



MALAYSIA

FINANCIAL SECTOR ASSESSMENT PROGRAM

April 2014

MONTERAY LIQUIDITY FRAMEWORKS—TECHNICAL NOTE

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MONETARY AND LIQUIDITY FRAMEWORKS

TECHNICAL NOTE

FEBRUARY 2013

INTERNATIONAL MONETARY FUND
MONETARY AND CAPITAL MARKETS DEPARTMENT

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I. SUMMARY

1. **Notwithstanding the shock of the global financial crisis, monetary conditions in Malaysia have remained relatively stable.** The Bank Negara Malaysia (BNM) took an active role in ensuring the resilience of the financial system and preserving liquidity conditions. This task was facilitated by the underlying strength of the banking sector, which did not experience any major disruption.¹

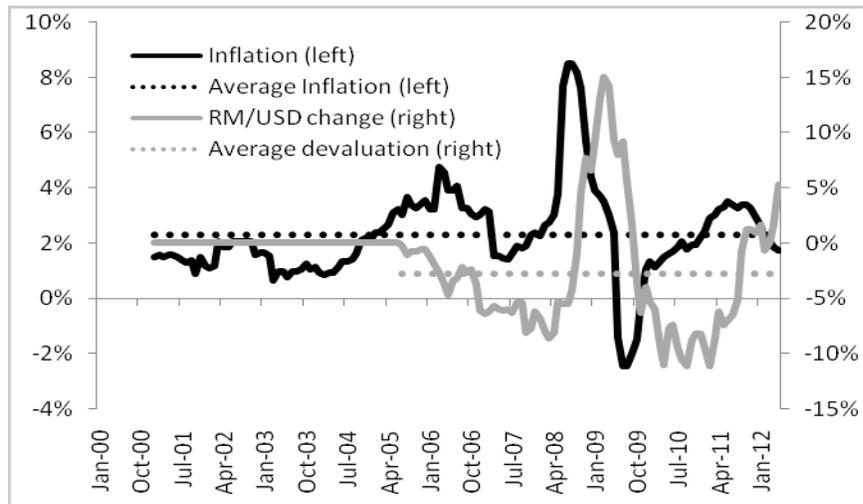
II. BACKGROUND

2. **The exchange rate peg was abandoned in 2005 and, since then, the average yearly appreciation of the ringgit against the U.S. dollar has been about 3 percent.** After the abandonment of the peg, the exchange rate started a phase of progressive appreciation, which reached an annual rate 5 percent at the end of 2007. As global risk appetite sharply dropped in 2009 the ringgit, like other emerging economy currencies, depreciated sharply as a consequence of a wave of capital outflows. Nonetheless, the depreciation was relatively short-lived and relatively moderate thanks mainly to the large buffer of foreign reserves used by the BNM to smooth the exchange rate path.²

3. **Inflation has returned to a more stable path, after some wider fluctuations before and during the global financial crisis.** Inflation is now at its long term average of about 2 percent (Figure 1), after spiking to 8 percent during 2008 and falling to -2 percent in 2009. This period of volatile inflation, while somewhat extreme, is consistent with the experience in other countries and is related both to the volatility of international commodity prices during 2008–2009 and to the deflationary effect of the global financial crisis.

¹ Prepared by Roberto Piazza (IMF) in the context of the 2013 Malaysia FSAP (<http://www.imf.org/external/pubs/ft/scr/2013/cr1352.pdf>).

² A number of central banks in Emerging Markets in other parts of the world also adopted a symmetric approach, accumulating reserves when current and capital inflows were strong, and running them down in the face of outflows, thus reducing exchange rate volatility.

Figure 1. Inflation and the Exchange Rate

Note: Annual change in the RM/USD exchange rate and in the CPI. The average change in the exchange rate is calculated starting from July 2005. Monthly observations. Source: BNM.

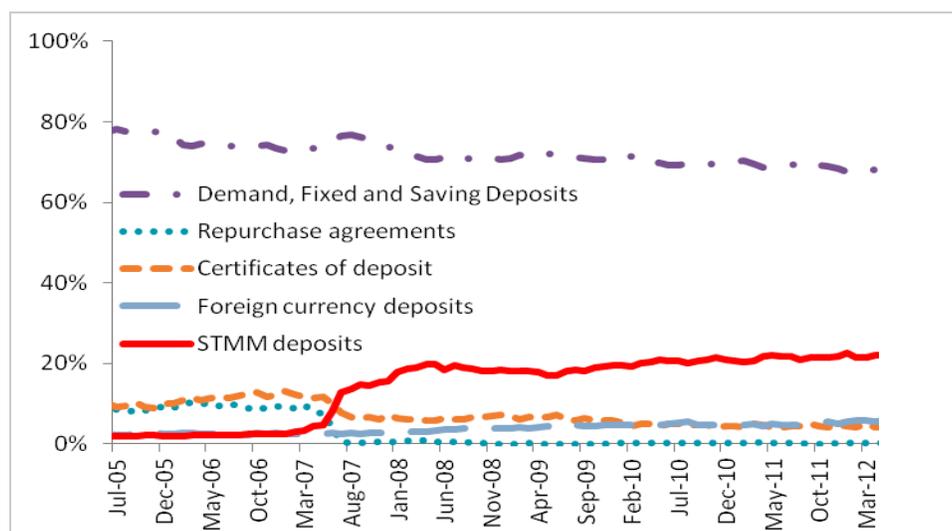
4. **The banking sector’s funding needs are satisfied mainly by deposits.** About 37 percent of deposits are held by non-financial enterprises, 36 percent by households, 16 percent by banks and financial institutions (including the BNM), 6 percent by federal and local authorities, and the remaining 5 percent by other types of depositors.

