# <Issue Paper for Possible Future Research>

# Exchange Rate Management of Vietnam

Re-examination of Policy Goals and Modality

December 25, 2003 Kenichi Ohno Vietnam Development Forum

This paper presents various ideas which may be relevant to the evaluation and reform of Vietnam's exchange rate management. While many theoretical and empirical studies on exchange rates exist, they do not directly address the questions that Vietnam currently faces. Based on such existing studies, this paper analyzes Vietnam's exchange rate problems concretely and realistically. The list of issues below are not meant to be complete or final; our purpose is to stimulate preliminary discussions. If sufficient interest is aroused, the VDF may launch a research project to deepen the analyses.

## I. Overview

#### Brief history

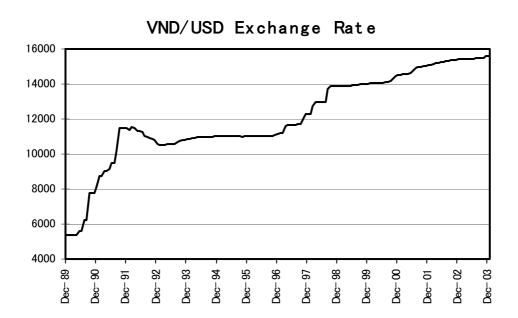
In the late 1980s, Vietnam had triple-digit inflation, multiple exchange rates, and a rapidly depreciating currency in the parallel market. In the early 1990s, however, Vietnam began to overcome these problems by containing inflation and stabilizing its currency. International integration with the West began in earnest around 1993. Since then, Vietnam's exchange rate management has evolved significantly as capital liberalization proceeded and new external circumstances arose.

Inflation was brought down to a single digit by 1993. But price stability was fragile and domestic inflation still remained high relative to the international level. In the final stage of disinflation, the State Bank of Vietnam (SBV) kept the VND/USD exchange rate at around 11,000 for more than five years, from late 1991 to early 1997 (moreover, the rate was virtually fixed at that level from early 1994 to late 1996). This "11,000 VND policy" can be interpreted as an attempt to secure lasting price stability by the discipline of a dollar peg. This *nominal anchor* use of the exchange rate finally succeeded in reducing inflation to a very low level. However, the side effect of this policy was gradual overvaluation. From the summer of 1996, the SBV began to effectively depreciate VND by broadening the bandwidth around the official

central rate. The actual rate always stayed near the highest (most depreciated) end of the band.

From 1997 to 1998, Vietnam had to cope with the impact of the Asian financial crisis. While Vietnam was not directly attacked by speculators, VND became overvalued relative to the regional currencies which fell sharply. The exchange rate band was further broadened to  $\pm 5\%$  in February 1997 and to  $\pm 10\%$  in October 1997. In February 1998, the official central rate itself was devalued from 11,175 to 11,800 VND/USD. These adjustments brought the actual exchange rate to 12,980, at the most depreciated end of the revised band.

In February 1999, the SBV introduced a new exchange rate mechanism. The central rate was now set daily at the average of interbank exchange rates on the previous transaction day with a very narrow band of  $\pm 0.1\%$ . With this mechanism, VND started to crawl (depreciate) very slowly towards the present level of around 15,600 (December 2003).



#### The issue

The current exchange rate mechanism based on averaging of the previous day's interbank exchange rates is imperfect since it is merely a technical procedure without analytical linkage with economic fundamentals. Since exchange rate policy and operational rules are not defined in terms of economic fundamentals, it is hard to know the policy intention of the SBV. Without an effective criterion, it is also difficult to evaluate whether or not the current level of VND is appropriate. Vietnam needs to re-formulate its exchange rate policy in a way that clarifies its economic objectives.

To do so, three levels of discussion must be made.

- (1) <u>Policy goals</u>: what should be achieved by exchange rate policy?
- (2) <u>Choice of system</u>: what kind of exchange rate management is suitable for Vietnam?
- (3) Choice of level: what level of VND is appropriate?

