

**Capital Account Safeguard Measures  
in the ASEAN Context**

## Glossary

AEs	Advanced Economies
AFC	Asian Financial Crisis
ASEAN	Association of Southeast Asian Nations
BOJ	Bank of Japan
BOT	Bank of Thailand
BNIBs	Bank Negara Interbank Bills
BNM	Bank Negara Malaysia
BSP	Bangko Sentral ng Pilipinas
CET	Common Equity Tier
CFMs	Capital Flow Management Measures
CMIM	Chiang Mai Initiative Multilateralisation
DI	Direct Investment
ECB	European Central Bank
EDYRF	Exporters' Dollar and Yen Rediscounting Facility
EMEs	Emerging Market Economies
FDI	Foreign Direct Investment
FEA	Foreign Exchange Administration
FMC	Financial Market Committee
FPIs	Foreign Portfolio Investments
FX	Foreign Exchange
GFC	Global Financial Crisis
IFIs	International Financial Institutions
IMF	International Monetary Fund
LEI	Legal Entity Identifier
LTV	Loan-to-Value
MPMs	Macroprudential Measures
NDF	Non-Deliverable Forward
OF	Overseas Filipino
OI	Other Investment

PI	Portfolio Investment
RENTAS	Real-time Electronic Transfer of Funds and Securities System
RREPI	Residential Real Estate Price Index
SBI	Bank Indonesia Certificate
SDA	Special Deposit Account
UFR	Use of Fund Resources
URR	Unremunerated Reserve Requirement

## **I. Introduction**

Many emerging market economies (EMEs) are undergoing capital account liberalisation, recognising that freer capital flows can provide greater economic opportunities. Nevertheless, policymakers need to be mindful of the risks that large-scale capital flows can pose on macroeconomic and financial stability and the appropriate policy responses.

In the current global environment, EMEs, which are highly integrated with the global economy, have been exposed to a series of external financial shocks as a result of policy decisions by advanced economies, in particular by a more common use of unconventional monetary policies in advanced economies since the global financial crisis (GFC). Such policies as well as their recent unwinding have led to extraordinary capital flow movements among EMEs, with significant impact on exchange rate volatilities and domestic financial conditions. This is because the buildup of inflows in earlier periods could lead to large and sudden outflows of capital. Sharp capital flow reversals can be homogenous across several EMEs due to herding behaviour by foreign investors and thus could result in destructive impact. Hence, managing capital flows, including the adoption of appropriate safeguard measures must be incorporated into the policy mix to maintain macroeconomic and financial stability. Policymakers need to carefully identify the triggers, nature and duration of the crisis or imminent crisis in order to appropriately calibrate their policy tools, while also accounting for country specific challenges.

In managing unprecedented volumes and volatility of capital flows, EMEs require robust policy toolkits beyond traditional domestic macroeconomic policies. Given country specificities and idiosyncrasies, a “one-size-fits-all” prescription or treatment may not be suitable. When policy space is available, countries may adjust monetary and fiscal policies as well as resort to exchange rate flexibility and foreign exchange reserve management to manage capital flows. Nevertheless, when these conventional tools are not sufficiently effective, more targeted measures such as macroprudential measures (MPMs) and capital flow management measures (CFMs) may be deployed as the complementary measure.

Over the past decade, there is a rising interest to use MPMs to safeguard financial stability when inflows are fueling excessive credit growth domestically. In EMEs, MPMs have been widely used since 1990s. Of late, studies have shown that countries have had successful experiences in managing capital flows using macroprudential policies (IMF, 2017b). Empirical studies have also found that MPMs are effective in mitigating certain components of systemic risk (BIS-IMF-FSB report, 2016).

Meanwhile, CFMs have been argued to be a more appropriate instrument compared to conventional tools (broad monetary and fiscal measures), given that they are targeted and have less unintended consequences on the domestic economy. Korinek (2011) and Qureshi et al. (2011) suggest that prudential management of capital flows to EMEs may be desirable from a welfare perspective, as they reduce the incidence and severity of financial crises. An IMF study (2018) also casts doubt on the traditional business cycle view and shows that all types of recessions including those arising from external shocks and small domestic macroeconomic policy mistakes could lead to permanent losses in output and welfare.<sup>1</sup> The literature advises policymakers to internalise and coordinate the actions of market participants toward a lower level of financial fragility by imposing measures that discourage excessively risky financial instruments, in particular short-term dollar denominated debts. Mitigating these externalities would increase both stability and efficiency in the EMEs and would make all stakeholders better off.

Based on the experience of ASEAN, views and guidance of International Financial Institutions<sup>2</sup> (IFIs) on managing capital flows remain rather rigid and only applicable when countries surpass a certain development threshold in their financial system infrastructure. Such guidelines or models at times do not adequately capture country-specific issues and do not sufficiently take into account prevailing macroeconomic circumstances. In addition, the existing IMF frameworks on capital flow management tend to be more directed at recipients rather than source countries, with only a handful of studies and policy papers that call for a more coordinated approach to regulate these flows by both source and recipient countries (Ghosh et al., 2014; and IMF, 2012). This is despite the significant spillover impact monetary policies in the advanced economies has had on emerging economies in the last decade. The impact on capital flow surges and reversals stems from both conventional monetary policies and unconventional tools such as quantitative easing programs. Empirical findings by Ghosh et al. (2014) also suggest that there may be scope for greater international cooperation on both ends as well as among recipient countries in managing large and volatile cross-border flows. As observed time and again that a country's decision on monetary policy could have a spillover impact on capital flows volatility into another jurisdiction, example being the episode of "taper tantrum" in mid-2013. IFIs should play a role in assisting countries in managing capital flows through the various channels in which they interact with their members (ECB, 2016).

Given these ongoing issues in managing capital flows, this paper aims to present the different approaches and safeguards in dealing with capital flows by ASEAN countries in Section II.

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<sup>1</sup> The Economic Scars of Crises and Recessions, IMF Blog, 2018.

<sup>2</sup> Classification of measures and appropriate use, recommendation on the sequence of measures to be used to manage capital flows. (See Section III and Appendix 1)

This paper will also present implications from IFIs' frameworks and ASEAN's perspectives towards guidance on capital flow management, drawing from the ASEAN experiences in Section III and ASEAN's collective proposal towards IFIs' framework going forward will be discussed in Section IV.

## II. Experiences of ASEAN countries

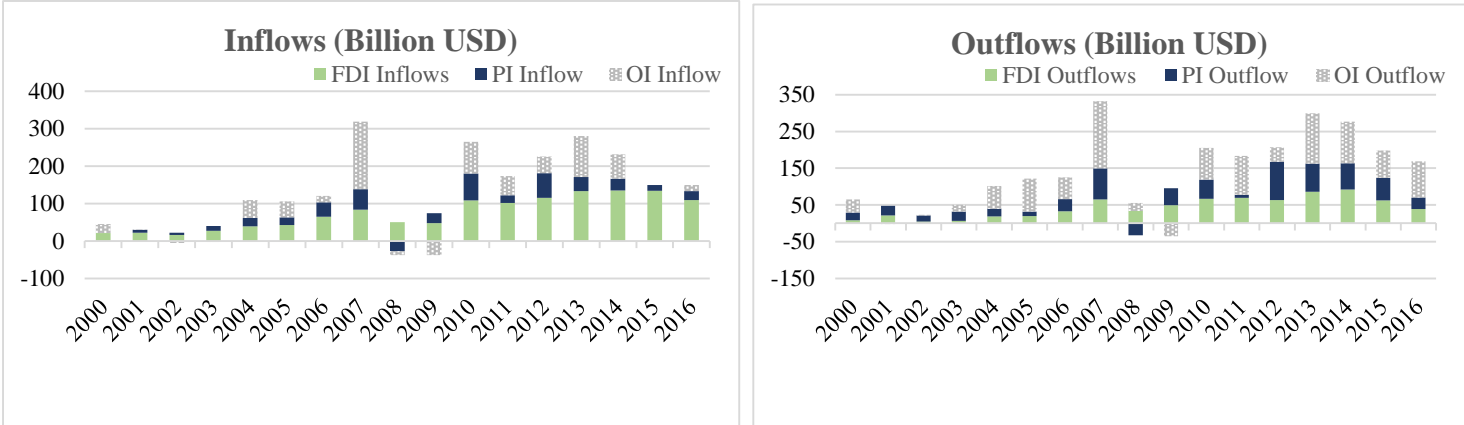
### 1) Capital flows in ASEAN

This section examines recent trends in capital flows in ASEAN, and outlines the recent policy measures implemented to mitigate the negative impact of capital flows.

**ASEAN has experienced increasing two-way capital flows over the past two decades,** as shown in Figures 1-3 below. Foreign Direct Investment (FDI) inflows to the region increased over five-fold, from around USD 21 billion in 2000 to USD 109 billion in 2016. Despite a slight pause in 2008-2009 during the GFC, net FDI inflows have since resumed. However, portfolio inflows and other investment inflows were more volatile.

FDI, portfolio investment (PI) and other investment (OI) outflows from ASEAN have also increased since 2000. This was partly due to ASEAN’s efforts to liberalise their capital accounts and allow residents to invest abroad more freely. ASEAN investors, however, divested their portfolio investment in 2008 and their other investment in 2009 following the GFC. Meanwhile, FDI outflows remained positive throughout, reflecting its long-term nature and being far less sensitive to shocks. The capital flows movement also resulted in exchange rate fluctuations and, to varying degrees, asset price movements in the region.

Figure 1: ASEAN’s capital inflows and outflows



Source: CEIC database and BOT staff calculations

Figure 2: Selected regional currency movements against the US dollar

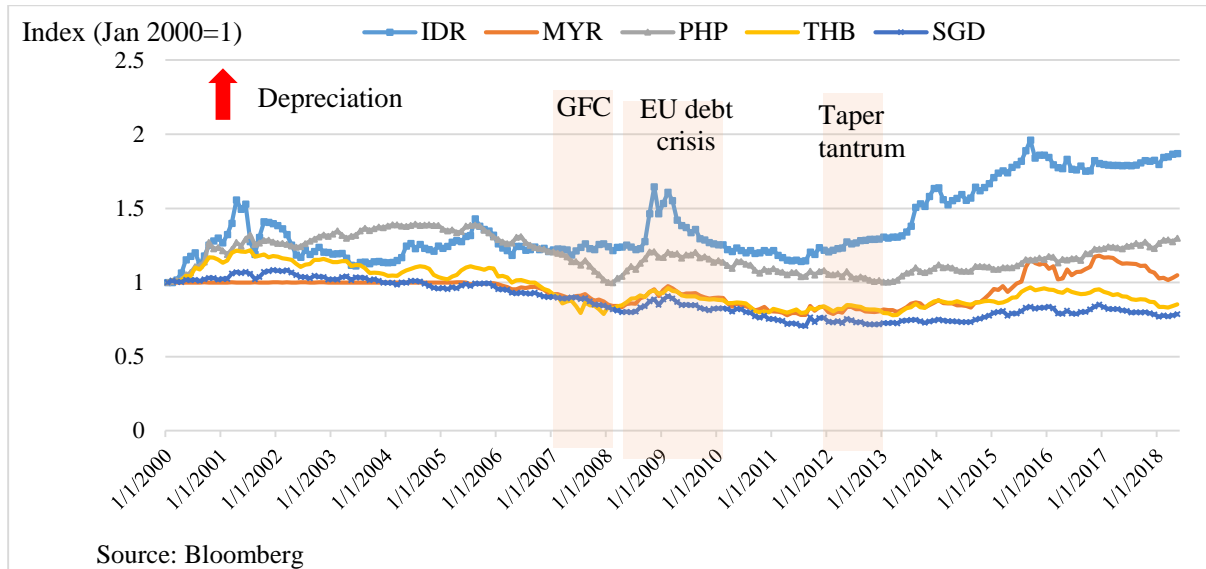
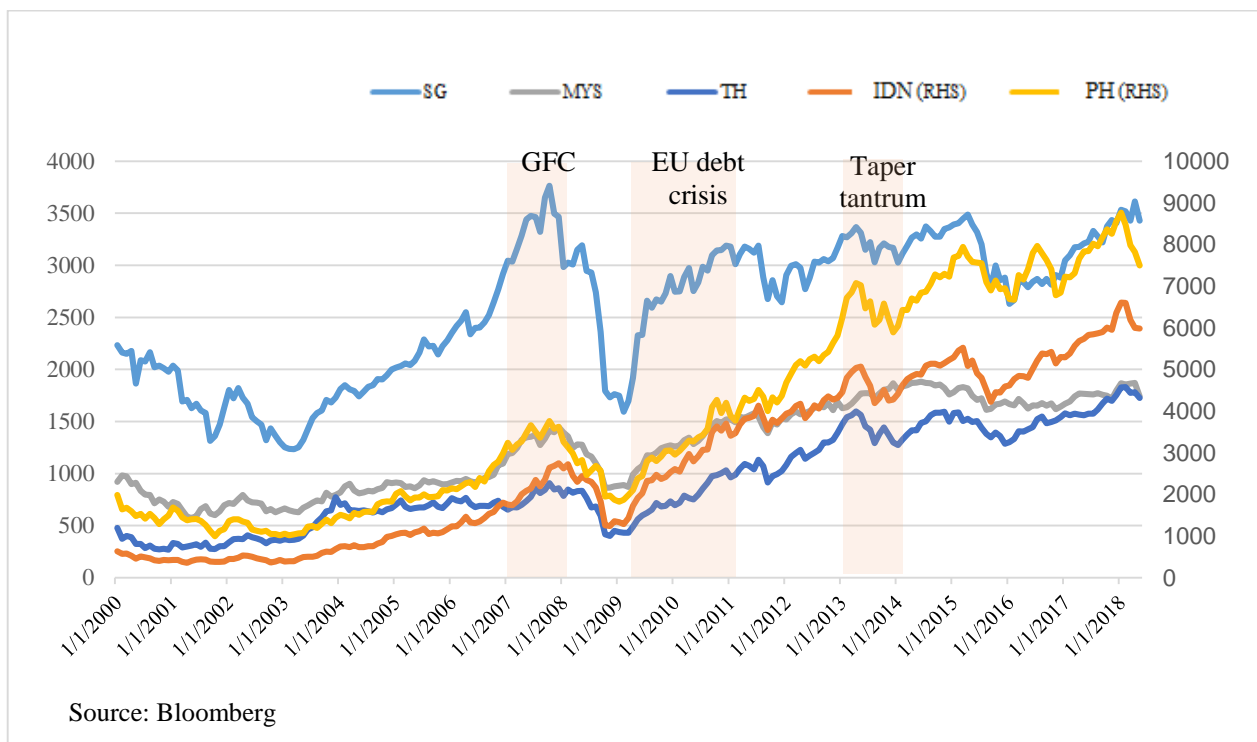


Figure 3: Stock indices of selected ASEAN countries



**With more pronounced volatile capital flows in the last decades threatening macroeconomic stability, this calls for appropriate policy responses for ASEAN countries.** Based on a survey conducted by the ASEAN Working Committee on Capital Account Liberalisation (WC-CAL), member countries have implemented various safeguard measures to preserve macroeconomic stability against the backdrop of significant global capital flow volatility during 2006-2015. Most countries employed a wide array of measures, including CFMs and MPMs, to



address their country-specific challenges and circumstances. Details of measures of selected countries are provided in the next section.

## 2) Experiences of selected ASEAN countries

To deal with volatile capital flows over the last decade, many ASEAN countries have implemented measures to safeguard their economic stability. **This section highlights the respective country experiences on capital flows, policies implemented including CFMs and MPMs, as well as their effectiveness**, hoping to shed some light on how to appropriately and timely mitigate the adverse impact of large capital flows.

### 2.1) Indonesia’s experience

#### Capital flow situation

**In the period after 2008, capital flows to Indonesia fluctuated significantly. Flows were highest in 2014** when net capital inflows were more than USD 40 billion. This was due to domestic economic stability and continued accommodative monetary policies in advanced economies. Figures 4 and 5 show that capital inflows to Indonesia rebounded in 2012, after a temporary drop in 2011, which coincided with the beginning of a current account deficit in recent years. This upsurge of capital flows was followed by a strong fall in 2013, when capital reversal hit most emerging countries, including Indonesia, due to “taper tantrum”. Capital reversals reoccurred in 2015, as investors felt jittery over rising uncertainties in the global financial market due to increasing expectation of fed funds rate hikes, concern over Greece’s fiscal negotiations and unanticipated Chinese renminbi devaluation.

Figure 4: Indonesia’s Balance of Payment

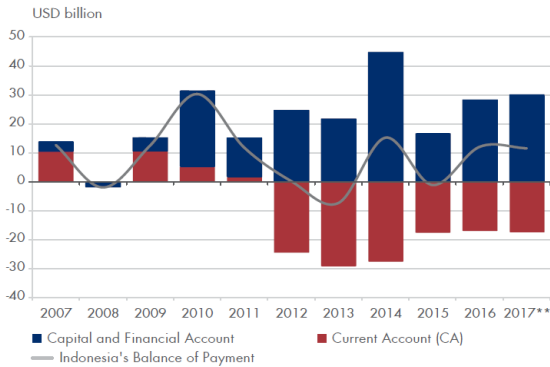
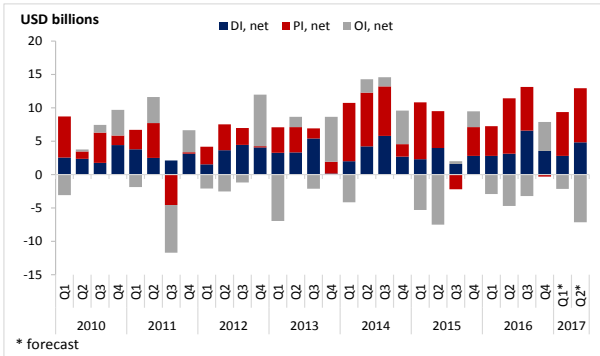


Figure 5: Indonesia’s Capital Flows by Type



**This high fluctuation of capital flows in Indonesia was due to the fact that a large part of the flows was in the form of portfolio investments, which were mostly short-term and invested in relatively liquid financial assets to gain higher returns.** Naturally, portfolio investments are risky as shifts among types of portfolio assets and between countries could happen in a frequent and instant manner. Portfolio investments are also highly sensitive to market sentiments, particularly negative ones.

**On that remark, volatile portfolio flows had contributed to turbulences in Indonesian financial markets, which challenged policy responses to curb negative repercussions on the overall economy.** It demonstrates evidence to the common knowledge that volatile capital flows could complicate monetary management as they could lead to exchange rate misalignment from economic fundamentals. The exchange rates' function as a shock absorber could therefore diminish and might even turn into a shock amplifier. The exchange rate that was misaligned from its fundamentals may also mislead economic agents in giving appropriate responses.

**On the other hand, FDI inflows to Indonesia were much less volatile and posted positive trend on the back of relatively good domestic economic prospect** from relatively strong domestic demand, long-term macroeconomic stability and continued structural reforms.

In addition, one must also not overlook OI flows which include foreign debts and deposits that tend to fluctuate as well. Nevertheless, their movements had much less influence over asset prices and exchange rates given that payment (outflows) and withdrawal (inflows) of foreign debts have been scheduled in accordance to loan agreements and thus could be anticipated in advance.

### **Implemented policies and their effectiveness**

Volatile capital flows and its corresponding challenges, together with the need to maintain the resilience of external sector, prompted Bank Indonesia to pursue a policy mix aimed to (1) change the structure of capital flows to reduce its volatility and its impact on the economy by preventing certain types of portfolio investment while also encouraging more long-term capital flows such as FDIs; and (2) improve statistics to monitor capital flows (balance of payments).

Various efforts were implemented through a series of policies since the GFC, including CFMs and MPMs, to strengthen economic and financial system stability that would in turn contribute to more sustained capital inflows. Policies pursued by Indonesia since the GFC were as follows:

#### **a) Policy to encourage FDIs:**

- **Reforms to improve business climate in Indonesia** were implemented in order to attract more FDIs.

#### **b) Policy to maintain macroeconomic stability:**

- **Greater exchange rate flexibility** was adopted so that the rupiah exchange rate could better adjust in order to correct any misalignment from the underlying economic fundamentals.
- **Adequate foreign exchange reserves** were maintained as cushion against possible capital reversal. The accumulation of foreign exchange reserves was a byproduct of monetary policy and was not aimed at meeting a certain target level.