III. MONETARY POLICY, LIQUIDITY FRAMEWORK AND ELA

Structural liquidity

5. **On the asset side, a large “excess liquidity” position vis-à-vis the BNM³ provides financial institutions with a comfortable liquidity position.** The excess liquidity in the financial system amounts to 350 billion ringgit. In addition, financial institutions hold about 40 billion in Treasury Bills and other government securities. Taken together, excess liquidity and government debt holdings represent 20 percent of total banking assets.

³ Excess liquidity is here defined as holdings of BNM paper, plus excess reserves and other amounts due by the BNM to financial institutions.

Figure 2. Deposits by Type

Source: BNM.

6. **On the liability side, Malaysian banks' liquidity is based largely on deposits.** Of commercial and Islamic banks' liabilities, 72 percent are constituted by deposits. The breakdown of deposits by type is presented in Figure 2. The main component (68 percent) of deposits is in the form of demand, fixed and saving deposits, which are owned mostly by individuals and by small and medium enterprises. The second largest (22 percent) component of deposits is short-term money market (STMM) deposits,⁴ which are wholesale investment instruments mainly for large non-financial enterprises. Finally, certificates of deposit and foreign currency deposits account for about 5 percent each. Banks manage fluctuations in their daily liquidity position primarily through the overnight interbank money market. The interbank market is predominantly unsecured and the outstanding amount of deposits financed by financial institutions⁵ is 14 percent of total deposits. Banks appear to be actively using the interbank market for the purpose of fulfilling their reserve requirements with the central bank, particularly at the end of each maintenance period. Nonetheless, in the current context where the banking sector faces an overall excess of liquidity, the role of the interbank market in re-distributing term liquidity across banking institution is limited.⁶

⁴ Short-term money market (STMM) deposits are fixed-term deposits with maturity from overnight to one year. If redeemed before maturity, interest is not paid. These deposits are mainly used by large corporations as a form of short-term investment of their excess liquidity. STMM deposits roughly coincide with the entry "Other deposits" in the BNM Statistical publications.

⁵ Excluding deposits held by BNM.

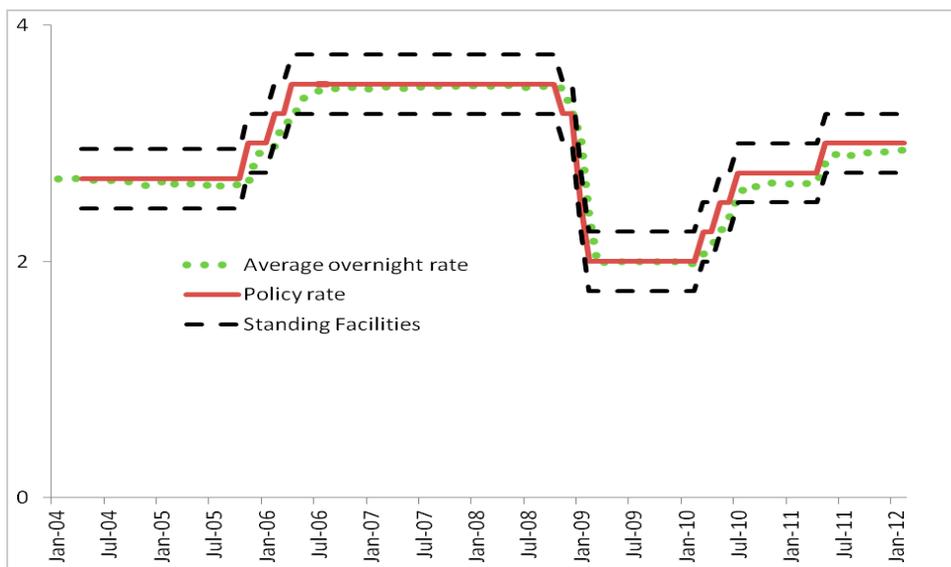
⁶ This is commonly the case in markets where banks hold a long-term structural surplus of reserve balances.

7. **Since 2007, wholesale deposits by non-financial firms have been flowing into new instruments.** As shown by Figure 2, until 2007 a repo market had emerged in Malaysia, with outstanding repos reaching a peak value of 75 billion ringgit. Two thirds of this market was attributable to large non-financial corporations seeking short-term investment instruments for their excess liquidity balances (corporations in Malaysia cannot invest in saving accounts, which are intended as a retail product, while the minimum maturity for fixed-term deposits is one month). In 2007, Malaysia strengthened its legal framework for the repo market in accordance with the Global Master Repurchasing Agreement (GMRA), which sets more stringent rules requiring both parties of the repo transactions to accept the rules in the GMRA. The introduction of these rules led to an almost complete disappearance of the repo market. In parallel, non-financial enterprises started to invest in other STMM deposits. This form of investment also replaced enterprises' holdings of Certificates of Deposit, which now are traded only by financial institutions. Figure 2 depicts the evolution in the share of the different types of instrument of deposit offered by banks.

8. **The increase in foreign reserves at the Central Bank is a major driver of the growth of the BNM's balance sheet.** The excess liquidity position of the banking system vis-à-vis the BNM is mechanically the counterpart liability to the large increase, between 2000 and 2008, in foreign exchange reserves. Until 2005, the increase in foreign reserves was a necessary consequence of the pegging of the ringgit against the US dollar, coupled with current and capital account inflows. With the abandonment of the peg, the increase in reserves continued, albeit at a slower rate, until 2008. This overall increase in foreign reserves, until 2008, went hand-in-hand with the growth of the Malaysian financial market and with its increased integration with the rest of the world. In this context, foreign reserves are used symmetrically, to smooth exchange rate fluctuations that are considered excessive. Since 2008, this broadly symmetrical approach to foreign exchange purchases and sales, allowing the market to guide the exchange rate level, has meant that net foreign exchange purchases are no longer driving a continued increase in the structural Ringgit surplus.

