POLICY RESPONSES IN ASIA TO CHANGING CAPITAL FLOWS
MANAGING CAPITAL FLOWS: INDONESIA’S EXPERIENCE

By

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1. Introduction

In today’s era of openness, monetary policy in one country is becoming mutually interdependent with other countries. The determination of a policy becomes more complex where one should pay attention to the condition of neighboring countries, as well as emerging markets and advanced countries, in addition to the condition of the domestic economy. A clear example of the interdependency policy is quantitative easing policy by the US.

Quantitative easing can be categorized as an unconventional monetary policy. This policy is aimed to stimulate the economy, such as increasing the rate of inflation and employment. This policy is done at the time of standard monetary policy through interest rate channel is no longer effective due to the zero lower bound. Given the level of interest rates are too low, the policy is taken to increase the supply of money by buying some financial assets. Expected impact of QE is an increased price of financial assets and a declining yield of bonds.

QE has been implemented by Japan in the early 2000s, followed by the UK, the Euro Zone, and the US (2008-present). The real impact of QE1 (Nov-08), Q2 (Nov-10), and QE3 (Sept-12) is some amount of liquidity pumped by the US into the global economy. What happens is that there is a capital flight from the US to emerging markets which offer a higher return. The money spent by the Fed was not solely used to augment the supply of credit to local business in the US, but the non-US bank invested the money into emerging markets. This policy is received a harsh criticism from the BRIC countries (Brazil, Russia, India, and China). They argue that this policy is the same as protectionism and competitive devaluation policies. This is due to capital outflow in the US that makes the USD depreciate. Meanwhile, the opposite is happening in emerging markets where their appreciating currency which will hurt the export performance. In addition, large capital inflows will lead to excess liquidity and cause asset price bubbles, such as in stock and property.

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The beginning reduction of QE (tapering) in June 2013 had an impact on foreign capital outflows in some emerging markets, including Indonesia. The ‘tapering of’ policy which began in January 2014 has caused currencies in some emerging markets to depreciate.

Based on the IMF’s Global Financial Stability Report of April 2014, capital inflows to emerging markets in 2013 were slightly lower than those in 2012. Capital inflows are still dominated by FDI. Compared to 2012, portfolio investment in 2013 is slightly lower. According to the report, during the global financial crisis in 2008 there were capital outflows, especially of the portfolio investment type. While the FDI and other investment remained positive.

The report also mentions that the foreign investors in local government bonds on average increased in 2013 compared to 2009. For example, in Indonesia the share of foreign investors who buy the government bonds in 2009 was about 19% and increased up to around 32% in 2013. While in Malaysia, foreign investors in government bonds increased from around 18% in 2009 to around 42% in 2013. This shows that the Fed’s QE policy has an impact on EM.

The majority of the portfolio inflows to emerging markets are bond purchases, while equity purchases are still limited. The largest bonds purchase by foreigners is in Malaysia (about 6% of GDP), followed by Mexico, Poland, Turkey, Chile, Indonesia (2% of GDP), Thailand, Brazil, and the Philippines. Inflows to Asia were supported by benign global financial conditions and the improved growth prospects. The turnaround in flows to the region from last September 2003 has been led by equity inflows.

According to IIF (May 2014), capital inflows are expected to remain sizeable this year and next at around $600 billion each year, assuming no major surprises in the path of Fed’s exit. EM Asia is set to continue to account for more than half of total capital flows to emerging markets, underpinned by solid growth prospects, the commitment to macroeconomic stability and gradual capital account liberalization.

