

# Foreign exchange intervention in Malaysia

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## Abstract

Given the rapid and volatile capital flows that emerging market economies (EMEs) have experienced in the years following the global financial crisis, foreign exchange market developments and the corresponding intervention by EME central banks have quickly become pertinent issues. To shed light on some of these issues from Malaysia's perspective, this paper first highlights the motives for and recent trends in Malaysia's foreign exchange interventions, followed by a discussion of their effectiveness. The paper then elaborates on Malaysia's efforts to improve the management of foreign exchange volatility. Finally, the paper concludes by highlighting the importance of collaborative efforts to address the root cause of volatile capital flows.

Keywords: capital flows, FX intervention, liquidity management, volatility, reserves accumulation

JEL classification: E58, E61, F31

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When capital flows into emerging market economies (EMEs) are high and volatile, their impact on the efficient functioning of the foreign exchange market – and hence the effectiveness of foreign exchange intervention – become pertinent issues for EME central banks. While strong capital flows into EMEs are nothing new, what is different this time are the stronger external drivers – prolonged low interest rates in the advanced economies combined with substantially weaker growth outlooks, in a landscape of excess global liquidity arising from quantitative easing measures in those same economies. These factors have amplified short-term portfolio flows seeking higher returns. The influx of capital flows into the EMEs<sup>2</sup> and the resulting impact on exchange rates have raised macroeconomic and financial stability concerns, as well as the questions of what central banks in EMEs can do about it and how the resultant balance sheet expansion can be managed effectively by means of sterilised foreign exchange interventions.

In this light, a formal framework is critical to ensuring the effectiveness of foreign exchange interventions. Intervention operations are conducted with the aim of achieving various macroeconomic objectives relating to inflation, competitiveness and financial stability.<sup>3</sup> According to the literature, the motive behind interventions is generally to counter short-term trends or volatility in the exchange rate, and to bring a misaligned exchange rate back onto its “fundamental path”.<sup>4,5</sup> This is especially true for EMEs in recent times, as they face the threat of potential surges in capital flows and the resulting deviation of the exchange rate from its long-term trend, with the associated threat of disruptions in both the real sector and financial markets.

To shed light on some of these issues from Malaysia’s perspective, this paper will start by highlighting the motives for and recent trends in Malaysia’s foreign exchange interventions, followed by a discussion of their effectiveness. The second part elaborates on efforts to improve the management of foreign exchange volatility. Finally, the paper concludes by highlighting the shortcomings of stand-alone actions, and the importance of collaborative efforts worldwide to address the root cause of volatile capital flows.

<sup>2</sup> The International Institute of Finance has projected that capital flows to EMEs will reach USD 1.1 trillion in 2013 (2006: USD 0.8 trillion) and that they are expected to remain high in the near term. This is also reflected in Malaysia’s financial accounts, where the level of gross portfolio flows has grown approximately twentyfold since 2005.

<sup>3</sup> R Moreno, “Motives for intervention” in *Foreign exchange market intervention in emerging markets: motives, techniques and implications*, BIS Paper, no 24, 2005.

<sup>4</sup> C Neely, “The practice of central bank intervention: looking under the hood”, *Federal Reserve Bank of St. Louis Review*, May–June 2001.

<sup>5</sup> R Baillie and W Osterberg, “Central bank intervention and risk in the forward market”, *Journal of International Economics*, no 43, 1997.

## I. Motives and recent trends

### Orderly market conditions are the key motive for FX intervention in Malaysia

After pegging the ringgit to the US dollar following the 1998 Asian financial crisis, Malaysia moved to a managed float exchange rate regime in July 2005. In this arrangement, the ringgit is referenced against a basket comprising the currencies of the country's major trade partners and is allowed to move according to market forces. Since then, the focus of central bank intervention has been limited to maintaining orderly foreign exchange market conditions with a view to avoiding extreme movements in the ringgit exchange rate that could destabilise the real economy.

