

Monetary and Financial Conditions in 2016



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Monetary and Financial Conditions in 2016

INTERNATIONAL MONETARY AND FINANCIAL CONDITIONS

Global financial markets remained volatile in 2016

Volatility in global financial markets remained unabated in 2016. Against the backdrop of subdued global growth and inflation, diverging monetary policies in the advanced economies, a strengthening US dollar and low global commodity prices, global financial markets experienced increased volatility as market players became more sensitive to “risk-on” and “risk-off” developments. Investor sentiments were influenced by a number of key risk factors that took place during the year. While concerns on growth and financial market volatility in People’s Republic of China (PR China), monetary policy path of the US and movements of commodity prices remained as key drivers of volatility, political developments in the UK and the US took the markets by surprise. Uncertainties surrounding these developments generated periods of heightened volatility, causing significant adjustments in global exchange rates as well as equity and bond prices.

During the first two months of 2016, global financial markets faced a period of heightened volatility, due to deteriorating investor sentiments arising from increased macroeconomic risks and declining global commodity prices. Market anxiety centred on the slowing momentum of global growth, particularly that of PR China, following the release of weaker economic data at the start of the year¹. PR China’s equity market also became the subject of focus when the Shanghai Composite Index fell by around 10% during the first trading week of the year, triggering circuit breakers

¹ In January, PR China’s GDP growth for 2015 was reported to have slowed to 6.9%, the weakest growth rate in 25 years. Manufacturing data was also reported weaker, with the official Purchasing Managers Index (PMI) indicating continued contraction in PR China’s manufacturing sector.

that halted trading on two separate days and adding to market nervousness². This spilled over to global stock markets, causing significant sell-offs, with major stock market indices falling by an average of around 5% in the first trading week of the year. In addition, global crude oil prices continued their declining trend, bottoming out at USD28 per barrel in mid-January – the lowest level in 12 years – amid prospects of weaker global demand and a supply glut arising from rising global inventories and the removal of key international sanctions. This led to further sell-offs in global financial markets, especially those of commodity exporting countries.

Despite the turbulent start to the year, the risk-averse environment began to gradually dissipate amid expectations of further monetary support in key advanced economies and a recovery in global crude oil prices. Central banks in key advanced economies provided further monetary accommodation through the lowering of policy interest rates and the intensification of asset purchase programmes to provide additional liquidity to the market³. Several central banks in the advanced economies went a step further in monetary accommodation. The Bank of Japan (BOJ) began to implement negative interest rates while the European Central Bank (ECB) took its policy rates further into negative territory. The low or negative short-term interest rate, coupled with the decline in term premium⁴, resulted in many sovereign bond

² PR China’s stock market circuit breaker was implemented on 1 January and is triggered at two levels. If the equity index rises or declines by 5%, trading is suspended for 15 minutes. If the index moves by 7%, trading is halted for the rest of the day.

³ For example, the European Central Bank (ECB) expanded its asset purchase programme in March and began buying corporate bonds in June; and the Bank of England (BOE) cut interest rates to a historical low of 0.25% while expanding its asset purchase programme in August.

⁴ Term premium is the compensation demanded by investors for the risks that are being taken for holding longer-term bonds, more specifically against the risk of higher interest rates in the future. A declining term premium reflects investors’ perception of lower interest rate risk.

yields in advanced economies trading at negative yields. This precipitated yet another round of global search for yield. Global investor risk appetite, especially towards emerging markets, improved further as oil prices recovered within a short time span, reaching above USD50 per barrel in June, following disruptions to global output and increased expectations of future production cuts⁵. As a result, capital flows returned to emerging markets, leading to the higher valuations for financial assets. The Morgan Stanley Capital International (MSCI) Emerging Market Index increased by 22% while emerging market sovereign bond yields declined by an average of around 70 basis points⁶.

Despite the general improvement in risk sentiments during the period, global financial markets remained prone to sudden shifts in sentiments. Consequently, the positive trend in global bond and equity markets during the period was punctuated by changing expectations on the path of US monetary policy and geopolitical events. Notably, the materialisation of two tail-risk events led to a sudden deterioration of investor sentiments. First, the result of the UK's EU referendum (Brexit) in June caused a temporary spike in volatility and a sharp repricing of global financial assets. However, the impact of Brexit was temporary, as markets were soon calmed by swift central bank responses and market normalisation after the initial reaction⁷.

Second, the result of the US presidential election caused another round of significant volatility from November onwards. Expectations of a faster pace of US interest rate normalisation arising from potential pro-growth and inflationary economic policies resulted in a massive rebalancing of global portfolio investments towards US dollar assets, particularly the equity market. The stronger demand for US dollar assets led to the appreciation of the US dollar. Following the US presidential election, the US dollar index appreciated by 3.8% from November to December 2016. The impact of the global portfolio rebalancing was most pronounced in emerging markets. Significant unwinding of portfolio investments in emerging markets led to the sharp depreciation in emerging market currencies.

⁵ Brent recovered from its bottom of USD28 per barrel in mid-January, increasing by around 80% to exceed USD50 per barrel in June.

⁶ For the period March – October 2016.

⁷ Immediately following Brexit, statements were released by the BOE, ECB and the Fed, ensuring liquidity support and that markets will continue to function properly.

Within a short span of two months, emerging market currencies depreciated by between 1.8% and 12.2% against the US dollar. Capital outflows from emerging markets also led to a significant increase in bond yields and a sharp decline in equity prices. The eventual interest rate increase by the US Federal Reserve (Fed) in December reinforced this trend. During the final two months of the year, capital outflows from emerging markets amounted to USD26.8 billion, the MSCI Index fell by 5% and emerging market sovereign bond yields increased by an average of around 30 basis points.

Chart 2.1

MSCI Emerging Market Index



Source: Bloomberg

Chart 2.2

US Dollar Index



Source: Bloomberg

The year also witnessed continued monetary policy easing across most central banks. One major consequence of the prolonged period of low and negative interest rate environment was the intensification of yield seeking and speculative investment behaviour. With interest rates remaining low for an extended period, market under-pricing of risks became more pronounced. During the year, the

symptom of risk under-pricing was evident in global bond markets, as reflected in global term premiums that had fallen to historical lows and were deeply into negative territory. Combined with expectations of lower short-term interest rates, sovereign bond yields in advanced economies became increasingly negative, driving investors to seek assets in emerging markets that yielded positive returns. It was reported that by July 2016, the outstanding amount of bonds in the advanced economies trading at negative interest rates had exceeded USD10 trillion⁸. As such, investors ventured into alternative asset investments, including property, infrastructure, private equity and hedge funds in search of higher yields. The higher exposure into alternative asset investments by institutional investors could raise solvency risks in the event of a financial shock in the markets⁹. The extent of this under-pricing and risk-taking behaviour could contribute to larger and faster adjustments in term premiums and global bond yields when the risk-taking cycle reverses, with implications for emerging markets. Glimpses of this were seen during the volatile phase in the last two months of the year, where the term premium adjusted sharply to turn positive as markets expected higher interest rates in the US. This was one of the key factors that triggered volatility in the financial markets of emerging economies. The sharp repricing of risk observed from November onwards coincided with large capital outflows and exchange rate depreciations across emerging markets. Given that these term premiums still remain at low levels, further repricing could lead to greater volatility in the future.