These questions are mutually related but can be discussed separately. For policy formulation, (1) and (2) are the most important. If they are answered clearly, the third question will be much easier to answer. The first question identifies the policy purpose while the second asks the modality by which that purpose can be achieved.

Moreover, the normal mode and the crisis mode of exchange rate management should be distinguished. The questions posed above are for the normal time when there is no serious pressure in the currency market. But sometimes (every several years or hopefully less often), a crisis may occur in which the home currency or the entire region is subjected to unstable market sentiment. If a crisis occurs, normal policy operation should be suspended and appropriate crisis response must be installed. The key decisions in a crisis are (i) whether and/or when to float; and (ii) what additional measures need to be introduced at the time of floating.

Since neither market nor government is perfect, the two must be combined appropriately in exchange rate management. The market should be the basis of exchange rate determination, but it sometimes exhibits volatility, misalignment and bubbles. The government should correct such irregularities, but too much intervention damages the proper functioning of the market. In Vietnam where the currency market in particular and financial markets in general are very shallow and undeveloped, we cannot expect the market to operate smoothly or find the correct exchange rate by itself. Therefore, the SBV is obliged to "make" the market and set its direction relatively more strongly than in more developed countries. In this sense, the SBV carries a heavy responsibility in managing the exchange rate.

The SBV must select policy goals and operational modality which are suitable for Vietnam's reality. The current exchange rate mechanism fails to define policy goals. Without policy goals, the operational rule cannot be evaluated adequately.

# II. Policy Goals

## Multiplicity of goals

The macroeconomic authorities of developing countries are faced with a difficult task. On the one hand, the global economy is unstable with frequent shocks, crises and instabilities. It is also a very tough place where big firms from EU, US, Japan, Korea, China, etc. compete fiercely. On the other hand, domestic capability is weak. Markets are underdeveloped and local enterprises lack competitiveness. The government is also without sufficient knowledge and resources. Under such circumstances, the central banker is required to manage the exchange rate in order to avoid unnecessary shocks to the national economy and provide a stable environment for economic development.

There are many possible goals of exchange rate policy. The candidates may include the following.

- (1) Competitiveness
- (2) Price stability
- (3) Current account adjustment
- (4) Domestic financial stability (balance-sheet problem)
- (5) Public debt management (exchange risks and debt sustainability)
- (6) Prevention of currency crisis
- (7) Minimizing the impact of various external shocks
- (8) Promoting growth, FDI and industrialization

Among these, (1) and (2) are the most fundamental. (3) is often advocated as important, but its desirability and feasibility can be questioned. (4) and (5) aim to avoid exchange risks. (6) and (7) are related to crisis prevention and response. Finally, (8) pursues supply-side goals, but whether that is the correct policy assignment is an open question. It is generally better to assign the exchange rate to macroeconomic or financial tasks. A stable macroeconomy in turn (indirectly) provides the best background for robust growth.

Since there is only one exchange rate, the central bank cannot pursue all these goals simultaneously; it has to choose. Furthermore, these goals are not equally valid for all cases, so each country must adapt its policy goals to initial conditions and changing circumstances. It is not right to ask for a simple and unchanging rule. Exchange rate management is a dynamic and complicated task which cannot be put on an autopilot controlled by a computer. Rules must be supplemented by human wisdom and judgment.

### Balancing flexibility and stability

For Vietnam, we propose eclectic and pragmatic policy goals in exchange rate management. This view is not derived from theoretical models or econometrics but from observing Vietnam's reality and the experiences of many other developing countries.

In normal times, we propose the basic strategy of mixing the two most fundamental goals of *competitiveness* and *price stability*. This is not easy, since competitiveness requires flexible adjustment of the exchange rate to eliminate overvaluation, but price stability requires using the nominal exchange rate as a *nominal anchor* (not fully accommodating domestic inflation). Flexibility and stability are conflicting requirements. However, this difficulty should not be taken negatively as a hopeless dilemma but positively as a challenge for continuously attentive policy management.

