PhD Research Proposal

The Transmission mechanism of monetary policy in Vietnam - Should it be improved by focusing on interest rate channel?

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Summary:

Monetary policy is one of the most important macroeconomic policies. Evaluating the timing and impact of its transmission mechanism on the economy is considered the main task required to achieve successful implementation. Yet the time lag and the level of impact as well as the importance of specific channel are significantly different from this country to another one. This could be seriously problematic in developing countries where institutional and practical development of the monetary policy is fundamental. In Vietnam, the transmission mechanism has not been proven effective and revealed with many shortcoming issues. This thesis aims to investigate this issue and gives some recommendations for improving Vietnam policy. To do this, the dissertation will be structured into seven chapters and Structure VAR analysis model is used as the main methodology. After reviewing the macroeconomic and monetary conditions, the effectiveness of the monetary transmission mechanism and especially the interest rate channel in Vietnam will be assessed by using empirical study. Reasons, necessary conditions and the main frameworks will be discussed in the next chapters. The final part of this thesis will propose a new policy regime for Vietnam which should be based on price or the interest rate.

Key words: macro economy, policy, monetary, transmission mechanism, interest rate channel, development, Vietnam.

I. INTRODUCTION

Monetary policy which has the functions to regulate the monetary conditions of the economy with the aim to stabilize price, create favorable conditions for economic growth and improve life of the community is one of the most important macroeconomic policies. Monetary policy has increasingly played a central role in the planning and implementation of national macroeconomic policies (Mishkin [1995]).

Monetary policy has major impacts on the macroeconomic variables of the economy, still might be accompanied by undesirable consequences. In order to achieve the goals of regulating monetary policy and avoid unexpected effects, the Central Bank will need to base on a full or proper assessment of the timing and impacts of the use of monetary policy tools on the economy, thus requiring comprehensive understanding of the transmission mechanism of monetary policy through main channels such as interest rates, exchange rates, asset prices, and expectations channel, etc and determination on the fastest and most efficient transmission channel of the economy from time to time.

Understanding the transmission mechanism is the determinant to answer a series of monetary policy questions (Mishkin, [1995]). Yet there are multiple different perspectives among economists on this issue, especially on the importance of each channel. Under different conditions or different development levels of financial markets, the impacts of monetary policy on the economy through each channel are not the same. In the developing countries, the monetary transmission mechanism is somewhat unstable and less efficient than in developed countries (Mishra et al., [2010]). In many cases, the responses of monetary policy have followed market movements rather than the orientation nature with the aim to short-term economic stability due to the underdeveloped financial system which is dominated by the unofficial sector. In addition, the study of the transmission mechanism of monetary policy in these countries is less focused, which makes it more necessary to study the transmission mechanism of monetary policy in a developing country like Vietnam, in order to help improve the planning and regulating of monetary policy, particularly to achieve long-term targets.

Issues of Vietnam's monetary policy transmission mechanism

Vietnam is a developing country which has the basic demographic characteristics as a large populated country with rapid population growth rate and mostly in working age while the average income per capita is at $ 1,300/person in 2012 (General Statistics Office of Vietnam). The structure and development of financial markets in Vietnam are at primitive level, especially the money market, bond market and stock market. There is also the lack of the standard economic yield curve. Therefore, nnder growth pressures, the conduct of monetary policy in Vietnam in recent years has the following main characteristics:

Applying monetary policy regime is mostly based on monetary volume. Since 1995, the State Bank of Vietnam has annually determined and received approval from Government on the indicators and orientations in the growth of the Total means of payment (M2) and Credit for the economy to be intermediary targets. In the period from 2000 to 2005, there was not much difference between the oriented objectives and actual results on M2 and Credit, only ranged from 0.5% to 5%. Yet since 2006, such gaps have been rising because Vietnam has increasingly integrated into the world economy. Additionally, external shocks including the Asian financial crisis in 1997, an increase in the price of oil and gas in the world market in 2007 and the global financial crisis in 2008 have had more impacts on the performance of oriented criteria. For example, the M2 targets were 20%-23% and 14%-16% in 2007 and 2012 respectively, while the actual growth rates were 46.12% and 17% respectively. Similarly for Credit growth indicator, the targets were 21%-23% and 15%-17% in 2009 and 2012 respectively, while the actual growth rates were 37.53% and 5.5%.

