Foreign exchange intervention and policy: Bank Indonesia experiences

1997 - October 2004

1. Introduction

The foreign exchange market in Indonesia has been developing in conjunction with changes in the exchange rate regime, which has moved gradually toward increased emphasis on market mechanisms. Essentially, the foreign exchange system is evolving from tight government control towards a free foreign exchange system, while the exchange rate system is moving progressively from a fixed exchange rate towards a flexible exchange rate system, at a pace consistent with prevailing economic conditions.

Since the adoption of free floating in mid-1997, the experience of sharp and persistent depreciations of the rupiah, sudden short term capital outflows, and a fragile domestic financial sector collectively motivated structural changes in Indonesia's foreign currency market. Bank Indonesia, as stipulated in the Bank Indonesia Act, has implemented several policies to maintain exchange rate stability, including intensive monitoring of foreign exchange market transactions, moral suasion, foreign currency intervention in the domestic foreign exchange markets, and direct controls through relevant regulations.

Since Indonesia moved from managed to free floating on 14 August 1997, intervention has been used primarily as a liquidity management tool to offset government expenditures. At the same time, such interventions can also stabilise rupiah volatility, especially during rapid depreciations associated with excess liquidity. Thus intervention, through tightening domestic liquidity by the sale of foreign exchange, can be used as a framework to influence the exchange rate. As well as absorbing excess rupiah liquidity, intervention by way of selling foreign currency also aims at lessening the volatility of the exchange rate; easing market pressures; and by its nature, adding foreign currency liquidity into a market which is often marked by lack of supply.

This paper reviews the development of the rupiah during period 1997 to 2004 and explains the activities of Bank Indonesia in maintaining the stability of the exchange rate.

2. Foreign currency intervention

2.1 Overview

Just like other central banks, Bank Indonesia has the authority to carry out foreign currency intervention at both policy and operational levels. Foreign currency intervention policies are mainly intended to maintain exchange rate stability, particularly at times when there are factors that impact negatively on the rupiah. Nevertheless, foreign exchange intervention is only undertaken when moral suasion is ineffective in influencing market participants and curbing excessive exchange rate movements.

Internal Bank Indonesia guidelines and regulations that guide and constrain foreign currency intervention emphasise efficient implementation, taking into account factors such as market liquidity conditions, transaction turnover, and market psychology. The execution of foreign currency intervention policy is varied as regards both timing and magnitude, in order to avoid predictability. Intervention operations are conducted in a measured and careful manner, recognising the importance of foreign exchange reserve adequacy.

Supply and demand conditions in the foreign currency market are always taken into account. When appropriate, the sale of US dollars in the domestic foreign exchange market is structured so as to provide a resistance level for the currency, with the objective of reducing the probability of exchange rate movements beyond that level.

Bank Indonesia does not announce foreign currency intervention to the public, reserving to itself information regarding volume, strategy, and timing. However, Bank Indonesia will continuously and very closely monitor foreign currency transaction activities, either indirectly via on-screen figures and broker's information (off-site supervision), or directly (on-site supervision).

2.2 Transaction types

Under the existing law, Bank Indonesia has the right to conduct all types of foreign currency transactions for intervention purposes. Yet Bank Indonesia intervenes mainly through spot transactions which dominate the domestic foreign exchange market. The choice of spot transactions for intervention relates to factors such as:

- The volume of spot transactions is relatively large in the domestic market.
- Spot transactions have the potential to influence price movement immediately.
- Spot transaction patterns can indicate speculative market behaviour.
- Spot transaction volumes can reflect the volatility of the exchange rate. For example, spot transaction volumes are almost in line with rupiah volatility, so they can be used as consideration in the decision to intervene.

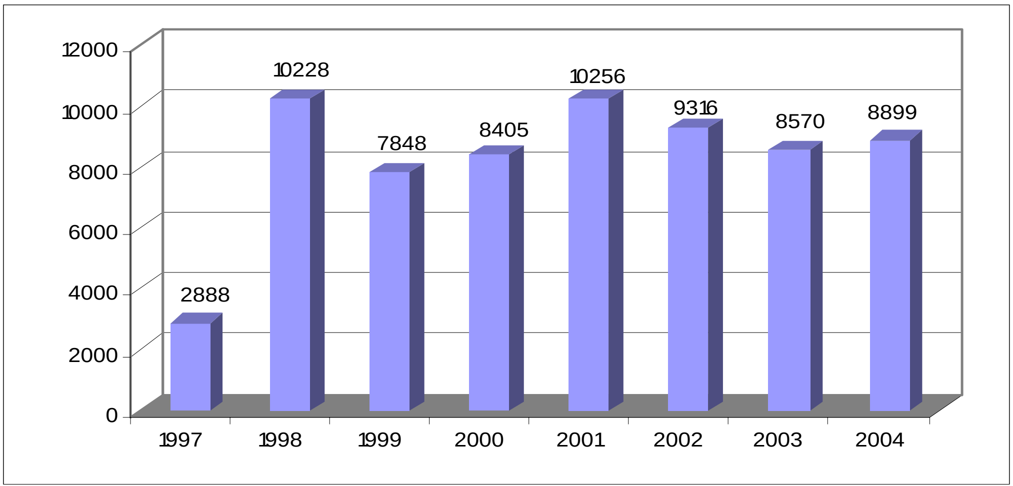
2.3 Timing and magnitude

Given that maintaining exchange rate stability is the prime objective of foreign exchange rate intervention, volatility is the main criterion determining the volume and timing of intervention. For this reason, the volume of foreign currency intervention significantly increased following the implementation of free floating in August 1997. At the same time, periods of intervention became more sporadic.