In theory, there are two factors that drive capital inflow, namely push factors and pull factors. Push factors are related to the economic cycle, monetary policy, structural changes and other developments in investor countries. These factors “push” capital from industrial countries to developing countries. On the other hand, pull factors are related to reforms and better prospects in the recipient countries. These “pull” capital into developing countries from industrial countries.
Table 1: Push and Pull Factors of Capital Flows

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>CYCLICAL</th>
<th>STRUCTURAL</th>
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<tbody>
<tr>
<td>PUSH</td>
<td>• Low US interest rates</td>
<td>• International portfolio diversification</td>
</tr>
<tr>
<td></td>
<td>• Low global risk aversion</td>
<td>• Low AE potential growth</td>
</tr>
<tr>
<td></td>
<td>• Strained AE balance sheets</td>
<td></td>
</tr>
<tr>
<td>PULL</td>
<td>• High commodity prices</td>
<td>• Improving EM balance sheets</td>
</tr>
<tr>
<td></td>
<td>• High domestic interest rates</td>
<td>• High EM potential growth</td>
</tr>
<tr>
<td></td>
<td>• Low domestic inflation</td>
<td>• Trade openness</td>
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Capital inflows are fundamentally beneficial to EMEs, such as easing financing constraints for productive investments, allowing diversification of investment risk, promoting inter-temporal trade, contributing to development of financial markets, institutional development which is better governance of public & private sectors. However, sudden surges also raise concerns for macroeconomic stability, such as exchange rate pressures, inflation, overheating, fiscal profligacy, and over-borrowing. A surge on capital inflows could also jeopardize financial stability, such as asset price bubbles, financial fragilities (e.g. currency and maturity mismatches).

2. Policy Responses to Capital Flows

In response to capital flows, policy options that can be done are through monetary & fiscal policy, macro-prudential policy, and structural policy.

Monetary policy is the process by which the monetary authority of a country controls the supply of money, often targeting a rate of interest, for the purpose of promoting economic growth and stability (e.g.: exchange rate policy, foreign exchange market intervention).

Fiscal policy is the use of government revenue collection (mainly taxes) and expenditure (spending) to influence the economy. According to Keynesian economics, when the government changes the levels of taxation and government spending, it influences aggregate demand and the level of economic activity.

Macro-prudential policy is the approach to financial regulation aimed to mitigate the risk of the financial system as a whole (or "systemic risk"). The main goal of macro-prudential regulation is to reduce the risk and the macroeconomic costs of financial instability (e.g: Capital Flow Management and regulatory measures).
Structural policy, sometimes an economy’s problems are deeper and longer lasting than excessive or inadequate demand, usually as a result of government policies or private practices that impede efficient and fair production of goods and services—that is, supply. Fixing such problems require changes to the economy, called structural policies (IMF).

For countries experiencing a surge in inflows, choosing appropriate responses can be challenging given the uncertainties associated with the causes and effects of the inflows and with possible policy reactions. The variety of policy responses adopted, and their potential multilateral implications suggest the importance of developing a broadly accepted framework for considering policies to deal with capital flows.

They are several core elements of a possible policy framework for Managing Capital Flows:

• The exchange rate should be allowed to appreciate when it is undervalued on a multilateral basis (real effective exchange rate REER).
• Countries with foreign exchange reserves that are not more than adequate from a precautionary perspective can respond to inflows by building reserves.
• Lowering policy rates consistent with inflation objectives.
• CFMs may be needed to mitigate the risks under certain conditions: the exchange rate is not undervalued on a multilateral basis (REER) in relation to medium-term fundamentals, reserves are in excess of adequate precautionary levels or sterilization costs are excessive, the economy is overheating, fiscal tightening measures are already in place.
• CFMs could be used to complement fiscal tightening plans that are already in place.
• Targeted CFMs that do not discriminate based on residency can be a second line of defense to address macroeconomic and financial stability risks.
• Removing CFM regulations under conditions of reduced risks.
• The design and implementation of CFMs should depend on country-specific circumstances and considerations of effectiveness and efficiency.
• Strengthening organizational framework.

Capital flows are a central feature of the international monetary system. A key challenge facing policy makers worldwide, and especially among G20 countries, is how to reap the benefits from financial globalization, while preventing and managing risks that could undermine financial stability and sustainable growth at the national and global level. In order to help addressing the challenges posed by large and volatile capital flows, G20 members, drawing on countries’ experiences, have come to the following conclusions, which should be seen as a non-binding contribution to their decision making process regarding capital flow management measures, and not as a limitation of national policy choices. Some points are:
No obligation to liberalize capital account under IMF legal framework.

CFM measures are designed to influence both residency based (capital control) and non-residency based.