- **Foreign exchange (FX) market intervention** was used to smoothen exchange rate volatility, and was not aimed at attaining a certain level of exchange rate.
- **Current account deficit** was guarded at levels that were sustainable and in line with economic fundamentals.
- **Financial market deepening** was accelerated in order to enhance its function as a shock absorber, reducing price volatility in the financial market.
- **The use of onshore banks for withdrawal of export and foreign debt proceeds** was made mandatory.
- **Bank Indonesia Certificate (SBI) minimum holding period** was implemented since 2010 to minimise adverse impact from short-term capital inflows on monetary and financial system stability, as well as to promote other transactions in the money market and to improve effectiveness in monetary management. (Last adjusted in 2015)
- **Foreign currency reserve requirement** was adjusted in 2011 not only to serve as a monetary instrument to control money supply but also to safeguard banks' foreign currency liquidity. (Last adjusted in 2018)
- **Regulation on bank's Net Open Position (NOP)** was first implemented in 1989 and aimed to mitigate banks' FX risk exposure due to a range of possible changes in external conditions. Since 2003, changes were made to the NOP policy to shift it from a micro perspective to a more macro-based objectives, which includes financial deepening and financial system stability. More specifically, adjustment of the NOP limit in 2010 was aimed at strengthening monetary and financial stability as well as supporting medium and long term growth through financial deepening, which includes deepening of the FX domestic market. The latest adjustment to the NOP limit was in 2015 and aimed at further improving bank's flexibility in managing their FX exposures whilst still maintaining prudential principles, and supporting financial deepening by introducing more depth in the domestic FX market.
- **Regulation on bank's short-term debt** was adjusted to minimize exposure to FX risks. In particular, the ceiling on bank's short-term debt was set to a maximum of 30% of capital, and approval from Bank Indonesia was required for long-term debt. This regulation was further relaxed in 2013, particularly in terms of the types of short-term debt to be included in fulfilling the requirement.
- **Rules governing foreign exchange transactions** were implemented as part of the financial deepening effort to help stabilise domestic financial markets. In particular, foreign exchange transactions against the rupiah above certain threshold were to be supported by underlying transactions in order to prevent speculative activities.

- **Corporate External Debt Regulation** was implemented in 2014 to strengthen the resilience of corporations that have foreign debt through the adoption of prudential principles. This regulation, consisting of hedging, liquidity and credit rating requirements, aimed to enhance corporate risk management practices of non-banks which will ultimately lead to rupiah economic stability in general. (Last adjusted in 2016)

c) **Macroprudential measures to mitigate procyclical behavior and systemic crisis**

- **Loan-to-Value (LTV) ratio** and Down Payments (DP) on motor vehicle loans was first implemented in 2012 and has been adjusted several times (last adjusted in 2018). This policy aimed to safeguard financial stability by mitigating the buildup of macrofinancial risks in the housing and motor vehicle sectors. LTV functions as a countercyclical tool to moderate mortgage loan creation and influence demand.
- **Secondary Reserve Requirement** was first introduced in 2009 and later adjusted in 2013 to further enhance banks' resilience to liquidity risk on the back of rising inflationary pressure, current account deficit and other external pressure which could adversely impact market liquidity and disrupt stability of the financial sector. In 2018, the secondary reserve requirement was replaced by the macroprudential liquidity buffer (MPLB), i.e. a countercyclical tool used to counter banks' liquidity procyclical behavior that aimed to manage speculation or excessive risk-taking due to oversupply of liquidity as well as to provide better liquidity flexibility to banks in times of stress (i.e. it can be used for repo to Bank Indonesia). The MPLB level was adjusted based on the credit cycle, complementary to the Countercyclical Capital Buffer (CCB).
- **Loan to Deposit Ratio-based Reserve Requirement (LDR-based RR)** was first introduced in 2010 to strengthen the resilience of banking sector and optimize banks' intermediary function amidst heightened pressure in the economy triggered by rising inflation. In 2015, the LDR was changed into the Loan to Funding Ratio (LFR) based RR, to support financial deepening by accommodating a broader based funding through the inclusion of securities issued by banks, as well as to support financial inclusion initiatives. Further refinements to the LFR-based RR (newly named Macroprudential Intermediation Ratio) were made in 2018 and applied to conventional and sharia banks, in which securities purchased by banks were also allowed to be acknowledged as banks' intermediation.
- **Countercyclical Capital Buffer (CCB)** was implemented in 2016 at 0% and has been evaluated every 6 months. The CCB functions as a countercyclical tool to mitigate the build-up of systemic risk from excessive credit growth. It has remained 0% since its implementation.

**d) Improvement of statistics to monitor capital flows:**

- **Refinement of BOP statistics.**
- **Introduction and Improvement of Banks Daily Report**, which includes data on FX transactions in the spot, forward, swap, and options markets, which can be utilised to monitor FX supply and demand, including those of non-residents (capital flows).

These policies have shown effectiveness in their aims to ensure macroeconomic and financial stability. In the 2010 to mid-2013 period, for instance, the implementation of SBI minimum holding period was quite effective in dampening the volatility in the SBI market, including lowering foreign capital inflows placed in SBI. In another direction, the subsequent lowering of the minimum holding period in 2013 after the “taper tantrum” and capital reversal also helped to stabilise capital flows in Indonesia.

Other measures such as the requirement imposed in 2014 for corporations to hedge their incoming FX debt repayment, together with countercyclical macroprudential tools have also contributed to greater macroeconomic and financial stability. The FX debt hedging requirement led to quite significant increase of the forward transactions which in turn helped improve the structure as well as the deepening of domestic FX market. As a result, it contributed to lower volatility of the rupiah exchange rate. Likewise, the LTV ratio has also played a role in returning stability as evidenced by a slight slowdown of the growth of mortgage loans.

It is important to note that while the aforementioned policies were primarily aimed to promote stability and sustainability of the Indonesian economy, these have in turn helped foster investors’ confidence. This is evidenced by the fact that FDI inflows to the economy returned since the fourth quarter of 2013 after a rather sharp reversal earlier in the year as overall macroeconomic and financial stability was kept intact.

Further explanation of key policy actions taken by Indonesia in recent years as well as their rationales and impacts are outlined in Appendix 2 Table 1.

## **2.2) Philippines’ experience**

Similar to other EMEs, capital surges are not new to the Philippines. From 2005 to present, the Philippines has experienced episodes of capital surges. The responses to them were adopted depending on the prevailing circumstances and nature/factors prompting the surges.

### **A. Capital flow situation during the pre-GFC**

The Philippines posted net capital outflows during the post-Asian Financial Crisis (AFC) from 2005 to 2006. In 2007, surges in capital inflows arising from foreign direct investments (FDIs), peaked at USD 2.92 billion. While there had been a decline in foreign portfolio investments

(FPIs) in the same year due to increased investor risk aversion, FPIs still posted inflows of USD 1.72 billion.

For the period 2005-2007, effects of capital surges were reflected in continued upward pressures on the peso-US dollar exchange rates and expansion in domestic liquidity. The peso appreciated against the US dollar from 1.73% in 2005 at PHP 55.09 to 11.19% in 2007 at PHP 46.15, with volatility ranging from 0.84% to 2.10%. The appreciation of the peso against the US dollar was largely due to the strong influx of foreign exchange (FX) from Overseas Filipino (OF) remittances, FPIs and FDI.

### **Implemented policies and their effectiveness**

The BSP implemented reforms to increase the resilience of the domestic financial system to the volatility of capital flows and to enable it to efficiently allocate capital flows in productive activities. The BSP also implemented the monitoring and transparency of capital flows of the banking sector. Alongside with the said reforms, the BSP continued its measures in reducing the supply of FX inflows and increasing the demand for FX in response to rising portfolio inflows.

- **Policy rates adjustment.** The BSP raised its key policy interest rates three times by a cumulative of 75 basis points in 2005.
- **Exchange rate flexibility.** The BSP continued to adhere to a market-determined exchange rate and allowed FX flexibility while guarding against speculative flows that could contribute to volatilities and undermine the inflation target.
- **Reserve accumulation.** This allowed to counter capital flow reversals when these threatened to bring negative impact on the value of the domestic currency.
- **Prepayments of foreign borrowings.** Amidst large FX inflows, the BSP accelerated the servicing of some of its outstanding debt obligations. The BSP also encouraged the National Government and the private sector to take advantage of strong external liquidity position to prepay their foreign debts.
- **Liquidity management.** The BSP implemented measures to help prevent inflationary pressures in the face of sustained FX inflows. This allowed special deposit account (SDA) placements of banks to be considered as alternative compliance with the liquidity floor requirements for government deposits. SDA facility is a monetary policy instrument deployed by the BSP for the purpose of managing excess domestic liquidity in the financial system and not intended for investment activities funded from non-resident sources.
- **Macroprudential management.** Various tools were introduced to limit banks' ability to fuel credit booms and engage in excessive leverage, such as limits to real estate loans exposure,

provisions for loan losses, requirements on banks' capital adequacy and regulations on derivatives activities

- **FX reforms.** The BSP reviewed and adopted policies aimed at making the regulatory environment more responsive to the needs of an expanding and more dynamic economy that has become increasingly integrated with global markets. The reforms adopted were intended to: (a) promote diversification of portfolio investments; (b) give banks greater flexibility in managing their FX exposure; and (c) facilitate non-trade current account transactions and outward investments of Philippine residents.
- **Capital market deepening.** The BSP supported initiatives related to the development of domestic and regional bond markets, particularly the creation of a wider array of financial products that would stir market activity and enhance greater market depth, breadth and liquidity.

The Philippines sustained its growth momentum amidst continued uncertainties in the global front due to its strong macroeconomic fundamentals. This is shown by the benign inflation environment, strong external position, improved fiscal condition and a resilient banking system.<sup>3</sup>

The BSP's adoption of several measures helped prevent excessive volatility in the FX market. These measures were also deemed effective in ensuring ample domestic liquidity and thus, allowed the BSP to contain possible inflationary pressures.

The measures also facilitated FX outflows for legitimate requirements and at the same time, addressed the influx of capital into the country.

### **B. Capital flows situation during 2008-2012**

Amidst the challenges posed by the stresses in the global economy and the global economic downturn, the Philippines experienced volatilities in capital flows.

In 2008, the Philippines posted a net capital outflow of USD 1.37 billion, a significant turnaround relative to a net inflow of USD 169.94 million in the previous year. This massive outflow was primarily attributed to substantial FPI outflows of around USD 1.59 billion, a major reversal from FPI inflows of USD 1.58 billion in 2007.

From 2009-2012, emerging markets in Asia, including the Philippines, experienced large capital inflows ranging from USD 0.90 billion to USD 11.49 billion, with the latter as the highest net inflow posted in 2010. This was mainly on account of extra accommodative monetary policy adopted in advanced economies, large interest rate differentials between advanced economies and emerging markets, and the US subprime crisis which prompted institutional investors to purchase financial assets including bonds and equities in emerging markets. Other factors such as the

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<sup>3</sup> BSP Report on Economic and Financial Development, 2007



country's macroeconomic conditions and authorities' fiscal and monetary policy management, upgrades on Philippine credit rating, and brighter growth prospects contributed to sustained net inflows in the aforementioned period.<sup>4</sup>

The Philippine peso, likewise, showed resilience, buoyed by strong dollar inflows from OF remittances and export earnings, solid business process outsourcing revenues and tourist receipts. In addition, the weakening of the US dollar against most currencies due to the more accommodative policy stance in the US economy and the protracted growth exhibited by advanced economies, provided support to the peso.

### **Implemented policies and their effectiveness**

To manage the effects of capital surges and help maintain the competitiveness of the Philippine peso, the following measures were introduced:

- **Policy rates adjustment:** During the global turmoil, policy rate reductions were implemented to bring down the cost of borrowing, and increase business and consumer confidence for economic expansion, among others.
- **Exchange rate flexibility:** The BSP continued to adhere to a market-determined exchange rate. The BSP monitored possible misalignments in the peso by looking at the movement of the real effective exchange rate to determine if there was a high and persistent deviation from its long-term average trend and whether such movements were supported by economic fundamentals.
- **Liquidity management:** The BSP implemented fine-tuning of liquidity measures to increase the effectiveness in managing the impact of surges in capital flows. The BSP expanded the access to SDA to allow trust entities of financial institutions under BSP supervision to place deposit into the facility. As growth in this facility rapidly accelerated during the GFC, the BSP later clarified that non-residents are prohibited from participating in the SDA.

The BSP also deployed dollar liquidity measures during the intensification of the 2008-2009 global financial crisis which assisted banks having US dollar liquidity needs and helped domestic firms manage foreign exchange risks. These included the BSP's US dollar repo facility,<sup>5</sup> promotion on the use of banks' hedging facilities and increasing the budget for Exporters' Dollar and Yen Rediscounting Facility (EDYRF).

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<sup>4</sup> BSP Report on Economic and Financial Development, 2010-2012; Yiu, M.S. (2011), "The Effect of Capital Flow Management Measures in Five Asian Economies on the Foreign Exchange Market," HKIMR Working Paper No.41

<sup>5</sup> In 2008, when the facility was introduced, a total of USD 43 million was availed of at a rate of 4.79 %. In 2009, only USD 34 million was availed of at 4.5 %. There was no availment in the succeeding years.

- **Reserves accumulation:** Despite episodes of heightened volatility, increasing level of the country's gross international reserves was observed as a defense in times of extreme stress in the FX market.
- **Macroprudential management:** The BSP issued new guidelines on internal capital adequacy assessment process and BSP's supervisory review process which applied to all universal and commercial banks on a group-wide basis. It also utilised tools to aid macro-prudential risk assessments, such as: (i) the Financial Stability Report, which serves to enhance the public's understanding of financial stability risks and vulnerabilities; (ii) macro-stress tests, which assess the vulnerability of banks to shocks; and (iii) Senior Bank Loan Officers' Survey, which monitors changes in overall credit standards of banks.
- **FX reforms:** Despite the uncertainties brought about by the GFC, the BSP continued to review, liberalise and rationalise the FX regulatory framework, keeping these attuned to domestic and global developments and taking into consideration international standards and best practices. FX reforms included measures that were designed to: (a) encourage outflows so as to temper the upward pressures on the peso and allow freer and more efficient capital flows in the long term; (b) facilitate access to banking system resources for funding of legitimate transactions; (c) broaden available financing options; and (d) provide opportunities for portfolio diversification. While FX regulations were being liberalised to address surges in capital flows, the BSP continued to maintain prudential regulations and supervision (monitoring/reporting/registration) which allow the BSP to capture data necessary for policy review, formulation, statistics and detection of impending crisis.
- **Capital market deepening:** The BSP continued to support initiatives to further develop the domestic capital market.
- **Regional and international cooperation:** Standby regional agreements and pooling facilities that can reduce pressure of reserves accumulation at the national level were established as a precaution against external fluctuations. The BSP participated in regional monetary and financial cooperation and integration (e.g., ASEAN Swap Arrangement, ASEAN+3 Chiang Mai Initiative Multilateralisation (CMIM), BSP-Bank of Japan (BOJ) Bilateral Swap Arrangement, BSP-BOJ Cross-Border Liquidity Arrangement, and ASEAN/ASEAN+3 surveillance mechanisms).

These measures reduced pressures on the exchange rate, financial stability and allowed the BSP to keep monetary policy focused on its primary objective of maintaining price stability.

The macroprudential tools resulted in adequate bank asset quality that minimised Philippine's direct exposure to the bursting of US asset price bubbles during the Global Financial Crisis in 2008/09.<sup>6</sup>

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<sup>6</sup>Amat, E. (2012), "Macro-prudential framework and analysis: A case study of Philippine banks." In E.M. Bernabe, Jr. (Ed.), Framework for macro-prudential policies for emerging economies in a globalized environment (pp.135-172).

### **C. Capital flows situation during 2013-2016**

Notwithstanding the uncertainties in the aftermath of the GFC, the Philippines continued to liberalise its capital account in accordance with the global thrust.

Following the Federal Reserve's announcement of the quantitative easing, the country's financial markets experienced some strains, exposing the Philippine economy to more volatile external conditions. Starting 2013, capital outflows were observed ranging from USD 2.23 billion to the highest level of USD 9.6 billion in 2014.

In 2016, capital outflows amounting to USD 175 million were likewise observed. Capital reversal was mainly attributed to heightened risk aversion of investors due to portfolio rebalancing and search-for-yield behavior. The rise in US interest rates also encouraged investors to return to US markets and retrench from emerging economies such as the Philippines.<sup>7</sup>

During the said periods of capital outflows, the Philippine peso depreciated against the US dollar. The weakening of the peso was attributed to diverging global growth prospects, asynchronous monetary policies, and increased geopolitical tensions. Global concerns on the US Fed's tapering of its bond purchases program and the Euro zone's debt crisis were also behind the peso's depreciation. While there had been continued expansion in domestic liquidity which provided support to the country's vibrant economic activity, the inflation rate remained to be within the target range over the horizon.

### **Implemented policies and their effectiveness**

The BSP continued to adopt a mix of policies that were intended to maintain and promote monetary and financial stability:

- **Exchange rate flexibility:** The BSP continued to allow peso-US dollar exchange rate to be determined by the market supply and demand. Thus, the exchange rate movement continued to be supported by the underlying economic factors.
- **Macroprudential regulations:** The BSP introduced the following measures to further enhance the financial sector's soundness by building banks' resiliency and regulating ability to fuel credit boom and engage in excessive leverage: (i) establishment of real estate stress test limit for real estate exposures (thresholds for banks were set at 10% of the capital adequacy ratio and 6% common equity tier (CET) 1 ratio after adjusting for stress test scenario); (ii) setting of non-deliverable forward (NDF) transactions thresholds for banks at 20% and 100% of unimpaired capital for domestic banks, and foreign bank branches, respectively; (iii) adoption of framework for dealing with domestic systemically important banks;

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<sup>7</sup> 2016 BSP Annual Report

(iv) generation of Residential Real Estate Price Index (RREPI); and (v) adoption of Basel III requirements;

- **Liquidity management:** When the Interest Rate Corridor system was adopted in 2016, the SDA facility was replaced by the term deposit facility.
- **Capital market deepening:** The BSP continued to adopt measures that helped promote development in the capital market.
- **FX reforms:** The BSP continued its efforts to keep FX regulations attuned to local and global developments. The reforms adopted were expected to: (a) further facilitate use of banking system resources for funding of legitimate transactions and further improve the capture of data; (b) further ease access to FX resources of banks for legitimate (trade and non-trade current account) FX transactions; (c) provide Philippine residents greater flexibility in managing cash flows and transacting in FX; (d) address demand for FX to fund resident-to-resident transactions; and (e) improve and ease access to FX loans to fund projects and activities to support economic growth.

The BSP implemented a wide array of macroprudential measures that complemented its monetary policy measures to better respond to the challenges of maintaining financial stability amidst a volatile external operating environment.

While volatile capital flows were observed reflecting sensitivity of financial markets to external developments, positive developments in the domestic front (e.g., the country's strong economic growth, ample liquidity in the financial system, increased investor's positive perception on the Philippine economy) helped cushion the economy.

#### **D. Capital flows situation in 2017**

For 2017, capital flows to the Philippines reversed to a net inflow of USD 2.7 billion from a net outflow of USD 175 million in the previous year. This was mainly boosted by significant inflows of FDI buoyed by the country's strong macroeconomic fundamentals and positive growth prospects.<sup>8</sup> Developments in the global economy heightened volatility in the exchange rate which resulted in the weakening of the peso against the US dollar.

The foremost requirement to manage adverse capital flow situations (e.g., reversals, sudden-stops) is by **achieving sound macroeconomic fundamentals** which support price stability, a stable financial sector and fiscal discipline.

Such condition is requisite to deepening the capital markets and channeling private investment and foreign capital flows to productive sectors of the economy. Nevertheless, the main

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<sup>8</sup> 2017 BSP Annual Report

measures against potential financial imbalances brought about by adverse capital flow situations is prudential regulation and supervision, which complements monetary policy. **Strengthening micro-prudential regulation** that is compliant to Basel III provisions particularly the inclusion of higher capital and liquidity requirements, is a necessary part of the toolkit. A right balance between financial stability and well-designed regulatory reforms should make financial systems more resilient while encouraging growth.

Another important step is **pursuing further regional cooperation**, which provides buffers in times of crisis and learnings from the experiences of other jurisdictions when dealing with capital flow surges or reversals. These cooperative efforts toward regional stability are achieved through standby agreements and facilities that a country can tap into to mitigate the impact of a crisis. Examples are the active participation of the BSP in regional monetary and financial cooperation and integration (e.g., ASEAN Swap Arrangement, ASEAN+3 Chiang Mai Initiative Multilateralisation, BSP-Bank of Japan (BOJ) Bilateral Swap Arrangement, BSP-BOJ Cross-Border Liquidity Arrangement, and ASEAN/ASEAN+3 surveillance mechanisms), and the lending facilities of the IMF (e.g., New Arrangement to Borrow and bilateral borrowing, where the Philippines is currently a lender).

The BSP continuously enhances its network analysis to test vulnerabilities in terms of interconnectedness of banks and corporates. The BSP likewise cooperates with other central banks or international financial institutions for information sharing and surveillance. The BSP also ensures timely and clear communication with financial institutions and market participants.