2001 recorded the highest level of the rupiah at Rp 10,256 in annual average terms (see Graph 1), and also the highest volatility. Accordingly, 2001 also saw substantial intervention as Bank Indonesia attempted to maintain exchange rate volatility within a reasonable range.

Graph 1

Annual average rupiah exchange rate



2.4 Method of intervention

Intervention methods can be classified into two types. First, the open method is intervention directly with the market without using an intermediary. The second type of intervention is the closed method, using intermediaries (an agent bank).

Bank Indonesia chooses between the open and closed method depending on several considerations, as follows:

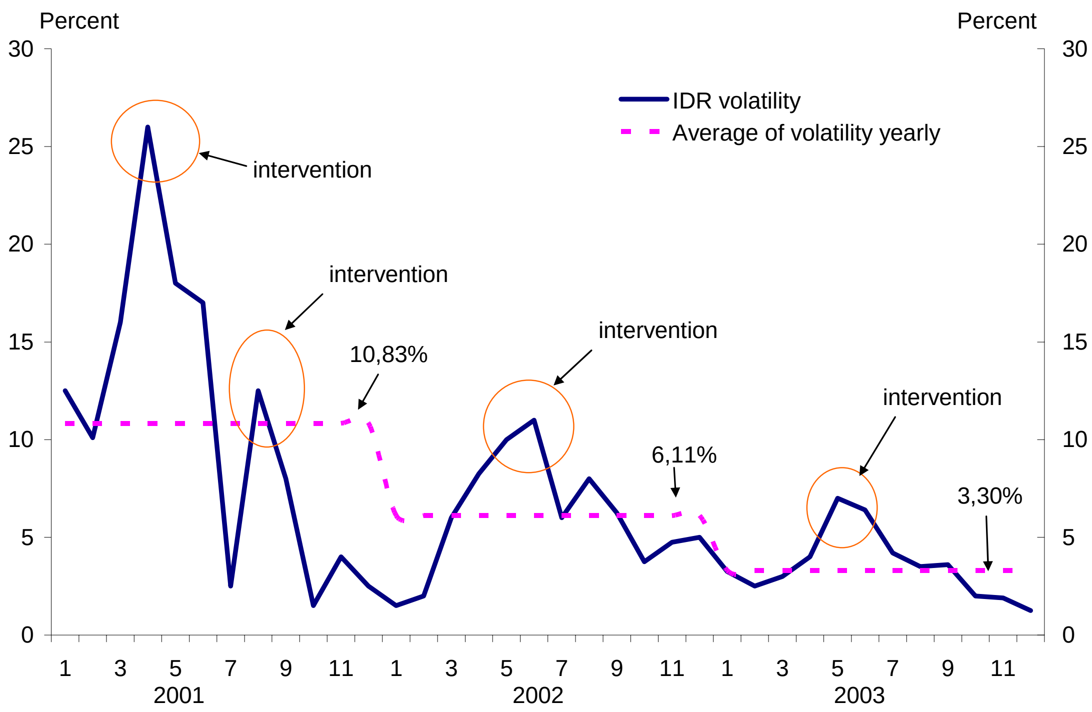
- Whether Bank Indonesia would prefer market participants to know clearly about the intervention or not.
- Development of market sentiment, which may influence intervention effectiveness.
- Results of technical analysis. Foreign currency intervention can be more effective in influencing market expectations when reinforcing market price trends or momentum that are consistent with market participants' technical analysis.
- Supply and demand for US dollars. Foreign currency intervention is unlikely to be effective when there are limited supplies of US dollars in situations of high demand for dollars.

2.5 Effectiveness of foreign currency intervention

Given Bank Indonesia's objective for foreign currency intervention, efficacy is mainly assessed in relation to rupiah volatility. As seen in Graph 2, rupiah volatility has diminished since free floating was adopted, suggesting the effectiveness of intervention. Reduced rupiah volatility is positive for the economy in general.