CFMs should be approached with economic perspective and financial risk management.

Application of CFMs depends on country specific circumstances. There is no one-size-fits-all approach.

CFMs are executed counter-cyclically, considering global and domestic condition (macroeconomic and financial stability).

CFMs should be scaled back when capital inflow pressures ease.

CFMs have a substantial impact on inflows and therefore merit greater scrutiny because they could potentially be used to substitute for appropriate macroeconomic policies. Such measures could divert inflows to other countries, thereby implying significant externalities. It is therefore useful to draw a line between CFMs—measures that are designed to influence flows—and structural and prudential policies that are not designed to influence capital inflows, which would not fall under the CFM umbrella and thus not merit greater scrutiny. These non-CFM measures do not discriminate by residency and typically, but not always, do not differentiate by currency. Included here are policies designed to strengthen the institutional framework by increasing the capacity of the economy to absorb capital inflows (e.g., measures aimed at developing local bond markets) or ensuring the resilience and soundness of financial institutions (e.g., capital adequacy and loan-to-value ratios, limits on net open foreign exchange positions, and limits on foreign currency mortgages). These non-CFM measures tend to be of a permanent nature, instead of being deployed temporarily in reaction to an inflow surge, like CFMs. As such, non-CFMs would not tend to have the same macroeconomic and multilateral effects as CFMs, namely to slow currency appreciation and/or divert capital flows to other countries, and could therefore be used any time.

As is evident, the classification of a particular measure along the spectrum as CFM or non-CFM requires the exercise of judgment as to whether, in fact, the measure was designed to influence capital flows. While the characteristics of a measure will be a primary indicator, measures that share similar features could, depending on circumstances, fit in different categories. For example, a measure could, on the surface, be considered a non-CFM or a non-residency-based CFM. Therefore, the actual classification of measures would need to be undertaken in view of the totality of country circumstances, including in the context of the entire package of measures that is implemented. This conceptual framework is applied in Figure below, which contains some illustrative examples of recent measures taken in the seven country cases. The figure also demonstrates that boundaries separating the categories along the spectrum of measures can be porous, and some measures might straddle different categories.
3. Indonesia's Experience

As mentioned in the Capital Flows and Exchange Rate Act (Act No. 24/1999), Indonesia adopted an open capital account. Meanwhile, Chinn and Ito (2008) empirically found that among ASEAN-5 countries, Indonesia is the second most opened country after Singapore in the term of capital account openness. Moreover, based on capital control index, Indonesia is a country with low capital control compared to its peers and even lower than India and China.

However, Prasad and Rajan (2008) argued that relationship between capital account openness and growth remains inconclusive. Furthermore, Kose et al. (2006) concludes that premature capital account openness could hurt the economy through bad structure of capital inflows, sudden stops, and capital reversal. In Indonesia's experience, the deluge of foreign capital inflows has encouraged rupiah to appreciate, but on the other hand it potentially undermines purchasing power and the current account. Due to investor's herding behavior,
excess flows can reverse suddenly in the event of a change in market sentiment. Thus, deep financial sector, effective supervision, and sound macroeconomic policy are needed to overcome the bad effect of capital account openness. After the GFC, Bank Indonesia has been actively issued some macro-prudential measures to manage foreign capital inflows and prevent external sector risks.

Consequently, in July 2010 BI applied 1 month-holding-period for BI bill in order to mitigate the risk of sudden reversals and to “put sand in the wheels” on short-term capital inflows. It means that the holder of bills cannot sell at least 1 month after they bought it. Ten months later, the minimum-holding-period of BI bill was tightened to a 6 month-holding-period. Moreover, Bank Indonesia introduced non-tradable Rupiah term deposit for banks in order to lock up domestic liquidity and to limit the supply of BI bills in the market. In addition, Bank Indonesia has set a limit on short-term offshore borrowing of the banks to limit currency risk of the banking system.