Competitiveness and price stability are mutually consistent and easy to achieve if the budget and money are under control, the domestic economy is healthy, and no serious external shocks exist. However, if any of these conditions is missing, the central bank has to reassess the weight of exchange rate flexibility relative to its stability. For example, the nominal anchor use of the exchange rate is quite appropriate if domestic inflation is on the rise or in the final stage of disinflation. But devaluation may be an option if competitiveness is lost due to external shocks under relatively sound macroeconomic management. As each circumstance is different, it is impossible to write down a simple formula. The central bank must exercise a good policy judgment in combining exchange rate flexibility and stability.

A developing country should adopt an exchange rate system which allows it to mix exchange rate flexibility and stability. The relative weight between flexibility and stability should be adjusted over time. In addition, revision of the system should be possible without the sense of policy failure or crisis. (Alternative exchange rate mechanisms will be discussed below.)

While the proper mix of competitiveness and price stability should be the main policy concern, other goals listed above, namely (3)-(7), should occasionally supplement it. At times, some of them may become a very serious policy issue. However, the last goal (8) should not be directly targeted for the reason noted earlier.

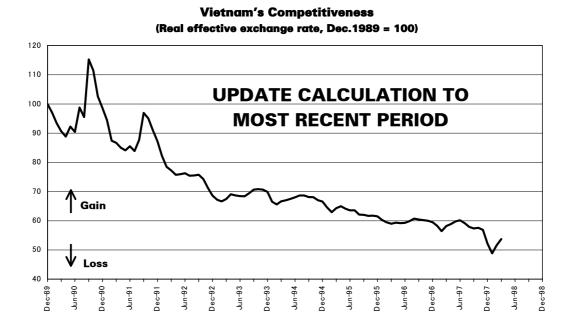
### **Utility and limits of REER**

The real effective exchange rate (REER) is an inflation-adjusted, trading partner-weighted exchange rate. It is an overall indicator of a nation's price competitiveness and can signal an overvaluation or undervaluation of the home currency. This indicator is a useful guide for achieving the proper mix of exchange rate flexibility and stability. It should be regarded as a basic input to policy making in the same way as the doctor checks the body temperature of a patient.

However, REER also have certain technical limitations. There is no definite number for REER as its calculation depends very much on the following factors:

- -- Choice of the base year
- --Type of the price index used (CPI is often used because of it is most commonly available)
- --Weighting of partner countries
- --International comparability of commodity baskets
- -- Data availability

Calculation of REER alone cannot show with certainty whether the home currency is overvalued or not. Because of the technical problems noted above, each researcher and organization tends to come up with different REER levels. Uncertainty is reduced somewhat if REER is calculated by direct sampling of prices rather than by the use of published price indices (which is, however, impractical for developing countries). Even in that case, ambiguity cannot be entirely eliminated.



The ambiguity of competitiveness

Besides these technical problems associated with REER, Vietnam also faces fundamental problems in evaluating the appropriateness of its exchange rate level. These problems are caused by Vietnam's status as a low-income developing and transition country.

First, there is ambiguity arising from <u>vertical trade structure</u>. Vietnam's exports are concentrated in primary commodities and processed manufacturing (garment, footwear,

electronic parts, etc) whose main markets are Japan, US and EU. Bilateral trade weights used in REER calculation are dominated by these developed economies, but they are not direct competitors of Vietnam. If Vietnam wishes to measure its competitive position properly, comparison should be made with China, ASEAN, Mexico, etc. But these true rivals are not represented by bilateral trade weights due to the absence of intra-industry trade.

