy: the economic structure is the structure of the sectors in supply side and the structure of factors in demand side; aggregate demand includes the intermediary demand (demand for production) and final demand (including final consumption, investment and net exports). Deflecting economic structure would weaken the supply side and increase the demand factors improperly. According to Keynesian theory, when the supply is weak, any increase in final demand would not stimulate the supply but increase the price. For example, the increase of public investment in the procurement of vehicles, office construction of public agencies, reconstruction of sidewalk and roads etc. would not induce both in terms of space (other sectors of the economy) and time. This not only leads to the conflict of fiscal and monetary policy but also causes other serious consequences.

If we consider the relationship between GDP in supply side and demand side using the Keynes – Leontief function, we can see that an increase for one unit of demand would lead to a change in the supply side, but when the supply is weak, any increase of demand side would only lead to the increase of price. The relationship was mathematized as follows.

$$GVA = v. \left(I - A^d\right)^{-1} \cdot \gamma^d$$

In which: GVA: Gross value added (GDP = GVA + indirect tax); V: Value added coefficient; A<sup>d</sup> is domestic direct input coefficient matrix; and

 $Y^{d}$  is domestic final demand matrix.

When both supply side and demand side are weak, the economy will fall into a spiral of the inflation and the recession. The next spiral is smaller than the former ones and afterward is the period of deflation and recession.

# 3 A Case Study in Vietnam

## 3.1 The Relationship between Economic Growth and Price in Vietnam

From the end of the 80s to the middle of the 90s of the twentieth century, the Vietnam's economy was "released", the economic growth was high due to a very low background in the past. After the year 1995, the country's economic policies were relatively stable. In the period of 1995 - 2000, GDP was stable at high levels, inflation was restrained around 10%. In the period of 2000 - 2006, there were remarkable new steps in economic policies such as allowing the enterprises to do import and export directly, approving the Vietnam Business Law in 2000 which release barriers in the establishment of enterprises, boosting the privatization of state enterprises, etc. The inflation in this period was low (approximately 5% in average) and GDP was stable at high levels in comparison to other regional countries (approximately 7.7% in average).

In 2007, the participation of Vietnam in the WTO with strong commitments disclosed the weaknesses of the economy. Besides, the over-assessment of the global crisis in Vietnam made the Government introduce the huge stimulus along with the improper management, which had negative impacts on the economy. The inflation was increased sharply to 23% and the instability appeared then. Since then, Vietnam was bogged with total demand management policies from restraining the inflation to boosting the economic growth.

In 2013, CPI was at very low level or even below zero (in the first four months of 2013) but the economy was in a very difficult situation, announced GDP is much lower than expected (estimated at 4.89%). In fact, according to the information from a meeting of the Vietnam's National Assembly, 65% of enterprises have reported loss and the rest have gone bankrupt or nearly bankrupt, the economy might not grow. Along with the "deflation" and GDP as reported, that might be a sign of serious "sickness". This demonstrates that low inflation was not really because of the effectiveness of the inflation restraining policy but because the purchasing power was too weak and the economy was deteriorated seriously. During a long period of time, the production has been slacked leading to the decrease of workers' income, the decrease in the demand side seemed to be a certainty.

Therefore, we can see that in Vietnam where the market economy and the competitive environment are not yet complete, policies are based on administrative commands, there are no regulations for the relationship between GDP and CPI.



Source: Statistics Year Book, 2011and authors' calculations Figure 1: Development of GDP and CPI in 1990 - 2012

**3.2 Relationship between 5 Price Indexes** (Consumer Price Index (CPI), export price index, import price index, GDP price index and transportation price index).

When we consider the relationship between the 5 price indexes, we can see that:

1. First, CPI always increased slower than GDP price index at -2%; especially in the first quarter of 2012, it was -2.7%. Is it a paradox where enterprises were under great pressure for a long period of time as the input price rise along with the "inflation tax", leading to the decrease of GDP added value or even some enterprises had to accept loss (to sell products under their producing price). If there is no timely measure in the coming time, enterprises will suffer from downsizing, perfunctorily producing or going bankrupt.

2. Secondly, in 4 quarters of 2011, the difference between export price index and CPI is not much (quarter I: -2.9%; quarter II: -2.43%; quarter III: 1.33%; quarter IV: 1.04%). In the year of 2012, especially in the first quarter on 2012, the export price index increased only 4.5%, much lower than the CPI increase at 15.95%. The added value portion in Vietnam's export commodity is very low because they are mainly processing commodity. Is it true that: commodities for export are sold lower than the domestic price?