Chart 2.3

10-year US Treasury Term Premium



Source: Federal Reserve Bank of New York

⁸ Source: BIS Quarterly Review, September 2016.

⁹ Source: Annual Survey of Large Pension Funds and Public Pension Reserve Funds 2015 (OECD).

Going forward, the uncertain and volatile environment is expected to continue, posing significant challenges for global financial markets. For emerging markets, the challenge is likely to be more pronounced. All the factors that have affected global financial markets in 2016 will continue to linger into 2017 and contribute to the intermittent swings between “risk-on” and “risk-off” investment cycles. Emerging markets have thus far exhibited resilience to the bouts of heightened volatility but will remain susceptible to external factors that shape global monetary and financial conditions.

DOMESTIC MONETARY AND FINANCIAL CONDITIONS

Ringgit volatility remained elevated due to external developments

The ringgit, along with most major and regional currencies, continued to be influenced by shifts in portfolio flows in 2016. In large part, the performance of the ringgit and other emerging market currencies reflected the continued uncertainties in the global economic and policy environment and geopolitical developments that led to swings in “risk-on” and “risk-off” conditions in the global financial markets during the year. These shifts in sentiments were reflected in the two noticeable phases of ringgit movements. In the first four months of the year, the ringgit was broadly on a strengthening trend against the US dollar due to sustained portfolio inflows. The inflows were driven mainly by expectations of a delay in the US interest rate normalisation and further monetary easing in the key advanced economies. From 1 May until year-end, however, the ringgit and most regional currencies faced significant depreciation pressure as investors unwound their holdings of financial assets in the region amid a strengthening US dollar and shifts in the geopolitical landscape.

Notwithstanding the global financial market volatility in early January, the period between 1 January and 30 April saw a period of portfolio flows into most regional economies, including into Malaysia’s financial market. Low or negative interest rates in many major economies and expectations of a slower pace of US interest rate normalisation in the earlier part of the year led to the resurgence of global yield-seeking by global investors. The release of better-than-expected economic data from PR China in April also improved global investor sentiments. The increased interest in Malaysia’s

financial assets also partly reflected the improving outlook for commodity-exporting countries following the sharp recovery in global crude oil prices between mid-January and June. Domestically, positive sentiments arising from the Government's commitment to maintain Malaysia's fiscal deficit target during the recalibration of 2016 Budget and the release of positive economic data for the fourth-quarter of 2015 also contributed to the strong demand for Malaysia's financial assets. Against these developments, Malaysia experienced portfolio inflows and the ringgit appreciated against the US dollar by 9.9% between 1 January and 30 April, with the ringgit reaching a high of RM3.865 against the US dollar in April. During the period, the ringgit appreciation against the US dollar was the strongest among regional currencies.

Sentiments, however, started to shift thereafter, and the ringgit along with several regional currencies depreciated against the US dollar. From May onwards, regional currencies were driven mainly by developments in the advanced economies, instead of any specific regional or country-related factors. In particular, the developments reflected the significant strengthening of the US dollar amidst continued expectation of higher interest rates in the US. During this period, the release of positive US economic data and hawkish statements by the Federal Open Market Committee (FOMC) contributed to persistent expectations of an interest rate hike before the end of the year. This affected sentiments among investors and reduced interest in emerging market assets, which affected the performance of most emerging market currencies. At the same time, the currencies of most commodity-exporting countries, including Malaysia, were also affected by the continued volatility in global crude oil prices during this period. The sharp increase in geopolitical uncertainty during the year following the result of Brexit also exacerbated the volatility and depreciation pressure on most emerging market currencies. The strength of the US dollar was further reinforced by the anticipation of a faster pace of US interest rate normalisation in 2017 amid the expectations of expansionary policies following the outcome of the US presidential election. For Malaysia, these uncertainties led to capital flow reversal during this period, with capital outflows intensifying in November and in early December. This reversal of portfolio flows retraced the gains in the ringgit during the first four months of the year.

Chart 2.4

Exchange Rate of the Malaysian Ringgit (RM) and Selected Regional Currencies against the US Dollar (USD)



¹ Regional currencies: Chinese renminbi, Indonesian rupiah, Korean won, Philippine peso, Singapore dollar, New Taiwan dollar and Thai baht. Each currency carries equal weight.

Note: An increase in the index represents an appreciation of the ringgit or of selected regional currencies against the US dollar.

Source: Bank Negara Malaysia

For the year as a whole, the ringgit depreciated by 4.3% to end the year at RM4.486 against the US dollar. The ringgit also depreciated against the euro (-0.7%), the Australian dollar (-3.4%) and the Japanese yen (-7.3%) but strengthened against the British pound (15.4%). Against regional currencies, the ringgit was broadly weaker. The ringgit's nominal effective exchange rate (NEER), a measure of ringgit performance against the currencies of Malaysia's major trading partners, however, remained relatively stable with a depreciation of 1.9%.

Chart 2.5

Summary of Malaysian Ringgit (RM) Performance against Major and Regional Currencies



Note: (+) indicates an appreciation of the ringgit against foreign currency.

Source: Bank Negara Malaysia

During the year, while the ringgit was affected by the same external shocks that impacted regional currencies, the volatility of the ringgit exchange rate was exacerbated by speculative activities in the offshore non-deliverable forward (NDF) market. This was especially evident in November following

the outcome of the US presidential election. As the uncertainty surrounding the election increased, speculation in the NDF market led to the sharp disconnect between the offshore and onshore pricing of the ringgit exchange rate. During this period, the opaque pricing mechanism in the NDF market spilled over to the onshore foreign exchange market and disrupted the domestic price discovery process. The speculative nature of the offshore NDF market, which created a disconnect between the exchange rate and the underlying domestic economic fundamentals, was a key factor behind the misalignment and volatility of the exchange rate (See Box Article on ‘Exchange Rate Volatility and Disconnect: Structural or Cyclical?’).