### **2.3) Malaysia's experience**

#### **Capital flows situation**

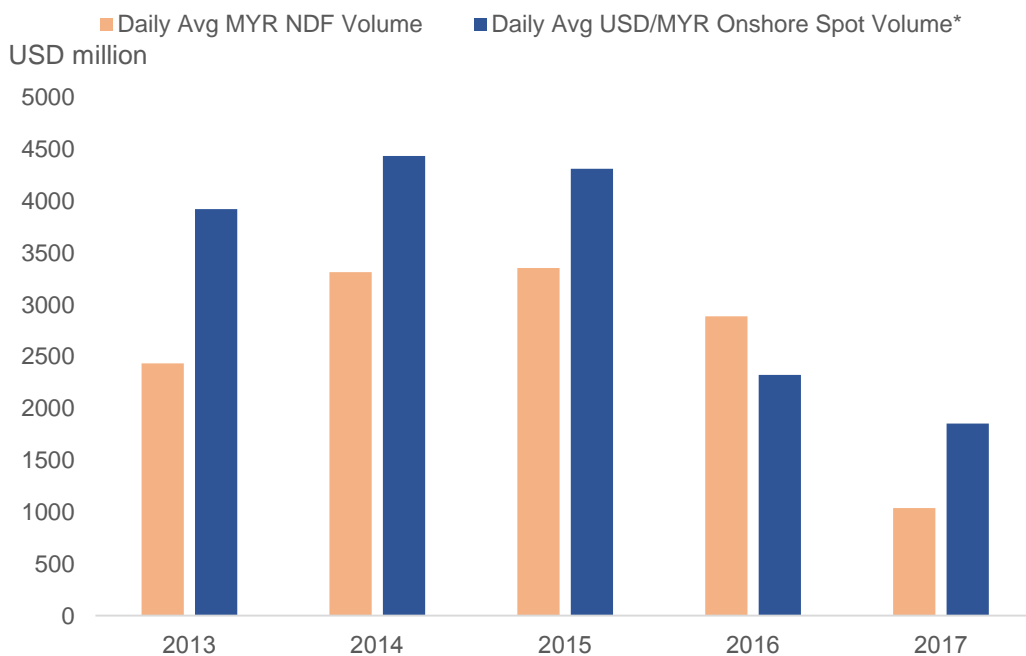
Over the past few years, the unwinding of the unconventional monetary policy by advanced economies have resulted in volatile capital flows in EMEs, including Malaysia. This in turn has affected most emerging market currencies, and ringgit was not spared. While all regional financial markets were affected by the unwinding of non-resident investments, the impact on Malaysia was more pronounced due to country-specific factors.

- First, there have been imbalances in the demand and supply of foreign currency in the domestic FX market despite Malaysia being in a current account surplus position for the past 20 years. This was largely due to the fact that the conversion of export proceeds into the ringgit had declined steadily over time (1% for 2011-2015; 28% for 2006-2010) with a net conversion of USD 0.5 billion for the period of January to November 2016. Despite the trade surplus, the demand for ringgit during this volatile period was not forthcoming and not reflective to the underlying economic activities. This has led

Malaysia's FX market to be unduly influenced by portfolio flows which resulted in the ringgit being vulnerable to changes in sentiment and speculative flows.

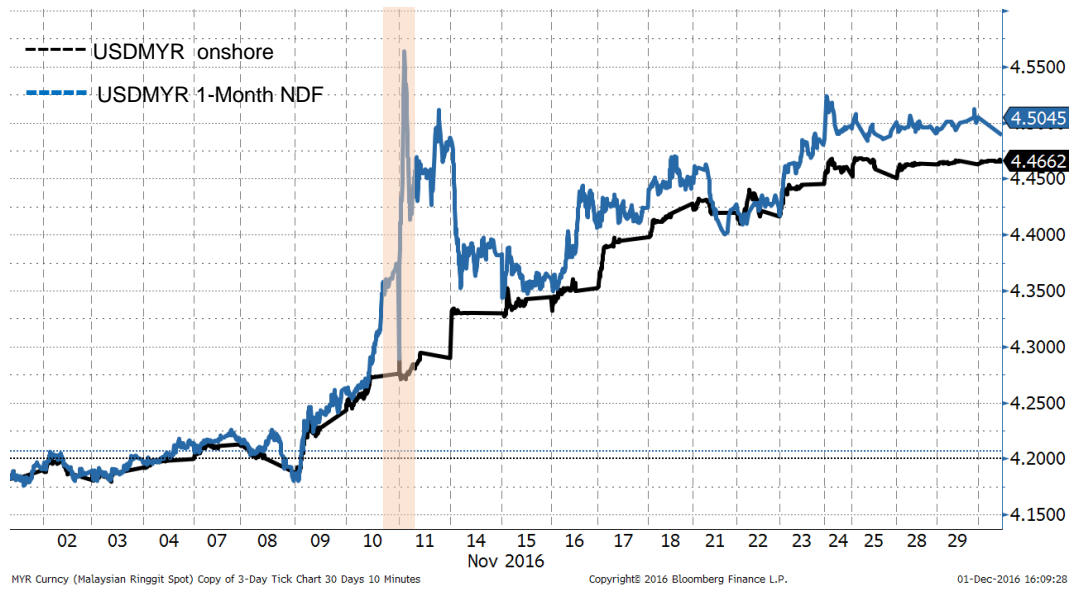
- Second, there were rising speculative pressures on the ringgit during this period from the offshore market. Engagement with market participants revealed that flows in NDF are largely speculative, as they do not have underlying ringgit-denominated assets. The large size of the offshore ringgit-denominated NDF market (Figure 6) relative to the onshore foreign exchange market led to large speculative or one-sided activity in the NDF markets, which distorted the price discovery process (Figure 7). For instance, in the days following the US presidential election in November 2016, ringgit-denominated NDFs implied a much larger depreciation in the exchange rate than that implied by foreign exchange forwards in the onshore market (Figure 8). Continuous trading activities in the offshore NDF market (while the onshore market is only open during the Malaysian trading day) and the US dollar's appreciation during US trading hours have resulted in sharp depreciations in the ringgit against the US dollar at the open of onshore trading sessions. Thus, NDF market has generated higher volatility in the domestic markets. As such, policy intervention was inevitable.

Figure 6: Ringgit NDF and FX onshore spot volume



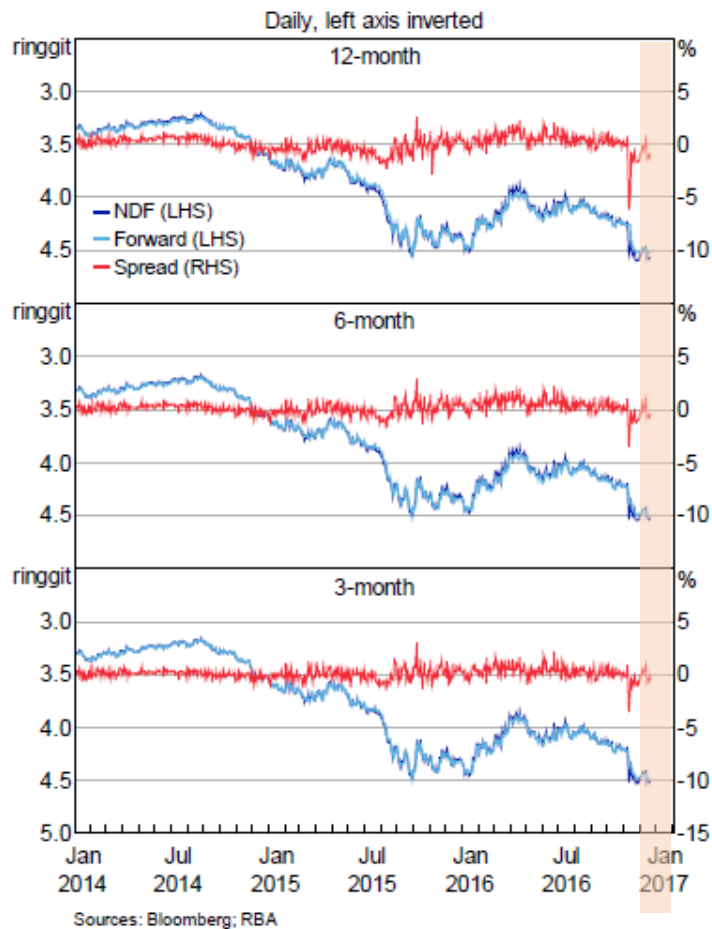
\*Data reflects interbank volume [Source: Bloomberg and Bank Negara Malaysia]

Figure 7: Prices in NDF market



MYR traded as high as 4.5500 in the NDF on 11 November vs onshore closing price of 4.2795

Figure 8: Malaysian Ringgit Forward Market



Period of US presidential election in October – November 2016



## **Implemented policies and their effectiveness**

Malaysia implemented policy strategies that focus on prudential measures and financial market development to address the specific concerns. Prudential measures have been implemented to reduce external vulnerabilities that would undermine the domestic macroeconomic and financial stability. In parallel, efforts were undertaken to develop a deep and vibrant domestic FX market to meet the diverse and complex demands of a more developed and internationally integrated economy. These efforts, which are guided by the long-term Financial Sector Blueprint 2011-2020, complement the external buffers and resilient financial institutions that contribute to Malaysia's resilience against the capital flow volatility, including exchange rate flexibility and macroeconomic strength that attract long term FDI flows.

**Prudential measures:** Post-AFC, rules were implemented to contain ringgit volatility. From 2002 to 2013, these rules have been liberalised gradually and have evolved towards enhancing efficiency and competitiveness of business operations (see Appendix 3). Currently, Malaysia maintains liberal rules that are aimed to pre-emptively reduce external vulnerabilities by encouraging longer term and more productive foreign exchange (FX) and cross-border capital flows, that support the development of the economy and do not pose significant risks to Malaysia's balance of payment position and orderly functioning of the FX market. For instance, the prudential limit on investment in foreign currency assets by residents with domestic ringgit borrowing is aimed at pre-emptively managing any potential systemic risk to the financial system.

**Developmental measures:** In December 2016, with BNM having reaffirmed ringgit as a non-internationalised currency<sup>9</sup>, the Financial Markets Committee<sup>10</sup> (FMC) announced its first series of initiatives aimed to promote a deeper, more transparent and well-functioning onshore FX market. The requirement for the conversion of export proceeds into ringgit, for instance, is aimed to ensure a better balance of supply and demand for foreign currency against ringgit, thus resulting in continuous liquidity of foreign currency in the onshore market and further enhance the depth and liquidity of Malaysia's financial markets. The second series of the initiatives were introduced in April 2017 to manage additional FX risk, improve the bond market liquidity as well as promote fair and responsible market conduct. In September and November 2017, the third series of the initiatives were announced aimed to further manage FX risk, improve bond market liquidity and enhance liquidity intermediation (see Table 1).

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<sup>9</sup> As an enhancement to the existing rules, attestation is required for onshore banks to seek written confirmation from the counterparty offshore bank that their FX transaction is not related to NDF trades.

<sup>10</sup> Established in May 2016 which comprises representatives from BNM and key domestic industry players (i.e., financial institutions, insurance companies and corporations).

Table 1: Financial Markets Committee Measures

Measures undertaken	Rationale
<b>First series (December 2016)</b>	
<ul style="list-style-type: none"> <li>• Liberalisation of the onshore ringgit hedging market</li> </ul>	(a) Provide greater flexibility for market participants to manage foreign exchange risks
<ul style="list-style-type: none"> <li>• Conversion requirement on proceeds of export of goods<sup>11</sup></li> </ul>	(b) Rebalance the demand and supply of foreign exchange in the onshore financial market
<ul style="list-style-type: none"> <li>• Streamlined treatment for investment in foreign currency assets</li> </ul>	(c) Prevent excessive accumulation of domestic debt by residents to fund investment abroad
<b>Second series (April 2017)</b>	
<ul style="list-style-type: none"> <li>• Streamline passive and dynamic hedging flexibilities for investors</li> <li>• Active hedging for corporations</li> </ul>	(a) Additional FX risk management flexibilities
<ul style="list-style-type: none"> <li>• Liberalise regulated short-selling to allow all residents to participate</li> </ul>	(b) Improve bond market liquidity
<ul style="list-style-type: none"> <li>• New code of conduct for wholesale financial market</li> </ul>	(c) Promote high standards of market integrity
<ul style="list-style-type: none"> <li>• Segregated securities account at the large value payment system, Real-time Electronic Transfer of Funds and Securities System (RENTAS)</li> <li>• Adopt the Legal Entity Identifier (LEI) for RENTAS</li> </ul>	(d) Strengthen financial market infrastructure
<b>Third series (September and November 2017)</b>	
<ul style="list-style-type: none"> <li>• Hedging of MYR exposure arising from trading of palm oil derivative contracts on Bursa Malaysia by non-resident market participants</li> </ul>	(a) Additional FX risk management flexibilities
<ul style="list-style-type: none"> <li>• Introduce regulated Short-Selling of MGII and Islamic banks under bilateral binding promise concept</li> </ul>	(b) Improve bond market liquidity
<ul style="list-style-type: none"> <li>• Issuance of Bank Negara Interbank Bills (BNIBs) in MYR and USD to onshore licensed banks</li> <li>• Expand eligible collateral for Monetary Operations</li> </ul>	(c) Enhance liquidity intermediation

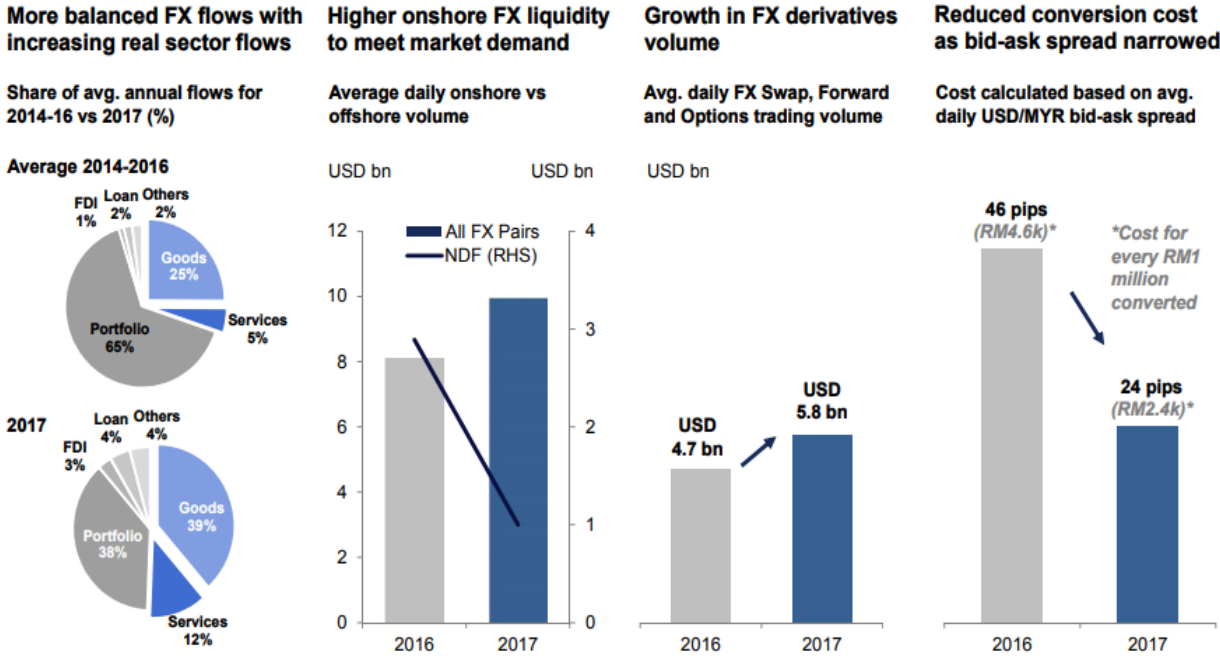
The series of measures introduced by the FMC have been crucial to Malaysia's success to improve liquidity, depth and participation in the FX market. As a result, conditions in the domestic financial market improved substantially (Figure 9) and is now more resilient to absorb shocks from volatile global spillovers. There is more balanced FX flows from diverse set of participants, with an increase of real sector flows, which accounted for more than half of the total flows. The share of average annual flows increased to 39% for goods and 12% for services in 2017 from 2014-2016

<sup>11</sup> BNM announced enhancement to the rules on 17 August 2018 where exporters are allowed to automatically sweep export proceeds into their Trade Foreign Currency Accounts maintained with onshore banks to meet up to 6 months' foreign currency obligations without the need to first convert proceeds into ringgit.

period at 25% for goods and 5% for services. The outflows from short-term non-resident investors following the measures resulted in the composition of non-resident holdings in the domestic financial markets moving towards more stable longer-term investors. The improved domestic financial market conditions, which also coincided with Malaysia’s stronger-than-expected economic performance, facilitated the appreciation of the ringgit in 2017 to better reflect underlying fundamentals when global financial market conditions improved. More importantly, the orderly functioning of the domestic financial market has continued to support Malaysia’s economic growth.

Figure 9: Effectiveness of FMC Measures

**FMC market development initiatives have led to a deeper and more efficient onshore FX market**



Source: Bank Negara Malaysia

The state of ongoing uncertainties within global policy, economic, political, and financial market development fronts will lead to periods of heightened volatility. In such circumstances, it is important for an emerging economy like Malaysia to be able to implement the necessary policies to address issues that are unique to the domestic environment in order to mitigate financial stability risks.

**2.4) Thailand’s experience**

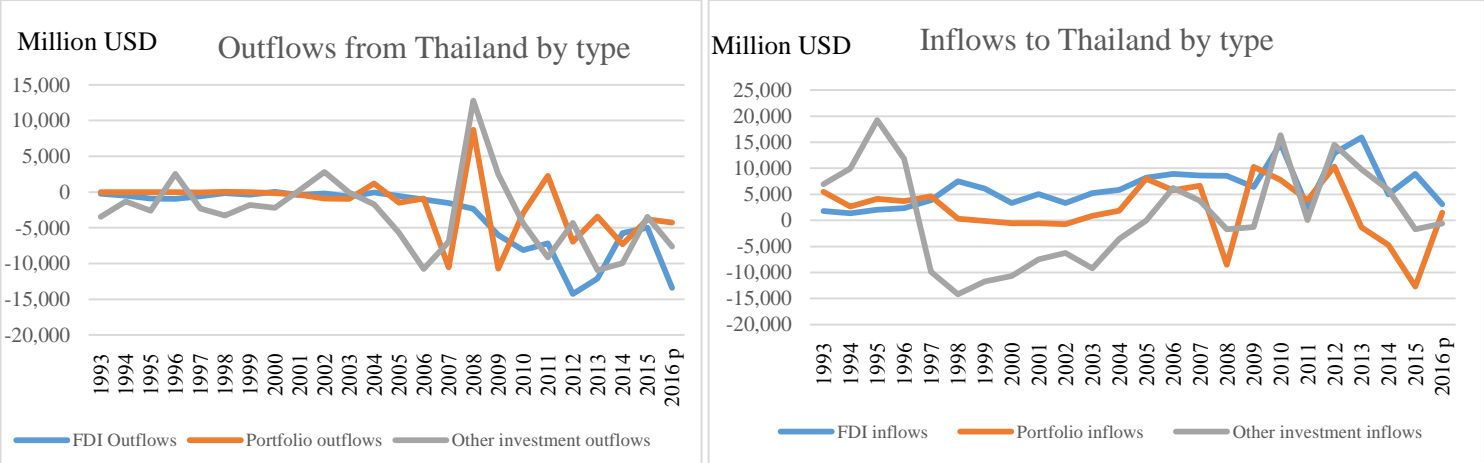
**Capital flow situation**

After the Asian Financial Crisis in 1997, capital inflows to Thailand slowly picked up and turned positive since 2003. During the 2005-2006 period, capital inflows to Thailand

accelerated significantly and reached its peak at around USD 21 billion. This was due to surges in both FDI and portfolio inflows as well as declining debt repayment outflows, resulting in considerable appreciation pressure on the baht. A large portion of the inflows was investment in short-term fixed income instruments and short-term deposits at commercial banks, hoping to benefit from both the attractive yields and the baht’s anticipated appreciation.

**In the post-GFC period, Thailand experienced more volatile capital flows as a result of monetary policies in major advanced economies.** This was particularly the case in 2011 and 2013 when capital flows volatility was more pronounced (Figure 10). In 2011, financial account registered a net inflow of USD 5.2 billion during the first half of the year due to large influx of portfolio investment and FDI. During the second half however, net capital movement registered a net outflow of USD 13.5 billion due to three major reasons. First, heightened risk aversion as a result of the sovereign debt crisis in the euro area prompted investors to curtail their holdings of risky assets including equity securities in the region and Thailand. Second, banks continued to receive foreign currency from exporters as previous hedging transactions matured, while new transactions also fell as exports contracted in the fourth quarter. This led to an excess of foreign currency, which allowed banks to repay their short-term debt obligations and increase their assets abroad. Third, the BOT’s ongoing efforts to liberalise Thai Direct Investment since late 2010 have also contributed to the outflows.