Graph 2

Rupiah exchange rate volatility and intervention



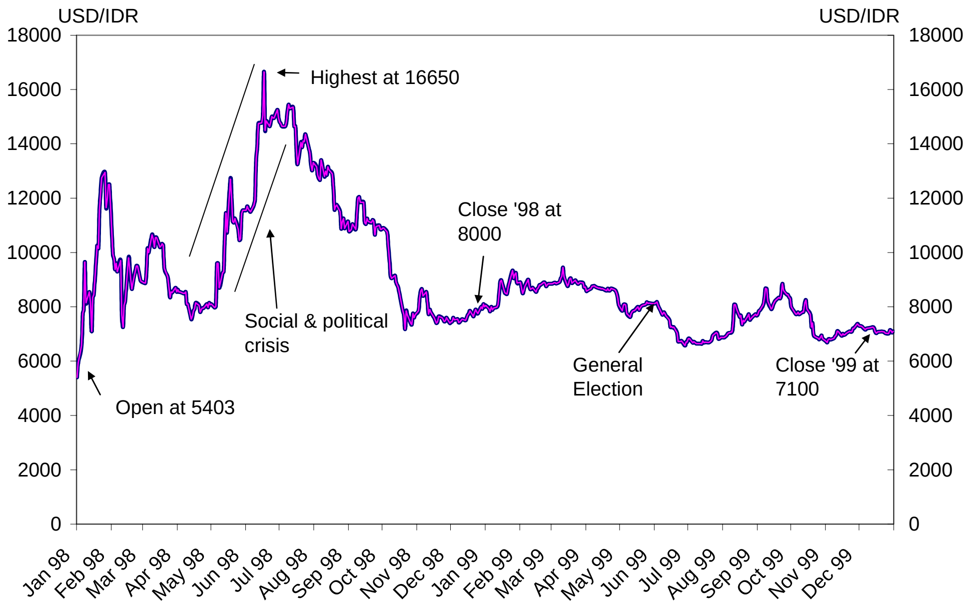
3. Movement of the rupiah exchange rate

This section traces the evolution of the rupiah from 1997 until 2004, illustrating the application of intervention policy:

3.1 1997 to 1999: a weakening rupiah and high volatility (Graph 3)

The rupiah in this period experienced strong fluctuations and severe downward pressure associated with the exchange rate crisis in Thailand. The driving force behind the rupiah turmoil included a fall in confidence of foreign investors as reflected in large capital outflows to pay maturing external debts, and speculative transactions.

Graph 3
Rupiah exchange rate, 1997 – 1999



In addition, worsening domestic economic fundamentals, due to the crisis of public confidence in the banking system and spiralling inflation, were also major contributors to currency turbulence up to July 1997.

Contagion effects from the exchange rate turmoil in Thailand spread to other ASEAN countries after July 1997, and accordingly the rupiah was under downward pressure. The widening of the managed float's intervention band on 11 July 1997, from 8% to 12% (with a lower limit of Rp 2,374 and an upper limit of Rp 2,678 per dollar) failed to abate the downward pressure. Capital outflows accelerated and speculative pressure strengthened. Consequently, the rupiah continued to weaken and, by mid-August 1997, the exchange rate surpassed the upper limit of the intervention band.

In response to the greater pressure on the rupiah and constraints on securing foreign exchange reserves, on 14 August 1997 Bank Indonesia decided to alter the foreign exchange system from managed float to free float. Subsequently rupiah swings became more volatile, particularly as a result of vigorous speculation against the rupiah. The volatility of the exchange rate altered the trading range from about Rp 2,500 to 2,600 per dollar in mid-July 1997 to Rp 2,700 to 3,000 per dollar.

In addition, swap premiums also changed from about 9.0% to 30.1%. From mid-August to the end of September 1997, the exchange rate moved in a narrow range, between Rp 2,900 and Rp 3,000 per dollar. This narrow range resulted from government measures to tighten monetary conditions and active intervention by Bank Indonesia in the foreign currency market through spot, forward, and swap transactions. Intervention aimed at supplying dollars when the market was running out of them, stabilising exchange rate fluctuations, and providing guidance to market players. In addition, measures taken by Bank Indonesia to restrict forward sales of foreign currency from domestic banks to non-residents were geared towards reducing speculative pressure on the rupiah. The restriction helped reduce rupiah volatility.

After October 1997, the rupiah was again under pressure. The exchange rate became very turbulent and even traded at a low point of about Rp 16,650 per dollar in the middle of June 1998. To address this turmoil, Bank Indonesia added to the supply of dollars by lowering the statutory reserve requirement for foreign currency, and initiated a concerted intervention with the Monetary Authority of Singapore and Bank of Japan. Unfortunately the rupiah was stable only in the short run because of the crisis of confidence in Indonesia's economic prospects and the high demand for dollars either for speculative transactions or for external debt payments. Because of that, attempts by Bank Indonesia to ease tight foreign currency liquidity in order to stabilise the rupiah were ineffective.

During the period from November 1998 to January 1999 the exchange rate was relatively stable in a range of Rp 7,500 to 8,000, mainly due to the improvement of Indonesian economic fundamentals and a number of appropriate fiscal policy measures taken by the government.

However, between February 1999 and March 1999, the rupiah depreciated to a range of Rp 8,500 to 9,260. Depreciation of a few Asian region currencies (THB, SGD) and the postponement of a freeze of several insolvent commercial banks had impacted negatively on the exchange rate.

By the end of 1999, the exchange rate had became relatively stable in a range of Rp 8,500 to 8,800. The stability of the exchange rate was partly the result of strong demand for rupiah related to fiscal year tax payments and loan disbursements from official creditors (the IMF, ADB, JEXIM). In addition, preparation for the upcoming general election had also contributed to positive sentiment over the outlook for the exchange rate.