Second, there is an issue related to <u>low domestic labor content</u> and <u>high exchange rate pass-through</u>. Vietnam's main exports noted above are dominated by natural or foreign inputs, both of which are denominated in USD. Domestic labor accounts for a very small part of total production cost (typically 10% or less). As a result, when VND depreciates, many costs and prices (including export prices) adjust very quickly with little real effect. Some domestic prices are quoted in USD even though payments may be made in VND or gold. If the Vietnamese economy could adjust to any exchange rate level, it would not be very meaningful to ask, "what is the correct VND/USD rate?" Any exchange rate would be the correct one once the economy had adjusted to that level. The equilibrium exchange rate is indeterminate when pass-through is very high (it is worthwhile to estimate Vietnam's pass-through coefficient). In such a case, depreciation will not improve competitiveness or the current account. Competitiveness must be improved through enterprise effort and institutional reforms rather than exchange rate adjustment.

Third, comparison of REER across time is invalid if <u>structural change</u> is significant. The Vietnamese economy has changed greatly with the systemic reforms under doi moi and global integration under the open door policy. Vietnam's guiding economic principle has also shifted dramatically. REER between 1993 and 2003 cannot be compared directly because the underlying economic structures are very different.

For all these reasons, REER is a convenient but imperfect index of competitiveness. The user of REER should always be reminded of these limitations and problems.

### Monitoring the need for adjustment

In addition to REER, the SBV should constantly monitor a broad range of macroeconomic indicators to see if any adjustment in VND is warranted or not. For example:

- --Competitiveness (using the REER index as discussed above)
- --Inflation at home and abroad
- -- Monetary and fiscal indicators
- -- Trends in exports and imports
- --International reserves and market pressure

- -- Trends in FDI and domestic investment
- --Domestic business conditions (production, sales, employment, etc)
- --Banking sector indicators (domestic credit, deposits, NPL, interest rates, etc)
- --Asset market conditions (land, housing, gold, stock market)

There is no simple formula for summarizing all these indicators. Experience and analysis must be used to make a judgment. Meanwhile, the literature on the early warning system of currency crisis may provide a more complete checklist of economic variables for the central bank

# III. Exchange Rate Mechanism

## Alternative options

Which exchange rate mechanism should Vietnam adopt to achieve the best mix of exchange rate flexibility and stability? Today, the exchange rate policy menu for developing countries is quite long. Here are some examples.

Proposal	Explanation	Advocates & countries		
Managed float	Artificial pegs invite currency crisis. Dollar peg should be avoided by any means. Countries with dollar pegs should not receive international support.	Meltzer Report (US, March 2000)		
Bipolar view	In the global finance of the 21st century, no country can choose a middle position between rigidity and flexibility. The only options are rigid fix or free float.	Barry Eichengreen, Stanley Fischer. Once popular, but now attracts less attention.		
Currency board	Fix the exchange rate and abolish the central bank. The monetary agency passively supplies base money in exchange for the same amount of foreign assets. Merits: greater confidence in price and currency stabilization. Demerits: absence of monetary policy and the lender of last resort at the time of banking crisis.	Hong Kong, Brunei. Estonia, Lithuania. People are more skeptical about applicability to larger countries (Argentina, Indonesia, etc.)		
Dollarization	More extreme thancurrency board. Abolish domestic currency and circulate USD. The merits and demerits are the same as in the case of currency board but magnified.	Panama, Ecuador.		
Multiple currency basket (in East Asia)	Dollar peg was a cause of the Asian crisis. Developing countries in East Asia should have more flexibility by pegging to a weighted average of USD, Euro and Yen (this is also supposed to promote the yen's internationalization).	Takatoshi Ito, Eiji Ogawa, Kwan Chi Hung, Japanese MOF, John Williamson.		
Target zone	Intervene as necessary to keep the exchange rate	John Williamson, Rudiger		

	within a prescribed band. There are many types	Dornbusch.			
	including (i) with or without the use of a currency				
	basket as the central rate; (ii) with or without inflation				
	slide (real versus nominal); (iii) soft versus hard band				
	(or double target zone with both hard and soft bands);				
	(iv) announced versus unannounced; (v) wide versus				
	narrow band; (vi) Band-Basket-Crawl; and so on.				
Return to soft	USD plays the dominant role in trade, investment and	Ronald McKinnon.			
dollar zone (in East	finance. It is proper and desirable for East Asian				
Asia)	developing countries to return to the mild dollar peg.				
	No single formula fits all countries; conditions are	Jeffrey Frankel, some IMF			
	different from country to country. Each country should	economists (Paul Masson).			
Eclectic	select the most suitable system among crawl,				
pragmatism	adjustable peg, managed float, etc. in response to				
	changing circumstances. In any system, improve				
	actual operation to avoid crisis.				

