Centre Emile Bernheim
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A Note on Studies of Monetary Policy and Implementation in Vietnam

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A Note on Studies of Monetary Policy and Implementation in Vietnam

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Abstract:

In this short paper, we have gone through some key results of monetary policy research applied for the Vietnamese economy, over the past 20 years after *Doi Moi*, together with a few caveats when putting these results in use. We look at different research themes, and suggest that future research make better and more diverse choice of analytic framework, and also put the macro and micro-setting connections at work, which appear to likely bring about better and more insightful results for the monetary economics literature in Vietnam.

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1 The background

The Vietnam's economy has embarked on its extensive economic reform program (*Doi Moi*) since 1986, *de jure*. Over the past 22 years, professionals, policy makers and normal workers in Vietnam have struggled to learn what the market economy really means to them, and what more need to be done, and in which direction, to build a genuine market economy.

The economy of Vietnam has gradually turned from a pure centrally planned model (also called *command economy*) to a more market-oriented economy. The amended Constitution 1992 recognized the private sector economy and legality of systems of market as an integral part of the economy. People have since enjoyed more freedom to conduct trade, set up privately held companies. The country's *per capita* income increased from as little as $210 when *Doi Moi* started in 1986, to over $900 by the end of 2008, a spectacular growth rate, although it is still a low level of *per capita* income to international standards.

Of course, there have been many problems and issues arising during the process of transition to a full-fledged market economy, no matter how impressive the outcomes of *Doi Moi* appeared to be. One may refer to typical research works in Vietnam for a better and in-depth understanding, such as Lipworth and Spitaller (1993), Fforde and de Vylder (1996), Riedel and Turley (1999), Riedel and Leung (2001), and so on. Many historical and remaining issues in both macro and micro settings of the Vietnamese economy have also been well documented in different series of working papers by the International Monetary Fund, the World Bank, the Asian Development Bank, etc. as key donors to Vietnam.

What we would like to discuss in this paper is, however, not to look at the problems and issues, which still remain in the emerging economy of Vietnam, and perhaps will be remaining for a while. The main theme of our discussion concentrates on the breadth and depth of different studies with respect to Vietnam's monetary policy and implementation since the beginning of its transition process. The rationale for this is going to be justified now.

The underlying rationale: The history of economic reform in Vietnam witnessed periods of turbulence, in which new source of risks were gradually "introduced" into the overall economic settings. In each period, there are specific issues that give rise to period-specific studies. Nonetheless, issues in relation to monetary policy have always been critical to Vietnam's economic development.

In the 1986-19887 period, inflation had at some point in time peaked at 774% per annum. After a short while of successful disinflation, the general price level jumped to 385%, in 1988. The stabilized level of CPI in Vietnam after 1988 was also short-lived. Inflation went up again in 1990-91 period, when the annualized peak reached the level of greater than 90%.

After a decade of stablized prices, Vietnam's inflation went up to two-digit level again, standing at the annualized CPI growth rates of 12% and 19.9% in 2007 and 2008, respectively, reminding consumers and the government of the hyperinflation and high inflation nightmares. Till late 2008, the battle against inflation was still being of primary concern to the whole country, stipulated in all decisions set out by the congress and the government, because in the first half of 2008 annualized monthly CPI at times exploded to the level of 30% p.a. (Vuong and Pham, 2009.)[1]

All these events give rise to monetary policy and its implementation at the national level. The efforts made for successful disinflation in Vietnam usually involve a determined stance of monetary policy, together with required tools avalaible in Vietnam. They also caused several serious adverse effects on the economy, namely inappropriate exchange rate policy, significant reduction of liquidity to the banking sector, overshooting overnight interbank rates (that usually sparks further concern of future liquidity trap) and contracted output level of the economy. These have been genuine observations from the economy, no matter whether or not Granger causality confirms them or what stylized facts induced from short-run equilibrium tell us. Truths are there for us to perceive.

On the other hand, we have seen the fact that a number of analyses on monetary plicy and implementation in Vietnam, although there have been

[1]Since mid-2008, Vietnam's General Statistics Office has changed its basis of CPI rate computation and release to year on year comparative statistic.

not many of them available to access, tend to discuss isolated issues in relation to monetary policy. It is our obligation to see the whole thing, and understand the operation of the economy in an interconnected manner. Bearing this in mind, this paper is to perform part of the task, trying the understand what have been done and what more to be done to grasp a truthful knowledge of monetary policy implementation in Vietnam.