Ringgit was also subjected to higher volatility due to the supply and demand imbalances in the domestic foreign exchange market. As a net exporter, Malaysia’s current account has been in a surplus position since 1998. Nevertheless, when these export proceeds are not converted into ringgit, it weakens the structural demand for the ringgit. At the same time, as Malaysian companies undertake more investments abroad, their demand for foreign currencies increases. This leads to further imbalances in the foreign exchange market. These underlying imbalances left the ringgit vulnerable to the sharp movements of portfolio investment flows by non-resident investors, which resulted in the frequent ringgit overshooting in response to global developments. Policy intervention was needed to rectify these imbalances. The Financial Markets Committee (FMC), in collaboration with Bank Negara Malaysia, introduced several measures to deepen and broaden the domestic foreign exchange market, including by promoting foreign exchange hedging within the domestic foreign exchange market. Another measure was to require the conversion of foreign currency export proceeds into ringgit, which would address the imbalances where export proceeds were overwhelmingly placed in foreign currency accounts in offshore markets. The renewed flow of foreign currency export proceeds into the domestic market would subsequently improve foreign currency liquidity in the onshore market. These measures were part of a series of market development initiatives to achieve a highly-developed, liquid, deep, transparent and well-functioning foreign exchange market in Malaysia.

Going forward, the volatile conditions are expected to continue as uncertainties on global growth, global monetary policy and global commodity prices

persist. As the world economy faces the realities of the impending global geopolitical shifts, global financial markets will continue to face episodes of sharp adjustments. In this regard, it is crucial for policymakers to have access to a wide range of policy tools to manage these risks. For Malaysia, policymakers will continue to focus on ensuring the domestic financial and foreign exchange markets reflect the developments in the Malaysian economy.

Interest rates declined in 2016, reflecting key policy decisions by the Bank

Domestic interest rates declined in 2016, with interbank rates, retail lending rates and fixed deposit rates trending lower during the year. The moderating trend took place amid stabilisation in the competition for stable funding and reflected key policy measures by the Bank, including the reduction in the Statutory Reserve Requirement (SRR) in February 2016 and the reduction in the Overnight Policy Rate (OPR) in July 2016.

At the beginning of the year, interbank rates for tenures of 1-month and longer were higher, reflecting mainly the increase in funding costs arising from competition for stable funding and the uneven distribution of liquidity among banks. As part of a comprehensive effort by the Bank to ensure sufficient liquidity in the domestic financial system, and to support the orderly functioning of the domestic financial markets, the SRR was reduced from 4.00% to 3.50% effective from 1 February 2016. The reduction in SRR resulted in a broad-based release of liquidity into the banking system, which helped to ease conditions in the interbank markets. Consequently, interbank rates for tenures of 1-month and longer, moderated throughout the first half of the year. By June 2016, the 3-month average interbank rate was lower by 21 basis points and the 3-month KLIBOR had declined by 19 basis points.

Retail lending rates and fixed deposit rates were relatively stable in the first half of 2016. The weighted average base rate (BR) of commercial banks was steady in the range of 3.78% - 3.83% and correspondingly, the weighted average lending rate (ALR) on outstanding loans also remained stable during this period. The average quoted fixed deposit rates of commercial banks for tenures 1 to 12-month were also steady, ranging between 3.08% and 3.31% in the first half of the year.

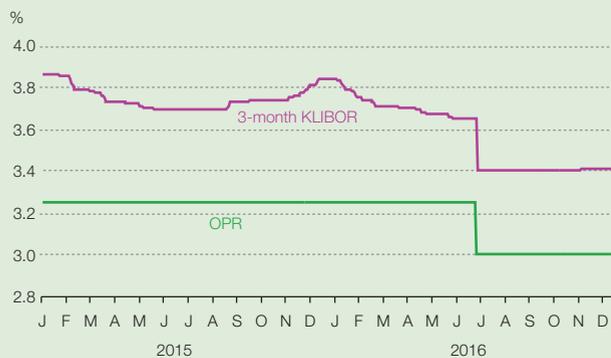
In the second half of the year, developments in domestic interest rates were mainly driven by the reduction in the OPR on 13 July 2016. From 1 to 12 July, the average overnight interbank rate (AOIR) traded within a range of 3.05% - 3.19%. Following the reduction in OPR, the AOIR decreased and stabilised at a lower range of 2.81% - 3.00%. Interbank rates for longer tenures also declined in line with the reduction in OPR. The 3-month KLIBOR fell by 25 basis points within a day after the OPR reduction. For the year as a whole, the 3-month KLIBOR declined by 43 basis points.

The change in OPR was also transmitted to retail lending rates and fixed deposit rates. The weighted average BR of commercial banks decreased by 22 basis points by August 2016, with downward revisions of BR by most banks in response to the OPR reduction ranging from 20 to 25 basis points. By the end of the year, the weighted average BR recorded its lowest level since it was introduced in January 2015 (December 2016: 3.61%; January 2016: 3.78%; January 2015: 3.81%). Correspondingly, the weighted ALR on outstanding loans fell by 21 basis points in the second half of 2016, from 5.42% in June 2016 to 5.21% in December 2016.

In addition, the 1 to 12-month average quoted fixed deposit rates of commercial banks fell by an average of 18 basis points in July 2016 following the reduction in the OPR. By the end of the year, they were at a lower range of 2.86% - 3.06%. Consistent with the decline in the fixed deposit rates, the banks' cost of funds (COF) gradually trended downwards in the second half of the year.

Chart 2.6

Policy and Interbank Market Rates



Source: Bank Negara Malaysia and Bloomberg

Chart 2.7

Commercial Banks' Lending Rates (at end-period)



Source: Bank Negara Malaysia

MGS yields increased towards the end of the year, in line with developments in global bond markets

In 2016, yields on Malaysian Government Securities (MGS) were primarily driven by external factors. For the year, the 3-year, 5-year and 10-year MGS yields increased by 24, 23 and 4 basis points, respectively.

Chart 2.8

MGS Yields



Source: Bank Negara Malaysia

During the first ten months of the year, yields were supported by a combination of factors that contributed to the increased demand for domestic bonds. This includes the expectation of subdued global growth and inflation, continued monetary stimulus and negative sovereign bond yields in the advanced economies. The inclusion of Malaysian Government Investment Issues (MGII) in the JP Morgan Government Bond Index – Emerging Markets (GBI-EM), announced in August, also contributed to the increased demand for Malaysian sovereign bonds, resulting in further downward

pressure on sovereign bond yields. During this period, non-resident holdings of Government bonds¹⁰ increased by RM41.1 billion to RM214.8 billion as at end-October 2016, with the share of non-resident holdings at 34% of total Government bonds outstanding (2015: 30%). Correspondingly, the 3-year, 5-year and 10-year MGS yields declined by 27, 16 and 57 basis points, respectively, during the period. The decline in yields also partly reflected the reduction in the OPR in July 2016.