The actual Credit growth rate for the first 10 months of 2013 was 6.5% compared to the annual targeted rate of 12% (The State Bank of Vietnam - SBV).

Instrument system utilizes both direct and indirect instruments and attempts to make the switch to indirect instruments, but in fact relying on direct instruments to achieve short-term objectives. The direct instruments are regulation on interest framework to directly control the interest rate of the economy; Nominal credit (positively fell from 80% of the refinancing funds in 1999 to 40% in 2003 and 10% in 2012) and Controlled exchange rate trading band. The State Bank of Vietnam also set up and completed the mechanism with respect to indirect instruments such as required reserve, refinancing and rediscount instruments and open money market. Starting from 1999, it has been applicable under the form of discount and rediscount of valuable papers. Open market operations have been put into practice since July 2000 and continued to renovate and develop. Open market transaction amount/GDP and the volume of trading in open market compared to M2 have increased significantly from 0.43% and 0.96% in 2000 to 12.76% and 14.3% in 2006, and to 25% and 27 in 2012 (SBV).

The route of interest rate liberalization had been performed quite successfully by the State Bank of Vietnam between 1992 and 2008. From 6/2002 - 5/2008, there was an implementation of agreed interest rate mechanism for both foreign currency and local currency. However, the State Bank of Vietnam has applied the administrative mechanism specifying the interest rate ceiling for deposit and loan in order to control the economy's interest rate due to external shocks from 2008 until now. Especially under the impact of global financial crisis in 2008, local currency movement has been disordered. Trouble in liquidity of the credit institutions and a rapid increase of bad debts which were hardly handled, decrease in the operation effectiveness of the banking system, impacts of the cross-ownership status on the financial strength of credit institutions, the State Bank had to rely primarily on the drastic application of administrative tools and sanctions in order to ensure market stability, especially with the regulation on interest rate ceiling of deposit and loan. Thanks to this, the interest rate for loans has declined from 18-21%/year in 2011 to 9-12%/ year at the end of 2012 (SBV).

With the features mentioned above, monetary policy has helped to impulse the growth of Vietnam economy in recent years. Vietnam has continuously achieved high GDP growth in the period 2000-2010 with an average of 7.0% annually, which lifts Vietnam - a poor country in the early 1990s to a middle income country. Vietnam has also achieved the MDGs on poverty reduction and hunger elimination. Besides, Vietnam's per capita income has improved significantly over the past 20 years from 140 USD/person/year in 1992 to 1,300 USD/person/year in 2012 (General Statistics of Vietnam - GSO).

However, many problems still exist, especially in the implementation of the ultimate objective of monetary policy:

Firstly, inflation is complicated and becomes a worrying economic phenomenon in Vietnam. Due to the prioritized growth objectives or in other words, the growth is more focused in resolving the mutual relationship between growth and inflation, since the years of 2000-2010, the SBV has been trying to control inflation under the objectives set forth by the National Assembly. However, most of these have not been achieved. Since 2004, the inflation has tended to rise. At many periods of time, the inflation exceeds much more than the operation target and at two-figure level, particularly 19.9% in 2008 and 18.13% in 2012. Vietnam's inflation is much higher than other countries in the region (ADB [2011]). The prolonged inflation status makes a huge impact on Vietnam's economy than other countries in the region. There also has a positive and close relationship between the money supply and inflation, with a lag of approximately 12 months and credit growth in the economy seems to be more relevant to the consumer price index (IMF [2006]).