3. Thirdly, import price index in the first three quarters of 2011 had always increased slower than the import price. But in the fourth quarter of 2011, import price index was higher than the export price for 0.56%; to the first quarter of 2012, the number was 5.99% and 2.73% in the second quarter. This demonstrates the fact that the import price was increasing while the export value was decreasing. The added value from export was even lower than before. And whether the import price is a price stabilizing factor?

4. Fourthly, from the second quarter of 2011, the passenger transportation price has been always higher than the commodity transportation price. Especially in the first quarter of 2012, the passenger transportation price was 4.2 times higher than the commodity

transportation price. Together with the commodity and service retail volume as well as the IIP were steadily decreasing since quarter II -2011, is it true that the domestic enterprises were facing difficulties from both input and output of the production process?



Source: Statistics Year Book, 2011and authors' calculations Figure 2: Set of 5 price indexes and GDP in 2011 – 2012 (quarterly)



Source: Statistics Year Book, 2011 and authors' calculations Figure 3: Transportation price index in 2011 and 2012 (quarterly)

# 3.3 Comparison of some Macroeconomic Factors in 2000-2006 and 2007 - 2012

The ICOR (Incremental Capital - Output Ratio) coefficient is continuously increasing, from 4.89 during the period of 2000to 7.56 for the period of 2007-2012. While the contribution of TFP to GDP was 22.93% during the period of 2000-2006, it reduced to 6.44% for the period 2007-2012. Besides, if calculating the ratio between value added and gross output from the period 2000 till now, this ratio seems getting smaller. In 2000, for producing 10 units of gross output, it would create more than 4 units of value added; however in the current period, for producing 10 units of gross output, it would only generate 3.5 units of value added. Therefore, an amount of money is used to invest, but a little quantity of commodity is made in return, which would break the cash-commodity relation contributing to the increase in cost of domestically produced commodity.

Also, accumulation of the economy through spending indicators (saving) is falling. If the accumulation in the internal economy accounts for about 36% of GDP for the period of 2000-2006, it is less than 30% for the period of 2007 - 2012 while annual investment increasingly accounts for high proportion of GDP, which shows that the growing debt together with the in efficient use of it poses huge risks in long term.

	2007 - 2012 (%)	2000 - 2006 (%)
Total resources (supply)	100.00	100.00
Domestic product	81.16	79.25
Import	18.84	20.75
Total demand	100.00	100.00
Intermediate demand	48.12	42.99
Final demand	51.88	57.01
Consumption (C + G)	20.2	26.42
Gross capital formation	8.88	10.75
Export	22.8	19.85
Intermediary cost/Gross output	65	54
Added value/Gross output	35	46
ICOR	7.56	4.89
The contribution of TFP to GDP	6.44	23
Saving/GDP ratio	28	36
GDP growth	6	7.5
Investment/GDP ratio	40	38.5

Table 1. Some macro com	parison of the perio	ods of 2000 – 200	6 and 2007 – 2012 (based	l
on th	e supply and use ta	able, 2011 of Vietr	nam)	

Some of our previous calculations and researches also supported the above argument. For example, the power of dispersion of final demand on production and on the average output requirement in the period of 2006 - 2010 was much higher than those in the period of 2000 - 2005. This means that if the domestic production was effective and sustainable, the change of demand would have induced impact on production but if it was weak and ineffective, the increase of final demand would lead to the increase of price.

Also according to the above research, the power of dispersion of final demand factors, domestic demand, many sectors of production and export on import have increased by time from 1989 to 2007. It means that the ineffective investment will require the greater import. The results of a series of researches using ICOR ratio also proved that the effectiveness of investment at present is very low.