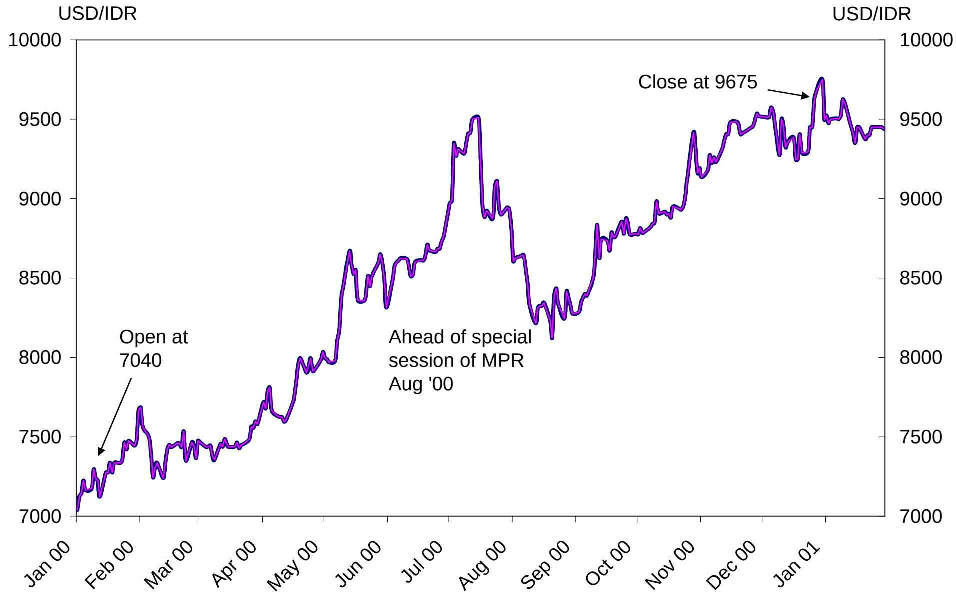
To sum up, in addition to negative sentiment, pressure against the exchange rate during the period 1998-99 was mainly due to fundamental factors including huge private and government offshore debt, and associated deteriorating country risk.

To stabilise the rupiah, the government employed several measures such as restoration of monetary stability, facilitation of trade finance by Bank Indonesia, restructuring of external corporate debt, and sterilisation of the domestic liquidity effect of government expenditures through sale of foreign exchange in the foreign exchange market.

3.2 2000: rupiah weakening and increasing volatility (Graph 4)

In the year 2000, the rupiah experienced renewed depreciation with increased volatility. The annual average rupiah exchange rate increased from Rp 7,850 to Rp 8,400.

Graph 4
Rupiah exchange rate, 2000



Leading into 2000, the rupiah had performed very well and strengthened against the US dollar. At the end of 1999 the newly elected government had generated optimism about social and political stability and economic recovery. These factors had resulted in an exchange rate close to a level of Rp 7,000 per US dollar.

However, the rupiah subsequently lost its support and weakened from early April 2000 due to social unrest, political uncertainties and the threat of disintegration of several regions in Indonesia. Moreover the rating agency Standard & Poor's had also downgraded sovereign long-term and short-term debt (from CCC+ and C to become Selective Default/SD). All these factors had encouraged private individuals and corporations to sell rupiah for US dollars so that the exchange rate weakened to a level of Rp 8,000.

From May 2000 to August 2000, the exchange rate continued to weaken and touched a level of Rp 9,600. The main factor was declining investor confidence in line with difficult social and political conditions ahead of the Annual Session of the People's Consultative Assembly. From then until the end of 2000, the rupiah weakened further due to the strengthening of the US dollar against major currencies during the period, coupled with increasing corporate demand and social unrest related to terrorist bombing acts at a number of religious places at year end. In December 2000, the monthly average exchange rate was Rp 9,435, a fall of 22.9% through the year. The rupiah closed at the low level of Rp 9,675 at year end.

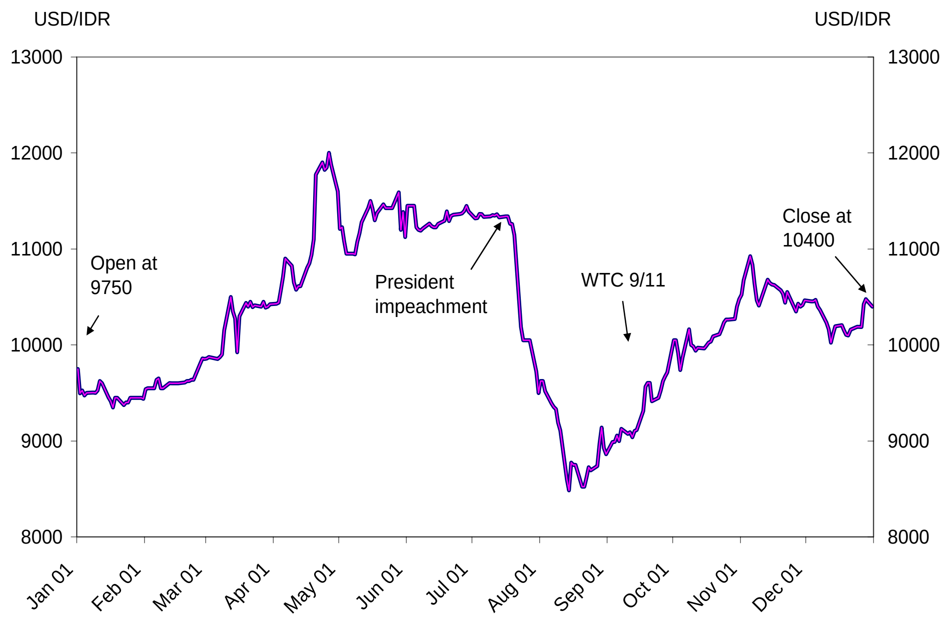
To address the ongoing depreciation of the rupiah, Bank Indonesia started tightening monetary conditions through open market operations to absorb excess rupiah liquidity. The policy (SBI) interest rate was raised to give a signal of monetary tightening to the market, and to reduce the pressure on the exchange rate. Bank Indonesia also intervened in the foreign exchange market by selling US dollars, thereby providing an additional supply of dollars in the market as well as absorbing excess rupiah liquidity.