Secondly, there has been a decline in output. Since 2008, Vietnam's GDP growth has fallen from 8.5 % in 2007 to 6.3 % in 2008 and 5.3 % in 2013. Current balance continues deficit, although it has been improved (-11.8 % of GDP in 2008, -6.2 % of GDP in 2009 and -4 % of GDP in 2010 (ADB [2010]). Besides, exports and foreign investment have been affected by the global financial crisis. There have been many changes in financial market, particularly the budget deficit rises highly, and the investment efficiency is low. All these factors create macroeconomic instability and decline of confidence in the conduct of monetary policy of the Government and the State Bank of Vietnam.

In addition, the transmission mechanism of monetary policy has not been formed with many shortcomings in interest rate management. The system of the ultimate targets, intermediate targets and operational targets is not clearly defined. Also, the relationship among targets is not tight enough and lacks of empirical evaluation on the transmission mechanism of the monetary policy. Additionally, regulatory role of the interest rate of the monetary policy tools is now very limited. The State Bank has not selected the mainstream interest rate and has not built an effective method of determining the types of interest rate, including the refinancing interest rate, rediscount interest rate, open market interest rate, and basic interest rate to ensure the close the relationship among administered interest rates, Treasury bills' interest rates and the market interest rates. Thus, the State bank's interest rate movement hardly affects market interest rates and the interest rate liberalization cannot be performed.

Moreover, the level of international integration of Vietnam is increasingly deeper. Apart from joining WTO in 2007, Vietnam continues to participate in the trans-pacific strategic economic partnership agreement (TPP) and the Asian Economic community (AEC) in an active and positive way. As a result, in consideration of both theory and practice of monetary policy in Vietnam, especially in new conditions of macro economy and monetary stance stemming from the deeper level of international integration, it is shown that a carefully done research on the transmission mechanism of monetary policy is crucially necessary for Vietnam to determine which policy framework is more effective in accordance with the new conditions and if it is necessary to switch from mechanism based on the volume to the mechanism based on the price (interest rate).

II. THESIS QUESTIONS

With the purpose of evaluating, analyzing the effectiveness of monetary policy through the transmission mechanisms to propose development and selection of operating method based on a more effective transmission channel in the changing economic monetary condition, the author will focus on studying and answering the following questions:

1. Does the increase of money supply affect the real output and inflation in the economy?

The question stems from the fact that since 1995, Vietnam has selected the operating method of the monetary policy based on volume, the intermediate targets are the increase of money supply (M2) and credit growth in the economy. Answering this question helps to reveal the actual effectiveness of monetary policy, particularly for achievement of the ultimate effectiveness that contributes to growth and inflation control.

Mishra et al., [2010] in the research on monetary policy in developing countries with low income indicates that: the relationship between policy tools of the Central Bank and the transmission mechanism to IS line of the economy seems to be the same in the developing countries which is poor and unreliable. According to a research by Ngoc [2003], the monetary conditions have effect on real variables of the economy, but their governing ability to GDP is very limited, the sensitive ratio of M2 and interest rates with GDP variable is only ranged around 0.179 - 0.36.

So, in Vietnam, how is the effectiveness level of monetary policy and is it the same as the conclusions made by the authors?

In order to answer this question, the author answers two questions. The first question is about the degree and the effect lag and the second one is about through which main channel this effect is the most. In order to study and reflect the role of the integration process, the author divides the research period into two stages of before and after the participation of Vietnam to the WTO in 2007. From those periods, the author measures and assesses how the impacts of monetary policy in these two stages differ from each other.

2. Why is the transmission mechanism of monetary policy less effective in Vietnam?

Based on the assessment result of the transmission mechanism of monetary policy, the following step is to study on the reason of result, so it answers the sub-questions:

Firstly, how is the monetary condition?

In the opinion of Hammond et al.,[2009], in the context of international economic integration through free trade and circulation of financial capital flows, the only challenge for monetary policy is the underdevelopment of the financial market and financial institutions.

In the opinion of Bhattacharya et al.,[2011], in the developing countries, the transmission mechanism of monetary policy is ineffective, firstly, due to the underdevelopment of bond markets and secondly, due to the low level of competition in banking system, the influence of the unofficially financial sector.

The subject will assess the monetary conditions in Vietnam such as the development level of financial markets, the banking system, the unofficial financial sector, people's psychology (inflation expectation) and the sensitivity of the economy with interest rate.