The downward trend in MGS yields reversed from November onwards, as the outcome of the US presidential election resulted in global bond market volatility. Expectations of pro-growth policies in the US, which could potentially boost US corporate earnings, resulted in rebalancing of portfolio investment by non-residents towards the US equity market. This led to sizeable sell-offs in global sovereign bond markets, including in Malaysia. The 3-year, 5-year and 10-year MGS yields increased by 50, 39 and 61 basis points, respectively, over the same period. While there were substantial amounts of non-resident outflows from the domestic bond market, these outflows did not completely offset the inflows during the first ten months of the year. For the year as a whole, non-resident portfolio inflows into Malaysian Government bonds amounted to RM16.2 billion.

In the corporate bond market, yields were broadly lower, reflecting the lower yield environment in the Government bond market and the reduction in the OPR. Despite the upward adjustments in the Government bond yields in November, the impact on corporate bond yields

was relatively contained due to the low and stable non-resident holdings of corporate bonds¹¹ and sustained demand by domestic investors. For the year, 5-year AAA and AA-rated corporate bond yields recorded marginal increases of 3.4 and 4.8 basis points respectively. The relatively stable corporate bond yields ensured that the fund-raising activities in the corporate bond market continued to support the financing needs of the economy. New corporate bond issuances amounted to RM137.3 billion during the year (2015: RM128.8 billion)¹², with the bulk of the issuances being raised to fund infrastructure projects and for refinancing activities. Liquidity and credit conditions in the corporate bond market also continued to remain healthy in 2016, as reflected in the higher total turnover of RM159.5 billion (2015: RM114.5 billion).

The domestic equity market declined amid higher market uncertainties

In 2016, the FTSE Bursa Malaysia Kuala Lumpur Composite Index (FBM KLCI) declined by 3.0% (2015: -3.9%) to close at 1641.73 points, amid higher market uncertainties and tepid investor sentiments.

During the early part of the year, the domestic equity market was affected by negative sentiments arising from the declining global oil prices and the spillover effects from the upheaval in PR China's stock market that roiled equity markets globally. The FBM KLCI reached its lowest point for the year at 1,600.92 points on 21 January 2016. However, global equity markets were then supported by positive sentiments arising from the recovery in global oil prices on rising expectations of future production cuts. The rally in the FBM KLCI was further supported by the resumption of portfolio inflows by non-resident investors amid improved sentiments driven mainly by expectations of a delay in the US interest rate normalisation. The index rebounded to the highest point for the year at 1727.99 points on 15 April 2016.

For the rest of the year, however, market performance was affected by intermittent periods of volatility arising from external developments. Shifting market expectations on the path of US interest rate normalisation that occurred throughout the year

Chart 2.9

5-year MGS and 5-year Corporate Bond Yields



Source: Bank Negara Malaysia

¹⁰ Refers to Malaysian Government Securities (MGS), Malaysian Government Investment Issues (MGII) and Sukuk Perumahan Kerajaan (SPK).

¹¹ The share of non-resident holdings in corporate bonds remained within the 2% - 3% range for the past three years.

¹² Refers to securities issued in Malaysia by both local and foreign companies which can be either short-term, medium-term or long-term papers in Conventional or Islamic principles.

was an important factor in influencing the demand for regional equities. The materialisation of two tail-risk events, namely the outcome of Brexit in June and US presidential election in November, led to portfolio rebalancing by global investors, who in turn, reduced equity holdings in emerging markets. While the impact on the domestic equity market from Brexit was temporary, the heightened uncertainty arising from the result of the US presidential election remained until the end of the year. For the year as a whole, non-resident investors reduced domestic equity holdings by RM3.2 billion (2015: -RM19.7 billion).

Apart from these external challenges, the FBM KLCI was also partly affected by weaker corporate earnings, particularly in the *oil and gas* and *property* sectors. Additionally, the rebalancing of the MSCI Index which trimmed Malaysia's weightage from 3.25% to 2.92% effective 1 June 2016 also added some downward pressures on the index.

Chart 2.10

Regional Equity Indices



Chart 2.11

FBM KLCI and Volatility of Returns on the KLCI¹



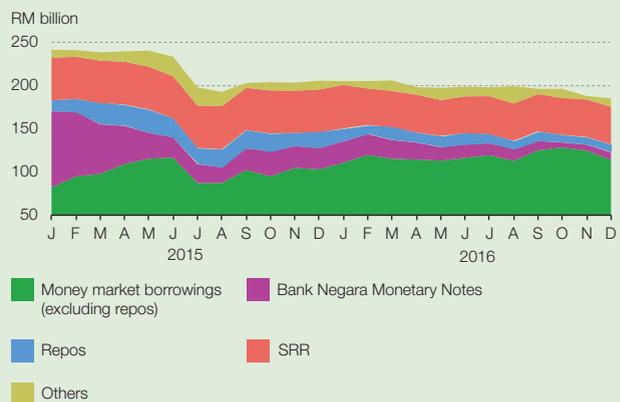
Overall liquidity conditions remained stable with some improvements recorded in M3 growth

In 2016, banking system liquidity remained ample despite volatility in domestic financial and foreign exchange markets. At the system level, aggregate outstanding liquidity placed with Bank Negara Malaysia remained ample and stable throughout the year. At the institutional level, most banking institutions continued to maintain surplus liquidity positions.

Throughout the year, the Bank's operations were focused on maintaining stability in the interbank market. As part of a comprehensive effort to ensure sufficient liquidity in the domestic financial system, the Bank reduced the SRR ratio from 4.00% to 3.50% which took effect from 1 February 2016. As a result, there was a broad-based release of liquidity into the banking system which led to greater interbank lending activity. This allowed the Bank to reduce the use of monetary operations, including the reverse repo facility, to provide liquidity to the banking system. Towards the later part of the year, the composition of monetary instruments used to absorb surplus liquidity was also adjusted to provide banks with greater flexibility in managing their liquidity positions. The tenure of instruments used to absorb surplus liquidity shifted towards the shorter maturities, allowing funds lent to the Bank to mature more frequently such that banks can readily meet any sudden withdrawals of funds due to outflows.