3.3 2001: sharp rupiah depreciation (Graph 5)

In the year 2001, the exchange rate sharply depreciated. The rupiah closed the year at Rp 10,400, a fall of 7% compared with the end-December 2000 level of Rp 9,675.

In the first four months of 2001, the rupiah had depreciated due to panic buying of US dollars because of increasing social and political uncertainties in relation to the impeachment of the leadership of the nation.

Graph 5
Rupiah exchange rate, 2001



From then until July 2001, the exchange rate was relatively stable, moving sideways within a range of Rp 11,000 to 11,500. Although the rupiah remained undervalued in most eyes, market participants would not take positions, preferring instead to "wait and see". Market focus was on the upcoming Special Session of the People's Consultative Assembly.

From August until September 2001, the rupiah strengthened quite sharply due to a smooth and successful People's Consultative Assembly meeting to nominate a new President. Overall, improving market sentiment was probably related to better social, economic, and security conditions. The rupiah appreciated as far as Rp 8,454 during this period.

The above conditions were not to last long, and the rupiah again slumped. In the final quarter of 2001, the exchange rate weakened and broke the psychological level of Rp 10,000 following profit taking after the strong rupiah phase associated with the successful transition of the national leadership. Reduced investor and corporate confidence about fundamental economic conditions was caused by the World Trade Center events on 11 September 2001, which were expected to slow global economic activity and badly affect the Indonesian economy.

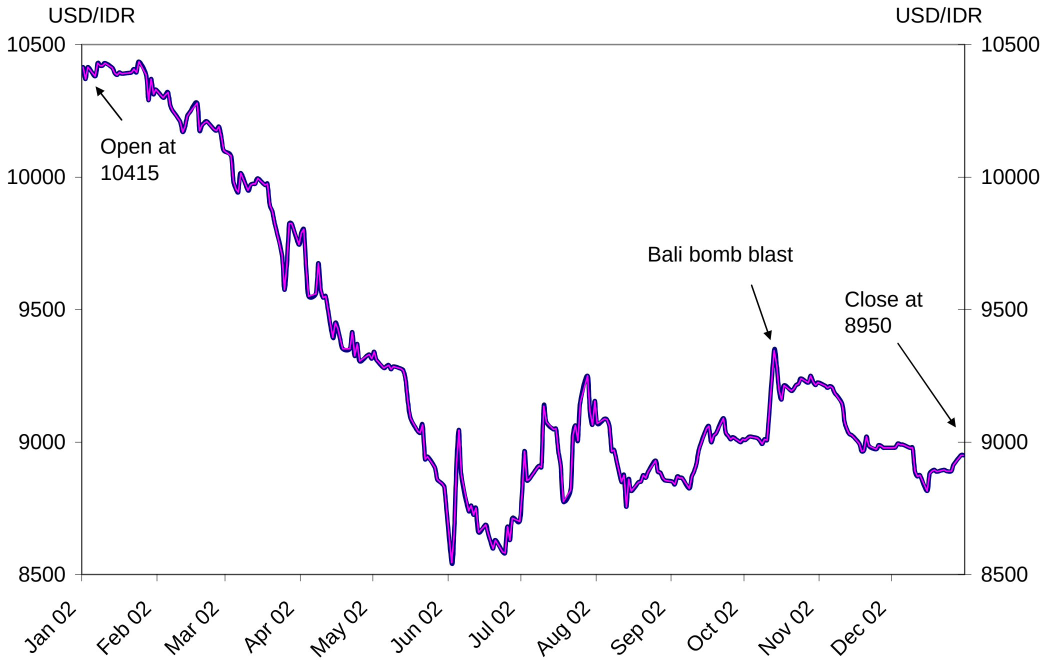
Again, to cope with sharp fluctuations of the exchange rate, Bank Indonesia conducted operations to absorb excess liquidity from the market through open market operations, and at the same time by intervention to sell US dollars in the market. Further, on 12 January 2001, Bank Indonesia issued regulation number 3/3/2001 which was aimed at limiting non-resident rupiah transactions with the potential to be used for speculation.

3.4 2002: rupiah appreciation with lower volatility (Graph 6)

In 2002, the rupiah sharply appreciated, closing at Rp 8,950, up 16.2% compared with the end of December 2001 (Rp 10,400). The rupiah had the most rapid appreciation of any currency in Asia during 2002.