The calculation of economic spread and power of dispersion on import of 16 sectors shown that only two groups have economic spread index and power of dispersion on import smaller than 1, namely agriculture sector and agriculture product processing sector. These two groups should be key economic priority of Vietnam: Gross Domestic Product (GDP) and Gross National Income (GNI)

Recently, the assessment of economic situation is usually stuck with GDP index. GDP in Vietnam now is not only calculated but regarded as a concept of supply, meaning that it is a sum of added values of sectors in the economy and import tax (the value added as calculated by the statistics office of Vietnam include product tax) in the principle of permanent residence, for example for an FDI enterprises operating in Vietnam's territory in more than one year, all their added value would be calculated in Vietnam's GDP, so as the natural resource exploiting enterprise. Thus, in fact, the growth of scale and scope of GDP does not fully reflect the real situation of the economy. For example, the profit of a natural resource exploiting enterprise will be transferred back to its home country but still reflected in GDP of Vietnam. There are many aggregate economic indicators in the System of National Accounts (SNA) but in this paper, we would like to regard another indicator to reflect more accurately the economic situation, that is the Gross National Income (GNI). GNI equals to GDP adding capital income and subtracting the capital expense. If the expense is greater than capital income, the GNI will be smaller than GDP and vice versa.

In the year book of the General Statistic Office of Vietnam, there is not only GDP but also GNI, but unfortunately, no one (or just a few people) uses the indicator in their research or reports. This indicator reflects more accurately what the country actually gains. People compare the resources of the nation to the precious property (gold) left by the former generation for the later. However, the property was hidden so secretively that they had to hire another to look for it and of course have to pay for it. The exploited property, before subtracting the hiring expenses, will be calculated in GDP. That family can show to the neighbor the property found (GDP) but they actually gain only a part of it (GNI).

Tracking the data in 12 years from 2000 to 2011, we can see that:

1. The GDP scale in 2011 is 5.7 times bigger than in 2000 and the annual average was 16.2%.

2. The GDP after eliminating price factor in 2011 was two times greater than in 2000 and the annual average was 7.3%.

However, the GNI in the real price in 2011 grew only 5.5 times in comparison to 2000 and if we eliminate the price factor in GNI by reflecting the GDP deflator, GNI grew only 1.96 times and at annual average of 6.7% in the period of 2000 - 2011. Considering the two period of 2000 to 2005 and 2006 to 2011, GDP and GNI growth in the two periods

were 7.5% - 7.3% and 6.7% - 5.7% respectively. In 2000, the GNI/GDP ratio was 99%, it was only 95.27% in 2011; this shows that the money outflow is getting bigger and the net income from capital was getting significantly smaller.

Considering the capital expense paid to foreign investors at current price in 2011, it increased 14 times in comparison to the number in 2000 (while GDP grew for 5 times); the average net capital expense paid to foreign countries was 22% annually (while average annual GDP was 7.26%). Figure 7 shows that the capital expense paid to foreign countries (capital expense – income from capital) in 2000 - 2011. This number sharply increased from 2005 - 2011.



Source: Statistics Year Book, 2011and authors' calculations Figure 4: Net capital expense paid to foreign countries

In addition, although it is not complete because of the FDI sector, it is clear that FDI sector plays a main role in making the money outflow of the country greater, and Figure 8 shows the relevance of FDI sector to the money outflow.



Source: Statistics Year Book, 2011 and authors' calculations Figure 5: Comparison of capital paid out and FDI (Unit: billion dongs)

It shows that beside the perpetual trade deficit, the capital payment outflow should also be seriously alerted<sup>4</sup>. Is this a negative consequence of the overcall for foreign investment without a clear direction? Besides, people focus too much on GDP indicator but forget about a fact that what we actually gain is the GNI.

Along with high trade deficit, this is a key reason leading to the devaluation of Vietnam dong. It proves that the speed of economic growth makes little sense in reflecting the real situation of the economy. This is not only a problem of resource exploitation but also a warning for us to tighten the management of FDI to limit the increasing money outflow.

Decreasing GNI/GDP ratio (98.6% in 2000 to 95.27% in 2011) is also a reason for the saving ratio (source for investment) of the economy fell sharply especially from 2006 till now (from 36% to 29%). The entire domestic saving is a basic source for investment but the ratio of saving over investment decreased from 87% in 2006 to only 67% in 2009. It means that the ratio has decreased for 20 percent points within 4 years. And the most importance is that the investment over GDP ratio has not decreased and usually at about 40%. The general statement such as slowing down the growth speed in order to stabilize the macro economy is not appropriate, it should be precise of what to stabilize? The restructure of the economy should not be like a "jack fruit" but there should be an overall plan on the initial distribution and how to restructure according to sectors and ownership? How to carry out the income redistribution to avoid the disadvantage of the country?

