

# Reserve management and FX intervention

Bank Indonesia

## Abstract

Bank Indonesia's main aim is to safeguard the stability of the rupiah. To this end, the Bank maintains foreign reserves that are sufficient in amount to achieve this monetary policy objective and also to meet international foreign currency obligations. Reserves are accumulated mainly from traditional sources, such as capital inflows, foreign bond issuance and government export proceeds. Like most central banks, Bank Indonesia applies the principles of security, liquidity and profitability in pursuing its reserves investment objectives. The Bank has recently implemented a new investment and diversification strategy for its reserves. In terms of investment strategy, the Bank has recently started to apply a currency immunisation approach, which aims to match the reserves currency allocation to the composition of the country's liabilities and therefore mitigate the currency risk in the reserves portfolio. Furthermore, the Bank's reserves management style has evolved from a traditional model into a more sophisticated multi-asset and multicurrency approach, optimising the balance between the need for reserve accumulation and the cost of holding these reserves.

JEL classification codes: E58.

Keywords: central bank policy; monetary operation; adequate foreign reserves; reserves management; currency immunisation approach; diversification strategy.

## Drivers of reserves accumulation from a policy perspective

Bank Indonesia's main objective is to achieve and maintain the rupiah's stability. The currency's stability is defined, among other criteria, as price stability for goods and services as reflected in inflation. Bank Indonesia implemented an inflation targeting framework in 2005, in which inflation is the primary monetary policy objective, while adhering to a floating exchange rate system. Exchange rate stability plays a crucial role in achieving price and financial system stability. For this purpose, rather than pegging the exchange rate to a particular level, Bank Indonesia operates an exchange rate policy designed to mitigate excessive rate volatility. The Bank maintains the exchange rate in line with its fundamental value, while maintaining market mechanisms and deepening domestic financial markets. This policy is focused on moderating the rupiah's volatility and sustaining adequate market liquidity, thus mitigating risks to macroeconomic and financial system stability.

As stipulated in Article 13 of the Act of the Republic of Indonesia concerning Bank Indonesia, the Bank seeks to maintain foreign reserves in an amount considered sufficient (i) to carry out monetary policy in order to achieve and maintain the rupiah's stability in value terms (with respect to both inflation and the exchange rate); and (ii) to fulfil international obligations in foreign currencies.

Monetary policy is carried out with the aim of maintaining an optimal balance between the "impossible trinity" objectives, in terms of moderate capital mobility and a more flexible exchange rate, while maintaining Bank Indonesia's independence in setting monetary policy (with respect to the policy mix). This requires that FX reserves are adequate. Hitherto, reserves for Bank Indonesia have been accumulated mainly from traditional sources, such as capital inflows, foreign bond issuance and government export proceeds.

Past crises have shown that adequate foreign reserves help to enhance a country's economic resilience. In conjunction with sound policies, adequate foreign reserves can help reduce the likelihood of a balance of payments crisis and safeguard economic and financial stability. This is also the case for Indonesia. An adequate amount of foreign reserves bolsters market confidence that the country can meet its current and future external obligations and strengthens its perception as a better credit risk in the view of rating agencies and market participants. This has helped to maintain stable and healthy capital flows, and to prevent the snowballing effect of market shocks. In addition, foreign reserves also help to protect the domestic financial markets and economy against the potential risks of sudden stops and capital flow reversals.

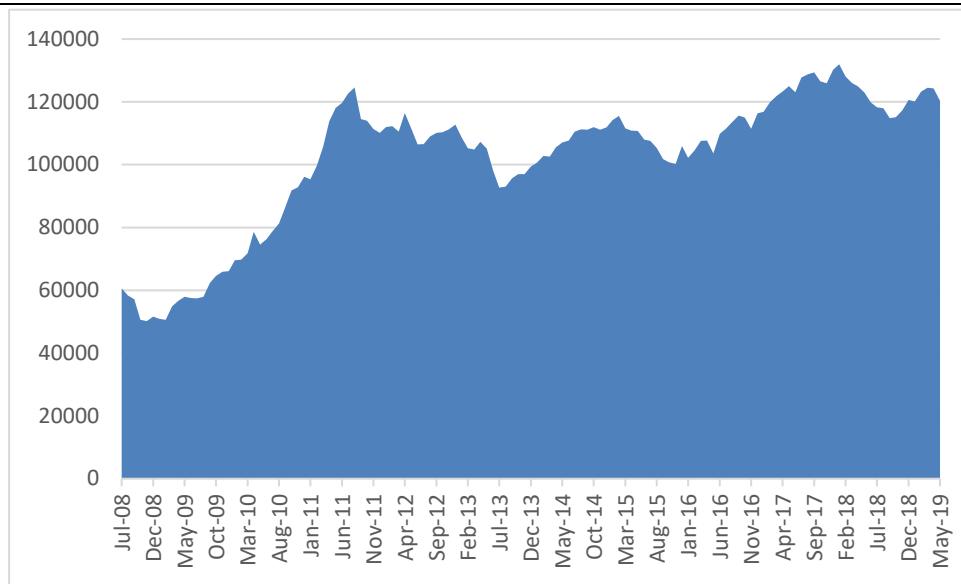
At USD 123.8 billion (in June 2019), Indonesia's reserves have significantly increased from USD 50.58 billion at the time of the Global Financial Crisis (October 2008) (Graph 1). Their current level would finance 7.1 months of imports or 6.8 months of imports in addition to servicing the government's external debt, well above the international standard for reserve adequacy of three months of imports.