Monetary policy: operational framework

9. **Since 2004, the BNM's formal monetary policy framework has been based on a corridor system, where the overnight interbank interest rate is the target policy rate.** The overnight deposit rate and the lending rate on standing facilities are set, respectively, at -25 bps and +25 bps around the policy rate. In practice, the framework operated as a floor system until 2010. The overnight policy rate (OPR) functioned as a floor to the interbank rate, as the BNM operated daily liquidity-absorbing OMOs late in the day, preventing the market rate from falling below the OPR. The effective width of the interest rate corridor was 25bp—insufficient in most markets to stimulate active interbank trading. In 2010, the auction for the overnight OMO was moved from late evening to earlier in the afternoon, effectively widening the corridor to 50bp. In this way, the BNM was able to motivate banks to improve their internal systems of liquidity management and to deal more with each other on the interbank market, rather than rely solely on the end-of-the-day interventions of the BNM.

Figure 3. Interest Rate Corridor

Percentage points. Source: BNM.

10. **The Statutory Reserve Requirement for banks is set at 4 percent of total eligible liabilities, with two maintenance periods every month.** While reserves' averaging is allowed, reserve balances must be, on a daily basis, within a 20 percent variation band around the prevailing target level. Balances below the band are not permitted, while balances in excess of the band's ceiling are not recognized in meeting the average reserve requirement. This is a relatively constrained use of reserves averaging, which may in general limit its benefits for banks' internal liquidity management. Under the current framework, the presence of the 20 percent oscillation band reduced further the scope for effective reserve averaging when the target reserve requirement was low, during 2009–2011. As the reserve ratio was reduced to 1 percent, the band became ± 0.2 percent of eligible liabilities, rather than ± 0.8 percent.

11. **Open Market Operations are mainly conducted through term deposits with BNM and issuance of BNM bills, but a variety of instruments is available to the BNM if needed.** In the current context of excess liquidity, only liquidity-draining OMOs are being employed. Since 2012 the issuance of central bank bills has become the major instrument for OMOs, in line with the BNM's target to increase the use of securities-based monetary instruments. For uncollateralized instruments (i.e. deposits), the average maturity of the OMOs is currently two weeks, while for securities-based instruments the average duration is three months. The current frequency of the OMOs is daily, both for deposit taking and liquidity draining repos. Table 1 reports the list of monetary policy instruments that the BNM can choose to activate.

Table 1. Instruments of Monetary Policy Operations

Instrument of Operation	Maturity	Method
OMO: Instruments to inject liquidity (not currently used)		
Repos (volume tender)	< 3 months	auctions
Foreign exchange swaps	<6 months	OTC
Asset purchase (forex or ringgit)	N/A	OTC
Collateralized lending	<1 year	auctions
OMO: Instruments to withdraw liquidity		
Reverse Repos (volume tender)	1-6 month	auctions
Issuance BNM notes	3 month – 3yr	auctions
Foreign exchange swaps	<6 months	OTC
Asset sales (forex or ringgit)	N/A	OTC
Deposits	o/n – 6 month	auctions/bilateral
Standing Facilities		
Deposit facility (liquidity withdrawal)	Overnight	Bilateral
Lending facility (liquidity injection)	Overnight	Bilateral

Source: BNM.

12. **Monetary operations with Islamic banks are carried out through specific Shariah-compliant instruments.** The statutory reserves' framework and the framework for BNM's outright purchase and sale of securities are identical for operations with both conventional and Islamic banks. For other OMOs, however, there are specific instruments (Wadiah Acceptance, Commodity Murabahah, BNM Monetary Islamic Notes, and BNM Notes-Istithmar), which parallel in terms of timing and maturity the use of deposits, repos and BNM Bills issuance. The BNM manages separately the pool of instruments and operations with Islamic and conventional banks. However, the two systems interact through the payment system and through the fact that conventional banks can lend to Islamic banks.

13. **The transmission mechanism of monetary policy to overnight interbank rates works smoothly.** The overnight interbank rate is well-anchored to the policy rate, with average daily deviations of only 2–3 basis points (Figure 3), and rarely traded beyond 10 basis points lower. The BNM has removed the stigma to accessing the standing facility, consistent with the growing practice globally for banks to be able to access central bank liquidity facilities in conduct of normal business. Overall, the actual use of the credit standing facility is rare.

14. **The type of collateral used for standing facilities has been recently expanded.** Both sovereign and private securities are eligible. The same type of collateral is eligible for both liquidity injecting OMOs and for the standing credit facility. For liquidity draining repos

the BNM at times borrows Malaysian Government Securities⁷ (MGS) from the Employees' Provident Fund (EPF). The BNM also provides to the market stock-lending of securities borrowed from the EPF, but the volume of these transactions remains low. For accessing the BNM credit facility, the following eligibility rules for collateral are applied:

- For ringgit-denominated securities, debt issued by the Malaysian government or by other EMEAP governments is always eligible. Securities issued by non EMEAP governments or by other non-residents are eligible if they have a minimum international rating of Baa3 or BBB-, whichever is the lower, as defined by Fitch, S&P and/or Moody's. Domestic private debt securities are eligible if they have a AAA domestic rating as defined by RAM and MARC.⁸ Thus far, banks have not taken advantage of the possibility of pledging eligible private debt securities as collateral.
- Some non-ringgit securities are also accepted, including EMEAP-members securities.⁹ Securities to be issued by the International Islamic Liquidity Management Corporation (IILMC) have recently been added to the list of eligible collateral. The IILMC is located in Kuala Lumpur and was established in 2010 by monetary authorities and multilateral organizations to introduce and facilitate effective cross-border Islamic liquidity management. In addition, the BNM has recently signed a MOU with Thailand and Singapore to enter into reciprocal cross-border collateral arrangements. The MOUs allowed Malaysian commercial and Islamic banks to obtain reciprocity from some of the EMEAP country partners on the acceptance of non-domestic collateral. Non-ringgit denominated eligible securities are subject to an additional 2 percent margin.¹⁰

The Supervisory Liquidity Framework

15. All banking institutions are required to follow the BNM Liquidity Framework for supervisory purposes, and submit their liquidity positions to the BNM supervisors on a monthly interval. The framework aims to assess:

⁷ The BNM does not utilize Government Investment Issues (GII), which are Shariah-compliant securities issued by the Government of Malaysia.