The author's view is close to the last (eclectic pragmatism). In order to balance flexibility and stability, not only the exchange rate level but also the exchange rate system should be revised from time to time in response to changing domestic and external developments. There are more than one system that can combine flexibility and stability (if well managed) including adjustable peg, variable crawl, currency basket with a band, managed float, and so on. What is important is not the name of the system but how well it is managed operationally.

Some of the options above are not suitable for Vietnam. Especially the bipolar view (each country must choose a rigid fix or free float, but not in between) is highly inappropriate. Free float is not a meaningful or feasible option for low-income countries with undeveloped markets. On the other hand, a rigid dollar peg, as in Argentina during 1991-2001, usually ends up in currency crisis and severe recession. A currency board and dollarization should not be adopted in Vietnam because they are too rigid.

### Exchange rate smoothing

In mixing exchange rate flexibility and stability, our general advice is to attain:

- --Short-term stability against USD
- --Long-term flexibility against USD

VND should be stable against USD on a day-to-day or even month-to-month basis, but over the longer run (a few to several years) it should adjust its level. The SBV should normally set the direction or intervene (if necessary) in the foreign exchange market. At the same time, it should also be equipped with a mechanism to adjust the level (if necessary) without inviting a crisis. Statistically, this is equivalent to smoothing the VND/USD exchange rate, or suppressing short-term fluctuation but realizing long-term trends (filtering out high

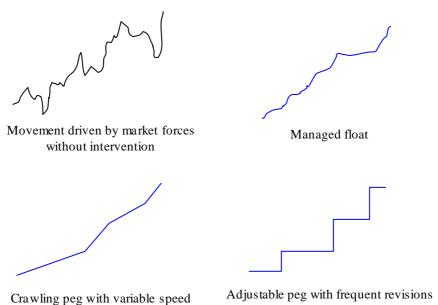
### frequencies).

But why should the central bank wish to smooth the exchange rate? Four reasons can be presented.

- (i) Short-term fluctuation contains more noise and less information on fundamentals compared with long-term movements (low signal-to-noise ratio).
- (ii) Prevention of unwarranted one-way movements such as bubbles, herding, information-cascade, etc.
- (iii) Lack of stabilizing currency traders; without official intervention, demand and supply would not meet or the exchange rate would be too volatile.
- (iv) Official provision of "hedging" (ensuring short-term exchange rate stability) for exporters and importers in countries without forward, swap or futures markets.

In smoothing exchange rates, countries with more developed financial markets (Singapore, Taiwan, Korea) often prefer managed float, with the market mainly determining the exchange rate while the central bank plays a supplementary role. By contrast, countries with primitive financial markets and capital control (China, Vietnam) often adopt an adjustable peg where the central bank mainly sets the exchange rate. Other countries may adopt systems in between. The relative weights of market and official intervention should be chosen in a way most comfortable for each country.

# **Exchange Rate Smoothing: An Illustration**



Exit policy problem and the timing of floating

In addition to improving the normal operation, Vietnam must also prepare for emergency situations. The exit policy problem addresses the question of how to end a fixed (or very stable) exchange rate without a big crisis. This is a particularly serious issue for countries with dollarization, a currency board, or an adjustable peg with infrequent adjustments. There are different occasions from which the exit policy problem arises.