Chart 2.12

Outstanding Ringgit Liquidity Placed with Bank Negara Malaysia (at end-period)

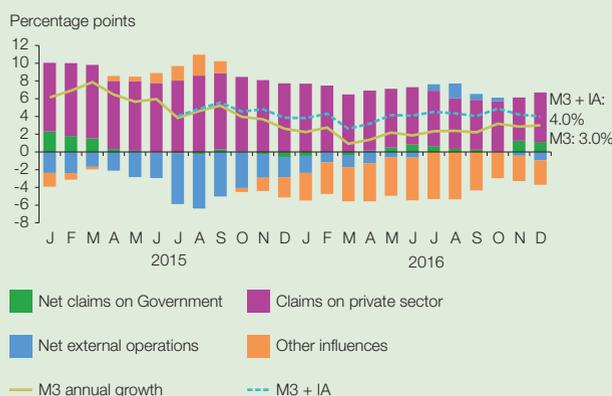


Private sector liquidity, as measured by broad money (M3), recorded a higher annual growth rate of 3.0% during the year (2015: 2.6%). The expansion in M3 was underpinned by continued credit extension by banks to businesses and households. The expansion in M3, however, was offset by net foreign outflows. M3 growth was also contained in part by the reclassification and continued growth of Islamic Investment Accounts, as reflected in the contraction

of 'other influences'. Adjusting for the impact of this reclassification, M3 would have increased at a higher rate of 4.0% in 2016. Meanwhile, total deposits in the banking system¹³ recorded an annual growth rate of 2.0% in 2016, compared to 2.3% in 2015, mainly due to a decline in deposits placed by businesses (2016: -2.3%, 2015: 0.9%). Nevertheless, household deposits continued to register a healthy growth of 5.1% during the year (2015: 5.3%).

Chart 2.13

Contribution to M3 Growth

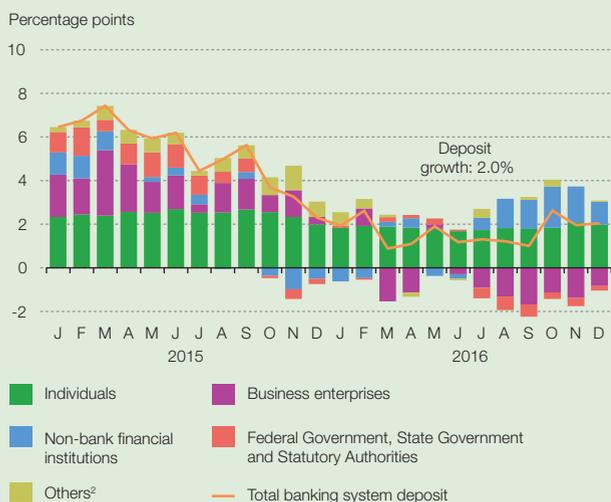


Note: From July 2015 onwards, the compilation of M3 was adjusted to exclude Islamic Investment Accounts (IA) due to a data reclassification exercise. This is reflected as a negative contribution through 'other influences'. The dotted line represents M3 growth had this reclassification not taken place.

Source: Bank Negara Malaysia

Chart 2.14

Contribution to Banking System Deposit¹ Growth by Holder



¹ Excludes domestic interbank deposits.

² Includes domestic other entities and foreign entities.

Source: Bank Negara Malaysia

Financing to the private sector was consistent with the pace of economic activity

Despite an environment of continued volatility, domestic financial intermediation remained uninterrupted during the year. Net financing through the banking system, non-bank financial institutions¹⁴ and the corporate bond market recorded a growth of 5.5% in 2016 (2015: 8.2%). The more moderate pace of growth in net financing during the year was in line with economic activity, reflecting mainly the lower growth of outstanding loans¹⁵ (2016: 5.3%; 2015: 7.5%). While financing through the corporate bond market remained healthy, the annual growth of outstanding corporate bonds as at end-December moderated to 6.1% in 2016 (2015: 10.7%). This was mainly due to the higher base recorded in December 2015 given large one-off issuances by a few companies.

Outstanding business loans¹⁶ grew at a slower pace of 4.8% (2015: 7.7%), with the moderation driven by the slower year-on-year growth of loans in the *mining and quarrying; wholesale and retail trade, restaurants and hotels; electricity, gas and water supply; and agriculture* sectors. The moderation in the growth of credit to businesses reflected the slower pace of economic activity with limited evidence of broad-based tightening in access to financing. All business segments experienced stable loan approval rates. The slower

¹³ Excluding deposits by banks.

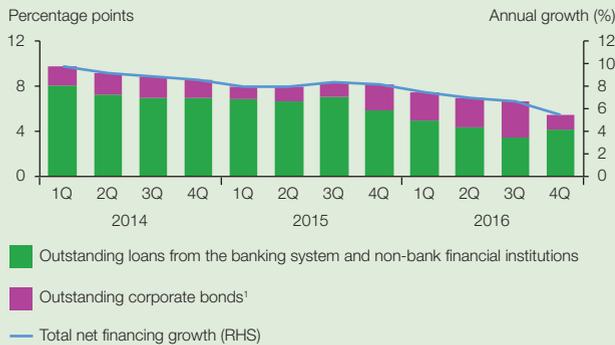
¹⁴ Non-bank financial institutions comprise development financial institutions (DFIs), *Lembaga Pembiayaan Perumahan Sektor Awam* (previously Treasury Housing Loans Division), insurance and stockbroking companies, and others.

¹⁵ Includes outstanding loans extended by the banking system and non-bank financial institutions.

¹⁶ Includes outstanding loans of public enterprises (PEs), but excludes outstanding loans of domestic financial institutions, domestic non-bank financial institutions, Government, domestic other entities, and foreign entities.

Chart 2.15

Total Net Financing to the Private Sector through Banks, Non-bank Financial Institutions and Corporate Bonds



¹ Excludes issuances by Cagamas and non-residents.

Source: Bank Negara Malaysia

outstanding business loan growth was also partly due to a number of large one-off repayments by a small number of firms. Excluding these repayments, the annual growth of outstanding business loans would have been higher. The growth in financing to SMEs continued to remain healthy at 9.0% as at end-December 2016. The level of loan disbursements to businesses, including to SMEs, was also sustained (monthly average over 2016: RM58.7 billion; 2015: RM59.0 billion) with a larger volume of loans extended to the *transport, storage and communication; agriculture; construction* and *real estate* sectors.

Business demand for funding from the capital markets remained healthy with the bond market being a key source of financing for the private

Chart 2.16

Outstanding Loans by Borrowers¹



¹ Comprises banking system and non-bank financial institutions outstanding loans.