⁸ RAM (Rating Agency Malaysia) and MARC (Malaysia Rating Corp) are rating agencies based in Malaysia.

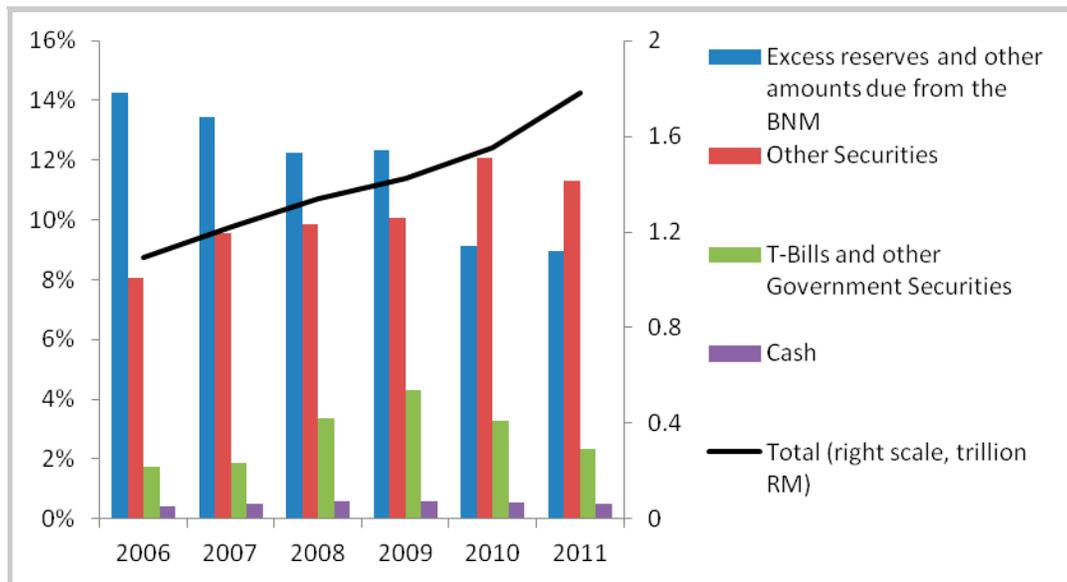
⁹ EMEAP-member securities are accepted as long as they are denominated in USD, GBP, EUR, JPY or the respective domestic currency. US Treasuries and UK Gilts are also accepted.

¹⁰ Rules for collateral eligibility and margins applied have been updated in May 2012 and can be found at <https://fast.bnm.gov.my/fastweb/public/files/GUIDELINES%20ON%20STANDING%20FACILITIES%20MAY%202012.pdf>

- a) the sufficiency, at various maturities (from one week to one year, for commercial banks; and from 3 days to one year for investment banks), of banks' liquidity in the normal course of their business;
- b) the capacity of banks to withstand liquidity withdrawal shocks, where banking institutions are required to maintain a net liquidity surplus position for the next 30 day period from the reporting date, after taking into consideration liquidity shocks in the form of a prescribed percentage of outflows of total deposits;
- c) the dependence of banks' funding structure on certain known volatile markets. The framework uses both contractual and behavioral maturities, and the degree to which assets are considered "liquefiable" incorporates a discount for tight market conditions.

16. **Banks' compliance with the Liquidity Framework is assessed on a ringgit basis, so the BNM does not set explicit limits on the net liquidity in foreign exchange currencies.** Nonetheless, for general monitoring purposes, banks are required to provide separate information on the net liquidity position in the major foreign currencies.

Figure 4. Liquid Assets of Commercial and Islamic Banks



Percentage of total assets, end of year values.

Source: BNM

17. **Liquid assets (predominantly MGS, GII and BNM liabilities) are about 22 percent of commercial and Islamic banks' total assets.** As shown in Figure 4, liquid assets are here defined as excess reserves and other amounts due from the BNM, government securities, cash and other securities. Liquid assets have been fairly stable, ranging from a maximum of 26 percent in 2009 to a minimum of 22 percent during 2011.

Emergency Lending Assistance (ELA) Powers

18. **The BNM has the power to extend ELA.**¹¹ If the financial institution is supervised by the BNM, then the BNM has the power to unilaterally activate ELA measures. Instead, if the institution is not supervised by the BNM, the lending operation must be approved by the Financial Stability Executive Committee.¹² ELA can be extended on both a collateralized and an uncollateralized basis. However, ELA has not been used since the Asian financial crisis of the 1990s, and the BNM is now in the process of reviewing its guidelines with the goal of strengthening the ELA framework.

19. **The tools for extending ELA are quite broad, and potentially include unconventional measures such as uncollateralized lending.** The BNM can enter into arrangements with other central banks to provide liquidity assistance to subsidiaries or branches outside Malaysia of any financial institution established in Malaysia. In the case of an institution deemed non-viable or likely to become so, the BNM may, for resolution purposes:

- purchase or subscribe to the shares or other capital instruments issued by such financial institution;
- provide financing to any other financial institution or a body corporate established by the Bank to purchase the whole or part of the business, assets, liabilities, shares or other capital instruments of an insolvent financial institution;
- vest in the Bank, another financial institution or any other person the whole or part of the business, assets or liabilities of, or all or any of the shares or other capital instruments issued by an insolvent financial institution.