Secondly, what are the subjective reasons in operating monetary policy? Such as the independence level of the central bank? The transgression of fiscal policy? And Capacity of planning and operating monetary policy? Including determination of targets, formation of transmission channel system, experimental analysis and evaluation?

3. Which monetary-policy-operating model should Vietnam choose and which transmission channel should be focused on – is it the interest-rate channel? To answer this question the research analyzes:

The research result indicates that the crisis has changed the role of the transmission channels in Malaysia (Raghavan et al., [2007]).

According to research by Camen [2006], Vietnam should choose a new intermediate target for monetary policy, rather than target of the exchange rate. Furthermore, the research of Le [2007] showed that the current condition in Vietnam does not fit the target inflation framework.

From 1990 to 2000, the interest rate channel and the exchange rate channel could play only limited roles in the transmission of monetary policy. The impact of monetary policy is implemented mainly through the channel of credit and money supply to the economy. From 2000 to present, with the monetary conditions, the economy has changed as a result of the integration process. A number of researches and practice in Vietnam show that the impact of monetary policy through the interest rate channel becomes clearer. The impact through the credit channel tends to decrease while the impact through the exchange rate channel becomes stronger. Although, the impact through the asset prices until 2005 is still weak, from 2006 onwards, it has become stronger with the development of the stock market. However, the State Bank continues to keep the monetary-policy-operating method through the amount and selecting the variables of money supply level and credit. Therefore, the achieved efficiency is not high, which is expressed through the increasing difference between the oriented indicators and performance of growth variables M2 and Credit.

Answers of additional questions:

How about the sensitivity of the economy to interest rate? The direct impact of the market interest rate to investors and consumers? How have the conditions for application of the monetary policy framework based on the price (interest rate) been developed? In order to switch into the operating mechanism through the price with the interest rate channel as the main transmission one, what are the suggestions for the government and SBV? Which type of interest rate should be chosen for the operating target?

III. LITERATRURE REVIEW

Researches on the transmission mechanism of monetary policy through the interest rate channel in the world

All researches indicate that the monetary policy affects the economy in the short term at least. However, there is no agreement on the transmission channels through which the monetary policy affects output and prices. The theoretical researches on the transmission mechanism of monetary policy have been developed in recent years.

Keynes, in the General Theory of Output and Employment, has described the importance of the interest rate in the transmission mechanism of monetary policy in the diagram: M↓ ⇨ ir ↑ ⇨ I ↓⇨ Y↓.

In scientific conference on the transmission mechanism of monetary policy (Symposium on "The Monetary Policy Transmission"), Taylor [1995] has used the financial cost model to re-evaluate the impact of monetary policy transmission mechanism on real GDP and price, and showed that traditional interest rate channel is the most important channel. Obstfeld and Rogoff [1995] have emphasized the importance of the exchange rate channel and concluded that the monetary policy planning should pay attention to the external factors.

Mishkin [1995, 1996 and 2001] has provided an overall assessment on the transmission mechanism of the different channels.

In the Euro countries, Smets and Wouters [2002] have proved that the monetary shocks through interest rates affect output, consumption and investment. Angeloni et al.,[2003] has also pointed out that the interest rate channel is the main channel of transmission mechanism in several European countries and is the most important channel in most countries. In those countries that the interest rate does not act the governing role, the other credit and financial channels may not express their roles. The empirical researches, Loyaza and Schmidt - Hebble [2002], have concluded that the traditional interest rate channel is the most relevant one to affect output and price, while the exchange rate becomes the most important channel in the open economies. Research by Boivin et al.,[2010] also concludes that the traditional channel - interest rate channel has effect on investment. Taylor and Williams [2010] consider that the rule of basic interest rate still performs well in the transmission of monetary policy and further researches should be done to match the different economic models and environments in the countries, especially the international link in monetary policy.