During a surge of foreign capital inflows, domestic liquidity rises excessively. Therefore, Bank Indonesia has actively adjusted the reserve requirement measures in order to absorb domestic liquidity and enhance liquidity management of the banks, without exerting negative impact on lending that are needed to stimulate growth. In November 2010, the Rupiah primary reserve requirement was increased from 5% to 8%. Besides that, in order to strengthen foreign exchange liquidity management, foreign exchange reserve requirement was increased from 1% to 5% in March 2011. Meanwhile, Bank Indonesia issued loan-to-value ratio and down-payment measures in March 2012 in order to control the accelerating growth of consumer credit (especially property and automobile sector). The loan-to-value ratio for property sector has been capped at 70% since then. In September 2013, BI announced additional policy for property credit, especially for second and third home buyer. The loan-to-value ratio is 60% for the second property and 50% for the third and the following. Table 2 summarizes macro-prudential measures taken by Bank Indonesia after the GFC.
Table 2: Bank Indonesia’s Macro-prudential Measures and Objectives

<table>
<thead>
<tr>
<th>Date</th>
<th>Measures</th>
<th>Objectives</th>
</tr>
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<tbody>
<tr>
<td>Jul 2010</td>
<td>Minimum Holding Period (MHP) on BI bills, 1 month holding period</td>
<td>To “put sand in the wheels” on short-term and speculative capital inflows, and mitigate risks of sudden reversals.</td>
</tr>
<tr>
<td></td>
<td>Introduce non-tradable Rupiah Term Deposit for banks</td>
<td>To lock up domestic liquidity to longer term, and limits the supply BI bills in the market.</td>
</tr>
<tr>
<td>Nov 2010</td>
<td>Increase Primary Rupiah Reserve Requirement from 5% to 8%</td>
<td>Helps absorb domestic liquidity</td>
</tr>
<tr>
<td>Jan 2011</td>
<td>Reinstate limits on short-term offshore borrowing of the banks</td>
<td>• To limit the short-term and volatile capital inflows.</td>
</tr>
<tr>
<td></td>
<td>Lengthen (from weekly to monthly) auction and offer longer maturity (3, 6, 9 months) of BI bills since June 2010.</td>
<td>• To limit FX exposure of the banking system stemming from capital inflows.</td>
</tr>
<tr>
<td>Mar 2011</td>
<td>Increase FX reserve requirements of the banks from 1% of FX deposits to 5%</td>
<td>• To strengthen FX liquidity management, thereby the resilience, of the banking system in facing increasing FX exposure stemming from capital inflows</td>
</tr>
<tr>
<td></td>
<td>Impose LDR based Reserve Requirement</td>
<td>• Helps absorb domestic liquidity.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To absorb domestic liquidity and enhance liquidity management of the banks, without exerting negative impact on lending that are needed to stimulate growth</td>
</tr>
<tr>
<td>May 2011</td>
<td>Introduce Six Month Holding Period (MHP) for SBI</td>
<td>To “put sand in the wheels” on short-term and speculative capital inflows, and mitigate risks of sudden reversals</td>
</tr>
<tr>
<td>Jun 2011</td>
<td>Increase foreign reserve requirement from 5% to 8%.</td>
<td>To absorb domestic liquidity and enhance liquidity management of the banks, without exerting negative impact on lending that are needed to stimulate growth.</td>
</tr>
<tr>
<td>Sep 2011</td>
<td>Foreign exchange export proceeds (DHE)</td>
<td>To increase supply of dollar.</td>
</tr>
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</table>
Mar 2012  • Loan to value (LTV) ratio for property sector (max 70%)  • Down-payment (DP) for automobile (min 30%), for productive vehicle (min 20%), and for motor-cycle (min 25%)  To control accelerating growth of credit to consumer sectors (especially property and automobile sectors)

Dec 2012  • Foreign exchange export proceeds (DHE)  • Adjustment of the deadline for receipt  • Limits of difference between DHE and the value of goods exports noticed  To increase supply of dollar.

Sep 2013  • LTV for second property 60%  • LTV for third property 50%  To slow the rate of increase in the concentration of credit risk in the property sector, and to encourage the precautionary principles.