Figure 10: Thailand capital flows by type



Source: Bank of Thailand

In 2013, Thailand registered a net capital inflow although capital flow volatility remained high. This reflected global financial conditions that had been affected by the Federal Reserve’s monetary policy, as well as the political situation in Thailand at the time. The financial account recorded a net surplus of USD 1.2 billion, a substantial decline from USD 14 billion in the previous year. This largely reflected the net outflow of foreign portfolio investment after the large influx a year earlier. At the same time, there was a net inflow of short-term and long-term borrowings,

including foreign direct investment, especially in financial institutions and insurance and automobile related businesses. The outflow of portfolio investment followed the same pattern of regional economies, with foreign investors selling both debt and equity securities. This was attributed to the taper tantrum that took place in May 2013. There were also effects of the domestic political situation towards the end of year. These were in contrast to the first quarter when there was a net inflow due to buoyant global liquidity that was influenced by accommodative monetary policies of major industrialised economies together with strong performance of the Thai economy. In summary, Thailand has experienced more capital volatility over the recent years due to uncertainties in both internal and external factors.

### **Implemented policies and their effectiveness**

In order to manage capital flows and ensure economic and financial stability, the Bank of Thailand (BOT) utilised a number of policies, including FX intervention, outflow liberalisation, and anti-speculative measures as follows;

- a) **FX flexibility:** In the face of speculative flows, the BOT allowed greater exchange rate flexibility so that the baht can move more freely and be determined by its fundamentals.
- b) **FX intervention:** The excessive exchange rate movements and rapid baht appreciation posed a threat to economic stability and therefore warranted the central bank's closer management. The BOT conducted its FX purchase operations during the episode of capital inflows in 2006, which resulted in a marked increase in gross reserves and a large net forward positions of roughly USD 18 billion. This rate of reserve accumulation was significantly faster than that during 2000–2005, when reserves grew only USD 5 billion per year on average.
- c) **Outflow liberalisation:** To deal with excessive capital inflows and promote balanced flows, the BOT has gradually relaxed regulations on outward direct investment in terms of the amount limits since 2007 and finally removed the amount limit for both Thai companies and individuals in 2010 and 2013, respectively. The BOT has also gradually relaxed regulations on portfolio investment abroad since 2003, by allowing six types of institutional investors; namely (1) the Government Pension Fund; (2) the Social Security Fund; (3) insurance companies; (4) specialised financial institutions; (5) mutual funds; and (6) provident funds, to invest in securities abroad, and in 2008 allowing retail investors to invest in securities abroad through local intermediaries, upon approval by the BOT. In 2013, the BOT has removed the requirement for both institutional and retail investors to seek prior approval from the BOT. In 2015, ten types of institutional investors have been allowed to invest in securities abroad. Moreover, since 2016 the BOT has allowed qualified investors having financial assets as

specified by the BOT to invest in securities abroad without the need to go through local intermediaries within limit set by the BOT. (See Appendix 4)

- d) Measures to manage inflows:** In general, Thailand welcomes investments from abroad especially those which involved with real economic transactions such as trade and investment, with fairly small restrictions on inflows. Large sums of foreign funds had flowed into the Thai financial market to invest in a number of short-term fixed income instruments with the objective of gaining from attractive yields and anticipated baht appreciation. Initially, the BOT dealt with these inflows by allowing the baht to appreciate and conducting FX intervention to curb excessive volatility as needed. As the upward pressure on the baht continued, the BOT had to implement a number of measures to discourage such activities. For example, the limitation on domestic financial institutions' short-term baht borrowing from non-resident and cap on outstanding balance of the non-resident baht bank account were introduced. (See Appendix 4)
- e) Unremunerated Reserve Requirement (URR):** The speculative pressure forced the BOT to implement the URR in December 2006. The measure served as a price-based friction on certain types of inflows which were subject to 30% withholding at banks with no interests and investors would get the full amount of reserve back after one year. The measure was eventually lifted early 2008.

**Box 1: The implementation of the Unremunerated Reserve Requirement**

Toward the end of 2006, the upward pressure on the baht had intensified, with large sums of foreign funds flowing into a number of short-term fixed income instruments with the objective of gaining from attractive yields and anticipated baht appreciation. These put upward pressure on the baht, which rapidly appreciated by 11.3% against the dollar in that year.

A range of macroeconomic tools were taken into consideration including both FX interventions and policy interest rate adjustment. Active FX intervention was done while the policy rate was kept unchanged at 5% to show commitment to maintaining price stability. However, FX intervention had proven to be ineffective as expectations of the baht appreciation persisted. The BOT, then, fell into the one-way bet scenario where intervention invited more speculative buying of the baht.

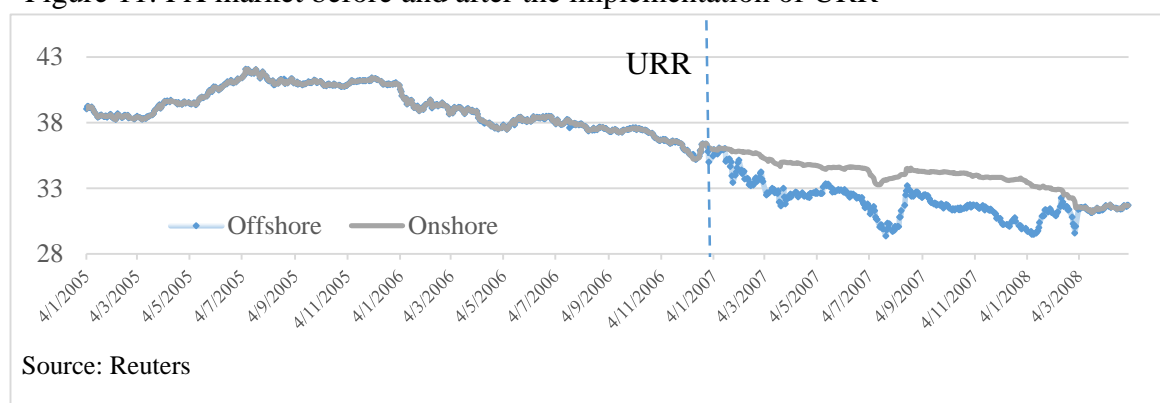
Consequently, the BOT implemented a number of measures to discourage such activities. For example, for transactions whose tenor were not over three months, financial institutions were allowed to borrow baht or enter into transactions comparable to baht borrowing from non-residents for only up to THB 50 million per entity without underlying trade and investment, or for up to the underlying value in September 2003. The outstanding balance of the non-resident

baht account at the end of day was allowed up to THB 300 million per non-resident in October 2003. Additional measures were being implemented on December 4, 2006, including extending the coverage of measure to transactions whose tenor were not over six months, from the previous three-month tenor. (See summary of the BOT's anti-speculative measures in Appendix 4.)

Nevertheless, these measures together with increased foreign exchange interventions were not quite effective as foreign investors could circumvent the measures and were able to find other ways to speculate on the baht. As a result, the baht's movement remained highly volatile and continued to strengthen. Therefore, the BOT decided to implement the Unremunerated Reserve Requirement (URR) measure on December 18, 2006 to serve as a price-based friction on the types of inflows that were prone to speculation. Among others, such flows include new inward investments in the form of foreign loans, fixed income instruments, mutual funds, property funds, currency swaps, and non-resident baht accounts without proofs of genuine trade and long-term investment underlying. Such inflows were subject to 30% withholding at banks bearing no interests. Foreign investors would receive the full amount of the reserve withheld only if their funds have remained in the country for at least one year, otherwise, a penalty would apply and foreign investors would be refunded only two-thirds of the reserve withheld. Exempted from the URR measure were inflows below USD 20,000, inflows related to trades in goods and services, foreign direct investment and equity investment in the stock market.

As situations improved, the BOT gradually relaxed the URR measure over time. Subsequently, foreign investors could opt to fully hedge their inward funds and be exempted from the URR for certain types of inflows. The measure proved to be successful in stabilising the baht and reducing the size of inflows to a more manageable level.

Figure 11: FX market before and after the implementation of URR



As shown in Figure 11, although the URR did not completely reverse the trend, the pace of appreciation became much more moderate after its implementation. However, due to the potential adverse effects of the URR measure on domestic businesses and its ineffectiveness in the long run, the URR measure was lifted on March 3, 2008.

- f) **Macroprudential policies:** Since 2000, LTV ratio, credit card and personal loans measures have been implemented with varying degree of constraints to deal with capital inflows (See Appendix 4).
- g) **Policy mix:** Clear and timely communication with the public has been pursued together with a policy mix comprising of measures to further liberalise the capital account and policy interest rate decreases. It has been observed that the BOT’s communication about the readily available policy toolkits has lessened the pressure on baht appreciation.

The BOT used various tools to address risks associated with capital flows and such tools were deemed to be effective as Thailand’s overall financial stability have remained sound. For example, the URR proved to be successful in stabilising the baht and reducing the size of inflows to more manageable levels. The LTV ratio was also effective in slowing down housing credit growth and did not derail long-term credit growth (Figure 12), which is in line with international experiences. Meanwhile, efforts to liberalise capital outflows since 2003 have resulted in a gradual increase in outflows (Figure 13).

Figure 12: Mortgage loan outstanding and growth

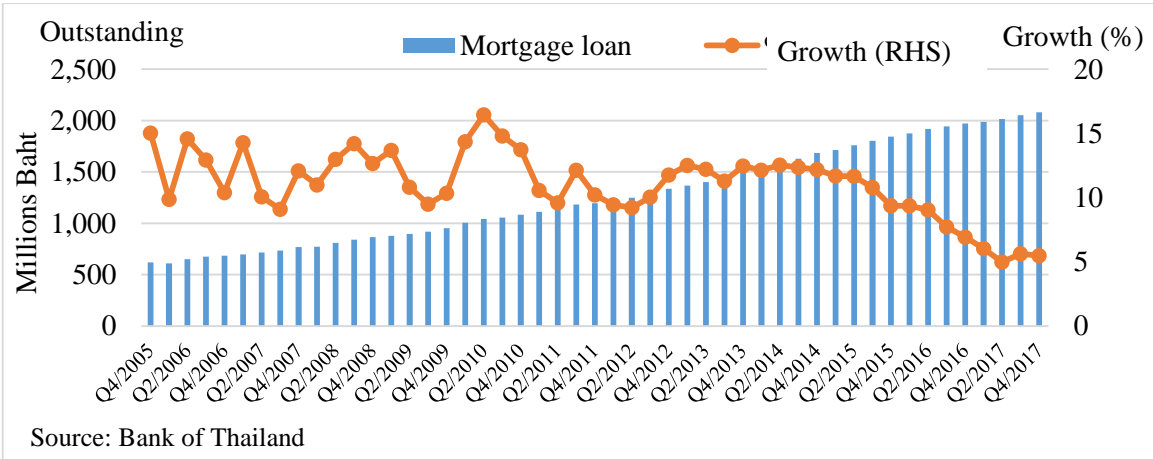
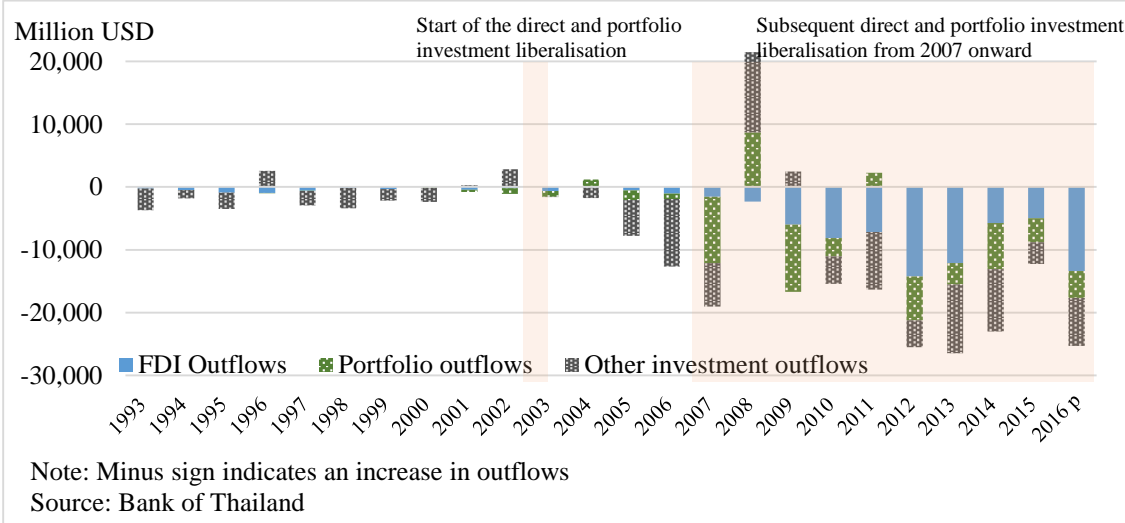


Figure 13: Outflows from Thailand by type and selected measures





## 2.5) Lessons learned from countries' experiences

**Each jurisdiction has its unique social, political and financial policy environments** to operate on that is conducive to sustainable economic growth that attains stable inflation and maximum employment. Nonetheless, in the ambit of international cooperation and increased regional integration, there is scope for economies such as ASEAN not only to promote viable plans and policies that will invariably benefit the ASEAN Member States, but also to **build on each other's experiences and learnings** from its various fora, committees and working groups.

**The experiences of the four ASEAN countries elaborated in this report show that different countries utilise different policies or measures to deal with their specific situations.** Notwithstanding this, there are common lessons on measures dealing with capital flows that would be useful not only for ASEAN countries, but for EMEs in general.

**First, capital flows usually provide benefits to a host country's economy but certain types of flows such as short-term portfolio investment and speculative flows are more volatile and could pose risks to recipient countries.** Moreover, these types of short-term foreign capital tend to be large and can reverse quickly, depending on other factors that may not be related to domestic fundamentals and policies of host countries. These external factors include global and home country's policies and economic outlook as well as market sentiments, or even herd behavior. Movement of these capital flows, both in- and outflows, affect the host country through exchange rate, asset prices and financial markets and therefore pose a major challenge for host countries.

**Second, each country's specific circumstances, such as financial market structure or stage of development as well as economic cycles, play a crucial role on countries' policy choice.** A mix of policies, ranging from exchange rate adjustment and reserve accumulation to macroprudential tools and to foreign exchange measures, can be implemented to mitigate adverse effects of capital flows in various manners. Policy flexibility is therefore essential as there is no 'one-size-fits-all' rule that could be applied to all countries at all times.

**Third, when a country decides on a range of policy options, the focus is primarily the outcome of the measures.** In other words, the intent of imposing a measure is whether the measure in question could address the country's concerns, e.g. lessening exchange rate volatility or curbing asset prices bubbles. This is regardless of how the measure is classified or labeled by others. In addition, as major players of activities that induce large capital movement tend to be foreign investors, measures to limit these activities often result in the different treatments between domestic and foreign players.

**Fourth, when emerging markets introduce capital account liberalisation policies, there are often cases where policies need to be amended or fine-tuned.** This is because policy makers have to deal with market sentiments, investors' perception and external factors which are hard to predict. Thus, flexibility in formulating these liberalisation plans is crucial, otherwise they are prone to be conservative and therefore less willing to allow liberalisation.

### **III. Implication from the IFI's frameworks and views from the perspective of recipient countries**

**The International Monetary Fund (IMF) had introduced an Institutional View in 2012, as a guide for member countries in managing capital flows. As recognised by the IMF, the Institutional View has no mandatory obligations and does not alter members' requirements and obligations under the IMF's Articles of Agreements or under other international agreements<sup>12</sup>. While the Institutional View does not presume full capital account liberalization as a final goal, it does acknowledge capital flows management measures (CFMs) as useful in responding to capital flows, discusses its appropriateness and provides a brief classification of measures.** This also includes the use of macroprudential measures (MPMs) as well as situations that warrant their use. There have been two main frameworks to help ensure that its advice on policies related to capital flows are comprehensive, namely (i) The Liberalisation and Management of Capital Flows: an Institutional View<sup>13</sup> and (ii) Macroprudential Policies Frameworks.<sup>14</sup> The application of the Institutional View on Capital Flows and Macroprudential Policies in bilateral surveillance are outlined in their respective Guidance Notes to Staff.<sup>15</sup>

Given the diversity in terms of stages of financial sector development among countries and evolving country circumstances, the issues on capital account liberalisation and capital flows management are dynamic and cannot remain a static framework. It should continue to be developed and evolved through time. For emerging market economies like ASEAN, greater flexibility should be permitted for the use of CFMs, as some of the financial market and exchange rate volatility are affected by the mismatch between the size of capital flows and capital markets and amplified by the prolonged period of low interest rates in the advanced economies. In this regard, CFMs are important complements to other macroeconomic management measures. Authorities need to have the flexibility in deploying all available tools in safeguarding macroeconomic and financial stability. This may include having appropriate prudential measures that do not aim at capital flows per se but rather at specific source of risks and financial fragility. This can play a crucial role in dampening the risks of overheating in the economy. Various macroprudential measures have been useful in dealing with this new reality, both from the standpoint of "leaning against the wind" or

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<sup>12</sup> Unless measures are inconsistent with Article VIII, Sections 2 and 3 on current payments and discriminatory currency practices.

<sup>13</sup> IMF 2012, "The Liberalization and Management of Capital Flows: An Institutional View" (Washington DC: International Monetary Fund).

<sup>14</sup> IMF 2013, "Key Aspects of Macroprudential Policy," (Washington, DC: International Monetary Fund) and IMF 2017 "Increasing Resilience To Large And Volatile Capital Flows: The Role Of Macroprudential Policies" (Washington DC: International Monetary Fund).

<sup>15</sup> IMF 2013, "Guidance note for the liberalization and management of capital flows" (Washington DC: International Monetary Fund) and IMF 2015, "Managing Capital Outflows - Further Operational Considerations" (Washington DC: International Monetary Fund).

taming pro-cyclicality and increasing the resilience of the financial system. We should emphasise, however, that the choice and the effectiveness of these measures are premised on the unique context of each economy.

**While existing guidance and frameworks from IFIs are indeed useful as a guideline, however, based on ASEAN's experiences they remain rather rigid and do not fully consider country-specific circumstances.** From ASEAN's experience outlined in the previous section, there are six elements that are important for policy makers to effectively address specific challenges. The key issues of concerns are elaborated as follows:

**Issue 1: IFI's guidelines may provide a stylised view but may not fully incorporate all country-specific circumstances or domestic factors**

ASEAN countries with less developed financial markets face episodes of massive global liquidity and sudden surges of capital flows. Such flows are usually disruptive and disproportionate to their economies and domestic financial markets. Economic agents have to bear the burden of sharp non-resident capital flow movements and increased vulnerability, such as to the price adjustment in property and equity markets. Without proper and flexible policy responses that fully take this factor into account, such massive capital flows could disrupt these financial markets and pose risks to macroeconomic stability, public welfare, as well as the sustainability of economic growth.

In Malaysia's case for instance, the ringgit's movements were increasingly being influenced by the offshore NDF markets, the bulk of which reflected speculative activity and not economic fundamentals. The authorities had to sustainably develop the onshore foreign exchange market by addressing imbalances in the demand and supply of FX in the domestic FX market and address the speculative pressures on the ringgit from offshore ringgit activities. In the case of Indonesia, the combination of large portfolio flows and relatively shallow foreign exchange market made the rupiah exchange rate volatile to portfolio investors' behavior that was sensitive to negative sentiments. This in turn contributed to volatility of rupiah exchange rate movement. Also, the Philippines, an emerging economy with heavy reliance on the banking system for funding economic growth, requires macroprudential measures that strike the right balance between supporting credit-making as long as it is anchored on constructive growth dynamics, and increasing resilience of banks to withstand downturns.

In addition, there seems to be a sharp difference in the conduct of monetary policy between advanced and emerging market economies. A typical industrialised country can lower interest rates in bad times without the fear of a sharp depreciation of its currency and can increase interest rates in good times without the fear of attracting more capital inflows. This is not the typical case for

EMEs. This could be attributed to the fear of free falling in bad times and fear of capital inflows in good times.<sup>16</sup> The implementation of capital flow measures also depends on the country's economic and financial development and readiness as well as the mandates and domestic laws governing the country.

Moreover, EMEs investors are diverse, comprising different participants, residents and non-residents with different investment behaviors, appetites, time horizons, incentives, and trading opportunities. Therefore, the flexibility to guide behaviors of such a diverse set of market participants is highly necessary.