In the first half of 2002, the exchange rate was supported by a surplus on the current account, touching Rp 8,425 at its strongest point. However, exchange rate volatility returned as the result of the Bali bomb blast in October 2002. This event triggered panic buying of US dollars and the rupiah quickly depreciated to as high as Rp 9,425. Rapid progress in restoring internal domestic security improved market confidence, and the rupiah appreciated to a level below Rp 9,000.

Graph 6
Rupiah exchange rate, 2002



To limit foreign exchange speculation, Bank Indonesia continued to monitor the compliance of banks with regulation PBI No 3/3/2001 on the limitation of rupiah transactions and foreign currency credit expansion. In this regulation, forward sale and swap transactions beyond certain amounts with non-residents continued to be prohibited, unless for real economic transactions (ie underlying transactions). The monitoring process strengthened banks' compliance, thereby helping to contain rupiah volatility.

To monitor market developments, Bank Indonesia carefully scrutinised foreign exchange transactions through the Money Market Information Centre (PIPU). This monitoring aimed at ensuring that market transactions were on a normal track according to the common practice prevailing in the foreign exchange market. Monitoring is part of an early warning system aimed at identifying at an early stage transactions that could potentially destabilise the rupiah market. In addition, Bank Indonesia routinely conducts surveys to learn about market agents' perceptions on the direction of exchange rate development. Results from this survey are one consideration in implementing exchange rate policy.

Based on its monitoring of market conditions, Bank Indonesia engaged in moral suasion to ease market pressures, by informing market agents of Bank Indonsia's view of matters. During the period under review, this was done on several occasions, including during the episode of panic buying of dollars by market players who over-reacted to the Bali tragedy. This policy strengthened market confidence and prevented further rupiah depreciation.

Because of the knowledge that Bank Indonesia obtains through its monitoring activities, moral suasion can in some situations improve market perceptions of the implications of events that have triggered baseless rumours. Detection of negative rumours and data flows through PIPU and from surveys, as well as market condition assessments and information from other sources such as the government and international institutions, provides a valuable information base not readily available to the market as a whole. Therefore, moral suasion might be seen as actions to expand the relevant information set available to market agents, thereby coordinating perceptions and perspectives on sensitive issues. In doing so, Bank Indonesia can indirectly change the attitudes of market agents that dominantly affect the exchange rate.

To complement these various policies, Bank Indonesia also undertook foreign exchange intervention by selling dollars in the market. These operations served two purposes. In addition to its role in absorbing excess rupiah liquidity, the policy also aimed at lessening volatility in the exchange rate by easing market pressures associated with the limited supply of dollars. In its implementation, this policy consistently took into account market psychology and the adequacy of foreign exchange reserves. Intervention was successful in reducing rupiah fluctuations throughout the reporting year, as shown in a declining average daily volatility of the exchange rate to 1.4% from 2.8% in the previous period. Looking at the level of the exchange rate, the foreign exchange intervention policy was also quite effective in maintaining the appreciating trend of the rupiah during 2002, and keeping the exchange rate below Rp 9,000 per US dollar until the end of the year.

3.5 2003: rupiah stability (Graph 7)

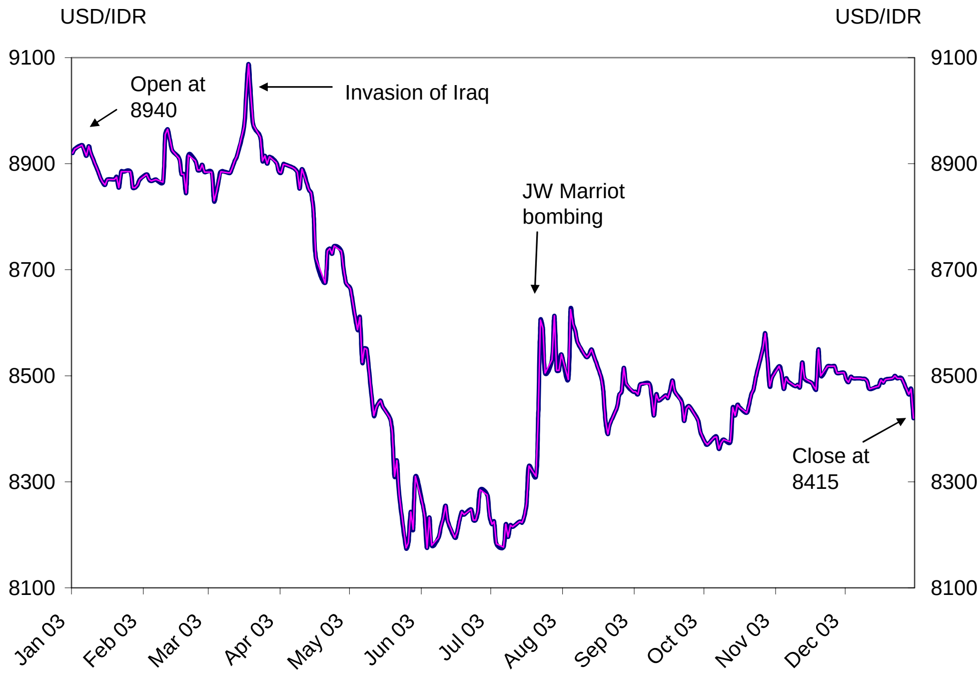
Over 2003, the rupiah was stable with a strengthening trend against the US dollar. The exchange rate closed the year at Rp 8,420, an appreciation of 6.3% as compared with the level at the end of December 2002 (Rp 8,950). The rupiah had traded within a range of Rp 8,175 to 9,088.