<sup>&</sup>lt;sup>4</sup>For example, the entire of added value from oil exploitation is added to GDP according to the permanent residence principle, but when calculating the GNI, 50% of this value will be eliminated to the foreign investors.

# **4** Research Result and Policy Implications

# 4.1 Policy Implications for Vietnam's Economy

Apparently, Vietnam's economy seems to be on the right track with high economic growth, inflation restraint and industrialization-modernization policies. However, based on the aforementioned research, some big issues of the economy can be recognized as follows.

1. So far most experts and policy advisors in Vietnam have focused on short-term policies such as aggregate demand management and monetary issues to prevent the dramatic increases in price, hence oblivious of other factors in long-term policies. There is no wrong with the Keynesian aggregate demand management policy if there is a consciousness that it is only a short-term one, which cannot be constantly used. The continuous use of this policy since 2007 has put Vietnam's economy in the spiral of inflation and recession, which leads to the decline in demand and supply. Even the inflation has been only superficially solved despite the core reasons of low productivity, reducing investment and deviant economic structure. Whether the priority ranking for industry, services and agriculture sectors is proper? Should export be the main basis for promoting the economic growth? Some industries, which create social added value and careers while barely stimulate the export (e.g. agriculture and agriculture production), have been hardly concentrated on. Is it high time we paid attention to the supply-side policy to consider the supply and long-term economic policies?

2. Regarding public investments, most of them tend to focus on the areas that have no direct influences on production, spread too thinly and create little economic efficiency, for example the head-office reconstruction of government agencies, the rebuilding of pavement and road, purchasing cars, building parks etc. Such public budget spending may create a few jobs, reduce some inventory materials, raise some GDP temporarily (the second half and all year 2012) but seem to have negative effects on the next years' development instead. In 2012, the Government aimed at enhancing the public investment of the second half year (particularly doubling it) to promote production but this poses serious hazards subsequently. Despite the continuous high levels of public investment, they all seem to spread too much and unable to improve the social added values and living standards. Our research group recommends that the public budget should be used for infrastructure construction, education, healthcare and the rural agriculture.

3. The dependence of growth on capital instead of technology innovation and the inefficient use of capital may cause inflation. Besides, the enterprises' inaccessibility to capital due to monetary tightening and banks' high interest rates has led to the strong decline in aggregate supply, income and capital, hence caused adverse impacts on aggregate demand. The decline of aggregate demand therefore deteriorates the supply and the economy falls in the spiral of inflation and recession.

4. Relating the production and business sector, during the year 2011, the government implemented the monetary tightening policy to prevent inflation while ignored their situation, the main component of the economy. In 2011 and 2012, the number of enterprises that went bankrupt set a record in history. Most of them are private enterprises that contributed 48% to the national GDP. Meanwhile, the investment efficiency of state and foreign enterprises was very low. The ICOR index of private enterprises from 2006 to 2010 was about 4, while those indexes of state and foreign enterprises were 9.7 and more than 10 respectively. What would happen once those private enterprises get insolvent or

bankrupt and incapable of expending the production? The slack production will result in the drop of the total added value of the economy. Then the declining income and consumption will lead to another serious demand crisis, which seems so hard to end.

## 4.2 The Scenario for the Economic Growth in Vietnam

According to the SNA Principle that GDP is an indicator has following approaches:

(1) Expenditure approach

Total demand = Expenditure on production + Expenditure on final commodity and services

Expenditure on final commodity and services includes C, G, I, Ex, (-M)

(2) Production Approach

Total supply = Intermediate cost + Value added cost

Vietnam often estimates GDP based on the expenditure method. However, we can't accurately predict or estimate GDP in short term by using expenditure method Keynes – Leontief relation shows relationship of supply and demand

$$GVA = v. \left(I - A^d\right)^{-1}.\gamma^d$$

 $\Sigma Y = GDP$ 

GVA + Tax on products - Subsidies on Products = GDP

On the assumption that production efficiency (through intermediate cost/ value of production) in 2012 is equivalent to 2010. By using supply and use table of the year 2010, relationships among assumed expenditure approach categories are as follows:

	1 <sup>st</sup> Scenario	2 <sup>nd</sup> Scenario
GDP growth rate	5.16	4.5
Private Consumption growth		
included Government Spending	5.5	6
(C growth rate included G)		
Gross Investment Growth	1.5	2.5
Export Growth	17	15
Import Growth	6.5	6.5

Table 2: Scenario of GDP forecast based on expenditure approach factors

Two scenarios were calculated based on the assumption that production efficiency of the year 2012 is equivalent to 2010. If production efficiency is better, GDP growth rate could be higher. Less production efficiency could be lower GDP growth rate than the calculated above.