Transmission mechanism of monetary policy in developing countries

Some studies have been done to evaluate the effectiveness of the transmission mechanism of monetary policy in developing countries. Using the VAR model, Disyatat and associates [2003] in Thailand point out that besides the interest rate channel, banks play an important role in the transmission of monetary policy, the exchange rate channel and asset price channel have insignificant effect. In Malaysia, the research by Mala Raghavan and Param Silvapule [2007] using SVAR model shows the post-financial-crisis in 1997 period, monetary shock has stronger effect on aggregate demand. In Sri Lanka, Amarasekara [2008] points out that the interest rate channel is the most important one. In Philippines, Bayangos [2010] points out that the credit channel is the most important one. In the case of South Africa, the research by Kabundi and Nonhlanhla [2011], using FAVAR model, concludes that the monetary shock has short-term effect on output and price, and besides the interest rate channel, the expectation channel has an important role in the transmission mechanism of monetary policy. Mukherjee and Bhattacharya [2011] point out that the interest rate channel affects private consumption and investment in emerging markets. With the comparison of the transmission mechanism in the dollarized and non- dollarized economy, in their research, Acosta - Ormaechea [2011] have proved that the interest rate channel is more important in Chile and New Zealand while the exchange rate channel plays a very important role in restraining inflation in Peru and Uruguay.

However, some researchers suggest that the transmission mechanism of monetary policy is weak in the low-income countries and the developing countries. Evaluation of transmission mechanisms in low-income countries, Mishra et al.,[2011] points out that the weak institutional mechanism reduces the transmission effectiveness of the monetary policy through the channels. For developing countries, Bhattacharya et al. [2011] has suggested that the weakness in the financial system and the presence in large-scale of the informal sector lead to inefficiency of monetary policy.

Researches on the transmission mechanism of monetary policy in Vietnam

Theoretical Research:

Being aware of the importance of research on transmission mechanism of monetary policy, a number of researches have been implemented by local researchers on domestic monetary policy. There can be listed some doctoral dissertations in Vietnam on that issue such as:

Research on the transmission mechanism through the interest rate channel by To [2003]. Research on quantitative analysis of the impact of monetary policy to a number of macroeconomic factors in Vietnam in the innovation era, author Bui [2006] and Demand for money and its consequences for monetary policy in Vietnam by Ha [2008]. Improving transmission mechanism of monetary policy in Vietnam in terms of the integration condition by Nguyen [2008].

In general, previous researches on the summary theoretical or simulation of the actual situation of monetary policy operation in Vietnam from the 1990s (when Vietnam switched to the 2-tier banking model separating the operating function of State Bank and function of commercial banks) to 2008, evaluate the positives and limitations in monetary policy operation and most researches indicate that (i) the monetary policy inclines towards amount, (ii) weak transmission effectiveness, (iii) the reasons are the underdeveloped financial market and dependent degree of SBV and status of the dollarization. The empirical analysis part in these researches was little paid attention to because the condition of collecting data and the integration level of economy were low.

Empirical Research:

In Vietnam, the issue of empirical research on monetary policy transmission is still very new, some major researches may include:

In the research on transmission mechanism of monetary policy in Vietnam, Le [2006] used a vector autoregressive model VAR with the variables of the industrial output, the consumer price index (CPI), the total payment means (M2), real loan interest rate (credit) and the real effective exchange rate (the base year is 1996) as the endogenous variables and the oil price, rice price and Fed funds interest rate as exogenous variables. The data were adjusted as the seasonal factors and are quarterly collected since the first quarter 1996 to third quarter 2005. The lag is 4 quarters. Result of the base VAR model showed that the money supply increase has impact on output increase from first quarter to third quarter; money supply also increases price level from the third quarter to the fourth quarter.

To evaluate the effectiveness of three transmission channels: interest rate, real exchange rate and credit, the author takes turns each variable in the extended VAR model. The result showed that: (i) the interest rate increase will start reduction of output after 3 months and can maintain in 6 following months, however, this effect is quite small (after 4 quarters, the interest rate only contributes 3.63 % to the output change), (ii) REER makes the output increase after 3 months and can maintain in 9 following months, after four quarters, the real effective exchange rate contributes 26.12% to the output change, and (iii) The credit makes the output increase after 3 months and can maintain its impact in 6 following months, after 4 quarters, the credit channel contributes 23.08 % to the output change. As such, it can be seen that from 1996 to 2005, monetary policy through the exchange rate channel and the credit channel is more effective than the interest rate channel.