Of course, no single measure of reserve adequacy fits all cases. The best measure for each country depends on their respective situation and condition, both internally and externally. Bank Indonesia currently assesses reserve adequacy based on (i) months of imports and short-term external debts, and (ii) the IMF Assessing Reserve Adequacy (ARA) metrics. Based on both reserve adequacy measures, the Bank

considers that the official reserve assets position is able to support external sector resilience and to maintain macroeconomic and financial system stability.

Indonesia's foreign reserves from 2008 to 2019

Graph 1



Source: Bloomberg, July 2019.

## FX interventions: motivations, strategies and tactics

Global financial conditions have tightened since early 2018. The rupiah has experienced downward pressure amid US dollar strength, risk-off sentiment and contagion risk in emerging market economies, which have resulted in capital outflows. In Q3 2018, the rupiah depreciated against the US dollar and continued to do so until early Q4 2018. In response, Bank Indonesia has applied stabilisation measures in both the FX market and the government bond market (dual intervention) to mitigate any rapid and excessive depreciation of the rupiah.

Bank Indonesia implements a forward-looking monetary operations strategy that seeks to maintain adequate liquidity in the foreign exchange market. These efforts include improvements to the effectiveness of foreign exchange swap hedging by setting efficient prices. In order to accelerate forex market deepening while providing an alternative hedging instrument for banks and corporations, Bank Indonesia also conducts domestic non-deliverable forwards (DNDF) transactions, which consist of an outright forward transaction with netting settlement in the domestic forex market, in local currency (the rupiah). The reference rates are JISDOR for USD against IDR and the Bank Indonesia FX Transaction Mid-rate for non-USD against IDR. DNDF transactions can be conducted by banks with customers and foreign parties to hedge FX movement risks, and must be supported by an underlying transaction in the form of trade in goods and services, investments or bank loans in foreign currencies. In addition to irregular auctions, Bank Indonesia regularly holds FX swap auctions as part of its monetary operations to help banks manage their liquidity.

Monitoring market conditions and domestic liquidity are the key elements in conducting interventions. Several factors, including short-term exchange rate

movements, market liquidity and market sentiment, are taken into consideration prior to an intervention. Other features, such as instrument, size, counterparty and intervention methods, comply with internal guidelines.

As an independent institution, Bank Indonesia has its own regulations and decision-making process and cannot be influenced by other parties including the government, public sector entities and the banking sector. However, Bank Indonesia emphasises policy coordination with the government and other relevant authorities in order to maintain economic stability and reinforce external resilience, including the promotion of exports and the reduction of imports, with a view to reducing the current account deficit.

Bank Indonesia regularly reviews the effectiveness and efficiency of its FX interventions. The main criterion in this respect is the proper functioning of financial markets. Volatility is considered significant in the case of both the appreciation and depreciation of the domestic currency. FX interventions are aligned with the day-to-day implementation of monetary policy during both normal and crisis periods. In addition, the Bank ensures sufficient rupiah liquidity by implementing a series of monetary operation tools such as term repos to mitigate the liquidity effects of FX interventions.

## Reserves management

As mandated by the Bank Indonesia Act, Bank Indonesia's main objectives are to maintain the value and adequacy of its foreign reserves, in particular, to support the effectiveness of monetary policy and the fulfillment of international obligations. Like many central banks, Bank Indonesia applies the principles of security, liquidity and profitability in pursuing its reserves management objectives.

These objectives and principles are then translated into two portfolio tranches:

- (i) a liquidity tranche that is used to address short-term liquidity needs for monetary policy and the payment of short-term international obligations, with a focus on security and liquidity, and
- (ii) the investment tranche (which includes internally and externally managed portfolios), which meets the need for a return and capital preservation by balancing security, liquidity and profitability.

In response to challenging external and internal circumstances, Bank Indonesia employs several strategies: (i) conducting investment strategy through currency immunisation and asset diversification, (ii) adopting best practices in reserve management through information technology (IT), including a new front office, middle office, and back office system and enhanced human resources capabilities, as well as strengthened governance and business processes, and (iii) cooperating through bilateral and multilateral arrangements to strengthen the financial safety net, including bilateral swap arrangements and bilateral repo lines.

Regarding the currency immunisation approach, the main aim is to match the foreign reserves currency allocation to the composition of the Bank's liabilities, and therefore mitigate the currency risk in its portfolio. On the other hand, diversification via the more sophisticated multi-asset portfolio will enhance returns and diversify the reserves portfolio risk. These strategies are intended to optimise the balance between

the need for reserve accumulation and the cost of holding reserves. Furthermore, Bank Indonesia has made organisational changes in recent years, particularly in separating the functions of the front, middle and back offices into separate departments, with the aim of improving governance in reserves management. The Bank has also implemented the “three lines of defence mechanism” in its reserves management activities, applying the concept of instilling risk management as a culture. The first line of defence is the Internal Control Officer (ICO), which is performed by an officer of the Reserve Management Department, as part of ex ante risk management. The second and third lines of defence are performed by the Risk Management and Internal Audit Departments, respectively. Based on the new organisational structure, as well as an enhanced decision-making process, the potential for procyclical investment behaviour can be limited.