The research team also carried out forecasting GDP growth rate of the year 2013 by using expenditure method like in 2012. As a result, 2013 GDP growth rate could only achieve from 4% - 5% if total expenditure and investment efficiency are unchanged as compared to 2012. However, the problem is that whether investment contributions, especially investment of state-owned corporations on economic growth of 2013 onwards remain the same with 2012. One note that public investment of the second half 2012 on rebuilding

new headquarters of state agencies, purchasing vehicles, digging and paving the roadway pavement could directly increase 2012 GDP. However, this kind of public investment is not really effective.

Many studies show that one of the inflation roots is inefficient investment. According to Keynes theory, when the supply (production) is weak, any increase in expenditure does not support supply side but increase in price only. Therefore, in order to develop economy sustainably, Vietnam needs to restructure comprehensively in the right direction on both supply and demand sides.

In addition, both investor and consumer are cautious in spending which lead to difficulty in production expansion. The current economy is really tough on both supply and demand sides. Weak supply declines demand and decline in demand could not support supply growth. In this situation, increase in public investment would be contrary to the Government's objective of macro-economic stability.

One of the reasons causing inflation could be realized through the state administration relating to monopolies of stated – owned corporation in gas, oil, electricity field. Within a month, in August 2012, gas price has risen at 2.600 VND per liter. By calculating the impact of rising oil and gas price from SUT 2010 Table (updated version), the direct impact of price increase is 0.65%, indirect is 1.4% and the total of all impacts on production price is 2.05%. These impacts do not only increase in CPI which affect people living conditions but also consumption structure while income does not increase (or even reduce) because of production deadlock. This would lead to weaken consumer expenditure and start a downward economic growth spiral with the next spiral is smaller than the previous one.

Commodity price like gas and oil increase with the high tax rate and fee in Vietnam could weaken expenditure categories in the next production cycle, particularly, final consumption and investment. The high fee, tax, monopoly commodity price and inflation tax will decrease economy savings which is the fundamental to reinvest in the next economic cycle. Supply side is also weak. Therefore, if the rate of demand side increases over the supply side, it could not lead to high economic growth but cause high inflation. With all of these arguments, our research team proposes GDP growth rate in 2013 should range between 4% - 4.5%.

# References

- [1] Albert O. Hirshman, 1986. Rival views of market society and other recent essays. New York: Viking
- [2] Barro, R., "*Inflation and growth*", Federal Reserve Bank of St. Louis Review, vol. 78, (1996), pp. 153-169.
- [3] Bruno, M. and W. Easterly, 1998. "*Inflation crises and long-run growth*", Journal of Monetary Economics, vol. 41, (1998), pp. 3-26.
- [4] Bui Trinh, Kiyoshi Kobayashi, Vu Trung Dien, (2011) "Economic integration and trade deficit : A Case of Vietnam" Journal of Economic and International finance, Vol 3(13), pp 669-675, 7, November, 2011
- [5] Bui Trinh, Kiyoshi Kobayashi, Pham Le Hoa & Nguyen Viet Phong, "Vietnamese Economic Structural Change and Policy Implications", Global Journal of Human Social Science (2012).

- [6] Bui Trinh, Kiyoshi Kobayashi, Trung-Dien Vu, Pham Le Hoa & Nguyen Viet Phong "New Economic Structure for Vietnam Toward Sustainable Economic Growth in 2020" Global Journal of HUMAN SOCIAL SCIENCE Sociology Economics & Political Science, Volume 12 Issue 10 Version 1.0, 2012
- [7] Keynes M. K., 1936. The General Theory of Employment, Interest and Money. Palgrave Macmillan.
- [8] Nguyễn Việt Phong, Bùi Trinh, "*Kinh tế quý I nhìn từ chỉ số giá*", Thời báo kinh tế Sài gòn, (2012).
- [9] Tobin, J., "Money and Economic Growth", Econometrica 32, (1965), pp. 671-684.
- [10] Vietnam Business Law, (2000).
- [11] Wassily Leontief (1986)"Input Output Economics"New York Oxford University Press, 1986