As it is generally accepted that capital flow liberalisation should depend on countries' economic and financial development and readiness, capital flow management framework should take into consideration countries' specific circumstances, conditions and developments, as well as their respective mandates and domestic laws. The IFIs may therefore explore the idea to: (a) group the countries depending on comparability of their domestic developments; (b) engage in close dialogue with them for better appreciation of their concerns and country-specific circumstances; (c) focus on how countries can maximise benefits from capital flows safely and (d) arrive at a capital flow framework that is more applicable, appropriate and tailored to the concerned group of countries. The framework may include suggestions and recommendations to particular countries on how to maximise the benefits of capital flows and outweigh their costs and risks, given their mandates, domestic laws, policy landscape and the proposed policy changes or responses. The framework must be flexible and agile to capture countries' changing circumstances.

## **Issue 2: Recommendations on the adoption of CFMs should be more flexible**

The IFIs' frameworks seem to have macro-policies such as monetary policy and exchange rate flexibility as the prime tools in dealing with capital flows. However, these macro-policy adjustments may be inappropriate and ineffective especially if sharp capital flow episodes stem from policies in other countries (more of this is discussed under Issue 3). Greater flexibility should be given to the use of CFMs to address capital flows. Waiting for signs of a crisis or imminent crisis before using any appropriate measures, as deemed fit by respective countries, can be too late and could result in unintended consequences and deviate macroeconomic policy prioritisation from domestic mandates in handling surges of capital flows.

Conventional macroeconomic adjustment may be ineffective or too slow to react to such situation. Delaying action will result in potentially detrimental effects on stability with heavy and

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<sup>16</sup> Federico, Pablo. et.al, 2014. "Reserve Requirement Policy over the Business Cycle" National Bureau of Economic Research, <http://www.nber.org/papers/w20612>.

long-lasting economic costs. In addition, there are limitations on the effectiveness of transmission mechanisms for such conventional tools.

Taking Thailand as an example, there was a capital flows surge in 2006. Among the macroeconomic toolkits ranging from exchange rate adjustment and foreign exchange interventions to policy interest rate adjustment, the country decided to allow some appreciation and use active interventions to slow down the appreciation path while keeping policy rates unchanged at 5% to avoid sending a wrong signal to the markets on the central bank's commitment to maintaining price stability. However, these policies had proven to be ineffective as expectations of the baht appreciation were sharp and persisted. As a result, the country faced with the one-way bet scenario where intervention invited more speculative buying of the local currency.

Unlike earlier episodes, capital flows did not create a bubble in the real estate sector but was rather channelled to the bond market. This is why the flows were not addressed by targeted macroprudential measures. Hence, the BOT had to resort to imposing the URR measure. The measure, while not popular, broke the momentum of the currency speculation and had provided the private sector time to adjust to the rise in the baht. This reflects that in times of crisis, some macro-adjustments have proved to be inefficient as it takes time to feed in to real economic activities. It also depends on effectiveness of its transmission mechanism. Having to take a fair amount of time to follow such recommendation may limit the ability to restore the situation from the crisis.

Learning from this episode, it may be difficult for countries to stick to a rigid rulebook when facing with such situations. Therefore, when assessing such situations, it is important to allow flexibility in applying prompt and appropriate measures. In addition, the Philippines' experiences regarding the capital flows have shown that managing capital flows could not necessarily be addressed by sound macroeconomic policies alone considering the external factors and uncertainties arising from global and local developments. Thus, the BSP used a combination of policies where macroprudential measures were complemented by capital flow management measures as necessary to maintain monetary and financial stability.

Moreover, MPMs alone cannot ensure resilience against destabilising effect of large capital flows, hence CFMs are deemed to be an essential part of a policy toolkit to preserve financial stability in certain circumstances. In some cases, capital flows could have a larger impact through exchange rate channel on the real sector than on asset prices. The use of MPMs to increase resilience to large and volatile capital flows may require broad-based measures that could have net negative externalities on the whole economy.

Related to this point on flexibility in adopting CFMs as it depends on the situation that a country faces, it is also useful if IFIs' framework gives more consideration to the "effectiveness"

of a measure with respect to its objectives (i.e. whether a measure is effective in achieving its intended outcome to resolve a particular situation).

Also, it remains unclear how to properly define “imminent crisis” or appropriate situations where the use of CFMs is warranted. When it comes to short-term and speculative capital flows, there should be preventive measures to discourage these flows. Therefore, preventive CFMs for prudential reasons could be useful to limit the build-up of risk, prevent deadweight loss and reduce social welfare costs. In such case, maintaining domestic resiliency could reduce the cost of global welfare as a whole, while certain CFMs can effectively complement other measures.

**Issue 3: In ASEAN’s viewpoint, the frameworks are rigid which may prevent pre-emptive use of measures. This may in-turn lead to premature unwinding of measures that could lead to renewed pressures.**

From ASEAN’s perspective, the mechanical classification of measures into CFMs or MPMs, as well as the views that CFMs should be used only temporarily and not pre-emptively may restrict authorities in undertaking appropriate measures for specific circumstances. For most emerging countries, it would be inaccurate to assume that CFMs must be temporary. It is crucial to recognise that policies concerning capital flow management can entail difficult trade-offs for an economy and at times be politically sensitive. Countries need to preserve flexibility in the implementation of CFMs and other measures to manage the impact of volatile capital flows. High inflows or outflows consistently create difficulty in managing macroeconomic and financial stability. For instance, sudden capital flow surges or reversals can lead to disorderly exchange rate fluctuations, which affect economic and financial stability, and subsequently dampen investor confidence. This is particularly pertinent for EMEs. Therefore, each country should have the flexibility to implement CFMs on a more permanent basis and as pre-emptive measures.

In the case of Indonesia, implementation of minimum holding period has helped to manage short-term capital flows to Bank Indonesia Certificate. Bank Indonesia adjusted the minimum holding period rule several times since its stipulation in 2010 through relaxation and tightening through 2015 in accordance with the prevailing condition. Therefore, since managing capital flows in ASEAN countries is a continuing issue, a rigid framework which stipulates that CFMs must be put as temporary measures could make ASEAN countries’ macroeconomy more susceptible to surge in capital flows.

In the case of Thailand, the URR was implemented in 2006 and was subsequently relaxed and replaced with other preventive prudential measures, i.e. non-internationalisation of local currency when the situation on the external fronts stabilised. The measures concerning the non-internationalisation of local currency are not deemed as CFMs as they do not intend to affect capital

flows with legitimate underlying economic activities. Instead, such measures aimed at limiting future speculative flows and safeguarding financial stability in the long-run. Some of these measures have been used until now with the main objective to safeguard financial stability. However, such measures are residency-based and may be considered as CFMs under the aforementioned framework, and as such, implementing such measures would go against the recommendation that CFMs should be temporary. Consequently, such recommendation puts pressure on authorities to unwind the measures even though they are deemed appropriate to be maintained.

Also, the IMF's recommendation on managing inflow surges states for authorities "to lift measures once the surges abate". Furthermore, the IMF recommends that for disruptive outflows, "CFMs should generally be used only in crisis situations or when a crisis is considered to be imminent". For example, the IMF's advice to phase out Malaysia's FMC's measures could have resulted in sub-optimal policy decisions, such as a premature removal of the measures. Flexibility is required in order to undertake a prudent and effective judgment under varying circumstances and challenges. In this regard, the IMF should distinguish the composition and sources of capital flows in assessing the effectiveness and appropriateness of CFMs. For instance, limits on speculative short-term inflows could be in place as a strategic way to prevent some of the volatility associated with sudden surges or reversal of these flows. At the same time, these CFMs should not discourage or deter long-term portfolio investments which are beneficial for economic and financial development.

The effectiveness of CFMs in safeguarding financial stability takes time. Hence, a premature removal of such measures before economic adjustments fully take place may create the wrong signal to market sentiment. The market could perceive this as policy inconsistency and may urge authorities to reimpose such measures if the situation persists. In doing so, it could trigger negative market reactions<sup>17</sup> leading to negative feedback loops with negative impacts on the economy. The IMF should also consider the asymmetries between inflow and outflow periods, whereby inflow episodes tend to "start at different times for different countries" due to country specific pull factors but "often tend to end together."<sup>18</sup> While the benefits of capital inflows may take time to be transmitted to the real economy, the negative impacts of capital reversals tend to be transmitted rapidly through the financial system and may be immediately disruptive to the real sector. Hence, recommendations must be calibrated to take into account the different nature and voracity of the outflows and the specific macroeconomic and financial objectives at hand.

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<sup>17</sup> CFMs can generate negative market reactions if they are costly for investors or are misconstrued, affecting future willingness to invest (IMF Institutional View on the Liberalization and Management of Capital Flows, 2012)

<sup>18</sup> IMF, 2011, "Recent Experiences in Managing Capital Inflows—Cross-Cutting Themes and Possible Policy Framework"



Moreover, the guidelines or frameworks may be misused by other advanced trading partners to pressure the authorities to lift measures prematurely if such measures are classified as CFMs under the framework. When circumstances warrant, the use of measures should not be time-bound, as it may reduce effectiveness in safeguarding financial stability. In order to prevent excessive flooding of capital, some measures need to be maintained for a longer period of time should the risks remain. Notable examples are measures regarding non-internationalisation of local currencies adopted by Malaysia and Thailand which have to be put in place as long as there was a need to curb currency speculation.

**Issue 4: The definitions and classifications of measures can put more burden on the authorities.**

Whether a measure is labeled as MPMs, CFMs or CFMs/MPMs, policymakers always consider the tools that are most suitable and targeted at the source of risk, while disregarding the label/nomenclature of such tools/measures. The classifications by the IMF that are based on residency and purpose together with specific recommendations (e.g. for CFMs to be time-bound) could unintentionally create an extra burden for policy makers when trying to effectively manage capital flows.

One of the measures imposed by Indonesia relates to corporate external debt regulation which requires hedging of net FX liability of corporates with external debt maturing within six months. The policy, while related to capital flows, was not intended to limit capital flows per se, but to ensure financial stability by enhancing corporate risk management on external debt. The intricacy in the nature of a capital-flow-related measure may call for reconsideration of CFM classification and whether it is suitable for various situations. Therefore, differences of view with the IMF with regard to the classification could be avoided. It is important to get around a situation where the IMF's classification end up putting a burden on the authority to abolish the regulation as soon as macro financial stability improves, while the regulation is actually needed preemptively as a prudential measure.

From ASEAN's perspective, some countries even view that the classification of measures into categories such as CFMs or MPMs may be misleading and should be reviewed. This is because of the overlapping nature of some CFMs and MPMs (e.g., a measure may be intended both to limit capital flows and to tackle systemic risks arising from such flows). Moreover, the focus on residency criteria oversimplifies the thought process on whether a measure is CFM or not. It may be inappropriate to classify all residency-based measures as being designed to limit capital flows. They may be driven by other considerations such as fiscal and social policies. In addition, a strict definition and implementation criteria may restrict monetary authorities from effectively managing capital flows. For instance, it may be more prudent to have all available options on the table, which

can be used in a policy mix combination, so that no single instrument is made to bear all the burden of adjustment. Further work is needed in the calibration of CFMs/MPMs and how they interact with other economic variables.

Moreover, the labeling of measures could have unintended consequences, particularly for economies perceived to be vulnerable. Investors and media tend to focus on the restrictive measures, which limit authorities' ability to conduct policies using available policy tools.

**Issue 5: The new classification of measures may lead to policy inaction or even discourage and lead to hesitation towards capital account liberalisation.**

Currently, ASEAN countries have made significant strides toward freer flows of capital in the region. Therefore, having an appropriate mix of policies depending on prevailing circumstances to preserve financial stability is crucial. The IMF's framework on macroprudential and capital flow management measures should serve as guidance to ASEAN countries. In this regard the framework that does not limit members' capacities to adopt measures deemed necessary to achieve their respective mandates and preserve domestic stability is appreciated.

The adoption of safeguard measures in response to the risks of capital account liberalisation creates an opportunity for ASEAN countries that have not reached the level of development required for liberalisation. Once liberalisation efforts are committed and undertaken, it is difficult to backtrack, given the possible costs and repercussions as well as the negative impression or signal it can send to the international community. Moreover, the market sentiment is highly sensitive to IMF's view about the conduct of safeguard measures by member countries. The new classification of measures may lead macroprudential measures to be labeled as capital flow management measures, which could constrain authorities' policy options thus leading to hesitation towards capital account liberalisation.

Thus, prudence and safeguards should complement and support the liberalisation process to mitigate possible resulting volatilities in capital flows. These may include prudential regulation and supervision, as well as risk management which may not affect free flow of capital during normal times. However, ASEAN countries should not take safeguard measures as substitute for sound macroeconomic policies but may adopt them as deemed appropriate based on prevailing domestic conditions and circumstances.

Liberalisation efforts should be undertaken in a calibrated and sequenced manner, taking into consideration the prevailing circumstances and the domestic economy's readiness vis-à-vis global developments. These efforts have been consistently supported by (a) initiatives that would further improve the resilience of the domestic banking system, deepen capital market and strengthen macroeconomic fundamentals and (b) macroprudential measures and information

requirements that may safeguard the economy against external shocks, possible imbalances and vulnerabilities.

In this regard, the IMF should strengthen its role as a trusted advisor in providing policy advice to recipient countries' capacity-building efforts in capital account liberalisation. These could include, among others, financial market development and framework on assessing and managing different types of capital flows. This should be conducted through constructive two-way policy dialogue between the IMF and the authorities. Moreover, the authorities can also benefit from a more regular multilateral assessment and review process for capital-flow-related policies by the IMF.

**Issue 6: Conversations between IFIs and recipient countries on spillovers should also entail more emphasis on source countries, with IFIs facilitating such engagements, and supported by greater international collaboration to mitigate capital flow volatility**

The recent GFC emphasised the importance of collaboration amongst countries, considering that the policy actions of the source countries may always have outward spillover effects on other countries. As highlighted earlier, the GFC and an unparalleled easing of monetary policy by the US and Japan resulted in a surge of capital flows to ASEAN countries. This led to currency appreciation and asset price bubbles that led to recipient countries' financial fragility. Capital flows in response to these global development have important implications on recipient countries' capital flow management measures. In particular, recipient economies should be able to reinforce appropriate policies to counter extreme capital flow volatilities and build cushions to ensure resilience at the same time. Some ASEAN countries intervened in foreign exchange markets to manage the short-term volatility in the exchange rate, which could hurt their economies and as a buffer to the expected reversal of the volatile capital flows. Apart from fiscal policies, CFMs have also been implemented to preemptively mitigate the potential domestic financial imbalances that could arise from these capital flows.

Therefore, IFIs should give more consideration to recipient countries' circumstances as a result of spillovers from source countries. Even though the IFIs do recognize that source countries can influence the scale and riskiness of global capital flows, the aforementioned frameworks on capital flows tend to examine obligations on markets at the receiving end of the flows. As these are typically emerging markets, such assessments therefore, may not provide enough consideration on the negative spillover effects from source countries. Perhaps the IMF's IV could be implemented in a more holistic and sensitive way by strengthening IV's coverage and analysis of the outward spillovers of source countries' policy measures, including unconventional monetary policies. Similar to the IMF's assessment of the appropriateness of CFMs, the IV should assess

source country's policies in respect of their appropriateness as well as against other available alternatives which may be less costly. This would complement the IV's current focus on recipient countries' policy responses to spillovers from source country's policies.

In addition, conversations between source countries and recipient countries as well as their collaborative efforts may help them both to address challenges of capital flows in a systematic manner and secure globally efficient outcome. Empirical findings by Ghosh et al. (2014) also suggest that there may be scope for greater international cooperation in managing large and volatile cross-border flows in order to tackle flows at both the source and receiving ends. Consequently, it can lead to a more optimal outcome globally if the cost of imposing restrictions is not so high. Collaboration between source and recipient countries could be the key to help prevent spillovers from measures in one jurisdiction to another. Collaboration may include sharing of experiences and best practices, which would be helpful in addressing any misalignment and possible ineffectiveness of policies and approaches. Efforts to address capital flow vulnerabilities should not only be a paramount concern of the recipient countries but also of source countries.

As not all aspects of concerns on capital flow can be collaborated, it is also imperative for ASEAN countries to be vigilant and conscious of the developments not only in their respective economies but also in the international markets. Source countries should also build macroeconomic stability and be more conscious in conducting their monetary policies to minimise adverse spillovers to other countries. On the other hand, recipient countries should deepen their financial markets and increase financial system resilience and development in order to strengthen their ability to absorb shocks.

#### IV. Conclusions and policy recommendations

**Experiences of selected ASEAN countries have shown that countries have been able to timely and efficiently manage and mitigate adverse effects of volatile capital flows with readily available policy toolkits.** These include measures such as macroprudential measures and capital flows management measures. Therefore, recommendations that may limit countries' policy space should be made taking into account, inter alia, the following factors:

**The incorporation of country-specific issues into IFIs' recommendations should be considered a priority.** Unlike those of developed countries, EMEs' financial markets are usually less developed, more vulnerable to sudden surges of global capital flows and often export-oriented. Their ability to absorb shocks and withstand massive capital flows that could disrupt their financial markets and destabilise their economies is limited. As a result, it is appropriate that IFIs take into account country-specific circumstances, conditions and developments when making suggestions and recommendations. In addition, due consideration should be given to preemptive use of measures whose primary objective is to ensure the financial market stability. A rigid framework that urges countries to prematurely unwind measures could lead to renewed pressures and financial instability.

**Furthermore, in ASEAN's perspective, the IFIs should allow greater flexibility in their frameworks.** A rigid and mechanistic framework may not be the right solution for all as it might impose undue constraints on countries already having limited policy tools. Restrictions on possible combination of policy instruments could hamper macroeconomic management and hinder economic stability of ASEAN countries. With reference to discussions at the IMF-BNM Seminar on Capital Flows Management (2017), authorities were of the view that capital account liberalisation is comparable to a double-edged sword for emerging economies. Therefore, it should be based on countries' readiness and be done in a feasible, well-sequenced and strategically-phased manner so as to allow ASEAN countries to optimally reap the benefits of capital flows while providing sufficient safeguards against adverse shocks.

**In the longer term, IFIs should be more symmetric and receptive in its recommendation by also taking into account the spillover effects from source countries rather than concentrating solely on the recipient countries to respond in some prescribed sequential manners.** Essentially, IFIs should encourage further collaboration between source countries and recipient countries. This is in line with the IMF's Independent Evaluation Office's recommendation in 2015 that greater attention should be given to the sources of international capital flows and what, if anything, could be done to minimise the volatility of capital movements.

More room to manage portfolio flows should be given to the recipient countries since the recipients of portfolio flows are directly affected by the volatility of the flows.

**Moreover, the IFIs could play a vital role in facilitating collaboration among source and recipient countries.** The recent GFC emphasised the importance of collaboration among countries considering that policy actions of source countries may always have implications on capital-recipient countries. Collaborative efforts of source and recipient countries may help both source and recipient countries to address challenges of capital flows in a systematic manner and help to secure globally efficient outcome.

**Last but not least, there is room to deliberate whether the determined classification of policies are suitable.** It has been observed that a country decides on a range of policy options based on policy objectives, rather than their classification given by IFIs. Moreover, the determined classification of measures may discourage and lead to hesitation towards capital account liberalisation.

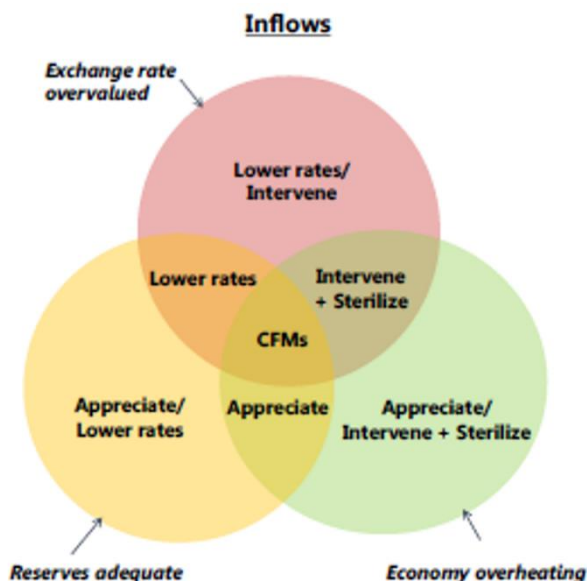
Building on the momentum of this research paper, it is imperative for the ASEAN countries to establish a regional view on the unconventional approach in managing capital flows to ensure this concerted voice is sealed on a solid ground. The regional view will provide a comprehensive, flexible and balanced approach for the management of capital flows.

## Appendix 1

### IMF's Institutional View on Liberalisation and Management of Capital Flows

#### For managing Inflow surges:

- The appropriate policy mix depends on a variety of country-specific conditions, including macroeconomic and financial stability, financial development, and institutional capacity.
- In certain circumstances, introducing CFMs can be useful, particularly when underlying macroeconomic conditions are highly uncertain, the room for macroeconomic policy adjustment is limited, or appropriate policies take undue time to be effective.
- CFMs could also be appropriate to safeguard financial stability when inflow surges contribute to systemic risk in the financial sector. Systemic financial risks that are unrelated to capital flows may be better addressed by macro-prudential measures that are targetted specifically to deal with such challenges.
- CFMs should be targeted, transparent, and generally temporary – being lifted once the surge abates, in light of their costs.
- When capital inflow surges contribute to both macroeconomic and systemic financial sector risks, a measure that is designed to limit capital inflows in order to address such risks can be both a CFM and an MPM. Some prudential measures can continue to be useful after a surge abates for managing systemic risks. Their usefulness relative to their costs needs to be evaluated on an ongoing basis, including by assessing whether there are alternative ways to address the prudential concerns that are not designed to limit capital flows.