IV. THE CHALLENGE OF CAPITAL FLOWS

20. **Changes in global risk sentiments have been major drivers in the pattern of capital flows to Malaysia.** In Malaysia, possibly more than in other emerging economies, capital flow reversals and capital flow volatility have been important challenges to financial stability. For instance, as global risk aversion began to increase in 2008, private capital flowed out of Malaysia. Conversely, when global risk aversion improved during 2010, the country experienced a wave of capital inflows. This pattern of capital flows, while being particularly strong in Malaysia, was also common across other developing countries in the region reinforcing the view that volatile capital flows had an international systemic nature. (Figure 5). Times of increased global risk, as in 2008/09 or in late 2011, are also associated

¹¹ As specified by the Central Bank of Malaysia Act 2009, paragraph 32.

¹² See the Technical Note on Crisis Preparedness and Crisis Management Framework.

with periods of more volatile capital flows. In particular, if we use the volatility index (VIX) of the U.S. stock market as a measure of global risk aversion, Figure 6 shows that the peak in global risk aversion was reached in 2008, followed by sharp drop during 2010. Risk aversion then started to rise again during the second half of 2011, in correspondence to the worsening of the European debt crisis. Again, the pattern of capital flows volatility is common across developing countries (Figure 7), but was relatively stronger in Malaysia.

21. **Portfolio and bank flows are the most volatile components of the financial account, and are related to measures of risk in advanced countries.** In particular, the correlation between the VIX and the standard deviation of portfolio flows and of “other investment flows” (whose main component are banking flows) is very high, and equals about 65 percent (Figure 6).

22. **The volatility of equity and bond flows display a common increasing pattern, together with some important differences.** As depicted in Figure 8, in late 2011 the estimated standard deviation of equity and bond flows were, respectively, two and nine times larger than their level in early 2004. Volatility of bond flows started increasing only after the 2008 Lehmann event, while equity flows’ volatility began increasing in late 2006.

23. **The market for government debt is particularly susceptible to large movements in the investment strategy of foreign investors.** The share of government securities held by foreigners has substantially increased in recent years, representing an important opportunity that promotes diversification in the portfolio of domestic investors. In fact, as foreign holdings of government debt increase, savings of domestic private investors can be channeled towards either the domestic private sector or towards an increase in the holdings of foreign assets by the major domestic investment funds. For instance, while between 2007 and 2012 the share of government securities held by foreigners has progressively increased, at different speed over the period, from 10 to 29 percent, the holdings of the EPF, the major public pension fund, has decreased from 50 to 31 percent.

24. **There are mitigating factors that favor stability in the Malaysian financial market even in face of sharp reversals in foreign investors’ strategies.** The increase in the share of government debt held by foreigners, while bringing some benefits, in principle makes the price of government debt more susceptible to changes in global risk appetite. Therefore, any large shock to the degree of foreign investors’ risk aversion could cause now a more challenging situation for the domestic financial system than in the past. For instance, between 2008Q2 and 2009Q1, at the height of the global financial crisis, foreign holdings of government securities sharply decreased, from 20 to 10 percent of the total. Nevertheless, the Malaysian market has a stable core of domestic investors, mainly unit trust, insurance companies and pension funds, which act as an important buffer against fluctuations in non-resident demand for domestic assets (both MGS and equities). As a result of this buffer, and appropriate liquidity management by the BNM, this large retrenchment of foreign investors did not create disruptions in the market. The increase in yields as non-residents sold was

sufficient to make the assets attractive to domestic institutional investors (in some cases, by raising the yield above those investors' internal rate of return targets). This analysis is supported by the fact that, during the global financial crisis, there was virtually no increase in the interest of government securities.

Figure 5. Private Capital Flows

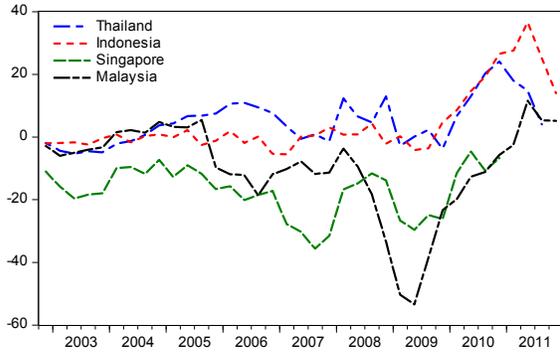


Figure 6. Volatility of Capital Flows and VIX

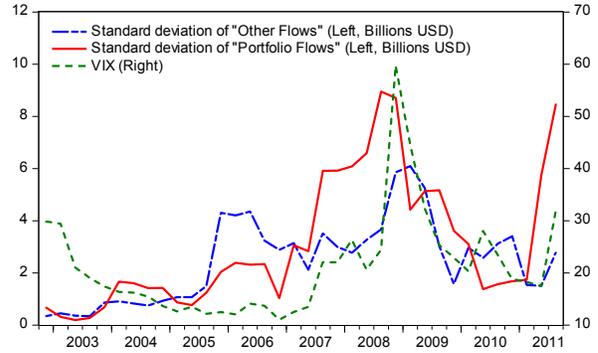


Figure 7. Standard Deviation of Private Capital Flows (Billions USD)