Organization of the paper: This paper has three main sections. The first part looks at specific themes of research in monetary policy and implementation that have been chosen by researchers. We try to observe the breadth and explain the issues relating to that. The second section is to sum up key results obtained from studies performed by different researchers, with the purpose of understanding how critical monetary issues have been researched thus far and why. In other words, we would like to view the depth of these studies. Last, but not least, we put down some final remarks after reviewing the literature.

2 Themes of research

Before 2001, there had been virtually no specialized studies dedicated to the issues of monetary policy in Vietnam, whether with concentration on theoretical modeling or finding of empirical evidences. Both modeling and econometric methods were not available and popular then in Vietnam. Major insights came from descriptive economic analyses, using basic "number-crunching" for past-against-present comparison, or gap analysis between economic goals[2] and actual realizations.

General descriptive theme: It is understandable that before 2000, the use of general descriptive theme of research is a rational choice and more useful for understanding of both Vietnamese technocrats and foreign donors / investors who would more often like to have a broad view of the economic situation in Vietnam.

[2]Goals are usually set out in plans and decisions by the Government and the National Assembly on an annual basis, at the beginning of the fiscal year.

Basic understandings and first insights about Vietnam's monetary policy, in its infancy, could be found in the early works written about the Vietnamese economy, namely Lipworth and Spitaller (1993), Fforde and de Vylder (1996), Riedel and Turley (1999), Shimomoto (1999).

Following these works, the broad audience could gain an overall understanding of the broader socio-economic situation of Vietnam, together with key insights, in a reasonable depth, about how monetary policy functioned and impacted other critical economic decisions. Basic economic statitics in these works are organized in useful ways to unveil the economic mechanism, in general, and how the monetary policy should be separated from fiscal activities. Grown up from works these, the State Bank of Vietnam (the central bank) and the Government has gradually embarked on the important process of designating the State Bank to act as increasingly more independent factor of setting and pursuing own monetary policy.

Without using highly technical tools these studies contribute a great deal to our understanding of the Vietnam's economy, and even though monetary policy was then not their concentration, different insightful discussions have drawn a substantially increasing attention by national economists, professionals and policy makers towards monetary issues, in a much better analytical framework.

Modeling and general theoretical discussions: The theme of modeling research was supposed to develop subtantially during the firsth 10 years of *Doi Moi*, with respect to monetary economics and policy implementation. However, our observation is that the efflorescence of monetary modeling has never been the case in Vietnam. Surprisingly, the volume of works on modeling Vietnam-specific monetary policy is almost neglible, and of no significant importance.

However, since the degree of adversity caused by monetary problems keeps inreasing, together with an increasing awareness of the public, economist, policy makers, there exists a trend of general theoretical discussions, with mixed contributions by international researchers (mainly from ODA donor countries) and national economists.

In the first place, these might look similar to the general descriptive theme. However, there is one important difference. In the advent of better developed sectors of Vietnam's market economy, the economic studies gradually become more sector-specific, with significant concentration on theoretical aspects. Therefore, the theoretical discussions about monetary policy in Vietnam have been a trend, still going on now.

The majority of these studies mostly emphasize on the foreign exchange regime, inflation, and anomalies in credit flows to economic sectors of the economy, such as Nguyen (1999), Riedel and Leung (2001), Vuong and Ngo (2002), Tyers and Reeds (2002), Ohno (2003), Camen (2005), Mai (2007), Parkard (2007), Vuong *et. al.* (2008).

This academic theme on monetary policy research upto now constitutes the largest portion of Vietnam's monetary economics literature.

Applied econometric studies: There have also been an increasing number of studies employing econometric methods to investigate monetary policy issues since 2000. This perhaps becomes an apparent trend, especially in studying short-run relationships between macro-economic factors and monetary supply (base and extension), US Dollar and local currency exchange rate, commercial rates/spread, and consumer prices.

Although the studies employing general theoretical discussions have been populated, they rarely come to specific findings. The majority of conclusions are suggestive, with main use for general understanding (in principal). Econometric analyses come in place as a more statistically inclined methodology, which have provided for more or less practical usage and implications in formulate policy and partly guided implementation on a better agreement among financial market players and policy makers.

However, more empirical studies were skewed to market and policy issues, where data were in general easier to access and were better organized, such as foreign exchange rates, and sometimes, interest rates as monetary transmission mechanism.

Some typical applied econometric studies that provide for original understandings and insights on monetary economics in Vietnam include Vuong and Ngo (2002), Adam *et. al.* (2002), Vuong (2003), and Le and Pfau (2008).

Clearly, the number of applied econometric studies is small by all means.

In addition to that, the narrow range of issues investigated by this analysis method also shows a severe limitation of monetary economics literature available and accessible in Vietnam.