- (i) After a successful disinflation: high-inflation countries often adopt a fixed exchange rate as a nominal anchor to stop inflation. After successful disinflation, however, the government cannot end the fixed exchange rate system since the success is closely associated with it. The home currency is pegged too long and becomes overvalued until it is finally attacked by speculators.
- (ii) <u>In the process of financial liberalization</u>: countries with rigid capital control or multiple exchange rates face the problem of currency unification and one-time depreciation in transition to a more liberal economic system.
- (iii) <u>Responding to various shocks</u>: whether or not macroeconomic management is sound, various domestic or external shocks will occur. The home currency may come under strong pressure and the authority must decide whether to yield to it.

The last possibility is most relevant to Vietnam. VND may be attacked due to, for example, regional currency crisis or other instability in the region. Proper response must be prepared in advance against such a circumstance.

As argued above, the exchange rate system should permit an easy exit to another system without crisis. In this regard, dollarization and a currency board, which fix the exchange rate by law or even by the constitution, are too risky and therefore unacceptable. (If East Asian economic integration proceeds greatly, a common regional currency may become feasible. But it is too early to discuss this possibility.)

If the home currency is already under attack, the central bank must decide whether to float and, if so, when. Again there is no general formula. Some countries do well to resist the market pressure but others float with relatively little damage. Some countries float immediately while others delay the decision for some time. In a typical crisis, a depreciation of 30% is normal and expectable. If the currency falls more than this, it can be considered a very severe crisis indeed (Indonesia and Russia suffered a 80% depreciation).

Once the crisis is over, the exchange rate usually stabilizes quickly and the central bank can restore the normal mode of exchange rate management. If this does not happen and the currency continues to fall for several months, wrong policy response should be suspected (this was the case with the Asian financial crisis in 1997-98; IMF-led policy packages may have

contributed to the worsening of the crisis).

If the decision is to float the currency, a set of supplementary policy measures should be simultaneously introduced to minimize the shock to the national economy and end the floating as soon as possible. Kazakhstan provides an excellent example of how to do this. After the Russian ruble collapsed in August 1998, the Kazakh currency (tenge) came under a strong downward pressure. When it finally floated in April 1999, the following measures were also taken:

- -- Temporary adoption of trade barriers and capital control
- --Special forward exchange arrangement to curb deposit withdrawals
- --Temporary freeze of public utility charges and other poverty alleviation measures
- --Temporary easing of prudential regulation on commercial banks
- -- No fiscal or monetary tightening
- -- No acceleration of structural reforms during the crisis

Kazakhstan was a market-oriented economy, but it temporarily deviated from the market principle to protect its consumers, depositors, firms and banks during the height of the crisis. After falling 33%, the tenge quickly stabilized within a few weeks. This was a very different policy response compared with the East Asian countries.

#### The China factor

In conducting exchange rate policy, Vietnam must carefully watch the Chinese situation because (i) China provides valuable lessons for Vietnam; and (ii) developments of the Chinese economy and RMB may pose potential problems for the Vietnamese economy.

China currently shows the sign of overheating. There is a large and persistent current-account surplus and FDI inflows are strong. Real growth is high, consumption is booming, and urban land prices are rising. International reserves are ballooning and money expands rapidly. For Vietnam, there are two macroeconomic risks.

The first risk is the bursting of the Chinese bubble which leads to deflation and economic confusion. If that happens, there will be a serious impact on the regional economy (including Vietnam) through weak demand, capital outflows and possible currency attacks. The second risk is the mishandling of RMB's exit policy problem. At present, the Chinese government refuses to revalue RMB despite international pressure. But sooner or later, China will have to move to a more flexible currency system. If the transition is smooth, there should be no great difficulty for Vietnam. But if it is a catastrophic transition, it will damage the regional

economy. The soft landing of the Chinese economy as well as RMB is the key.

## The currency basket?

The argument for multiple currency baskets is popular among Japanese economists and officials. They propose that East Asian developing countries should stop using USD as the benchmark and adopt currency baskets composed of USD, Euro and Yen. However, the author does not support such an idea.