In the article "The monetary transmission mechanism in terms of quantitative analysis", Nguyen [2009] used vector autoregressive model under structural form with 9 monthly data series from January 1998 to December 2009 that are collected from the IFS (data of financial targets of IMF), including: the world's CPI, U.S CPI, U.S industrial output, Fed Funds interest rate, domestic industrial output, the M2 money supply, interest rate of 3-month term VND deposit, the exchange rate of USD/VND. The research derived a number of conclusions as follows: (i) Money supply M2 has a positive impact on economic growth, but the extent is not large, (ii) Domestic economy has a high aperture and is greatly affected by external shocks. Analysis of variance shows that the domestic industrial output in the medium term is mainly affected by the external factors when the variables such as industrial output, U.S. inflation, Fed's interest rate and world commodity prices contribute about, 14.5 %, 9.25 %, 8.14 % and 6.78 % respectively to the domestic output changes while the variables such as domestic CPI, M2, interest rates, exchange rate contribute only from 1-2 % to the output, (iii)the change of VND interest rate on money market through the use of tools such as OMO, the refinancing interest rate will take 3-5 months to take effect. The devaluation of VND also causes the VND interest rate reduced but it will take 5-10 months, (iv) Facing the shocks of economic growth in overheating economy, CPI index tends to rise quickly and continuously in 5-10 months, however, the CPI index also fell sharply during the period of 6-9 months after the implementation of tightening monetary policy.

In the article "Applying SVAR model to determine the effect of monetary policy and inflation forecast in Vietnam", Pham [2008] used the vector autoregressive model under structural form SVAR, which used the monthly data series from 1/1994 to 6/2008 of 4 endogenous variables including industrial output, CPI, M2 money supply and 3-month term deposit interest rate and the world oil price is used as exogenous variable. The result showed that: (i) monetary policy shock (interest rate increase) makes the output grow and inflation reduce. The reflection of inflation is relatively slow compared to the output because of price rigidity or lag of the policy. The inflation only starts to decline after 2-3 months and the output starts to decline after 1 month, (ii) the variance decomposition result shows that the tool of interest rate or the money supply is not really good at response to fluctuations which aim to macroeconomic stability in the short term, while the output shocks only account for less than 5% of the volatility of M2 and 10% of the volatility of interest rate, (iii) the volatility of growth speed and inflation is due to the impact of such shocks (accounting for more than 90 %), the shocks of M2 and interest rates only contribute a little to the volatility of growth and inflation.

The domestic researches both theoretical ones and experiment ones are generally new and reveal the following limitations:

(i) There are no in-depth and comprehensive researches even in both theory and experiment stretching for the period from 1990 until now, when the system of Vietnam's commercial banks is changed into 2 levels, thereby effectively assessing the impact of monetary policy in different periods, especially before and after Vietnam joined the WTO,
(ii) Some of the conclusions derived from the experimental studies have developed at different levels about both impact level of the tools and the lag of impact, Le [2008] thinks that credit and exchange rate have major contribution to the output change, while Nguyen [2009] thinks that it is due to the impact of external shocks and Pham [2008] thinks that the money supply has not responded well and been affected by the volatility of growth and inflation by the impact of such shocks.
(iii) The new research data have been only updated from quarter I/1996 to quarter IV/2008, and after 2007-Vietnam officially joined WTO, the monetary policy operation in Vietnam has many changes;
(iv) The conclusions derived only stop at description of phenomena and have no experimental research result indicating the causes leading the ineffective transmission mechanism of monetary policy in Vietnam;
(v) There are no researches emphasizing the role of the interest rate transmission channel in terms of economic integration and building the founding

conditions to operate the indirect tools as well as switch into the regulating model based on the price (interest rate).