Since the floating of the ringgit, the approach to foreign exchange intervention has further evolved, in line with the development of the Malaysian foreign exchange market and as market participants have become better equipped to manage their own foreign exchange risks. During this period, the Malaysian foreign exchange market has grown from average daily transactions of USD 2.3 billion in 2005 to USD 10.8 billion in 2012, along with the gradual liberalisation in the foreign exchange market. Interventions were more intensive immediately after the floating of the exchange rate, with the intention of reassuring financial market players and real sector participants that the ringgit exchange rate would remain stable under the new regime. As, at this time, the foreign exchange market was less developed with only a limited range of hedging tools, the interventions served several purposes. By smoothing exchange rate movements with a gradually increasing tolerance of higher volatility, they not only provided stability to the overall market and the real sector, but they also helped to develop the risk management capabilities of market participants.

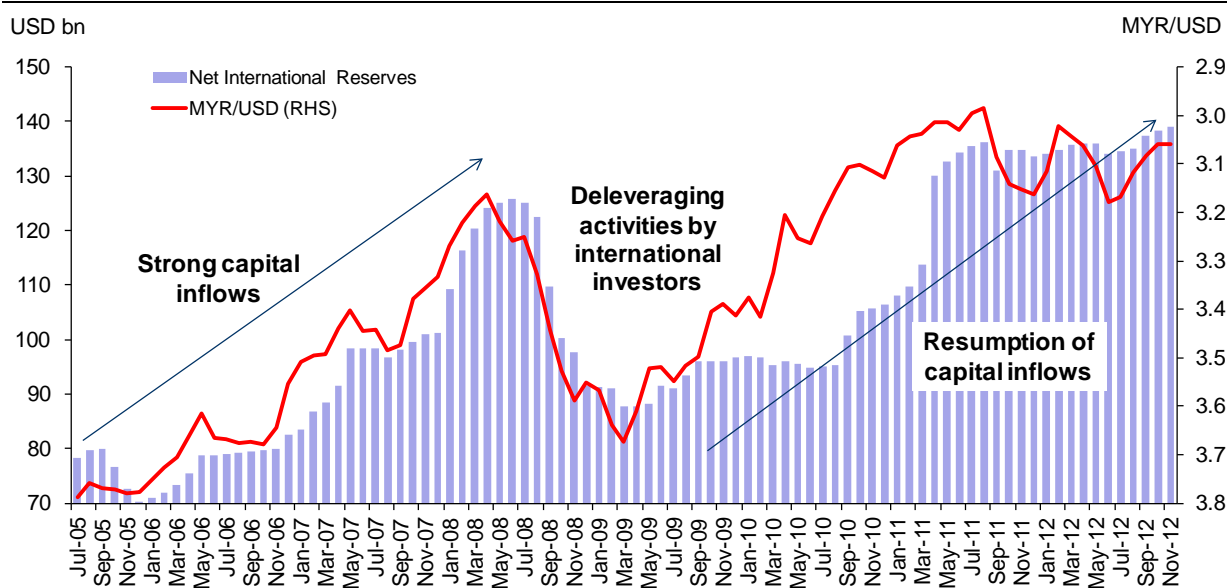
Over the years, foreign exchange interventions have become much less frequent. At the same time, they have focused more on addressing periods of market dysfunction. Experience has shown that portfolio flows are the main factor influencing ringgit volatility, given that such flows are often sizeable, short-term and sensitive to market news. When inflows or outflows have reached extreme levels, the central bank has intervened with the aim of mitigating volatility, maintaining orderly market functioning and reducing any destabilising effects on the real economy. In all cases, the decision to intervene has hinged on whether the financial markets are judged capable of intermediating these excessive flows.

For example, between 2007 and 2008, the central bank intervened to counter strong portfolio inflows against the US dollar that sharply increased international reserves, from USD 83.5 billion in January 2007 to USD 125.8 billion in June 2008, a rise of just over 50%. But the onset of the global financial crisis caused a sudden reversal of portfolio investment, exerting a significant downward pull on the ringgit. The central bank again intervened to moderate the sharp depreciation pressure on the ringgit. As a result, international reserves fell by more than a quarter, from more than USD 120 billion in September 2008 to USD 88 billion at the end of April 2009.

## Net international reserves and the ringgit exchange rate

(Jul 2005–Nov 2012)

Chart 1



Source: Central Bank of Malaysia.

### Effectiveness of intervention

Interventions by the central bank appear to have achieved their objectives in managing ringgit volatility and maintaining orderly foreign exchange and financial market conditions, even during periods of high volatility in global currency markets. At the height of the 2008 turmoil in global financial markets, Malaysia's interventions were relatively effective in moderating excessive exchange rate volatility by providing two-way flows (see Table 1). But during times of low global volatility, as in January 2007, interventions were on a more limited scale than elsewhere in the Asia-Pacific region. This seems to suggest, at least in Malaysia's case, that higher reserves volatility is associated with lower exchange rate volatility.