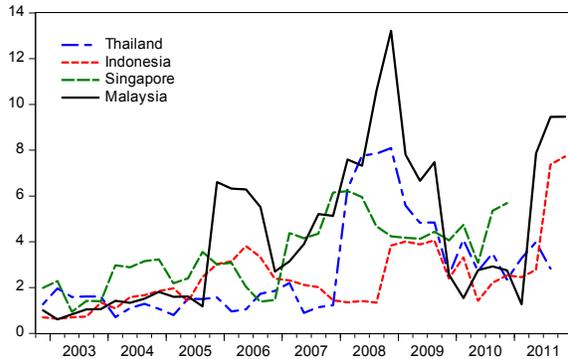
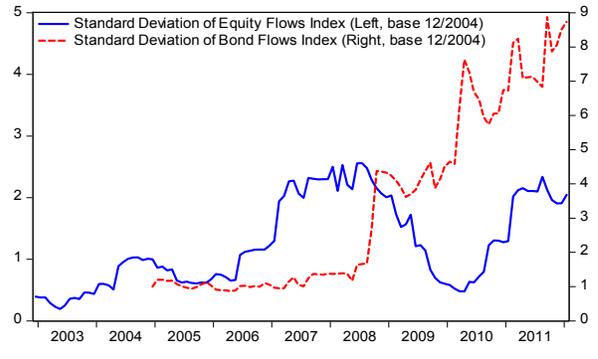


Figure 8. Standard Deviation of Flows (Index Base=12/2004)



**Figure 9. Private Flows and Reserves
(Billions USD)**

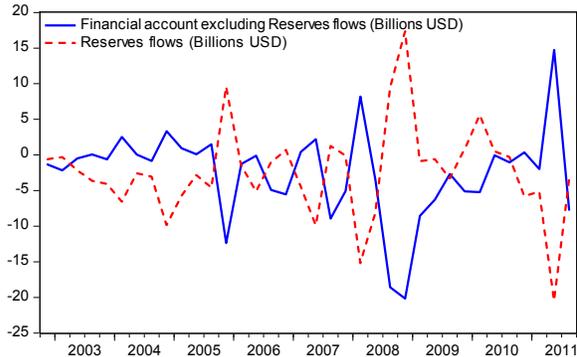
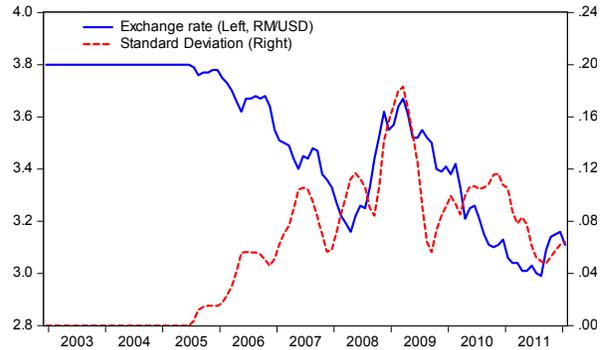


Figure 10. Nominal Exchange Rate



Standard deviations are calculated using one year rolling windows.
Source: IMF, EPFR and Bloomberg.

25. **Official reserves were used to stabilize the impact on exchange rate volatility of the large swings in capital flows.** Malaysia has reduced the role of capital controls via progressive liberalization of its capital account measures, with the remaining measures mainly impacting the buying and selling of ringgit outside Malaysia. Market counterparties indicate that the residual measures do not appear to be de facto binding for ‘real money’ transactions.¹³ Against this backdrop, the country has experienced a major wave of capital outflow in 2009, followed by a surge in capital inflows (Figure 5). The stock of central bank’s foreign reserves was actively used, when necessary, to absorb these sudden changes in the demand for foreign currency. In particular, the correlation between the outflow of private capital and the stock of official reserves was 95 percent (Figure 9). The draw-down in reserves during 2008 and 2009 was large and amounted to U.S. \$ 50 billion (27 percent of total reserves). The stock of reserves was then rapidly re-built since late 2010, thanks to the resurgence of inflows which in part are related to the new inclusion of Malaysia in major regional investment indexes. The current stock of foreign exchange reserves is considered adequate¹⁴, and is equivalent to over 8 months of imports, representing a better coverage ratio than those observed in 2006 and in 2007.

26. **The BNM’s active use of foreign reserves was an effective tool in avoiding extreme fluctuations in the exchange rate.** BNM’s sales of foreign exchange counter-balanced the sudden outflow of private capital, and contributed to avoid extreme movements, both in the direction of appreciation and in the direction of depreciation in the exchange rate

¹³ Remaining controls do prevent speculative use of derivatives by investors without an underlying cash position.

¹⁴ See *Pilot External Sector Report—Individual Economy Assessments*, IMF SM/12/167.

vis-à-vis the U.S. dollar (Figure 10).¹⁵ The large amount of foreign exchange sold by the central bank was an important tool in providing the domestic market with foreign exchange liquidity during periods of stress.

27. **The draw-down in official reserves also compensated the discontinuation of the foreign exchange swaps, which were used by the BNM for draining excess ringgit liquidity.** These swaps were extensively used before the global financial crisis, but were discontinued in 2009, consistently with the reduction in the volume of other ringgit-draining operations. A collateral effect of the reduction in the volume of the swaps was that foreign exchange was being drained from banks. However, this did not prove to be problematic, since the banking sector did not show signs of stress in foreign exchange liquidity. Apart from the sale of foreign reserves there was no need, according to the authorities, for any extra form of emergency foreign exchange lending to any domestic financial institution.

28. **The impact of the global financial crisis led to a longer-lasting reduction in the level of foreign exchange reserves in Malaysia than in other regional countries.** For instance, in South Korea and in Thailand (and, to a lesser degree, in Indonesia), the stock of foreign exchange reserves was relatively stable, or even grew, throughout the period 2008-2010. On the contrary, in Malaysia, the dollar value of the reserves dropped by about a quarter between June 2008 and June 2009.¹⁶ The more aggressive use of foreign reserves in Malaysia meant that the year-on-year devaluation of the ringgit reached a peak of only 15 percent during 2009, compared with devaluation peaks of over 25 percent for the currencies of Korea, Thailand and Indonesia. While characterized by a stronger intervention in reducing peaks in short-term volatility in the exchange rate, the BNM's policy also allowed the ringgit to follow, on average, a path comparable with that of other countries' dynamics. For instance, over the period June 2008 through June 2009, the ringgit depreciated by 7.3 percent while the Korean won, the Indian rupee and the Thai baht depreciated by 18.4 percent, 9.8 percent and 1.5 percent, respectively.