IV. PROPOSED RESEARCH METHOLODOGY AND DATA

Since 1990, monetary policy analysis framework is very popular with the application of VAR model proposed by Sims [1980]. In the previous years, the development of VAR model under structural form continues to create favorable conditions to handle the various economic problems, the issues of identifying the happening possibility of economy variables at the same period and the dynamic relationship between macroeconomic variables and the policy tools.

The author identifies the SVAR model structure for Vietnam, of which:

Selection of variables:

External variables: the U.S. base rate, world oil price.

Domestic variables: industrial output, consumer price index, M2 money demand, VND deposit interest rate with 3-month term or open-market interest rate, nominal exchange rate.

Exogenous variables: world oil price (PC) and base rate (Federal Funds Rate) of the U.S.

In the remaining five variables describing the economy of Vietnam, the industrial production value (IPVN) and CPI (PVN) are considered as target variables of monetary policy.

The policy variables are M2 money demand and deposit interest rates with 3-month term of the commercial banks or open-market interest rate.

Nominal exchange rate index (NEER) presents as a variable of market information. The use the nominal exchange rate index is reasonable because from 1995 until now, Vietnam has made business transactions with many different business partners; REER represents the basket of currencies.

Another different point from previous researches is that the model will use the open-market interest rate (OMO) variable to assess the transmission mechanism of monetary policy through interest rate channel instead of using the variable of deposit or loan interest rate. As based on the fact that within the past 5 years, the SBV has tended to increase the use of indirect tools, especially the open-market tools to provide liquidity to the system as well as signal, adjust the interest rate on the money market (interbank interest rate, deposit – loan interest rate on the market...)

Data:

SVAR model uses monthly data from January 1990 up to present. The research period includes the stages before and after Vietnam joined the WTO. Variables are seasonally adjusted (SA) and under the log form except for interest rate that is expressed in percentage.

Sources of data:

- Domestic variables such as GDP, Inflation, Industrial production value and the figures involving the sensitivity to interest rate of individuals and enterprises will be collected from GSO of Vietnam (GSO). Variables such as Money supply, Credit growth, Exchange rate, Interest rate including OMO interest and bank deposit and lending interest rate will be collected from SBV. As a PhD candidate supported by Vietnam Government and the research aim to raise policy implication, I am allowed to assess all these packages of figures for free.
- Exogenous variables such as World oil price (PC) and base rate (Federal Funds Rate) of the U.S and data needed to be made comparison among similar Asia developing countries in region are available from public sources - the IMF's Financial Statistics (IFS), the World Bank and ADB (annually indicators).

V. SCIENTIFIC CONTRIBUTION

About the theoretical research:

The research contributes to explain more about the transmission mechanism of monetary policy in developing countries - case study in Vietnam. The research explains the objective and subjective conditions that make policy effectiveness reduce and especially the change of lag and strength of the currency impact on the economy due to the influence of international integration - Vietnam joined WTO.

Research shows that which variables, besides the tools of monetary policy, affect the bank lending interest rate and how these variables affect the relationship between the tools of monetary policy and interest rate.

About empirical evidence

The contribution of the research is to develop and analyze data system on monetary conditions and impact assessment model of the transmission of monetary policy through the interest rate channel in the long period from 1990 to date in Vietnam. Currently, the research done for this process is a research gap on monetary policy in Vietnam;

The research will compare the result derived from the model and the actual development in Vietnam to assess and explain why the conclusions derived from the model cannot really explain the case of developing countries and identify the conditions that need to be built and added.

Policy Implication

The research will provide recommendations on monetary policy operation as follows:

Point out the necessity to change the operating method of monetary policy in Vietnam as the currently operating method based on the amount seems to be ineffective and the undesirable consequences become more serious;

Recommend applying monetary policy operating model based on the price - the interest rate is chosen as intermediate target;

Recommend building the target system, applying tools and coordination between monetary policy and other macroeconomic policies (fiscal) to ensure effectiveness of monetary policy;

Further development of the research

Many studies have shown the important role of the exchange rate channel to open economies, particularly in the context of international integration and growing world monetary linkage. The author wishes to expand the scope of research towards the direction as research of the transmission mechanism of monetary policy through the interest rate channel in the developing Asian countries.