Source: Bank Negara Malaysia

Chart 2.17

Approval Rate for Banking System Loans Extended to Businesses¹



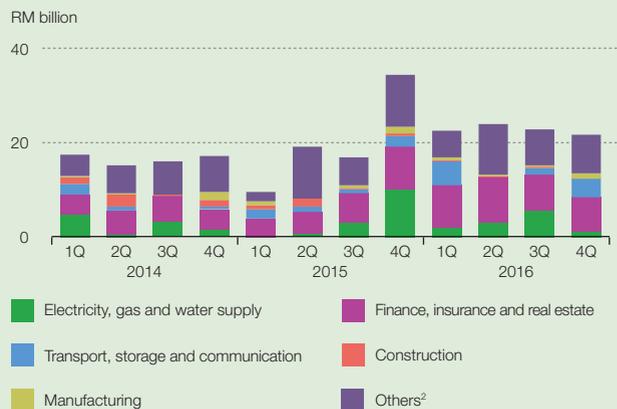
¹ Banking system only.

Source: Bank Negara Malaysia

sector. New corporate bond issuances¹⁷ amounted to RM91.1 billion in 2016 (2015: RM79.9 billion) with issuances mainly from the *finance, insurance and real estate; infrastructure and electricity, gas and water supply* sectors. The bulk of the issuances were raised for the funding of infrastructure projects and refinancing activities. Financing via the equity market¹⁹, however, moderated to RM7.0 billion in 2016 (2015: RM11.3 billion) as the uncertain global market environment affected domestic market sentiments.

Chart 2.18

Gross Corporate Bonds Issued by Sector¹



¹ Excludes issuances by financial institutions, Cagamas and non residents.

² Includes *infrastructure, wholesale and retail trade, restaurants and hotels and mining and quarrying* sectors.

Source: Bank Negara Malaysia

¹⁷ Excludes funds raised by financial institutions, Cagamas and non-residents.

¹⁸ Excludes issuances by financial institutions and non-residents.

Chart 2.19

Approval Rate for Banking System Loans Extended to Households for the Purchase of Residential Property¹



¹ Banking system only.

Source: Bank Negara Malaysia

The growth in household debt¹⁹ continued to moderate during the year to 5.4% (2015: 7.3%). This was attributable to the moderate growth in domestic demand, and was in part due to the pre-emptive macro- and microprudential measures implemented by the Bank to ensure prudent levels of household debt. The moderation was observed across most loan types, particularly loans for the *purchase of non-residential properties; purchase of securities and purchase of passenger cars*. The growth in *residential property* loans, which accounted for 50.0% of total household debt, also moderated to 9.1% during the year (2015: 11.0%). Nevertheless, borrowers with the capacity to service their debt continued to have access to residential property financing during the year, supported by stable approval rates across all house price segments.

¹⁹ Comprises outstanding household loans extended by banks and non-bank financial institutions. Non-bank financial institutions comprise two development financial institutions, *Lembaga Pembiayaan Perumahan Sektor Awam*, insurance and stockbroking companies, and others.

Exchange Rate Volatility and Disconnect: Structural or Cyclical?

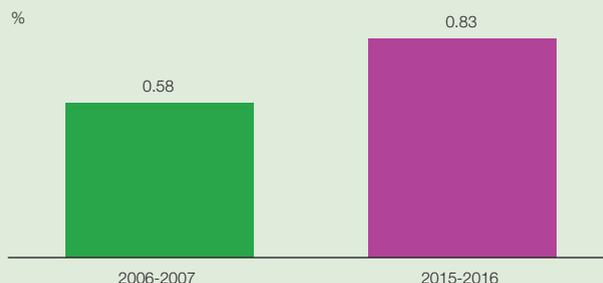
By Ng Jiale, Syed Akmal Shafiq Syed Haris and Sim Wee Haw

Introduction

In recent years, emerging market currencies have experienced a significant rise in the volatility of their exchange rates, particularly after the financial crisis in the developed countries (Chart 1). This volatility has become increasingly persistent, to the extent that it has led to periods of an *exchange rate disconnect*, a situation that describes prolonged deviations between exchange rate movements and the underlying economic fundamentals. Such a disconnect is a reflection of the interactions between a confluence of factors that have shaped the global monetary landscape in recent years. Some drivers of the large fluctuations in exchange rates were cyclical in nature. It was in part due to cycles of “risk-on” and “risk-off” sentiments as a result of shifts in investors’ expectations concerning global growth prospects, policy directions and geopolitical developments. Attributing all the fluctuations to these cyclical global developments and uncertainty, however, is akin to highlighting the waves instead of the underlying current as the global foreign exchange market has structurally evolved over the years. This article looks at the structural changes in the global foreign exchange markets and how these changes in the landscape have exacerbated the volatility of exchange rates – and the consequential implications for small open emerging economies.

Chart 1

Average Intraday Volatility of Emerging Market Currencies against the US Dollar



Note: Intraday volatility is measured by the gap between the high and low exchange rate during the day. Emerging markets include Malaysia, Indonesia, Korea, Singapore, Thailand, Chinese Taipei, India, Philippines, PR China, Mexico, Brazil, Colombia and South Africa.

Source: Bloomberg

Structural changes in the global financial markets have resulted in heightened volatility and prolonged exchange rate disconnect

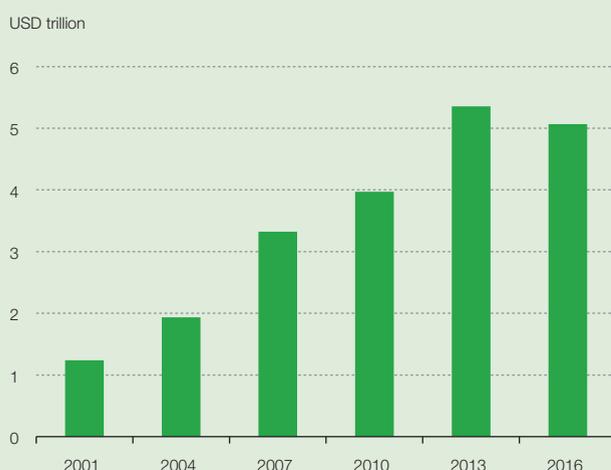
A large part of the rise in exchange rate volatility in recent years can be attributed to cyclical factors, such as the unprecedented introduction of unconventional monetary policies of the major developed countries in the post-crisis years and global developments that have led to shifts in sentiments in the global financial markets. Nevertheless, the structural evolution of the global foreign exchange markets may have exacerbated the degree and persistence of exchange rate volatility. The markets have grown bigger in size and have outpaced the growth of underlying economic activity. At the same time, market players and their behaviour have also evolved as the markets became more complex. These structural developments, coupled with structural rigidities such as the continued reliance on the US dollar, may have contributed to the increased volatility of exchange rates.