A. Domestic Monetary Policy in Tranquil and Crisis Times

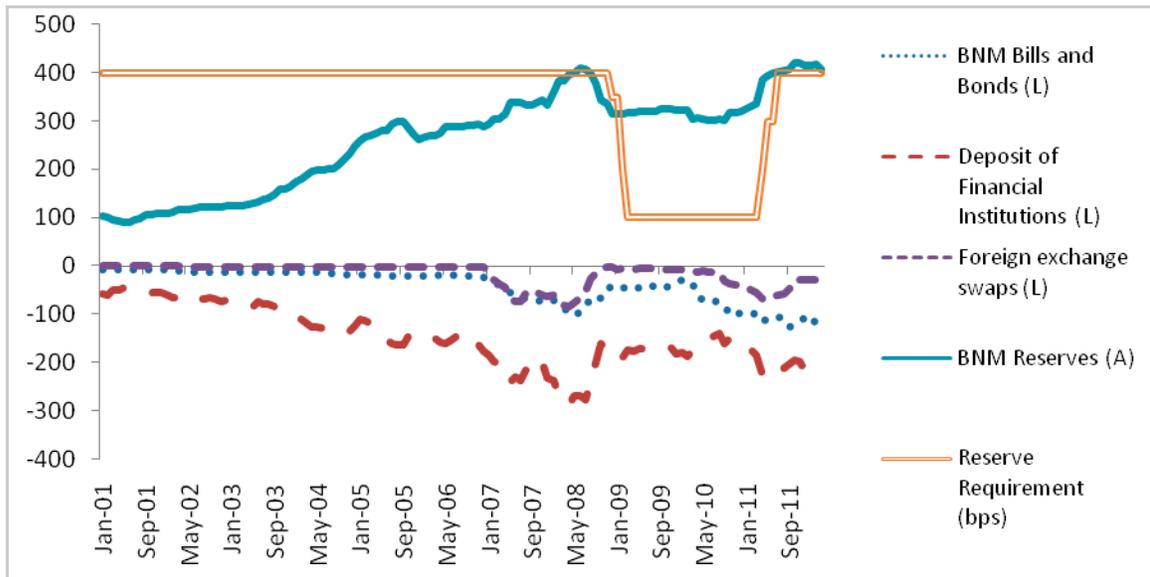
29. **The BNM took a series of strong measures in order to preserve the stability of the financial sector during the global financial crisis.** From a quantitative perspective (Figure 11), between June 2008 and June 2009, the BNM sold about 150 billion ringgit in foreign exchange. Following these actions, and to avoid a liquidity squeeze, the BNM

¹⁵ The volatility of the nominal effective exchange rate (NEER) has been even smaller. Over the period 01/2005-04/2012, the monthly correlation between NEER (calculated by the BIS) and the RM/USD exchange rate was 83 percent. Over the same period, however, the coefficient of variation of the RM/USD exchange rate was 7.5 percent, while the corresponding value for the NEER was just 2.9 percent.

¹⁶ Foreign reserves grew substantially between December 2007 and June 2008. This is why the real extent of the reduction in foreign reserves cannot be fully appreciated from Table 2, which only reports end of year values.

compensated its foreign exchange injection with an immediate drop in liquidity absorbing OMOs, such as a 60 billion ringgit reduction in foreign exchange swaps.¹⁷ At the same time, an additional 60 billion ringgit was released through reduced issuance of BNM paper. Subsequently, the reserve requirement was reduced (from 4 to 1 percent). This last measure provided banks with ringgit liquidity without the need of providing collateral, releasing additional ringgit liquidity into the system.¹⁸ From a balance sheet perspective, the liquidity-releasing measures implied a reduction in the BNM’s liabilities which, on the asset side, equaled the reduction in foreign reserves. This evolution of the central bank’s balance sheet is the mirror image of the fact that domestic assets were in part changing hands, from foreign to domestic investors. In correspondence of the RM 150 billion liquidity released by the BNM, it is possible to observe an increase in holdings of government securities and of other domestic securities by domestic banks (50 billion) and by the EPF (30 billion). Table 2 provides a detailed evolution of the BNM’s balance sheet.

Figure 11. Central Bank’s Assets, Liabilities and Reserve Requirements



Billion ringgits, unless otherwise indicated.

Source: BNM.

¹⁷ These swaps make up most of the category called “deposits with financial institutions” by the BNM.

¹⁸ i.e., compared with liquidity-injecting OMO or SF, which require banks to provide collateral.

Table 2. Balance Sheet of Bank Negara Malaysia

Liabilities							
	<i>Capital and Reserves</i>	<i>Currency in Circulation</i>	<i>Financial Institutions Deposits</i>	<i>Federal Government Deposits</i>	<i>BNM Bills and Bonds</i>	<i>Other Liabilities</i>	<i>TOTAL</i>
2007	30	42	232	14.3	69	38	425
2008	32	48	184	11.2	44	26	345
2009	40	51	182	18.6	33	30	363
2010	20	56	171	14.2	100	29	390
2011	29	62	215	10.8	108	46	473

Assets						
	<i>Gold, Foreign Exchange and IMF position</i>	<i>Malaysian Gov. Papers</i>	<i>Deposits with Financial Institutions</i>	<i>Loans and Advances</i>	<i>Other Assets</i>	<i>TOTAL</i>
2007	336	3	63	12	12	425
2008	318	3	5	12	8	345
2009	331	3	9	12	7	363
2010	328	2	41	12	7	390
2011	423	2	29	11	8	473

End of year figures, billion RM.