Overall, various factors such as decreased risk, an adequate supply of foreign exchange in the market, higher returns on rupiah instruments, and improved economic fundamentals as well as Bank Indonesia's commitment to maintaining exchange rate stability turned out to play a significant role in generating positive market sentiment and lifting the exchange rate. Nonetheless, the rapid capital inflows needed to be monitored closely because most were invested in short term portfolio assets (hot money) which could easily reverse.

Bank Indonesia continuously monitored foreign currency transaction activities, either indirectly (off-site supervision) or directly (on-site supervision). Indirect supervision was conducted through the Dealing Room, and analysis of inter bank transaction data recorded with the PIPU, foreign exchange flow reports (LLD), as well as data provided by the banks' monthly reports to Bank Indonesia.

During the reporting period, Bank Indonesia conducted a number of on-site supervision visits to the main banks active in the market. Such visits were conducted ahead of the 2003 Annual Session of the People's Consultative Assembly, when the political environment was marked by growing concerns. At the same time, foreign investors' interest was shifting from rupiah-denominated bond investments (high yielding currency) to offshore stock exchanges (high growth assets), particularly on the back of efforts by a foreign financial institution to reduce its rupiah exposure. These supervisory measures, later combined with foreign currency intervention, proved sufficiently effective in subduing market pressures on the rupiah and led the currency to gradually stabilise near the Rp 8,400 level against the US dollar.

Graph 7
Rupiah exchange rate, 2003



During this period too, foreign currency intervention policy was intended, ultimately, to maintain exchange rate stability, especially at times when negative factors weighted on the rupiah. However, foreign exchange intervention was undertaken only when moral suasion was deemed ineffective in calming market participants and curbing excessive exchange rate movements. The sale of US dollars in the foreign exchange market was executed to provide a resistance level for the currency, to reduce the probability of exchange rate movements beyond that level. Policy implementation is always undertaken with due consideration for supply and demand conditions in the foreign currency market. In this context, technical analysis is used to identify "resistance levels" that if reinforced by intervention could interrupt the momentum that leads to panic buying of dollars.

Foreign exchange intervention operations carried out during 2003 indeed proved effective in minimising excessive exchange rate volatility. This is observable from the rupiah's performance during the year, which was far more stable than in previous years.

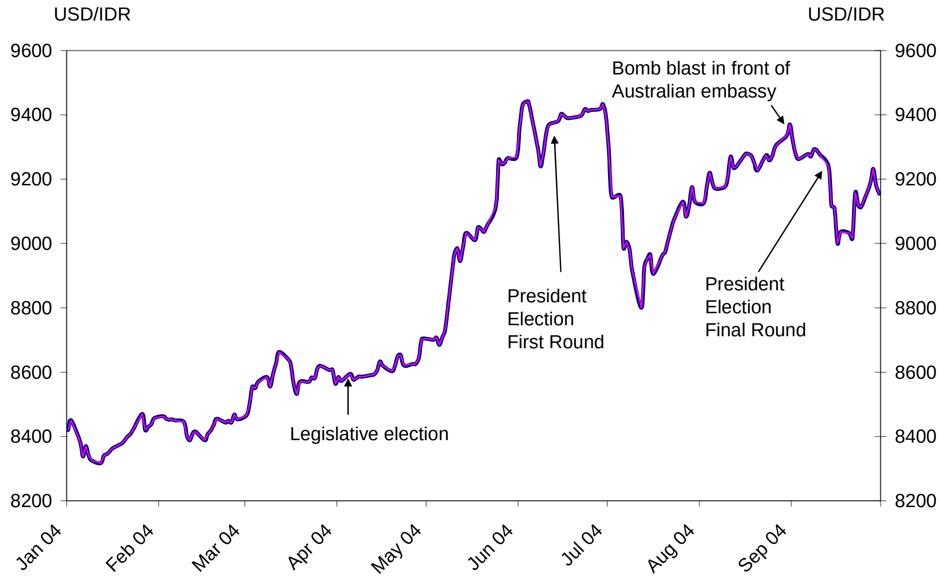
To further support the supervision of foreign exchange transactions, Bank Indonesia also issued a number of regulations during the year, specifically Bank Indonesia Regulation (PBI) No 5/24/PBI/2003, dated 31 October 2003, in reference to Money Market Information Centres; and Circular Letter No 3/34/DPD, dated 24 December 2003, on procedures for the submission of data related to foreign exchange transaction through the PIPU. These regulations deal with reporting procedures, including timing, and impose sanctions should the reports provided by the banks not adhere to the regulations. In addition, PBI No 3/3/2001, dated 12 January 2001, on the limitation of rupiah transactions and the provision of foreign currency credit by banks, was streamlined. In general, the current regulations are deemed adequate to limit speculative activities in the foreign exchange markets.