A. Bigger and more complex global foreign exchange markets

Despite tighter financial regulation and a secular slowdown in the world economy and trade, the combined global foreign exchange markets still make up the world's largest financial market. After years of globalisation, deregulation and growth in financial services, the size is unlikely to shrink in the near term. While the latest Bank for International Settlements (BIS) Triennial Central Bank Survey of Foreign Exchange and Over-The-Counter (OTC) Derivatives Market Activity showed a slight slowdown in the volume of global foreign exchange trading, the market has still grown by more than four times in the last 15 years (Chart 2). Much of this rise in foreign exchange turnover has been driven by increased trading activity of "other financial institutions", which includes smaller banks, mutual funds, money market funds, insurance companies, pension funds, hedge funds, currency funds and central banks, among others (Chart 3). The increased turnover is driven by greater activity of high-frequency traders and smaller banks and the emergence of retail investors (both individuals and smaller institutions).

Chart 2

Total Foreign Exchange Turnover

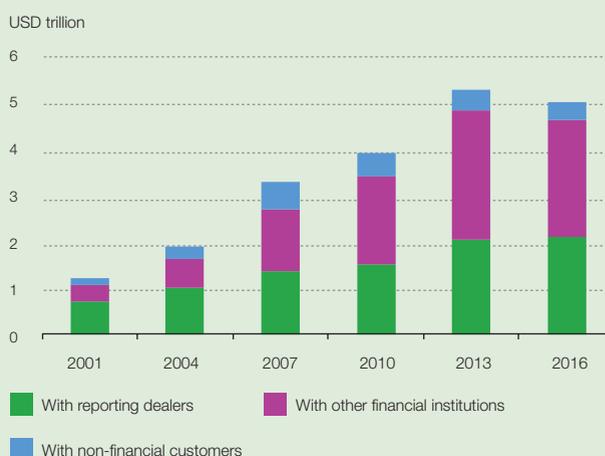


Note: Adjusted for local and cross-border inter-dealer double-counting, i.e. 'net-net' basis.

Source: Bank for International Settlements (BIS)

Chart 3

Global Foreign Exchange Turnover by Counterparty



Note: Adjusted for local and cross-border inter-dealer double-counting, i.e. 'net-net' basis.

Source: Bank for International Settlements (BIS)

An important structural change that has enabled the increased foreign exchange trading is the rise of electronic and algorithmic trading, which has reduced transaction costs significantly and increased market liquidity. While these changes have enhanced the depth of the foreign exchange market, they have also inadvertently opened up the market to more speculative behaviour and greater volatility. This is especially evident in episodes of high uncertainty, during which traders tend to show herding behaviour, leading to a drying up of liquidity that can cause sharp swings in prices and hence volatility.

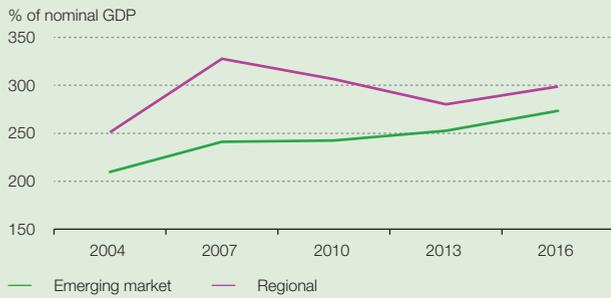
B. Global foreign exchange trading has outpaced real economic flows

Over the years, as global financial flows overwhelm trade flows, the foreign exchange turnover of regional currencies has also increased more than the underlying economic activity¹ (Chart 4 and 5). This implies that the role of the underlying demand for currency that is driven by global trade has become less prominent in determining the exchange rate. Exchange rate movements are now more prone to financial flows, which are predominantly driven by portfolio investors and currency traders, who are generally fickle in nature. As a result, a large part of foreign exchange trading responds to shifts in investor sentiments and external factors, leading to greater exchange rate volatility.

¹ This is also the case globally. Foreign exchange turnover has increased more than underlying economic activity, whether measured by GDP, equity turnover or gross trade flows (The USD4 trillion question: What explains FX growth since the 2007 survey, BIS 2010).

Chart 4

Foreign Exchange Turnover/GDP



Note: Regional countries include Malaysia, Indonesia, Korea, Singapore, Thailand, Chinese Taipei, India, Philippines and PR China while emerging markets include Mexico, Brazil, Colombia, South Africa and all regional countries. 2016 data up to 3Q.
Source: Bank for International Settlements (BIS) and Bloomberg

Chart 5

Foreign Exchange Turnover/Trade



Note: Regional countries include Malaysia, Indonesia, Korea, Singapore, Thailand, Chinese Taipei, India, Philippines and PR China while emerging markets include Mexico, Brazil, Colombia, South Africa and all regional countries. 2016 data up to 3Q.
Source: Bank for International Settlements (BIS) and Bloomberg

C. Persistent low interest rate environment and abundant liquidity in the global monetary system

Nine years after the financial crisis in the developed world, key policy rates of major central banks remain close to zero, with quantitative easing measures still in place. In fact, policy rates have gone negative for some central banks. While the low interest rate and abundant liquidity environment was initially thought to be temporary and hence was considered cyclical, there are views to suggest that after nine years, they may have fundamentally changed market behaviour. Global yield-seeking behaviour has become entrenched and more structural. As the US Federal Reserve begins to normalise the US interest rates, these behaviours have begun to reverse. Nevertheless, interest rates will continue to remain low. The diverging path of monetary policy between the US and other advanced economies will also continue to cause swings in capital flows and significant volatility in emerging market currencies. Going forward, the fact that economic, financial and geopolitical shocks are becoming more common amidst persistent incentives to seek higher yielding assets points to continued swings between large yield-seeking capital inflows and sudden reversals, leaving emerging market currencies vulnerable to increased fluctuations and overshooting.

D. Continued over-reliance on the US dollar

Despite great efforts globally to encourage the shift away from the US dollar as the major global reserve currency, the US dollar in fact has gained market share in terms of turnover in 2016 (Chart 6). With the US dollar maintaining its dominance in the global financial markets, the relative weakness or strength of the US dollar continues to drive international financial flows. Given its importance, investors tend to react to developments that would affect the US dollar instead of the health of the respective domestic economies. As a result, exchange rate movements reflect economic and policy developments in the US instead of the economic fundamentals of the economies global investors are invested in.