Secondary RR 2.5% is raised:  • To 3% from 1 to October 31, 2013.  • To 3.5% of from November 1  • To 4% from December 2, 2013.  To absorb liquidity and to strengthen the banking system

Adjustments of LDR related RR  • The upper limit of the LDR related RR is reduced from 100% to 92%,  • The lower limit remains at 78%.  • Disincentive is imposed on banks that have LDR above 92% with CAR less than 14%  • Disincentive is also imposed on banks that have LDR less than 78%  • To maintain optimal intermediation.  • Bank is expected to keep their LDR in the range of 78% to 92%.

As mentioned in BI Act, Bank Indonesia as the monetary authority has the responsibility to maintain the stability of Rupiah. The effort must be supported by an effective monitoring system of foreign exchange.

Based on the laws that exist today (Act No. 24/1999 on The Capital Flows and Exchange Rates System) the mandate of Bank Indonesia is very limited, thus limiting the space of Bank Indonesia in regulating the stability of the rupiah. Some of the limitations experienced by Bank Indonesia at this time include:

i. Limited access for data and information on the residents of foreign exchange activity.
ii. Limited authority to regulate the ownership, acquisition, and use of foreign exchange, especially in a crisis situation.
iii. Limited access to regulate non-banks, such as private foreign loans and foreign exchange export proceeds.
iv. Limited authority to withdraw currency from foreign exchange proceeds. BI currently requires exporters and debtors to receive foreign exchange proceeds and debt through foreign banks in Indonesia.

So far the current law is set based on the precautionary principle, especially for commercial banks. We argue that this law should be amended to give more mandate to BI to deal with capital flows. Therefore Bank Indonesia gains legitimation in managing capital flows, both for normal condition and for crisis.

In a draft of amendment of Law No. 24/1999, BI proposes three main points, namely (i) object coverage; (ii) transaction coverage; and (iii) BI’s mandates. The comparison of the proposed draft with existing laws can be shown in the following table.

**Table 3: Comparison Draft Bill and the Current Act Law No. 24/1999**

<table>
<thead>
<tr>
<th></th>
<th>Current Act</th>
<th>Exchange Act (Draft Bill)</th>
</tr>
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<tbody>
<tr>
<td><strong>Objects coverage</strong></td>
<td>Resident</td>
<td>• Resident</td>
</tr>
<tr>
<td></td>
<td>• Bank</td>
<td>• Bank</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Non-Bank</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Non-resident</td>
</tr>
<tr>
<td><strong>Transaction coverage</strong></td>
<td>• Capital account</td>
<td>• Current account</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Capital account</td>
</tr>
<tr>
<td><strong>BI’s authority</strong></td>
<td>Limited to:</td>
<td>Expanded to include:</td>
</tr>
<tr>
<td></td>
<td>• Collect information and data from the residence;</td>
<td>• Monitoring and regulation of the ownership, acquisition, and use of foreign exchange, included under crisis condition;</td>
</tr>
<tr>
<td></td>
<td>• Establish provisions of various types of banks’ foreign exchange transactions.</td>
<td>• Regulations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• administrative;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• tariff (tax, unremunerated reserve requirement).</td>
</tr>
</tbody>
</table>

The GFC gives lessons for BI, namely:

1. Multiple challenges vs instrument mix
   The crisis in developed countries like the US and Europe led to a large amount of capital inflows to emerging countries whose macroeconomic situation is much better. This condition becomes a problem domestically, especially on the exchange rate. The central bank should be able to develop a monetary instrument that can tackle the multiple challenges due to large amount of capital inflows. In Indonesia, BI uses a combination of macroprudential policy and monetary policy (policy mix). This refers to the use instrument mix.
2. **No macro stability without financial stability**
   To achieve macroeconomic stability, achieving and maintaining low inflation by the central bank is not enough. A number of crises in recent decades indicate that macroeconomic instability is mainly caused by instability in financial sectors. Financial markets which are inherently marked with imperfection have created an excessive pro-cyclicality. Therefore, the key to manage macroeconomic stability is not only how to control domestic and external imbalances, but also financial imbalances, such as credit growth, asset prices, and risk taking behavior in the financial sector.