3 Results obtained and caveats

Now we appreciate the fact that there have been a handful of scholarly studies on monetary policy and implementation in Vietnam. The low volume of research literature indicates a correspondingly poor outcomes, that says not many insights and substantial knowledge have been provided to the audience, both in the academic and policy circles.

Some key results It is to our advantage to review the results from the said studies in a more systemic manner, towards the whole target of Vietnam's economic development.[3]

Early works before 2000, such as Lipworth and Spitaller (1993), Shimomoto (1999), Riedel and Turley (1999) suggest several important insights. Since the start of a nascent market economy, macro-economic conditions such as credit flows, fierce fights against hyper- and recurring high inflation, overwhelming task of supporting export-led growth, etc. have place monetary policy and implementation increasingly high on the governmental agenda. The monetary policy was then suggested to be performed in a *better* collaboration with fiscal policy. The trend of making Vietnam's central bank more independent was put forward early on, in absence of foremost priorities and degree of independence desired.

These studies also indicate the importance of better managed bond issue, together with the building of a smooth functioning bond market, which combined together could form a better vehicle and provide the government, central banks, with more monetary policy tools.

In a somewhat more technical view, Vuong and Ngo (2002) present a discussion over the continuous existence of parallel exchange rate system,

[3]To our best understanding, economists have tendency to connect and compare results within the same research discipline and analytical methodology, which severely reduced the visibility of the overall economic situation.

official market rate and "free-market" one. In a fairly strange settings mixed between some freedom of foreign exchange hoarding by households and heavily regulated formal forex market, this "parallel structure" may have in part saved the local currency (Vietnamese Dong) from significant depreciation during the 1997-99 period, when the Asian financial crisis spread to chill the whole region, causing detrimental impacts on regional economies, such as Thailand, Indonesia, South Korea and Taiwan.

Adam *et al* (2002) documented their results which support the idea that no currency substitution has ever existed in Vietnam, despite US Dollar's constant appreciation in value over almost the entire period post-*Doi Moi*. The dollarization in Vietnam could be distinguished from currency substitution, without affecting the generality of PPP evidence as found by Vuong (2003). Their approach is to use a VECM system to decompose different effects on medium-term relationship (equilibrium), then move on to use a single-equation specification for error-correction model.[4] One major result is the conclusion that the more significant depreciation in the value of local currency, with 3 to 4 month lag, the shift to US Dollar becomes more apparent.

One useful investigation on the PPP effect, following Cassel model, is reported in Vuong (2003). The controversial discussions over evidences supporting and rejecting PPP relationships have continued for decades now. For the fledgling marketing economy of Vietnam, the evidence of this is important on two counts. On the one hand, exchange rate targeting continues to be important in the central bank's choice, at present and in the future. On the other hand, the government and central bank's intervention into the market continues to be a frequent practice. However, without the confirmed PPP relationship, there would be no direction to go, except going for a completely floated system; a choice that has been impossible for any visible future.

Camen (2005) describes a combination of legal framework, policy strategy, monetary policy instruments and determinants of inflation altogether to put forward some key remarks of (i) transition of resposibilities for conducting policy in Vietnam to the central bank; (ii) establishing strategic target of desirable inflation; and (iii) a better clarification of the monetary policy

[4]They use the popular specification $\Delta(m_t - p_t) = \alpha\mu_{t-k} + \sum_{i=0}^{k-1} \gamma_i \Delta Y_{t-i} + u_t$.

strategy, including defining a more appropriate intermediate target, instead of exchange rates.

In a more general discussion by Packard (2007), channels of policy transmissions are discussed, with author's conclusion that it has been "a cloudy picture." Inflation is considered in this as the primary target, but not the best. A better candidate, as suggested at the end, is real exchange rate, which should take into account net effect of comparative inflation levels of trade partner countries.

In the study by Le and Pfau (2008), a basic VAR specification is employed to analyze the monetary transmission mechanism in Vietnam's economy. They report results that support a Granger causality from increase of money supply to incremental output, at 5% significance level; or more apparently, industrial output. Price stickiness has been confirmed, after observing results of the estimation, which basically say that a positive shock to money finally leads to an increase in general price level, which remains persistent for quite a while. In brief, the results advocate the stance that instead of interest rates, exchange rate and credit channels play a pivotal role in transmitting monetary policy in Vietnam.

Caveats The above reported results from academic research in the field are clearly useful to our understanding, especially when the volume of research is so low in Vietnam.

However, they do posit a number of disadvantages, which put them subject to some severe limitations, both in terms of explanatory capability and real-world applications.