Reserves and exchange rate volatility for Asia-Pacific countries (% chg)

Table 1

	Asia-Pacific countries <sup>1</sup>		Malaysia	
	Reserves volatility, 1 s.d.	Exchange rate volatility, 1 s.d.	Reserves volatility, 1 s.d.	Exchange rate volatility, 1 s.d.
January 2007 (VIX at lowest point <sup>2</sup> )	±2.67%	±1.55%	±1.33%	±1.00%
September 2008 (peak of financial crisis)	±3.41%	±2.41%	±4.09%	±1.94%
April 2011 (high portfolio inflows into EMEs)	±2.71%	±2.33%	±3.62%	±1.62%
September 2011 (high global risk aversion)	±2.45%	±2.54%	±3.45%	±2.65%

<sup>1</sup> Selected Asia-Pacific countries are Australia, China, India, Indonesia, Japan, New Zealand, Pakistan, Philippines, Singapore, South Korea, Chinese Taipei and Thailand. <sup>2</sup> VIX data from January 2000 to December 2012.

Sources: Bloomberg; IMF; Central Bank of Malaysia calculations.

## II. Improving the management of foreign exchange volatility

### Continuing efforts to enhance resilience

Capital flows to EMEs are likely to increase in the future, with net capital inflows most probable over the medium to long term given the balance of push and pull factors. In this regard, the central bank is making continued efforts to enhance its capacity in managing volatile capital flows.

### A robust surveillance framework in place

Fostering an open and close relationship with market players for surveillance purposes is an important tool in anticipating changes in market sentiment and gauging the intensity of capital flows. In addition to engaging continuously with market participants when assessing early warning indicators, the central bank also tracks cross-border flows via a monitoring system that provides near real-time information. The system captures details of flows across local financial markets including volumes, the instruments involved and the nature of transactions. This provides the central bank with the information needed to manage capital flows. At the regional level, surveillance has benefited from a regular exchange of information between EMEAP central banks through Dealing Room Network teleconferences and meetings on financial markets. The periodic teleconference allows EMEAP members to share sensitive information including insights on capital flows in each market.

### Managing the challenges of foreign exchange intervention

Given that most emerging economy central banks have continued to intervene in foreign exchange markets, the sustainability of reserves accumulation naturally becomes important. Two of the key challenges in managing the accumulation of reserves from intervention operations relate to the currency mismatch in the central bank's assets and liabilities as well as the rising differential between interest rates in the advanced economies and emerging economies.

First, the central bank's balance sheet may experience significant volatility from foreign exchange translation gains or losses due to the mismatch between its foreign currency assets and its local currency liabilities. A strengthening local currency may lead to negative capital on the balance sheet as foreign currency-denominated assets are revalued downwards due to currency movements. In addition, during a period of significant capital inflows and heavy intervention, the local currency has a tendency to appreciate for the same reasons that led to the inflows in the first place. To mitigate the impact of such a currency mismatch, the Central Bank of Malaysia has increased the diversification of its foreign currency assets.

Second, carrying costs can arise from the growing differential between the interest returns of advanced and emerging economies. This is especially the case for emerging Asian economies into which US dollar-denominated funds flow from advanced economies, in search of higher yields. Without the capacity to invest in assets with a lower credit quality or instruments of greater complexity, the cost of the central bank's interventions would normally be higher than the returns from its investments. Other steps to mitigate these carry costs include taking duration position and moving into less liquid investments. The central bank manages its investments actively, diversifying between short- and longer-term assets (duration) or between lower and higher-rated

fixed income assets (credit), based on market conditions and with a view to optimising the balance between risk and return.