The reason is that currency baskets do not facilitate exchange rate management very much. Currency baskets solve only a small part of the adjustment problem arising from the fluctuations of the major currencies, while other adjustments (inflation gap, real shocks, currency crisis) are left to the judgment of the monetary authority. Currency baskets are even harmful if they give the false sense of security and automaticity. Exchange rate movement driven by the major currencies does not coincide with the adjustment needed from a broader perspective. With or without currency baskets, insight and experience are crucial for good macroeconomic management. What is required is intelligent and experienced central bank staff and not the installment of a partially automatic adjustment mechanism.

Adjustment to:	Dollar peg	Inflation slide	Currency basket	Basket + inflation slide
Fluctuations of USD, yen, euro	Manual	Manual	Auto	Auto
International inflation gap	Manual	Auto	Manual	Auto
Real shocks	Manual	Manual	Manual	Manual
Currency crisis	Manual	Manual	Manual	Manual

### Concrete suggestions

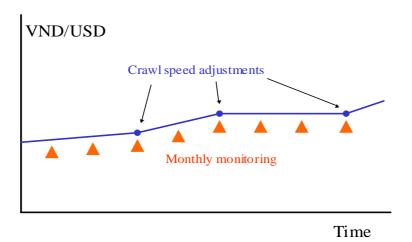
Finally, let us summarize our conclusions with concrete proposals.

As to the system, Vietnam's reality as an economy with underdeveloped markets calls for a system in which the SBV mainly sets the daily exchange rate while market signals are used as supplementary inputs. Free float is impractical and rigid fixes are dangerous. Specifically, the author proposes a *variable crawl* with monthly monitoring and speed adjustment (if there is no reason to change the speed, no adjustment is made that month). On the surface, this system may operate much like the current system; VND will slowly depreciate. But the pattern of crawling will no longer be left to the will of the market. It will be analyzed, determined and announced by the SBV with proper reasoning. Formalization of the crawling mechanism strengthens the analytical capability as well as the policy accountability of the SBV.

Even when the need for adjustment is slim, it is recommended that VND is allowed to move slightly against USD (not kept at a certain level for too long). This is to give the impression that the exchange rate is not pegged at all and change is possible at any time. In this regard, a variable crawl (which adjusts the sliding speed) is superior to an adjustable peg (which adjusts the level). Realigning the peg is big news and stirs much political debate while modifying the speed of sliding attracts much less attention and can be done quietly.

A variable crawl has been adopted by many developing and transition countries including Indonesia and Kazakhstan. It is a suitable system for a developing country whose financial markets are not yet fully developed. On the other hand, pegs with infrequent adjustments tend to cause the exit policy problem as seen in Mexico, Argentina, Hong Kong and China.

# Variable Crawl with Monthly Evaluation



As to the current level of VND/USD, the author does not see any need for a major revision. A new exchange rate mechanism can be started smoothly without a big initial one-time jump. But this issue should be more carefully evaluated by the SBV before coming to a final conclusion. At any rate, it is not wise to realign the exchange rate level without clear reason; that will confuse the market.

As to the band around the central rate, I suggest a relatively narrow band of  $\pm 1\%$  or even less. This is because the SBV must play the role of a market maker in a thin market with a small number of participants (dominated by a few state-owned commercial banks). In such a market, currency movements within the band do not contain much economic information. The fact that the actual rate is usually stuck to the upper end of the band should not be construed as the evidence of VND's overvaluation. The current bandwidth of  $\pm 0.1\%$  is a little too narrow but, in the author's view, still within the acceptable range.

In order to manage a variable crawl effectively, the SBV must conduct additional studies to support its operation. They include:

- --Analyses on policy objectives and operation mechanism (along the line of this paper)
- --Reliable calculation of REER
- --Monthly monitoring mechanism of a broad range of relevant economic variables
- --Survey of relevant literature (including currency crisis early warning systems)
- --Statistically estimate Vietnam's exchange rate pass-through coefficients
- -- Prepare procedure for switching from the normal mode to the crisis mode

[END]