The diagram does not prescribe or take a view on the appropriate combination of the three policies—only on circumstances under which each might be appropriate.

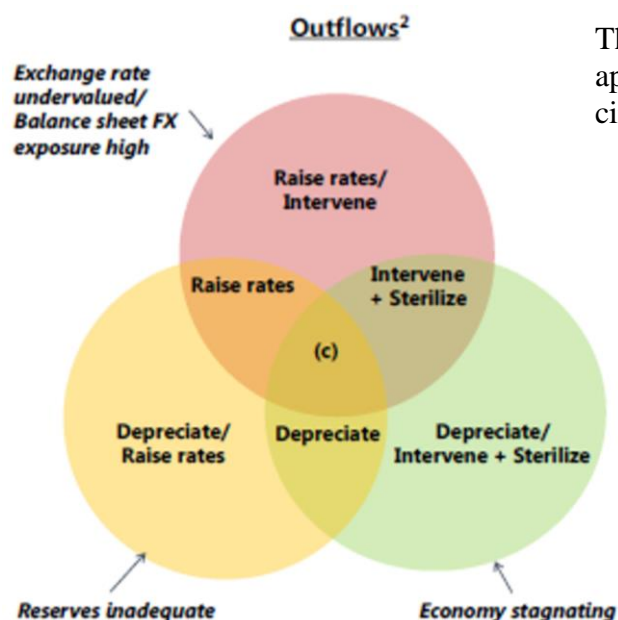
Each circle represents cases where the relevant condition is met. For example, the top circle (“Exchange rate overvalued”) represents cases where the exchange rate is assessed to be overvalued. The intersection of all three circles reflects cases where the exchange rate is overvalued, reserves are judged to be adequate, and the economy is overheating.

In such cases of limited policy flexibility, as represented by the intersection of all three circles, CFMs can be useful to support, and not substitute for, the needed macroeconomic adjustment.

CFMs could also be useful to safeguard systemic financial stability under certain circumstances. At other times, CFMs can help gain time when taking the needed policy steps requires time, when the macroeconomic adjustments require time to take effect, or when there is heightened uncertainty about the underlying economic stance due to the surge.

## For responding to disruptive outflows:

- When responding to disruptive outflows, CFMs should generally be used only in crisis situations or when a crisis is considered to be imminent. CFMs are more effective when they are implemented as part of a broad policy package that includes sound macroeconomic policies as well as financial regulations. They should be temporary, being lifted once crisis condition abate, and may need to be adjusted on an ongoing basis in order to remain effective.



The diagram does not prescribe or take a view on the appropriate combination of the three policies-only on circumstances under which each might be appropriate.

Each circle represents cases where the relevant condition is met. For example, the top circle (“Exchange rate overvalued”) represents cases where the exchange rate is assessed to be undervalued. The intersection of all three circles (the area marked “c”) reflects cases where the exchange rate is undervalued, reserves are judged to be inadequate, and the economy is struggling. A country in (c) is likely to be in crisis or imminent crisis.

**In such cases of limited policy flexibility**, as represented by the intersection of all three circles alternative options, including official financing (e.g., UFR) and, in crisis or imminent crisis, introducing temporary outflow CFMs and/or easing existing inflow CFMs can be useful to support, and not substitute for, the needed macroeconomic adjustment.

In crisis circumstances, **financial stability considerations** can also warrant CFMs to provide breathing space while fundamental policy adjustment is implemented.

*IMF 2012, “The Liberalization And Management Of Capital Flows: An Institutional View” (Washington DC: International Monetary Fund).*



## Appendix 2

### Indonesia's experience

#### Capital Flows in Indonesia

As an emerging country, Indonesia is in the course of developing its economy to a higher level. This process certainly calls for capital which is beyond the size offered by domestic sources. Accordingly, since the new order era, Indonesia has opened itself to foreign capital flows. Starting earlier with FDI, capital has flowed to Indonesia in a number of forms. In addition to FDI, foreign debt also surged up prior to the 1997 Asian crisis. In line with further development in the economy especially in the financial sector, foreign capital inflows poured even more heavily into the country. The type of capital inflows has also become more varied, including foreign portfolio investment.

In the meantime, global environment also evolved quite unprecedentedly. Following the GFC in 2008 and European debt crisis in 2010, central banks in crisis countries launched asset purchasing programs – also known as quantitative easing. These programs were designed to facilitate their accommodative monetary policy stance as their policy rates have reached the bottom 0%. Some even went further to negative rates, such as ECB and BOJ. Quantitative easing consequently injected ample liquidity to the economy. Due to slow economic recovery and gloomy economic prospect, most of the excessive liquidity went to financial markets (stock and bond markets) and send financial asset prices up – while reducing its rate of return. Afterwards, those liquidity flew to other countries in search of higher return in particular to emerging market countries like Indonesia.

Capital inflows to Indonesia tend to increase post the global financial crisis in 2008. Figure 1 and 2 shows that capital inflows to Indonesia rebound in 2012, after a short drop in 2011, which coincides with the beginning of current account deficit in recent years. Capital inflows to Indonesia was dominated by Portfolio Investments (PI) flows, while Direct Investments (DI) and Other Investments (mostly external debts and deposits) flows contributed by a smaller portion.

Overall in the period after 2008, capital flows fluctuated and pointed to the highest level in 2014 when net capital inflows reached more than USD 40 billion against the background of domestic economic stability and still accommodative monetary policies in advanced economies. This upsurge of capital flows occurred however after quite a strong fall in 2013, when capital reversal hit most emerging countries including Indonesia due to taper tantrum. Capital reversal reoccurred in 2015, as investors felt jittery over rising uncertainties in the global financial market due to increasing expectation of Fed funds rate hikes, concern over Greece's fiscal negotiation, and unanticipated Chinese renminbi devaluation.

This high fluctuation of capital flows in Indonesia was due to the fact that a large part of the flows was in the form of Portfolio Investments. Naturally, portfolio investments are risky as shifts among types of portfolio assets and between countries could happen in a frequent and instant manner. Portfolio investments are also highly sensitive to market sentiments, particularly negative ones. All in all, inflows and outflows of portfolio investments are very influential to the asset prices and exchange rates

On the other hand, Direct Investment (DI) to Indonesia was much less volatile and tend to be positive as it continued to flow in along the line of relatively good domestic economic prospect, supported by relatively strong domestic demand, long-term macroeconomic stability and continued structural reforms. In addition, one must also not overlook Other Investments (OI) which include foreign debts and deposits that tend to fluctuate as well. Nevertheless, OI movements have much

less influence over assets prices and exchange rates considering that payment (outflows) and withdrawal (inflows) of foreign debts have been scheduled in accordance to loan agreement, thus can be anticipated in advance and cause less impact on asset prices and rupiah exchange rate.

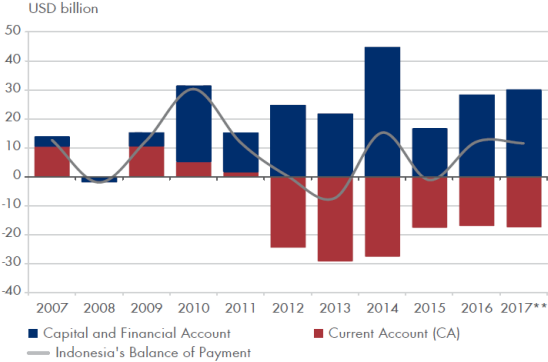


Figure 1: Indonesia's BoP

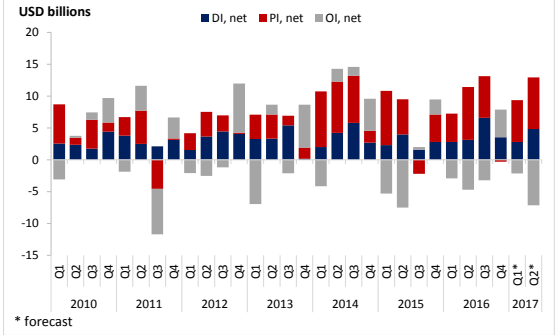


Figure 2: Capital Flows by Type

Put it more systematically, capital inflows to Indonesia is attributable to a number of push and pull factors:

- Push factors:
  - **Ample global liquidity.** Extra accommodative monetary policy pursued by Advanced Economies (AEs)' central banks such as the Federal Reserves, European Central Bank, Bank of England and Bank of Japan, through lowering of policy rate reaching zero bound and followed by large asset purchases has uplifted global liquidity. The real sectors were unable to largely absorb the ample liquidity, therefore it was mostly channeled to the financial market.
  - **Low return.** Since ample liquidity injected by AEs' central banks could not be fully absorbed by the real sector, it was invested in the financial market that boosted asset prices but pushed down rate of return.
  - **Compressed risk premium.** The racing for higher return was also supported by decreasing risk premium, including risk premium for emerging market countries.
- Pull factors:
  - **Higher rate of return.** In general, investment return in EMEs – including Indonesia – is higher than in AEs, and the spread between return in EME and AE even got wider – meaning higher return – with lower risk premium.
  - **Solid and sound macroeconomic performance.** Indonesia has maintained solid macroeconomic performance, supported by sound and conducive policies. The country has sustained high growth over the years, kept inflation in check and the exchange rate stable, and continued structural reform programs.
  - **Investment grade rating.** Indonesia sovereign ratings have been improved and successfully reached investment grade that add to the country's appeal.

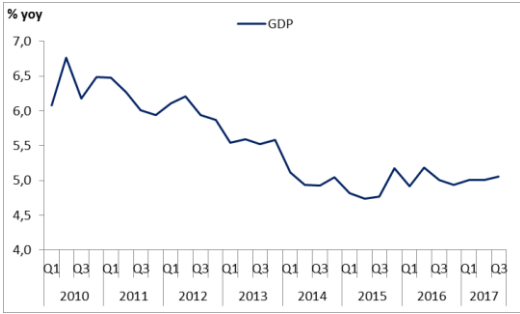


Figure 3: GDP Growth

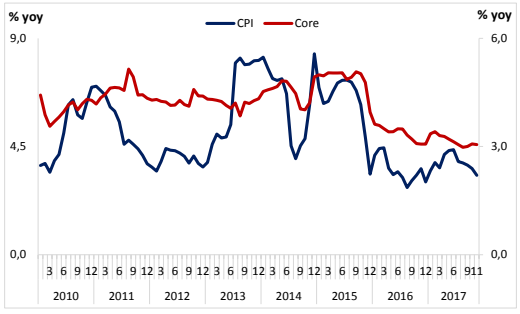


Figure 4: Inflation

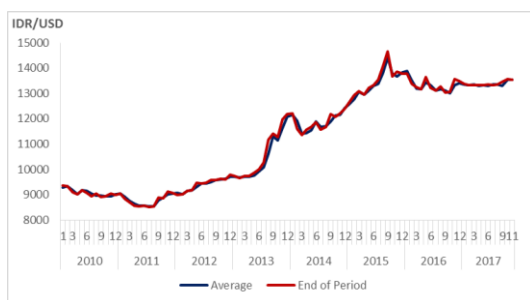


Figure 5: Rupiah Exchange Rate

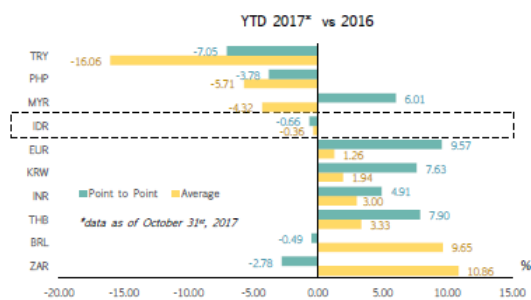


Figure 6: Exchange Rate Development, 2017

### The Impact of Capital Flows to Indonesian Economy and the Policy Response

Many economic textbooks and empirical research proved that capital flows is perceived to provide benefits to the global economy, for both the source countries and especially the recipient countries. Free flows of capital could facilitate efficient allocation of resources (capital) that would benefit all. Certain type of capital flows – particularly direct investments – provides larger positive impact in the form of new employment opportunity, transfer of technology and export potential. For Indonesia in particular, capital flows can also help finance current account deficit and foreign debt, or more generally finance all capital needs for development. Capital flows can also support financial deepening in the foreign exchange, bond and stock markets. All of these benefits could be reaped if the capital flows smoothly in accordance with economic fundamentals, and stays for a long period of time.

On the other hand, these positive impacts may not occur if capital moves in and out in a quick and abrupt fashion, and within a short term. Unfortunately, capital inflows to Indonesia in the form of portfolio inflows tend to rise over the years but was very short-term, and therefore cannot be utilised optimally to finance economic activities in the real sector. These portfolio inflows in general is very sensitive to market sentiment as well as change in relative returns and technical factors, and set aside economic fundamental factors.

These volatile portfolio flows had contributed to turbulences in Indonesian financial markets, risking asset prices to fall and rupiah foreign exchange to depreciate. In turn, it brought challenges to policy response in curbing negative repercussions to the overall economy. The volatile capital flows had more negative impacts particularly when reversals occur. Capital outflows may be triggered by reversal of favorable push factors (external shocks, including global negative sentiment) and/or setback of pull factors (domestic shocks). In particular, capital reversal triggered volatility in the financial market and fall in the prices of financial assets as well as depreciation of domestic currency.

Capital flows can also bring about complication in the monetary management conducted by central banks. During economic boom (strong growth and high inflation), capital flows may reduce the effectiveness of monetary policy that is conducted thorough interest rate instrument. Effort to reduce inflation by raising interest rate would only attract more inflows such that broad money increase or cost of sterilisation rises, and vice versa.

Capital flows can also complicate monetary management as it makes the domestic exchange rate shift away from its fundamentals (overshooting). It, therefore, does not only reduce its function as a shock absorber (under flexible exchange rate regime) to external shocks, but even turns it into a shock amplifier. Furthermore, exchange rate that is away from its fundamentals would mislead economic agents in responding to exchange rate developments.

The volatile foreign capital flows and its corresponding challenges, together with the need to maintain the resilience of external sector, urged Bank Indonesia to pursue a policy mix. Such policy mix aims to (1) change the structure of capital flows to reduce its volatility and its impact on the economy by preventing certain types of portfolio investment while also encouraging more long-term capital flows such as FDIs; and (2) improve statistics to monitor capital flows (balance of payments).

Various efforts were implemented through a series of policies since the GFC, including capital flow measures and macroprudential measures, to strengthen the economic and financial system stability that would in turn contribute to more sustained capital inflows. A range of policies pursued by BI/Indonesia since the GFC were as follows:

**a) Policy to encourage FDI:**

- Improvement of business climate to attract more FDI

**b) Policy to maintain macroeconomic stability:**

- **Strengthening policy mix** to safeguard the macroeconomic and financial system stability.
- **Adoption of exchange rate flexibility of Rupiah** along its fundamental value while still maintaining market mechanism that aligns with financial deepening effort.
- **Maintaining adequate foreign exchange reserves** taking into account possible capital reversal. The accumulation of foreign exchange reserves is a byproduct of monetary policy and is not specifically targeted to a certain level of foreign exchange reserves.
- **Foreign exchange (FX) market intervention** was used to smoothen exchange rate volatility, and was not aimed at attaining a certain level of exchange rate.
- **Current account deficit** was guarded at levels that were sustainable and in line with economic fundamentals.
- **Financial market deepening** was accelerated in order to enhance its function as a shock absorber, reducing price volatility in the financial market.
- **Mandatory use of onshore banks for withdrawal of export and foreign debt proceed.**
- **Bank Indonesia Certificate (SBI) minimum holding period** was implemented since 2010 to minimise the adverse impact from short-term capital inflows on monetary and financial system stability, as well as to promote other transactions in the money market and to improve effectiveness in monetary management. (Last adjusted in 2015)
- **Foreign currency reserve requirement** was adjusted in 2011 not only to serve as a monetary instrument to control money supply but also to safeguard banks' foreign currency liquidity. (Last adjusted in 2018)
- **Regulation on bank's Net Open Position (NOP)** was first implemented in 1989 and aimed to mitigate banks' foreign exchange (FX) risk exposure due to a range of possible changes in external conditions. Since 2003, changes were made to the NOP policy to shift it from a micro perspective to a more macro-based objectives, which includes financial deepening and financial system stability. More specifically, adjustment of the NOP limit in 2010 was aimed at strengthening monetary and financial stability as well as supporting medium and long term growth through financial deepening, which includes deepening of the FX domestic market. The latest adjustment to the NOP limit was in 2015 and aimed at further improving bank's flexibility in managing their FX exposures whilst still maintaining prudential principles, and supporting financial deepening by introducing more depth in the domestic FX market.
- **Regulation on bank's short term debt** was adjusted to minimise exposure to foreign exchange risks. In particular, the ceiling on bank's short-term debt was set to a maximum

of 30% of capital and an approval from Bank Indonesia was required for bank's long term debt. This regulation was further adjusted in 2013 by imposing relaxation particularly concerning the types of short term debt to be included in fulfilling the requirement.

- **Rules governing foreign exchange transactions** were implemented as part of the financial deepening effort to help stabilise domestic financial markets. In particular, foreign exchange transactions against the rupiah above certain threshold were to be supported by underlying transactions in order to prevent speculative activities.
- **Corporate External Debt Regulation** was implemented in 2014 to strengthen the resilience of corporations that have foreign debt through the adoption of prudential principals. This regulation, consisting of hedging, liquidity and credit rating requirements, aims to enhance corporate risk management practices of non-banks which will ultimately lead to rupiah economic stability in general. (Last adjusted in 2016).

### c) **Macroprudential measures**

- **Loan-to-Value (LTV) ratio** and Down Payments (DP) on motor vehicle loans was first implemented in 2012, which aims to safeguard financial stability by mitigating the buildup of macrofinancial risks in the housing and motor vehicle sector. LTV functions as a countercyclical tool to moderate mortgage loan creation and influence demand. This policy is evaluated at least once a year and had been adjusted several times in accordance to the credit cycle (adjustments made in 2013, 2015, 2016 and 2018).
- **Secondary Reserve Requirement** was first introduced in 2009 and later adjusted in 2013 to further enhance banks' resilience to liquidity risk on the back of rising inflationary pressure, current account deficit and other external pressure, which could adversely impact market liquidity and disrupt stability of the financial sector. In 2018, the secondary reserve requirement was replaced by the macroprudential liquidity buffer (MPLB). The MPLB is a countercyclical tool used to counter banks' liquidity procyclical behavior. It aims to manage speculation or excessive risk-taking due to oversupply of liquidity (mostly when credit growth is at an expansionary path) as well as to provide better liquidity flexibility to banks in times of stress (i.e. it can be used for repo to Bank Indonesia). The MPLB level is adjusted based on the credit cycle, complementary to the Countercyclical Capital Buffer (CCB).
- **Loan to Deposit Ratio-based Reserve Requirement (LDR-based RR)** was first introduced in 2010 to strengthen resiliency of the banking sector and optimize banks' intermediary function amidst worsen economic condition triggered by rising inflationary pressure. This was done by setting an optimum intermediation range with the provision of reserve requirement incentives and disincentives that takes into account bank's capital adequacy level. In 2015, the LDR was changed into the Loan to Funding Ratio (LFR) based RR, to support financial deepening by accommodating a broader based funding through the inclusion of securities issued by banks, as well as support financial inclusion initiatives by creating an incentive to surpass the upper band limit of up to 94% shall the bank meet its SMEs target loans. In 2018, further refinements to the LFR-based RR were made in which securities purchased by banks were also allowed to be acknowledged as banks' intermediation (to the real sector via the financial market). This new LFR-based RR was named the Macroprudential Intermediation Ratio (MPIR) and applies to both conventional and sharia banks.
- **Countercyclical Capital Buffer (CCB)** was implemented in 2016 at 0% and has been evaluated every 6 months. The CCB functions as a countercyclical tool to mitigate the

buildup of systemic risk from excessive credit growth. It has remained 0% since its implementation.

**d) Improvement of statistics to monitor capital flows:**

- Refinement of BOP statistics.
- Introduction and improvement of Banks Daily Report, which includes foreign exchange (FX) transactions in the spot, forward, swap and options markets, which can be utilised to monitor FX supply and demand, including from non-residents (capital flows).