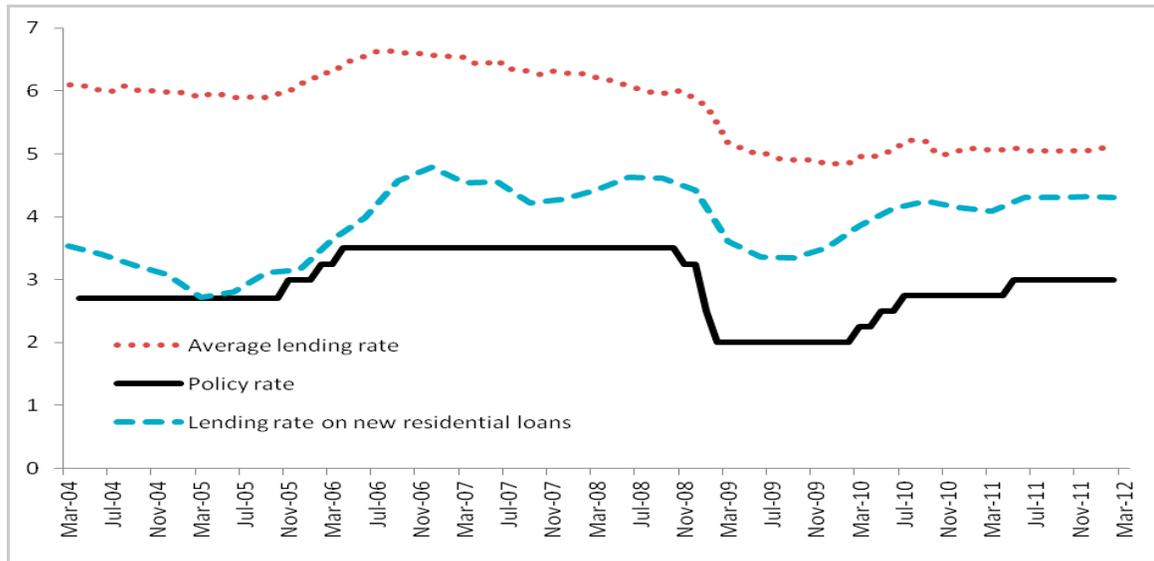
Source: BNM.

30. **To gain more flexibility in managing systemic liquidity during the global financial crisis, the BNM reduced the maturity of its liquidity-draining OMOs.**

Moreover, as part of the set of measures to offset the reduction in official reserves (which drained liquidity), the BNM released ringgit liquidity back into the system by not renewing some maturing liquidity-absorbing OMOs.

B. Evolution of Lending Rate

31. **The structural excess liquidity position in the financial system puts downward pressure on interest rates.** The new wave of capital inflows, started in 2010, and the sterilized re-build of foreign reserves, contribute to reinforcing the excess liquidity position. Moreover, there is concern that large increases in the policy rate may, in the current international context of low yields, trigger even stronger capital inflows.

Figure 12. Interest Rates

Percentage points.

Source: BNM.

32. **Against this backdrop, the spread between the average lending rate to customers and the policy has been shrinking substantially, and should be carefully investigated.**

The progressive reduction in the lending rate (Figure 12) can be justified, at least in part, by the reduction in credit risk as proxied by the share of non-performing loans. Increased bank competition and reduction in the cost of banking operations can also be contributing factors. However, the spread between the average lending rate on outstanding debt and the policy rate is now only about 2 percent. The spread with the lending rate on new residential loans, while not displaying the same trend in reduction, is as low as 1.3 percent. Moreover, the average lending rate and the lending rate on new loans have responded only partially to the increase in the policy rate started in 2010. These facts should be carefully investigated to ensure that banks' lending standards are not deteriorating and that loans are soundly priced.

V. CONCLUSIONS

33. **The Malaysian financial system weathered well the global financial crisis, thanks also to an appropriate and effective set of policy tools available to the BNM.** There was no major shortfall of liquidity in either domestic or foreign currency, and no banks went under severe stress. While the BNM had clearly signaled¹⁹ to the market that, if needed, it would have provided various forms of emergency liquidity, there was no need to activate such policies.

¹⁹ BNM press statements on October 14, 16, 30 and on November 5, 2008.

34. **Looking ahead, there are some critical points that the authorities might consider.** In particular, three aspects warrant attention:

- The stable liquidity position - supported by a growing deposit base, with low exposure to foreign exchange funding - that structurally characterizes the Malaysian banking system has shielded the country from the most adverse effects of the global financial crisis. No crisis of confidence, triggered for instance by the risk of failure of a large bank or non-bank financial institution, was observed. In this sense, while the resilience shown by the financial sector is encouraging, the recent global financial crisis was not an extreme test for the monetary operations and the ELA frameworks in situations of severe stress.
- The BNM has shown a strong ability to influence the banking system, and the financial market at large. This ability crucially contributes to stabilize the Malaysian banking system during periods of stress, and to avoid excessive risk build-up and moral hazard in times strong growth. As the Malaysian financial market develops, the reassuring presence of a strong central bank will have to be increasingly complemented by fostering and supporting a self-reliant banking and financial system. For instance, the BNM may consider a widening in the oscillation band for the purpose of statutory reserves averaging, and a change in the maintenance period from bi-monthly to two weeks.²⁰ While maintaining high legal standards for repo transactions, the BNM could also continue in the process of identifying the constraints that hinder the development of this market segment in Malaysia.
- Lending rates have now reached historical lows, with the spread between the average lending rate and the policy rate equal to just 2 percent. Such an environment with ample liquidity and low interest rates may lead to unsound lending practices and to asset bubbles. Authorities should remain vigilant, investigating the drivers of this reduction in spreads.

²⁰ For various technical reasons, this small change facilitates liquidity management by banks, and short-term liquidity forecasting by the central bank.