Data sufficiency and quality: This has naturally been a severe problem, to every economist wishing to conduct statistically inclined studies in monetary policy. Finding proxies for economic aggregates is as difficult as obtaining the desired data. The situation like Le and Pfau and Adam *et al* using proxies for total output is not rare, and decreases the credibility of the results obtained significantly.

In the environment where economic aggregates may not be collected directly from raw sources, the risk of multicollinearity is also high. Violations of technical standards, such as BLUE, in econometric tests would likely happen. Thus, whenever possible we believe strictly following misspecification checks should be done appropriately and in details.

Fragmented and contradicting results: Another serious issue is that the majority of results have been obtained separately by disconnected authors. In short, they are all fragmented and almost totally un-related. Perhaps, this paper has until now, this only place where different results are considered together towards to same topic of monetary policy.

This fact causes a serious limitation. Results could hardly be communicated and verified by peer researchers, including validity of data, adjustment of models and reasoning on appropriate explainatory powers/conclusions. The natural consequence is that among the handful of useful studies, missing pieces of understanding hinder us from building a more complete picture.

Among only a few researches, as we have seen, contradicting results are not an uncommon problem. This is partly caused by both the methods employed and the selection of the monetary policy issues for consideration. When results are not connected and obtained using different analytical frameworks, contradiction is most likely to happen. And this is the case for monetary literature of Vietnam's economy.

Lack of synthesis: Unlike the preceding limitation of a technical result being "isolated" from other useful insights, the lack of synthesis leads to a severe impairment of our understanding capacity. The monetary economics is not about the dynamics of economic random process, or stylized facts or nice description of the monetary economy. It is about how different factors of the economy interract with one another, and how completely causal relationships define a shift of the economy, in terms of monetary policy variable and targets.

This could not be done without an appropriate and well-structure synthesis. And this has been absent, thus far.

4 Some concluding remarks

In this short paper, we have gone through some key results of monetary policy research applied for the Vietnamese economy, after *Doi Moi*, together with a few caveats when putting these results in use. The following remarks would be worthwhile for researchers to consider while exploring related issues.

Choices of analytical framework: Different themes as presented above tend to report different things. The range of topics is quite long, consider Walsh (2003), and a more diverse range of analysis should be useful. More choices would naturally lead to more surprising results, at different view-angles. The current use of analysis methods is narrow and limited, thus we could hardly expect more insightful or complete results.

The lack of efforts in suggestive modeling for different aggregates and exogenous economic variables is one critical limitation for choices of frameworks. As seen in a good account of modeling choices described in Walsh (2003), more exogenous variables should be able to enter future technical specification, without having to alter substantially or 'invent' new estimators.

Connection between macro and micro-settings: The increasing number of financial markets in Vietnam, and tools that the government could put in use is nothing more than a closer connection between macro policy goals, including monetary policy, and the market capability of transmitting signals and effects. In Le and Pfau (2008) one suggestion is to look at a *possibly effective* channel of asset prices, and in Vuong *et al* (2008) the discussion advocates a priority of exploring the interconnection among most important markets (now and also in the future), i.e. capital markets, money markets and real properties market.

The weak connection between macro goals and micro-settings perhaps represents the most critical disadvantage of all economic studies in Vietnam, not just for monetary policy. Restrictions imposed or likely imposed by the State Bank of Vietnam, such as its proposal to prohibit public media's report on free-market exchange rates, limited access to both monetary base and broad money supplies (M1, M2) as well as a list of 'matters of confidentiality' would normaly obscure the capability of reading true economic situation in monetary terms.

Event studies in relation to monetary economics It is not an overstatement to say that event studies should be of critical importance in Vietnam's economy. The particular patterns of intervention, cultural and communication impacts, and specific environment in Vietnam have made even studies more insightful in terms of understanding what's really going on.

One recent example is the stimulus program launched in February 2009, in a bid to curb the negative impacts of the global financial crisis, that subsidizes 4 percentage point of commercial rates offered by commercial banks and finance firms participating in the government-led stimulus package. Over just five months, this has put over VND 330 trillion ($ 19.4 billion) liquidity through the banking system to the economy, in the form of working capital; a program that is expected to be short-lived, to avoid persistent pressure that may push up inflation. This special setting could be a lot more meaningful than normal standard relationships as usually explored. It is because the specific evolution of mentality and behavior of credit borrowers, normal practices of funds using and the cultural values of the corporate sector may again shortly posit the risk of plunging into the illiquidity-inflation spiral. That is why we would like to make the point very clear.

In our anticipation, it would likely take some more time to develop the monetary economic literature in Vietnam to a full swing. However, with the above-mentioned remarks the volume and usefulness of literature in this field should be improved significantly.

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