These policies were pursued adjusting to specific circumstances in relation to macroeconomic and financial stability. In the period of 2010 to mid-2013 for instance, the implementation of minimum holding period of SBI had been quite effective in dampening the volatility in the SBI market, including lowering foreign capital inflows placed in SBI. In the other direction, subsequent lowering of the minimum holding period in 2013 post the taper tantrum and capital reversal had helped in stabilising the capital flows in Indonesia.

Other measures imposed to maintain stability such as the requirement for corporations to hedge their incoming FX debt repayment, together with countercyclical macroprudential tools had also contributed to stability and resilience of the financial system. After the implementation of hedging requirement and minimum liquidity ratio in 2014, corporate external debt was no longer on the rise and was stable at around USD 160 billion since 2015. The FX debt hedging requirement led to quite significant increase of the forward transactions which in turn helped improve the structure as well as the deepening of domestic FX market. As a result, it contributed to lower volatility of the rupiah exchange rate. Likewise, the LTV ratio has also played a role in returning stability as evidenced by a slight slowdown of the growth of mortgage loans.

It is important to note that while the aforementioned policies were primarily aimed to promote stability and sustainability of the Indonesian economy, these have in turn helped foster investors' confidence. This is evidenced by the fact that FDI inflows to the economy returned since the fourth quarter of 2013 after a rather sharp reversal earlier in the year as overall macroeconomic and financial stability was kept intact.

In more detail, some of the main measures mentioned above and its implementation in recent year are elaborated in the subsequent Table 1.

**Table 1: Highlight of Indonesia's Selected Stability Measures**

Stability Measures	Background/Rationale	Regulation	Impact
<b>1. SBI Minimum Holding Period</b>			
<ul style="list-style-type: none"> <li>July 2010: One month holding period</li> </ul>	<ul style="list-style-type: none"> <li>After GFC in 2008, AEs implemented quantitative easing (asset purchase). It created ample global liquidity mostly invested in financial assets and pushed capital flows to EMEs in search for higher returns.</li> <li>Capital flows surged to Indonesia – dominated by short-term portfolio investments (PI) – and invested in Bank Indonesia certificate (SBI), government bonds, corporate stocks, etc.</li> <li>Capital flows to SBI complicated monetary management. It increased volatility in SBI market, as well as in FX market. It becomes more problematic when BI has to manage inflation by increasing policy rate that will invite more capital inflows.</li> </ul>	<p>Every party –resident and non-resident – who buy SBI is not allowed to sell it back in the secondary market during a regulated time period since the date of purchase of the SBI</p> <p>This policy is intended to strengthen monetary policy by minimising disruption from short term capital inflows invested in monetary policy instrument.</p> <p>This policy was also expected to promote other transactions in the money market and to improve effectiveness in monetary management.</p>	<p>The policy was quite effective in dampening the volatility in the SBI market, including lowering foreign capital inflows placed in SBI (Figure C.1).</p> <p>Further, the declining short term inflows to SBI also reduced the volatility in the FX market.</p>
<ul style="list-style-type: none"> <li>May 2011: Six month holding period</li> </ul>			<p>The extension from one to six month holding period lowered further short term capital inflows to SBI.</p>
<ul style="list-style-type: none"> <li>September 2013: One month holding period</li> </ul>			<p>Subsequent adjustment from six to one month holding period was aimed at relaxation, post the taper tantrum that had led to a sharp drop in capital inflows to Indonesia.</p>
<ul style="list-style-type: none"> <li>September 2015: One week holding period</li> </ul>			<p>Further adjustment from one month to one week holding period was under the consideration that capital flows to SBI did not increase volatility.</p>
<b>2. Adjustment to Foreign Exchange Reserve Requirement</b>			
<ul style="list-style-type: none"> <li>February 2011: Increase FX RR</li> </ul>	<ul style="list-style-type: none"> <li>The surging capital inflows to Indonesia had pushed up bank's foreign currency liquidity. This excess FX liquidity coupled with short term portfolio nature of the capital inflows raised the risk of foreign currency instability which would threaten macroeconomic stability as a whole.</li> </ul>	<p>Foreign exchange reserves requirement was raised to 8% of third party fund (previously 1%).</p>	<p>Rupiah volatility throughout the present was maintained below peers average</p>

Stability Measures	Background/Rationale	Regulation	Impact
<ul style="list-style-type: none"> <li>April 2018: adjustment of FX RR calculation</li> </ul>	<ul style="list-style-type: none"> <li>Since 2016, Bank Indonesia had launched initiative to reformulate the operational framework of monetary policy which is aimed to increase the effectiveness of monetary policy transmission.</li> <li>In 2018 an adjustment to the calculation of FX RR was considered necessary as part of the reformulation initiative.</li> </ul>	<p>Without changing the requirement of total 8% FX RR, the calculation was adjusted from all on daily basis to a combination of daily FX RR (6%) and average FX RR (2%).</p> <p>The averaging part is functioned as interest rate buffer to absorb interest rate volatility in the financial market. The averaging of FX RR also gives room for banks to increase the efficiency of its liquidity management.</p>	<p>The measures was set to be effective starting October 2018.</p>
<b>3. Loan to Value (LTV)</b>			
<ul style="list-style-type: none"> <li>2012: LTV ratio and Down Payment for Automotive Loans</li> <li>2013: revision to LTV regulation (tightening)</li> </ul>	<ul style="list-style-type: none"> <li>At its core, the LTV policy aims to maintain financial system stability and bolster banking resilience through prudential principles. This is achieved by, among others, slowing the concentration of credit risk in the property sector as well as promoting the application of prudential principles when disbursing credit, in order to preserve sustainable growth of the property sector over the medium and long term. On the other hand, the LTV/FTV regulation also aims to provide low and middle-income earners a greater opportunity to acquire appropriate housing as well as simultaneously enhance aspects of consumer protection in the property sector.</li> </ul>	<ul style="list-style-type: none"> <li>The 2012 regulation governs, among others, maximum limits on the Loan to Value (LTV) ratio on Mortgages Loans for Landed Houses (KPR) and Flats (KPRS) with area exceeding 70 m<sup>2</sup></li> <li>In 2013, the revised regulation apply a progressive LTV/FTV ratio. The primary objective of the regulation is to anticipate potential default risk attributable to weaker repayment capacity.</li> <li>The coverage of the new LTV regulation include shop-houses and office-houses and applies</li> </ul>	<ul style="list-style-type: none"> <li>The adjustment had resulted in slight slowdown of the growth of these loans in 2013 (Figure C.2).</li> <li>The LTV regulation supported more stability and sustainability of the economy, which in turn helped restore investors' confidence.</li> <li>Capital movement inflows returned in the fourth quarter of 2013 after quite a sharp reversal earlier in the year, contributing to capital and financial account surplus of USD 9.2 billion which was higher than the previous quarter.</li> </ul>



Stability Measures	Background/Rationale	Regulation	Impact
	<ul style="list-style-type: none"> <li>Central and regional government housing schemes are exempt from the aforementioned regulation.</li> <li>In 2013, The LTV/FTV regulation was amended due to excessive credit growth in the property sector, particularly for houses and high-rises (flats and apartments) subsequent to the introduction of the LTV/FTV regulation in the middle of 2012. Excessive growth in the property sector has also affected borrower behaviour in terms of utilising bank loans/financing.</li> </ul>	<p>to both commercial banks and sharia banks.</p> <ul style="list-style-type: none"> <li>The new LTV/FTV policy regulates: (1) the treatment of married borrowers; (2) the handling of top-up credit facilities and new financing based on the property used as collateral from the previous loan; and (3) restrictions on banks providing top-up credit/financing facilities to meet downpayments on mortgage loans and/or property-backed consumer loans/financing.</li> </ul>	
<ul style="list-style-type: none"> <li>2015: relaxation of LTV (FTV) and Down Payment for Automotive Loans</li> </ul>	<ul style="list-style-type: none"> <li>The LTV regulation was relaxed in an effort to maintain the economic growth momentum.</li> <li>Considering further development in 2015 regarding the need to boost credit for the economy, the LTV regulation was relaxed. The extension to Financing to Value (FTV) was aimed to give more space for banks to enhance its intermediary function by relying not only on third party funds.</li> </ul>	<ul style="list-style-type: none"> <li>The LTV/FTV ratio for housing loan/ financing (KPR) was raised 10% for landed houses, apartments as well as home stores/home offices from 21m<sup>2</sup> to 70 m<sup>2</sup> and above and down payment for motor vehicles (two-wheelers and three-wheelers nonproductive) were reduced by 5%.</li> <li>In order to mitigate risk and avoid escalating potential credit/financing risk, the new LTV/FTV policy and downpayments could only be applied by banks that meet a</li> </ul>	<p>The relaxation did not cause a spur of capital inflows into Indonesia. Financial and capital account surplus year on year declined somewhat by the end of 2015 compared to the previous year.</p>

Stability Measures	Background/Rationale	Regulation	Impact
		<p>certain minimum requirement of non-performing loans (NPL), or non-performing financing (NPF).</p>	
<ul style="list-style-type: none"> <li>2016: relaxation of LTV (FTV) and Down Payment for Automotive Loans</li> </ul>	<ul style="list-style-type: none"> <li>The LTV and FTV ratio on housing loans, as well as downpayments on motor vehicle loans was further refined in order to stimulate banks' intermediation function while maintaining prudential principles and consumer protection.</li> </ul>	<ul style="list-style-type: none"> <li>Four amendments were made: (i) The ratio and tiering of housing loans and financing were changed for the 1st, 2nd and 3rd facilities; (ii) The requirements for total NPL and NPF of less than 5% were changed from gross to net; (iii) Top up loans from commercial banks and new financing from Islamic banks or sharia business units for existing financing shall apply the same LTV and FTV ratios as long as the loan is a performing loan; and (iv) Housing loans and financing for incomplete property are permitted up to the 2nd facility with phased liquidation.</li> </ul>	
<ul style="list-style-type: none"> <li>2018: relaxation of LTV (FTV) regulation</li> </ul>	<ul style="list-style-type: none"> <li>To further induce economic growth, in 2018, BI continued to relax the LTV regulation. The LTV/FTV policy is part of Bank Indonesia's policy mix instituted to stimulate economic growth by inducing growth in the national property sector, which still has the potential to be accelerated.</li> </ul>	<ul style="list-style-type: none"> <li>Through the new policy, Bank Indonesia has authorised the banking industry to manage the LTV/FTV applicable to the first mortgage facility in accordance with the borrower analysis and risk-management policy of each respective bank.</li> </ul>	

Stability Measures	Background/Rationale	Regulation	Impact
	<ul style="list-style-type: none"> <li>The relaxation includes (i) relaxation of the LTV ratio for property loans and FTV ratios for property financing, (ii) relaxation of total loan or financing facilities through indent mechanism, and (iii) regulation of the stages and amount of credit / financing disbursement.</li> </ul>	<p>Pursuant to the previous LTV/FTV regulation, the first mortgage facility for a landed house of <math>\leq 70\text{m}^2</math>, apartment of <math>\leq 21\text{m}^2</math> and home store/home office was set at the discretion of each respective bank. By relaxing the policy, the affected house types have been expanded to landed houses and apartments of <math>&gt;70\text{m}^2</math> and apartments of <math>22-70\text{m}^2</math>. When determining the magnitude of the LTV/FTV policy for each borrower, however, the banks are required to comply with prudential principles, meaning that only banks with a net total NPL ratio of <math>&lt;5\%</math> and a gross NPL ratio on housing loans of <math>&lt;5\%</math> may benefit from the new policy. Since the regulation was first issued, central government and local government housing programs are still exempted.</p>	
<b>4. Secondary Reserve Requirement</b>			
<ul style="list-style-type: none"> <li>2009: Secondary RR was first implemented</li> <li>2013: Adjustment to Secondary RR</li> </ul>	<ul style="list-style-type: none"> <li>The global economy and financial turbulences following the GFC could potentially have an adverse impact on bank liquidity. Thus, there was a need to instill</li> </ul>	<ul style="list-style-type: none"> <li>The Secondary Reserve Requirement was initially set at 2.5% of the third party funds in rupiah (TPF).</li> </ul>	<ul style="list-style-type: none"> <li>The adjustment of the RR and LDR and other policy responses by BI and the government had succeeded in gaining stability</li> </ul>

Stability Measures	Background/Rationale	Regulation	Impact
<ul style="list-style-type: none"> <li>2018: The secondary RR was changed into the Macroprudential Liquidity Buffer (MPLB)</li> </ul>	<p>greater liquidity flexibility for banks in order to mitigate increasing liquidity risk that could disrupt the overall banking system stability.</p> <ul style="list-style-type: none"> <li>Adjustments to Secondary Reserve Requirement in 2013 were intended to increase banks' liquidity buffer on the back of rising inflationary pressure, current account deficit and other external pressure which could adversely impact market liquidity and disrupt stability of the financial sector.</li> <li>The MPLB imposed in 2018 is a countercyclical tool used to counter banks' liquidity procyclical behavior. Similar to the previous secondary RR, it aims to manage speculation or excessive risk-taking due to oversupply of liquidity (mostly when credit growth is at an expansionary path), but at the same time, it also aims to provide better liquidity flexibility for banks in times of stress (i.e. it can be used for repo to the central bank). The MPLB level is adjusted based on the credit cycle, complementary to the Countercyclical Capital Buffer (CCB).</li> </ul>	<ul style="list-style-type: none"> <li>In 2013, the Secondary RR was increased to 4% of the third party funds in rupiah (TPF). The instruments acknowledged as Secondary RR were extended to include Bank Indonesia Certificates of Deposits.</li> <li>The MPLB regulation applies to both conventional and sharia banks. It was first stipulated in July 2018 and set at 4% of the third party funds in rupiah similar to the previous Secondary RR rule. The regulation stipulated that 2% of the third party funds in rupiah can be used for repo to Bank Indonesia.</li> <li>In November 2018 the percentage of MPLB that can be used for repo to BI is increased to 4%</li> </ul>	<p>and restoring investor perceptions of the outlook for investment in Indonesia</p> <ul style="list-style-type: none"> <li>In the fourth quarter of 2013, the capital and financial account booked a surplus of USD 9.2 billion, higher than that of the previous quarters. This rise was attributable to foreign capital inflows in other investments and portfolio investments, in particular Indonesian government bonds. Direct investment was also maintained in surplus, albeit down from that of the previous quarter due to ongoing uncertain global economic and financial conditions.</li> <li>In 2014, investors remained resolute in their holdings of domestic financial assets as the position of non-resident investments in Indonesia's IIP increased to USD 419.8 billion from USD 370.5 billion in 2013. The positive perception of investors concerning economic stability in Indonesia, coupled with attractive returns, exceeded negative global and domestic sentiment in 2014.</li> </ul>

Stability Measures	Background/Rationale	Regulation	Impact
<b>5. LDR-based Reserve Requirement</b>			
<ul style="list-style-type: none"> <li>• 2010: LDR-based RR was introduced</li> <li>• 2013: Adjustment to LDR-based RR</li> <li>• 2015: The LDR-based RR was changed to LFR-based RR</li> </ul>	<ul style="list-style-type: none"> <li>• LDR-based RR was first introduced in 2010 and refined in 2013 on the back of excess liquidity and rising inflationary pressure, which heightened the need to strengthen resiliency of the banking sector and optimize banks' intermediary function. This is done by setting an optimum intermediation range with the provision of reserve requirement incentives and disincentives that takes into account bank's capital adequacy level.</li> <li>• In 2015, the LDR-based RR was changed into the LFR-based RR to support financial deepening by accommodating a broader based funding through the inclusion of securities issued by banks, as well as support financial inclusion initiatives by creating an incentive to surpass the upper band limit of up to 94% shall the bank meet its SMEs target loans.</li> </ul>	<ul style="list-style-type: none"> <li>• Initially the LDR-based RR set an LDR target range of 78% to 100%, with an exception for banks that have capital above 14%. They are allowed to surpass the upper band limit.</li> <li>• In 2013, the upper band limit was changed from 100% to 92%.</li> <li>• In 2015, the LFR changed the lower band limit of 100% to 78% so the target range became 78% to 92%. Banks could surpass the upper band up to 94% if banks have fulfilled their SMEs financing target and have gross NPL of SMEs and total loans less than 5%. Securities issued by banks that are allowed to be accounted as funding include MTN, FRN and bonds (other than subordinated bonds) subject to several other criteria (i.e. rating).</li> <li>• Banks that could not achieve the LFR target range shall be subject to a requirement of additional statutory reserve requirements (RR).</li> </ul>	<ul style="list-style-type: none"> <li>• In the fourth quarter of 2015, foreign portfolio inflows rebound and increased. External debt in the other investment category also increased in the second half of 2015, especially long term debt.</li> <li>• The relaxation to the new RR-LFR has contributed to stronger economic growth and investors' positive perception to the Indonesian economy. This, coupled with attractive return had led to increased capital inflows toward the end of 2015.</li> </ul>

Stability Measures	Background/Rationale	Regulation	Impact
<ul style="list-style-type: none"> <li>2018: The LFR-based RR was changed into the Macroprudential Intermediation Ratio (MPIR)</li> </ul>	<ul style="list-style-type: none"> <li>In 2018, further refinements to the LFR-based RR were made in which securities owned by banks were allowed to be acknowledged as banks' intermediation (to the real sector via the financial market). This new LFR-based RR was named the Macroprudential Intermediation Ratio (MPIR). The enhancement was made to reinforce financial deepening.</li> </ul>	<ul style="list-style-type: none"> <li>The MPIR target range was set at 80% to 92% with the same capital adequacy minimum incentive of 14% to surpass the upper band limit.</li> <li>Securities owned by banks that are allowed to be accounted in the MPIR include non-bank corporate bonds or sukuk subject to several other criteria (i.e. rating, ownership, etc.).</li> <li>The new policy applies to both conventional and sharia banks, whilst the previous LFR-based RR only applied to conventional banks.</li> </ul>	
<b>6. Countercyclical Capital Buffer (CCB)</b>			
<ul style="list-style-type: none"> <li>2016: Effective at 0% as of January 2016</li> </ul>	<ul style="list-style-type: none"> <li>The CCB functions as a countercyclical tool to mitigate the buildup of systemic risk from excessive credit growth.</li> </ul>	<ul style="list-style-type: none"> <li>The CCB is set at 0% and is evaluated every 6 months.</li> </ul>	
<b>7. Regulation on Bank's Net Open Position (NOP)</b>			
<ul style="list-style-type: none"> <li>NOP limit was first implemented in 1989 and has changed many times taking into account the economic cycle.</li> </ul>	<ul style="list-style-type: none"> <li>The policy was implemented with an aim to mitigate banks' foreign exchange (FX) risk exposure due to a range of possible changes in external conditions. Excessive net open FX position can expose banks to material losses due to the volatility of the underlying currencies.</li> <li>Since 2003, changes were made to the NOP policy to shift it from a micro perspective to a more macro-based objectives, which includes</li> </ul>	<ul style="list-style-type: none"> <li>1989: NOP 25% end of day</li> <li>1994: Overall (on &amp; off B/S) NOP end of day 20% of capital</li> <li>2003: Overall NOP end of day (20%); &amp; overall end of day incorporating market risk (30%)</li> <li>2004: Overall NOP end of day (20%); and NOP of Mid &amp; End of Day Balance Sheet (20%)</li> </ul>	

Stability Measures	Background/Rationale	Regulation	Impact
	financial deepening and financial system stability.	<ul style="list-style-type: none"> <li>• 2005: Overall NOP &amp; end of day balance sheet (20%); and NOP at any time (20%)</li> <li>• 2010: Revocation of Balance Sheet NOP, Overall NOP end of day (20%); and NOP 30 Minutes (20%)</li> <li>• 2015: Revocation of 30 Minutes NOP, Overall NOP end of day (20%)</li> </ul>	
<b>8. Adjustment of Bank's Short-Term Debt Regulation</b>			
<ul style="list-style-type: none"> <li>• August 2013: Relaxation of Bank's Short Term Debt Regulation</li> </ul>	<ul style="list-style-type: none"> <li>• Global economic challenges in 2013 worsened Indonesia's external balance and put pressure on the rupiah.</li> <li>• Under the existing regulation, banks were required to include non-resident Rupiah checking account as short term debt (regulated to be limited up to 30% of bank's capital). This in turn put pressure on the Rupiah since banks accordingly asked non-resident customers to convert their rupiah fund to foreign currency.</li> </ul>	<p>Under regulation stipulated in 2005, banks are obligated to limit its daily outstanding short term debt up to 30% of bank's capital. This regulation was relaxed in 2013, whereby non-resident's checking account funded from certain types of transactions are excluded from the calculation of bank's short term debt.</p> <p>The 2013 policy is intended to reduce demand for foreign exchange from non-resident. Banks previously required their non-residents customers to convert their rupiah current account to foreign exchange in order for banks to meet the 30% short term debt limit.</p>	<p>While the Rupiah was under pressure, which was similar with the currency of other emerging country peers, the volatility trended down since Q4 2013 through 2014.</p>
<b>9. Rule on Foreign Exchange Transactions</b>			