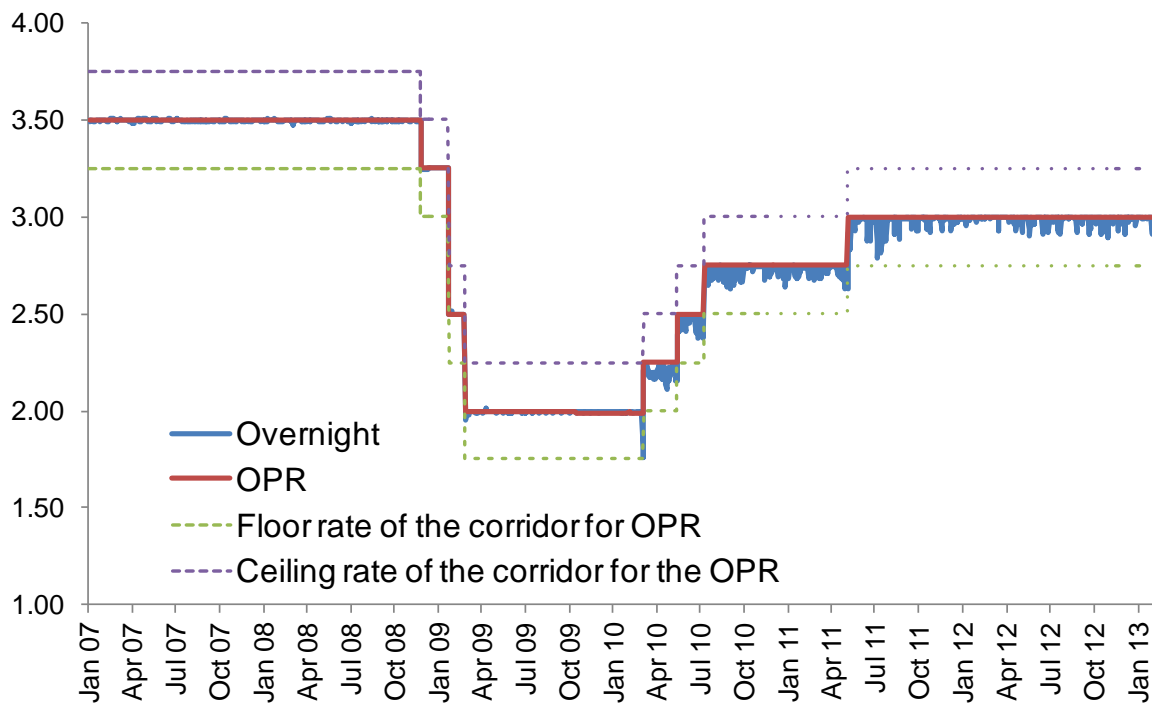
### Wide range of monetary instruments has allowed effective and flexible liquidity management

In addition to cost considerations, a further challenge following an intervention is the need to manage liquidity creation or withdrawal and hence the impact on monetary conditions. In this respect, effective and flexible liquidity management has benefited from advances in Malaysia’s financial market development and a broadening range of instruments. Traditional liquidity management instruments such as direct borrowing and reserve requirements are now accompanied by the use of repo operations, BNM bills and FX swaps. Direct borrowings and BNM bills are potent instruments for the management of excess liquidity as they are subject to flexible issuance limits<sup>6</sup> and issuance tenure. BNM bills have additional advantages in managing duration and liquidity risks.

The wide range of monetary instruments has enabled the efficient sterilisation of liquidity, thus avoiding overly expansionary monetary conditions. The effectiveness of the central bank’s sterilisation operations can be seen by the stability of the monetary base even in the course of intervention operations. At the same time, interest rates in the interbank market have remained stable without experiencing downward pressure from excess liquidity (Chart 2).

Policy rate (OPR) and interbank rate

Chart 2



Source: Central Bank of Malaysia.

<sup>6</sup> The issuance of BNM Notes is limited to the prevailing level of international reserves.

## Reduced need for central bank intervention

Despite its intervention capabilities, the central bank appreciates the need to find a longer-term solution. Over the years, continuous financial market development and liberalisation of foreign exchange administration (FEA) rules in Malaysia have effectively reduced the central bank's presence in the foreign exchange market. Indeed, intervention has recently been minimal. The central bank's international reserves remained within the range of USD 134.1 billion and USD 139.1 billion in 2012 (for comparison, reserves ranged between USD 108.1 billion and USD 136.3 billion in 2011).

Central to this has been the development of both the domestic financial market and financial instruments and also the increased occurrence of two-way flows. The central bank has no doubt that intervention operations need to go hand in hand with market development, as the availability of liquidity management instruments equip the market to manage the volatility of the exchange rate. In addition, there are growing signs that measures taken over the years have resulted in a better matching of inflows and outflows, thanks to an open trade environment and the liberalisation of rules for investment abroad.