3.6 January–September 2004: depreciation and relatively high volatility (Graphs 8 and 9)

In 2004, the exchange rate weakened. From early January 2004 to September 2004 the rupiah depreciated by 9%, driven by several internal and external factors.

Graph 8

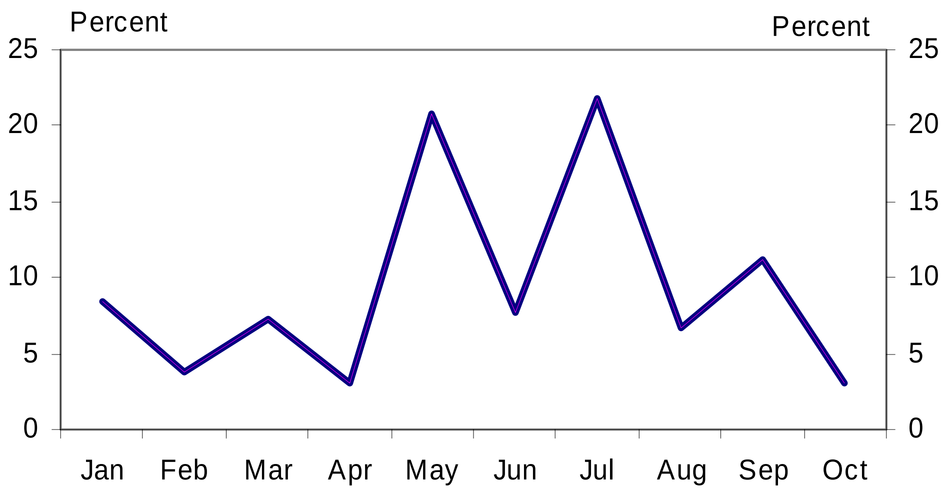
Rupiah exchange rate, January to September 2004



The 2004 general election became the main domestic factor drawing the market's attention. From the beginning of the election campaign (March 2004) until September 2004, the exchange rate fluctuated and tended to weaken. The successful conclusion of the first general election process provided a direct positive short term boost for the rupiah. However, the Kuningan bomb blast in September 2004 undermined that positive sentiment.

Graph 9

Volatility of the Rupiah, Jan-Oct 2004



The main external factor was the recovery of the US economy, which led the Fed to increase the policy rate from 1.25% to 1.75%, producing a negative impact on the rupiah exchange rate against the US dollar.

In the fourth quarter of 2004, especially after implementation of the Newly Improved Net Open Position regulation in September 2004, the rupiah became more stable (as reflected in reduced measured volatility). Meanwhile, the market continued to focus on the first 100 days of the new cabinet under the leadership of the newly elected President.

4. Policies linked to exchange rate

Foreign currency intervention is not the only tool used by Bank Indonesia to maintain rupiah stability. Foreign currency intervention may not always be effective alone, depending on the current global financial market and the complexity of macro and micro economic conditions.

To further support foreign exchange management, Bank Indonesia has issued a number of regulations, and conducts direct and indirect supervision as follows:

1. ***Bank Indonesia Regulation (PBI) No 3/3/2001 On The Restriction of Rupiah Transactions and Foreign Currency Credit Offered by Banks (12 January 2001)***. This regulation was introduced to restrict rupiah transactions offshore in order to mitigate the volatility of the rupiah. The new regulation is enforced so as to prohibit onshore banks from lending to non-resident accounts or transferring rupiah to offshore accounts. The regulation effectively prohibits offshore trading in rupiah. The rupiah, then, is a non-deliverable currency in the offshore market.
2. ***Conduct indirect supervision by monitoring foreign exchange transactions***. Commercial banks dealing in foreign exchange must submit daily transactions reports through a PIPU terminal (on-line). The obligation to submit reports strongly supports the monitoring of up-to-date domestic foreign exchange activities.
3. ***Conduct a number of on-site supervision visits among the main commercial banks which actively trade in the foreign exchange market***. For example, some bank visits were conducted in 2003 in the context of political uncertainty and shifting foreign investor sentiment (see above for more detail).
4. ***Bank Indonesia Regulation (PBI) No 6/20/PBI/2004 Improved Net Open Position (15 July 2004)***. The regulation was introduced to decrease speculative activities in the foreign exchange market, as reflected by the downward trend in the level of banks' net open positions (NOP).

5. Conclusion

- Since the implementation of free floating in August 1997, Indonesia has experienced movements of the exchange rate which are not only driven by fundamental factors reflecting economic conditions, but which are also substantially influenced by market reactions to non-economic events that have increased risk premia.
- Bank Indonesia, which is authorised to maintain exchange rate stability, has conducted several policies such as intensive monitoring of foreign exchange market transactions, moral suasion, and intervention in the domestic foreign exchange market.
- Foreign exchange market intervention can be used to address unwarranted exchange rate movements stemming from temporary shocks. It is not an independent policy instrument and cannot generate permanent changes in exchange rates, especially when the objectives are inconsistent with macro economic policies.
- To further reduce unwelcome fluctuations, Bank Indonesia has issued several regulations such as limitations on transactions by non-residents and on net open positions, and has conducted both indirect (off-site) and direct (on-site) supervision of market participants.