Stability Measures	Background/Rationale	Regulation	Impact
<ul style="list-style-type: none"> <li>September 2014: Regulation on Foreign Exchange Transactions against Rupiah between Banks and Domestic Parties</li> </ul>	<ul style="list-style-type: none"> <li>2013-2014 global economic uncertainty among others from the Fed's plan for policy normalisation had spurred a worsening of external balance with pressure on current account and financial account (capital outflows). Rupiah was accordingly under pressures. In the meantime, Indonesia's shallow financial market add to the risk of volatility, including from foreign exchange transactions not backed by real economic activities.</li> </ul>	<p>Foreign exchange transactions against Rupiah performed by banks with customers above certain thresholds must have underlying transactions, with the scope of underlying transactions wide enough to give flexibility.</p> <p>The measures is expected to prevent speculative activities as well as encourage the deepening of domestic foreign exchange market through enhancement of foreign exchange transactions that relate to economic activities, and to contribute to financial market stability</p>	<p>The policy is part of BI's various measures to deepen domestic financial market, which overall has contributed to more active FX market as reflected in higher daily transaction volume (increasing 11.7% in 2015 from 2014; or 0.52% of GDP in 2015 from 0.48% in 2014).</p> <p>Another indication of more active FX market is the decline of rupiah bid-ask spread in 2014, reaching 8.4 points or below the historical figure of 11 points.</p> <p>More active FX transactions helped reduce liquidity risk which would otherwise put pressure on the rupiah exchange rate.</p> <p>Accordingly, volatility of Rupiah exchange rate also declined in Q4 2014, and although heightened in 2015 due to challenging global condition, was curbed below emerging market's average.</p>
<b>10. Corporate External Debt Regulation</b>			
<ul style="list-style-type: none"> <li>2014: Enhanced Corporate Risk Management on External Debt</li> </ul>	<ul style="list-style-type: none"> <li>In 2014, greater foreign exchange supply originated from the private sector in the form of external debt, which rapid growth was fuelled by strong domestic demand to support national economic activity. External funds also remained abundant and cheap compared to domestic funding, thus</li> </ul>	<p>Obligation on non-bank corporations:</p> <ul style="list-style-type: none"> <li>Hedge a minimum of 20% of the negative balance between foreign currency assets and foreign currency liabilities</li> </ul>	<ul style="list-style-type: none"> <li>In terms of compliance to the regulation, as June 2017, around 90% of corporations with foreign debt has complied with the hedging obligation. Those that have fulfilled the minimum</li> </ul>



Stability Measures	Background/Rationale	Regulation	Impact
	<p>compelling the private sector to seek external loans.</p> <ul style="list-style-type: none"> <li>● In less than a decade, total private sector external debt has skyrocketed three-fold from USD54.3 billion at the end of 2005 to USD163.2 billion in October 2014. The position of private external debt at the end of 2014 accounted for 55.7% of total external debt in Indonesia amounting to USD293 billion. Of this private external debt, 30% was short term.</li> <li>● Growing private external debt produced potential macroeconomic risks in the Indonesian economy. From an external standpoint, the possibility of tighter global liquidity and the downward export commodity price trend reduced corporate repayment capacity, particularly of exporters, which spurred currency mismatch risk and liquidity risk. Domestically, growing external debt was accompanied by a rising debt service ratio (DSR), which is indicative of potential overleverage risk</li> <li>● As a consequence, FX demand in the spot market is dominated by corporates for debt repayment. Corporates usually buy FX just before the due date. As a result, corporates were exposed to FX risk and rupiah also frequently faced enormous pressure.</li> </ul>	<p>with a maturity period of up to six months.</p> <ul style="list-style-type: none"> <li>● Liquidity ratio: maintain foreign currency assets equivalent to 50% of foreign currency liabilities with a maturity period of 3 months. The Liquidity Ratio has been increased to 75% since January 2016.</li> <li>● Credit Rating: Non-bank corporation that want to issue/sign new foreign debt since January 2016 is required to have credit rating minimum of BB-.</li> </ul> <p>This policy is aimed at improving risk mitigation of nonbank corporations especially in managing FX risk, liquidity risks and overleverage risk.</p>	<p>liquidity ratio is around 87% (Figure C.4).</p> <ul style="list-style-type: none"> <li>● The regulation significantly improved risk mitigation of nonbank's foreign debt and reduced Indonesia external vulnerability.</li> <li>● The hedging requirement increased the forward transaction quite significantly (Figure C3). The increase in forward market has improved the structure as well as the deepening of domestic FX market. As a result, it contributed to lower volatility of the rupiah exchange rate.</li> </ul>



## Chartpack – Indonesia

The policy of Minimum Holding Period of CB Bills effectively affects capital inflows to CB Bills (SBI)

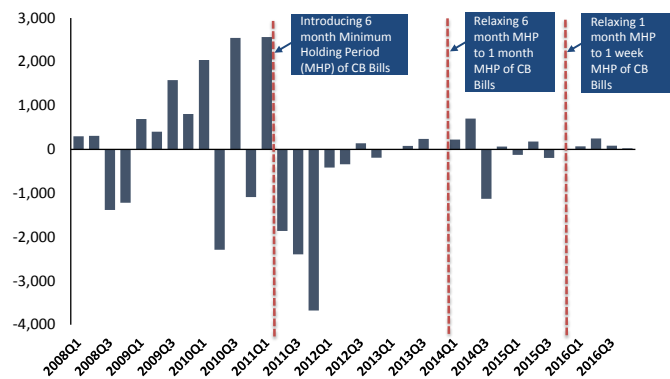


Figure C.1. Capital Inflows to CB Bills

The LTV ratio results in a slowdown of the growth of mortgage loans

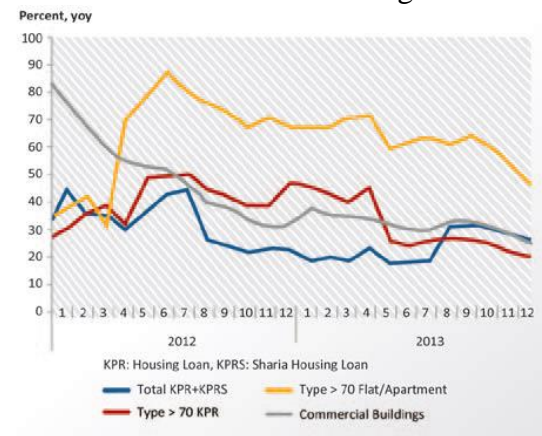


Figure C.2. Mortgage Loans

The hedging requirement regulation increases the daily average of forward buy transaction particularly in the end of each quarter

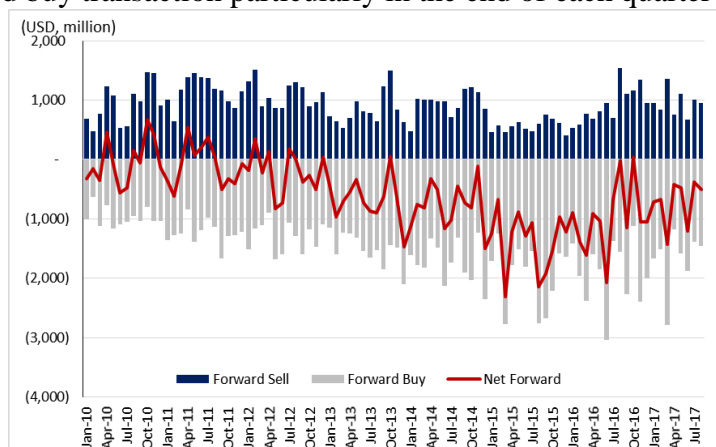


Figure C.3. FX Forward Transactions

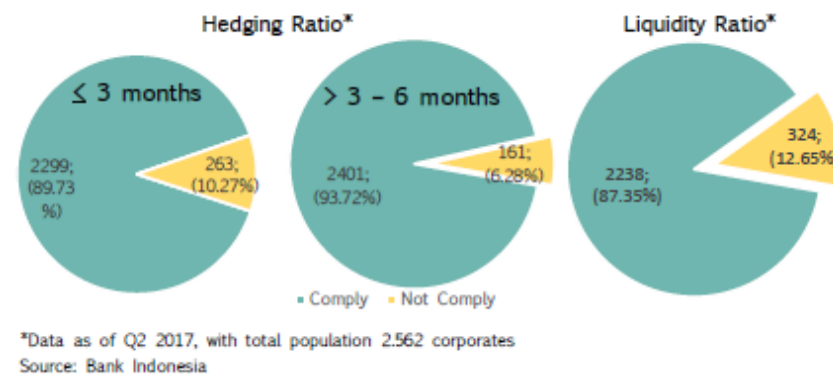


Figure C.4. Compliance Rate on Hedging and Liquidity Requirements

## Appendix 3

### Malaysia's Foreign Exchange Administration Rules (FEA)

Measures undertaken	Rationale
<b>FEA after the Asian Financial Crisis</b>	
<ul style="list-style-type: none"> <li>• Regulation of external account transactions of non-residents</li> </ul>	(a) Contain negative repercussions of ringgit prices volatility
<ul style="list-style-type: none"> <li>• Requirement for short-term capital flows to remain in the country for one year</li> </ul>	(b) Stabilise short-term capital flows arising from portfolio investments by non-residents
<b>FEA liberalisation (2002-2013)</b>	
<ul style="list-style-type: none"> <li>• Access to competitive financing for resident companies through foreign currency borrowing from licensed onshore banks and non-resident companies within group</li> </ul>	(a) Facilitate the expansion of the private sector's productive capacity abroad (b) Enhance financial management efficiency for resident companies within group
<ul style="list-style-type: none"> <li>• Facilitate productive direct investment abroad, subject to prudential requirements</li> </ul>	(c) Support the presence of domestic businesses globally (d) Promote more flexible cross-border capital mobility for productive purposes
<ul style="list-style-type: none"> <li>• Promote international trade settlement using local currencies</li> </ul>	(e) Provide greater flexibilities for exporters, importers and investors in managing foreign exchange risks and facilitate settling of trade and investment in local currencies

## Appendix 4

### Summary of the BOT's anti-speculative measures during 2003–2017

Date	Detail of measures
Sep 2003	For underlying trade or investment, financial institutions can borrow Thai baht or enter into transactions comparable to baht borrowing from non-residents up to underlying value. However, for transactions without underlying trade and investment, financial institutions can borrow Thai baht or enter in transactions comparable to baht borrowing from non-residents for only up to THB 50 million per entity only for a maturity not more than three months.
Oct 2003	The daily outstanding balance of the Non-resident Baht Account is limited to a maximum of THB 300 million per non-resident. Exceptions to this limit are considered on a case by case basis by the BOT.
Nov 2003	Financial institutions are not allowed to undertake non-deliverable forward (NDF) transactions against Thai Baht with Non-Residents (NRs) except rollover transactions and transactions to be terminated due to settlement failure (unwind) caused by the counter party being unable to seek sufficient liquidity to fully settle the transaction.
Nov 2006	<ul style="list-style-type: none"> <li>- The BOT seeks cooperation from financial institutions not to issue and sell bills of exchange in baht for all maturities to non-residents.</li> <li>- Financial institutions can borrow Thai baht or enter in transactions comparable to baht borrowing from non-residents without underlying trades and investments in Thailand for only up to THB 50 million per group of entity only for a maturity not more than three months.</li> </ul>
Dec 2006	<ul style="list-style-type: none"> <li>– Financial institutions are asked to refrain from selling and buying all types of debt securities through sell-and-buy-back transactions for all maturities. Such transactions are financial instruments which non-residents can use to evade the BOT's anti-speculation measures.</li> <li>– Financial institutions are allowed to buy and sell foreign currencies with non-residents or to credit THB into or debit THB from the Non-resident Baht Accounts for the settlements relating to investments in government bonds, treasury bills or BOT bonds only when such investment holdings are longer than three months.</li> <li>– Financial institutions are allowed to borrow baht or enter into transactions comparable to baht borrowing from non-residents without underlying trades and investments in Thailand only for a maturity not more than six months (previously three months)</li> </ul>
Feb 2008	<ul style="list-style-type: none"> <li>- For transactions without underlying trade and investment in any maturity, financial institutions can borrow Thai baht or enter in transactions comparable to baht borrowing from non-residents for only up to THB 10 million per group of entity (previously THB 50 million per group of entity).</li> <li>- The daily outstanding balance of the Non-resident Baht Account for securities is limited to a maximum of THB 300 million per non-resident. Exceptions to this limit are considered on a case by case basis by the BOT.</li> </ul>

**The BOT's selected measures and relaxation of controls on capital outflows and FX regulations, 2002-2017**

Date	Direct investment abroad	Portfolio investment abroad	Foreign Currency Deposit (FCD)	Others
2002		Mutual funds are allowed to make portfolio investments abroad of up to USD 200mn per year.		
2003		Upon approval by the BOT, six types of institutional investors; namely government pension funds, social security funds, provident funds, mutual funds (excluding private funds), insurance companies and specialised financial institutions, are allowed to invest abroad, in: (1) debt securities issued by the Thai government and corporates, and (2) sovereign and quasi-sovereign debt instruments issued by non-residents, subject to annual limits set by the authorities.		Imposing a 70% LTV limit on high-value residential properties ( $\geq$ THB 10 mn)
2006			Allowing individuals and juristic persons with foreign currency (FC) earnings and having future obligation within 6 months to deposit into FCD up to the outstanding limit of USD 0.5 mn and USD 50 mn, respectively	

Date	Direct investment abroad	Portfolio investment abroad	Foreign Currency Deposit (FCD)	Others																		
2007	<ul style="list-style-type: none"> <li>-Thai parent companies are allowed to invest in or lend to subsidiary<sup>19</sup> and affiliated companies abroad up to USD 50mn per company per year.</li> <li>- Thai subsidiary companies are allowed to invest in or lend to their parent and affiliated companies ab As it has been observed, a country decides on a range of policy options based on policy objectives, rather than their classification given by IFIs increased up to USD 20mn per company per year</li> <li>- Companies listed in the Stock Exchange of Thailand (SET) are allowed to invest in or lend to subsidiary and affiliated companies abroad up to USD 100mn per year</li> </ul>	<ul style="list-style-type: none"> <li>- Seven types of institutional investors including securities companies are allowed to invest in oversea securities, including Thai securities<sup>20</sup> issued abroad with no limit, and in foreign securities abroad up to an outstanding balance of USD 50mn per investor with no prior approval.</li> <li>- The BOT approves an investment quota of a USD 10bn outstanding balance to the SEC (Securities and Exchange Commission Thailand) to be allocated among investors under the SEC such as, mutual fund, pension fund and private funds for purchasing overseas securities</li> </ul>	<ul style="list-style-type: none"> <li>- Allowing individuals and juristic persons with FC earnings but without future obligation to deposit into FCD up to the outstanding limit of USD 0.05 mn and USD 2mn, respectively.</li> <li>- Residents with foreign currencies originated abroad can deposit up to the outstanding limit as follows;</li> </ul> <table border="1" data-bbox="1176 603 1624 774"> <thead> <tr> <th></th> <th>Individual</th> <th>Juristic person</th> </tr> </thead> <tbody> <tr> <td>With obligations within 12 months</td> <td>USD 1mn</td> <td>USD 100mn</td> </tr> <tr> <td>Without obligations</td> <td>USD 0.1 mn</td> <td>USD 5 mn</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>- Residents with foreign currencies bought, exchanged, or borrowed from authorised financial institutions (foreign currencies originated domestically) can deposit up to the outstanding limit as follows;</li> </ul> <table border="1" data-bbox="1176 1034 1624 1204"> <thead> <tr> <th></th> <th>Individual</th> <th>Juristic person</th> </tr> </thead> <tbody> <tr> <td>With obligations within 12 months</td> <td>USD 0.5mn</td> <td>USD 50mn</td> </tr> <tr> <td>Without obligations</td> <td>USD 0.05mn</td> <td>USD 0.2mn</td> </tr> </tbody> </table>		Individual	Juristic person	With obligations within 12 months	USD 1mn	USD 100mn	Without obligations	USD 0.1 mn	USD 5 mn		Individual	Juristic person	With obligations within 12 months	USD 0.5mn	USD 50mn	Without obligations	USD 0.05mn	USD 0.2mn	<ul style="list-style-type: none"> <li>- The limit of fund remittances by Thai residents to a family member who is a permanent resident abroad is raised to USD 1mn.</li> <li>- Relaxing the repatriation requirement for Thai residents with foreign currency receipts by extending the period in which such receipts must be brought into the country to 360 days.</li> </ul>
	Individual	Juristic person																				
With obligations within 12 months	USD 1mn	USD 100mn																				
Without obligations	USD 0.1 mn	USD 5 mn																				
	Individual	Juristic person																				
With obligations within 12 months	USD 0.5mn	USD 50mn																				
Without obligations	USD 0.05mn	USD 0.2mn																				

<sup>19</sup> Subsidiary company here refers to a foreign company of which 10% of shares are held or owned by a Thai parent company.

<sup>20</sup> Thai Securities is the securities issued by Thai resident in abroad.

<b>Date</b>	<b>Direct investment abroad</b>	<b>Portfolio investment abroad</b>	<b>Foreign Currency Deposit (FCD)</b>	<b>Others</b>
2008	Further relaxing for Thai parent companies, Thai subsidiary companies and companies in the SET to invest in or lend to subsidiary and affiliated companies abroad such as raising amount limit of Thai parent companies up to USD 100 mn per year	<ul style="list-style-type: none"> <li>- Increasing the investment quota of overseas securities for the SEC from up to a USD 10bn to USD 30 bn outstanding balance</li> <li>- Upon approval by the BOT, retail investors are allowed to invest in oversea securities through local intermediaries within the amount limit allocated by the SEC</li> </ul>	<ul style="list-style-type: none"> <li>– Removing the outstanding limit on FCDs whose foreign currencies are originated abroad for both individuals and juristic persons.</li> <li>– Raising the limit on FCDs for residents with foreign currency originated domestically</li> </ul>	Increasing the limit for purchase of properties abroad from USD 1 mn to USD 5 mn.
2009		Eight types of institutional investors including Thai juristic persons with assets of at least THB 5 bn are allowed to invest in overseas securities		High-value mortgages ( $\geq$ THB 10 mn): Increasing LTV limit for high-value mortgage from 70% to 80% and imposing higher risk-weighted capital charge of 75% for loans with LTV greater than 80%, otherwise risk-weighted capital charge of 35%
2010	<ul style="list-style-type: none"> <li>- Thai companies and individuals are allowed to invest in or lend to subsidiary and affiliated companies abroad without limit (as necessary) and up to USD 100 mn, respectively.</li> <li>- Thai companies are allowed to lend to non-affiliated business entities abroad up to USD 50 mn.</li> </ul>	Increasing the investment quota of overseas securities for the SEC from up to a USD 30bn to USD 50bn outstanding balance.	Raising the outstanding limit on FCDs for residents with foreign currencies originated domestically without obligations up to USD 0.5mn.	Increasing the limit for purchase of properties abroad from USD 5 mn to USD 10 mn.
2012		- Nine types of institutional investors including company listed in the Stock Exchange of Thailand are allowed to invest in overseas securities		High-rise property ( $<$ THB 10 mn): Imposing risk-weighted capital charge of 75% for loans with LTV greater than 90%, otherwise risk-weighted capital charge of 35%



Date	Direct investment abroad	Portfolio investment abroad	Foreign Currency Deposit (FCD)	Others
		- Expanding list of permitted type of overseas securities, including foreign currency denominated bond issued and offered in Thailand.		
2013	Removing the amount limit for individuals investing in or lending to subsidiary and affiliated companies abroad	- Institutional investors are allowed to invest in overseas securities without limit, where such investment shall not exceed the limit set by the supervisory authority of the investors. - Increasing the investment quota of overseas securities for the SEC from up to a USD 50 bn to USD 75 bn outstanding balance.	Raising the outstanding limit on FCDs for residents with foreign currencies originated domestically with obligations up to obligations amount	Low-rise property (< 10 mn THB): Imposing risk-weighted capital charge of 75% for loans with LTV greater than 95%, otherwise risk-weighted capital charge of 35%.
2015		Ten types of institutional investors including derivatives dealer are allowed to invest in overseas securities	Raising the outstanding limit on FCDs for residents with foreign currencies originated domestically without obligations up to USD 5 mn	Increasing the limit for purchases of properties abroad from USD 10 mn to USD 50 mn.
2016		Thai juristic persons or individuals having investments in securities or derivatives or deposits of at least THB 100 mn are allowed to invest in overseas securities up to 5mn per year.		
2017		Increasing the investment quota of overseas securities for the SEC from up to a USD 75 bn to USD 100 bn outstanding balance.		
2018		Thai Juristic persons or individuals having investments in securities or derivatives or deposits of at least THB 50 mn but less than THB 100 mn are allowed to invest in overseas securities up to USD 1 mn per year.		

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