Malaysia currently imposes no restrictions on any movement in the current account, allowing international trade to flourish, as reflected in the growth of total trade, which has grown by 124% over the past decade. Furthermore, in 2010, Malaysia accorded residents the option of conducting settlement with non-residents for goods and services in ringgit (previously, this was permitted only in foreign currency), further easing the movement of trade flows. A recent observation is that domestic infrastructure development projects have necessitated higher imports of capital goods, allowing total imports to grow faster than total exports<sup>7</sup> and naturally leading to higher trade outflows. This has led to an improved balance of inflows and outflows, effectively reducing the need for the central bank to intervene in the foreign exchange market. In 2012, on a cash basis, the 34% increase in gross inflows (driven by portfolio flows) during the year coincided with a 39% increase in gross outflows (driven by trade flows).

The central bank has also progressively liberalised rules for investment in foreign currency assets by providing greater flexibility for such investments by resident corporations. This has helped reduce the need to intervene in at least two ways. First, liberalisation measures have facilitated direct investment outflows and have therefore led to better matching of inflows and outflows. The capacity of resident corporations to invest in foreign currency assets has increased dramatically following certain liberalisation measures that provide greater flexibility on the use and source of foreign currency funds for investment purposes. This is reflected in increased direct investment abroad, which has grown from a yearly average of USD 0.8 billion in 1990–2000 to USD 7.1 billion in 2001–11. Such flexibility also enhances the capacity of resident corporations to manage foreign currency risks effectively. Second, the freedom to open foreign currency accounts for the purpose, among others, of investment and retention of export proceeds has contributed to a greater decentralisation of reserves due to rising foreign currency deposits held within the domestic banking sector. This has reduced the need for businesses and

<sup>7</sup> On a year-on-year basis since 2010, Malaysia's total imports grew at an average of 19% while total exports grew at 15%.

financial institutions to constantly approach the central bank to purchase foreign currency. Between 1999 and 2012, the total amount of foreign currency deposits placed with domestic financial institutions rose fifteenfold,<sup>8</sup> of which placements by domestic business enterprises accounted for more than half.

### III. Global problems call for global solutions

#### Fixing the root of the problem

While Malaysia has the capacity to manage the impact of volatile capital flows, the central bank recognises that addressing the problem's root cause – the drivers of volatile capital flows – is critical to achieving a sustainable solution. The literature on foreign exchange intervention by central banks shows that discussions on this area generally revolve around short-term solutions such as the motivations for intervention, the efficiency and effectiveness of intervention and the management of intervention costs.<sup>9</sup> But most such studies address symptoms when efforts should really be focused on fixing the root of the problem. Fixing the root of the problem, however, is not straightforward. Any solution would require not only a collaborative effort globally but a strong willingness and commitment to implement and follow through with an agreed restructuring roadmap. Given the nature of capital flows, the optimal solution would naturally require efforts from both the supplier and recipient of the capital flows.

#### Collaboration for an optimal solution

Thus far, countries have usually resorted to standalone action based on each country's individual need and with a view to containing domestic risks. Unfortunately, while unilateral actions may provide some temporary relief, standalone actions are generally not sufficient to achieve the desired outcome. Worse, what looks like the best solution for one country could have unintended and detrimental consequences for the rest. Thus, in dealing with capital flows volatility, a collective action plan is the key to increasing the likelihood of success and to avoiding regulatory arbitrage between member countries. It is therefore, a necessity for countries to share collective responsibility and accountability in ensuring global financial stability.

<sup>8</sup> Total foreign exchange deposits placed with domestic financial institutions rose from USD 1.8 billion as at end-1999 to USD 28 billion as at end-Nov 2012.

<sup>9</sup> See for example J Frait, "Exchange rate appreciation and negative central bank capital: is there a problem?", paper presented at the Expert Forum on Central Bank Finances and Impact on Independence, Bank of England, 2005; C Yin, "A discussion of official foreign exchange intervention", 2008; J Benes, A Berg, R Portillo, and D Vavra, "Modeling sterilized interventions and balance sheet effects of monetary policy", *IMF Working Paper*, January 2013.