VI. THESIS STRUCTURE AND PLAN

Thesis structure:

Chapter 1- *Introduction* which contains three main parts starts with the justification and the aim of the research, then the literature review and outline of the thesis. Literature review will be the main part of this chapter which focuses on both theoretical and empirical studies on money mechanism in the world and in Vietnam. By comparing the method and data which have been used to assess the transmission mechanism among authors and between Vietnam and other countries in the world, I show the gaps which need to be filled in this dissertation as well as the methodology and data will be used.

Chapter 2- *Overview on Vietnam Macro economy from 1990 to present.* This chapter deals with the macroeconomic conditions in Vietnam. That is to say, how it has been developing over the past 20 years, what the main characteristics are and if it has typical feature of emerging market with middle - income per capital. Moreover, if the main features of its key macroeconomic policies including monetary policy, fiscal policy and trade policy and the correlation among them consist or not, and the economy integration into the world economy from time - to - time.

Chapter 3- *Evolution of Monetary Policy in Vietnam.* This chapter will go into detail about the implementation of monetary policy in Vietnam including the policy targets (the operation, intermediate and final targets), its instruments and the monetary mechanism. In this chapter, the comparison about the use of monetary policy between the period before Vietnam joined the WTO and post-WTO period will be mentioned.

Chapter 4- *Evaluation the effectiveness of monetary policy transmission in Vietnam.* In this part, the author will apply empirical analysis to evaluate the effectiveness of monetary transmission mechanism. Firstly, it is the timing and impact of monetary policy on ultimate targets including real output growth and inflation. The second is the determination about the effectiveness of the main channels including credit, exchange - rate, interest rate and asset price channel. Last but not least, the researcher will go into detail about interest rate channel, particularly the transmission from policy rates to short time interest rates in banking sector and from those rates to the real economy interest rates.

Chapter 5 - *Why the transmission mechanism is almost ineffective?* The chapter deals with analyzing the reasons from two main sources of objective and subjective perspectives. With objective reasons, the researcher analyzes the impact of macroeconomic conditions which is mentioned in Chapter 2 on the monetary policy.

Next, I focus on the conduct of monetary policy - the independence of the SBV as well as the systematization and strategy of policy making. Furthermore, the researcher investigates the issue if it would be dominated by fiscal policy and if it follows up with the changing in macro and monetary conditions, particularly the international integration.

Chapter 6 - *Should Vietnam switch to money policy framework which bases on the price (interest rate) instead of the volume (money supply)*? Following the results found out in Chapter 4 and 5, the sixth chapter will propose the new and improved method for conducting monetary policy in the decade of integration and globalization in Vietnam. First, it is by examining monetary policy based on exchange - rate or inflation targeting which is not a better remedy. The next step, it will focus on the response of the economy with interest rate and the signals and conditions which fit well with this method.

Chapter 7 - *Conclusions and Recommendations.* This final chapter gives a short overview of the main conclusions and a number of policy recommendations concerning the optimization of switching to monetary framework based on interest rate in Vietnam in the coming years.

Plan

The first year of the project will involve identification and gathering of relevant materials. Literature review will take place at this early stage and by the end of first year the draft chapter (Chapter 1) will be finished. During the second and third year of the project, the researcher will focus on writing the following chapters and two papers. The rest of time will be spent on correcting the draft and finishing the third paper before dissertation defence at the final quarter of the fourth year. The research plan as follows:

Time	**Year 1**				**Year 2**				**Year 3**				**Year 4**			
Work	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Proposal	x	x														
PhD Program		x	x	x	x	x	x	x								
Literature Review		x	x													
Data Collection			x	x	x											
Data Analysis				x	x	x										
Paper writing							Paper 1			Paper 2			Paper 3			
Thesis Writing				Ch.1	Chapter 2 and 3			Chapter 4 and 5			Chapter 6 and 7					
Draft Correction														x	x	
Defence																x

VII. REFERENCES

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