3. **Exchange Rate Policy Should Play an Important Role in the ITF**

   The role of exchange rate in Indonesian economy becomes more crucial. This is due to a substantial contribution of exchange rate to inflation and economic growth. Too weak an exchange rate will jeopardize the achievement of the inflation target. While too strong an exchange rate will weaken the economic growth due to falling exports and increasing imports.

   Traditional way of thinking about the exchange rate regime and capital account openness can be framed into the 'impossible trinity' or 'trilemma'. In this trilemma, policymakers can only have two of three possible outcomes: open capital markets, monetary independence and exchange rates stability.

   After the global financial crisis, BI uses policy mix (monetary-macroprudential policy) that allow the policy maker to do some adjustment regarding the trilemma above. The first adjustment is by mixing monetary policy with macro-prudential policy. Monetary policy, which primary objective is to maintain price stability needs to synergize with macro-prudential policy oriented at maintaining the stability of the financial system as a whole. More specifically, monetary policy has the potential to support the stability of the financial system through its ability to affect the financial conditions and the behavior of financial institutions in taking risks. On the other hand, macro-prudential policies are designed to mitigate pro-cyclicality in the economy, so it can support monetary policy in controlling fluctuations of output and inflation.

   The second is setting the macro-prudential policy as main policy to manage dynamic capital flows. Some of the instrument mix should be applied in order to lengthen the capital in domestic economy and so we can use them as self-insurance (optimum reserves). The third is managing the exchange rate movement consistent with economic fundamental as well as to reduce short-term volatility. This is done by intervening in the foreign exchange market.

   One issue on implementation of macro-prudential policy is whether it uses a rule or discretion. As in monetary policy, there is always a trade-off between using the rule vs discretion. Given the strengths and weaknesses, the Inflation Targeting Framework (ITF) may be the best alternative.
In this framework, the central bank should be equipped with a clear decision-making process. The use of rules will guide the central bank to determine how strong its reaction to some chosen indicators. Even though, it is clear but it is too rigid. Not all variables are captured by those chosen variables. To avoid the rigidity of this framework, policy makers still have an option to use their discretion to deviate from the rule.

Bank Indonesia currently modifies ITF to be an enhanced ITF. There are 5 principles of enhancement:

1. The policy framework continues to adhere to an inflation target as the overriding objective of monetary policy.
2. Monetary and macro-prudential policy integration.
3. Managing the dynamics of capital flows and exchange rates.
4. Strengthening policy communication strategy as part of policy instruments.
5. Strengthening BI and Government policies coordination.

Implementation of enhanced ITF is essentially using two pillars, namely monetary policy pillar and macro-prudential policy pillar. The main instrument in the monetary pillar comprises the BI Rate, foreign exchange intervention, and the liquidity management instruments. The monetary instruments are used to influence interest rates and exchange rates. On the other hand, macro-prudential instruments are used to support monetary policy through the balance sheets of banks and companies, such as CAR and dynamic surcharge provision.

The ultimate goal of monetary policy is to keep inflation low and stable and also to reduce output fluctuations. Meanwhile, the ultimate goal of macro-prudential policy is to mitigate the systemic risks due to excessive pro-cyclicality. With this framework, macroeconomic stability is expected to be achieved.

4. Closing Remarks

In some years ahead, it is likely that capital flows to Emerging Markets will be sustained due to a combination of cyclical and structural factors. A relative strength and better growth prospects for EM Asia has attracted increasing private capital inflows.

We live nowadays in more open and integrated to global economy. This means more volatility and risks. Improving the absorptive capacity by further developing capital markets should be a priority. The use of capital control is possible and treated as ‘the third line of defense’ after macroeconomic policy measures (monetary policy, exchange rate policy, fiscal policy) and prudential measures or Capital Flow Management (CFM) has been implemented.
For the case of Indonesia, we need to address capital flows more rigorously. The existing Act No. 24/1999 regarding Capital Flows and Exchange Rate needs to be amended. This is because there is no explicit mandate for BI to handle capital flows. This act is seen also to be “too liberal” so that there is no room for capital control. Internally within BI, by adopting “Enhanced” ITF we expect this framework to be more flexible to address capital flows as well as systemic risk problems.