E. Changing investor behaviour amidst increased presence of asset managers

The recent years have also seen an increase in asset managers in the global financial market. Asset management companies (AMC) have so far not been subjected to the same regulatory regime imposed on banks in the wake of the global financial crisis^{2,3}. Driven by the balance sheet pressures of ultimate investors (pension funds and insurance companies), AMCs' behaviour can cause significant volatility in the global financial and foreign exchange markets. Business models of large AMCs may amplify volatility and increase asset market correlations as their views may influence other smaller investors' trading decisions. In addition, common risk management tools used among AMCs can also lead to similar trading outcomes. AMCs' investment in emerging market assets via benchmark indices also poses potential vulnerability. A modest rebalancing of strategy (e.g. country composition and weights) can generate large portfolio

² The Assets under Management (AUM) by the largest 500 AMCs has increased rapidly, doubling from USD35 trillion in 2002 to USD70 trillion in 2012. The industry is mainly dominated by a small number of large players, where the share of the largest 20 AMCs was about 40% of total AUM of largest 500 AMCs as at 2012.

³ Asset management industry includes various investment vehicles (such as mutual funds, exchange-traded funds, money market funds, private equity funds, and hedge funds) and their management companies (IMF Global Financial Stability Report, April 2015).

Chart 6

Share of Average Daily Turnover of Selected Major Currencies in the Global Foreign Exchange Market



Note: As two currencies are involved in each transaction, the sum of shares in individual currencies will total 200%.

Source: Bank for International Settlements (BIS)

adjustments that can significantly increase market volatility for emerging economies. This herding behaviour of the AMCs can often cause fund managers to lose sight of the underlying fundamentals of the assets and cause significant volatility in the foreign exchange markets, especially during periods when market liquidity is low.

F. Increased speculation in the non-deliverable forward (NDF) market

NDF markets, especially for non-internationalised currencies, have long been available. NDF markets emerged and gained importance in policy regimes with restrictions on foreign participation in domestic foreign exchange market and offshore deliverability. Often, investors would utilise the NDF market to circumvent trading in the onshore market for both hedging and speculative purposes. Despite being a market that is opaque, volatile and unregulated, the size of the NDF markets continues to grow⁴. Among the six currencies that have the largest NDF markets globally⁵, accounting for two thirds of all NDFs, turnover increased at a faster pace of 8.7% between 2013 and 2016. The risks for small and open emerging economies are large as the size of the NDF trading volume can easily overwhelm and dominate other factors in determining the exchange rate (Chart 7). While the NDF market provides an avenue for some participants to hedge currency exposures, the market is open to speculative behaviour, especially during periods of market uncertainty. In fact, studies have shown that 60% - 80% of NDF trades are speculative in nature⁶. The speculative activity in the NDF market can lead to major distortions in the price discovery process of domestic foreign exchange markets of emerging economies. This in turn results in significant disconnect between the exchange rate movements and real economic activities in the onshore market. For Malaysia, this was most evident when the offshore ringgit NDF rate deviated sharply from the onshore rate in the days following the US presidential election (Chart 8). It also lends support to Bank Negara Malaysia's efforts to reinforce the policy of non-internationalisation of the ringgit and focus on shifting ringgit-related transactions back to the onshore market.

⁴ The 2016 BIS Triennial Central Bank Survey of Foreign Exchange and OTC Derivatives Market Activity shows that NDF turnover grew by 5.3% in dollar terms between April 2013 and April 2016.

⁵ The BIS has highlighted that the top six currencies that are traded in the NDF market in terms of turnover are the Chinese renminbi, Korean won, Indian rupee, New Taiwan dollar, Brazilian real and Russian ruble.

⁶ Federal Reserve Bank of New York 'An Overview of Non-Deliverable Foreign Exchange Forward Markets', May 2005

Chart 7

Non Deliverable Forward (NDF) Volume/GDP



Note: Regional countries include Indonesia, Korea, Chinese Taipei, India and Philippines. NDF volume refers to only regional currencies versus US dollar.

Source: Bloomberg and Haver Analytics

Chart 8

Ringgit Intraday Prices in the Offshore and Onshore Market



Source: Bloomberg

Negative spillover effects on the real economy amid destabilising foreign exchange markets

Standard textbook theory suggests that exchange rate depreciation should provide the support for exports and hence trade as the weaker exchange rate increases the competitiveness of the exports. Recent experience of regional countries, however, suggests that the evidence of support from a weaker exchange rate in boosting export competitiveness is limited at best. Despite the sharp depreciation in recent years, exports of regional economies have not experienced significant improvement. In Asia, despite a 13% depreciation on average against the US dollar between September 2014 and October 2016, the benefits were only experienced in the form of translation gains. Over the same period, regional exports fell by 13.2% in US dollar terms, but only 1% in local currency terms, supported by favourable conversion, rather than stronger demand (Chart 9). Besides low and uneven global demand amid weaker global trade, the stronger US dollar against most currencies also meant that effective depreciation of any currency has been limited. At the same time, the global supply chain naturally implies that most exports have imported components and the costs increase when the domestic currency is weaker.

Chart 9

Nominal Exports of Regional Economy in US Dollar and Local Currency



Note: Seasonally adjusted nominal exports of regional countries (Malaysia, Indonesia, Thailand, Korea and Philippines) in USD and LCY terms. Data only up to October 2016.

Source: CEIC

While most Asian economies are in a better position to manage the depreciation and extreme exchange rate volatility, prolonged disconnect of the exchange rate can eventually spill over to the real economy. These spillover effects can manifest in various forms. These include higher inflation as the prolonged weakness in currencies forces producers to pass on the higher costs to consumers, potential external and foreign exchange debt distresses, adverse sentiments amongst household and businesses, and the vicious cycle of self-fulfilling expectations.

Increasing challenges for policymakers to find the balance between the costs and benefits of exchange rate flexibility

As exchange rate volatility has become more pronounced and prolonged, it is important for policymakers to manage the trade-off between the benefits of allowing exchange rate flexibility to act as a shock absorber to the economy and the potential costs of allowing sharp adjustments in the exchange rate. While exchange rate flexibility is beneficial during normal times, policymakers must remain pragmatic, especially during periods of high uncertainty. As a regulator, the central bank has a role to address structural imbalances⁷ that can lead to unwarranted distortions to the domestic foreign exchange market. Correcting these imbalances will ensure that exchange rate movements remain orderly to support trade, businesses and genuine investors. This is especially important for small and highly open economies, where the exchange rate is an important price. For Malaysia, our philosophy on financial market developments and exchange rate policy remains the same – that they should reflect the economic realities of Malaysia.

⁷ One of the imbalances is the uneven demand and supply for foreign currencies in the domestic foreign exchange market, due to export proceeds being overwhelmingly placed in offshore markets. The recently announced measure requiring the conversion of foreign currency export proceeds into ringgit will help to address this imbalance.

