



Overcoming the weather to reach the sky

The higher toward the sky, the more wind blows. This is the real challenge that requires the handling of which may vary. This is the time for a self-proving to go beyond the challenges and continuing life.

CHAPTER III

**STRENGTHENING
MACROECONOMIC STABILITY
TO SUPPORT SUSTAINABLE
ECONOMIC GROWTH**



CHAPTER III

Strengthening Macroeconomic Stability to Support Sustainable Economic Growth



The Indonesian economy still faced a number of challenges in 2010 in order to support the attainment of high and sustainable domestic economic growth. In 2010, the Indonesian economy was marked with large foreign capital inflows, high levels of excess liquidity, rising inflation, along with various obstacles in the banking industry and real sector. These challenges raised the complexity in policy decisions such that Bank Indonesia is faced with a policy trilemma: that is whether to safeguard price stability, exchange rate stability, and/or stability of the financial system. Therefore appropriate choices in policy, be it monetary, macroprudentials and banking were very important. Nonetheless, the above policies were deemed insufficient and support from appropriate structural policies was still needed. These structural policies were needed to increase capacity, productivity and competitiveness such that the pace of economic growth could accelerate and macroeconomic stability can be maintained.

In principle, inflows of foreign capital are still needed as one of the sources of economic financing. Nonetheless, foreign capital inflows dominated by short term capital, may potentially put pressures on macroeconomic stability and complicate monetary policy. Large amount of foreign capital inflows can cause the exchange rate to appreciate sharply to levels above its true fundamental value. In this condition, appreciation of the exchange rate besides

being susceptible to a correction also reduces exports competitiveness. Moreover, inflows of foreign capital, especially those of a short term nature, can destabilize the macro economy. This is due to the susceptible nature of foreign capital inflows toward negative sentiment which in turn can trigger a large and sudden capital reversal.

Rapid inflows of foreign capital can also increase any excess liquidity in the banking system. Besides that, with larger source of financing in the State Budget (APBN) stemming from foreign exchange revenue, it will also in turn increase liquidity in the economy. This excess liquidity in the banking system can put pressure on macroeconomic stability, such that it needs to be managed optimally. To address this issue, the central bank needs to make use of various policy instruments which can control liquidity, either those which are permanent in nature or temporary. In addition to that, policy coordination with the government is vital to manage excess liquidity originating from the government's financial operations. This coordination is also needed in terms of adding instruments necessary to utilize excess liquidity. Thus the excess liquidity can be used to finance investment activities in the real sector.

Another challenge which must be faced is the increase in inflationary pressure. To achieve a low level of inflation whilst facing the two challenges



mentioned above, the steps which must be taken in managing foreign capital inflows as well as excess liquidity need to be covered by policy which is able to anchor future inflationary expectations. Furthermore, structural policy needs to be strengthened to increase the capability of the supply side to respond to accelerated demand. In this regard, various policies to overcome obstacles to increase economic capacity are absolutely essential.

3.1

Economic Dynamics and Challenges



The dynamics of the Indonesian economy in 2010 were marked by an improvement in domestic economic performance as external conditions became increasingly conducive. The increase in economic growth was mainly supported by higher investment and exports. The improved investment performance was accompanied by continually improving market perceptions and the relatively low price of imported goods. The improvement in exports was driven by the rising prices of Indonesia's commodities, especially natural resource based commodities, along with better global demand. Meanwhile, non oil and gas imports also increased significantly, especially toward the end of the year, in line with the increased domestic economic activity. The improvement in exports performance and the rapid inflows of foreign capital resulted in a higher balance of payments surplus. Nevertheless, inflationary pressure in the reporting year rose quite significantly to 6.96%, surpassing the inflation target of $5\% \pm 1\%$. The increased inflationary pressure primarily came from higher prices in the volatile foods group in relation to supply disruptions

as a result of bad weather. As for core inflation, the increase was relatively under control, supported by the appreciating trend of the rupiah and benign inflationary expectations.

In the reporting year, the performance of the domestic financial markets also improved. This was reflected in the yield on government bonds (SUN) which declined significantly since the beginning of the year in line with the rapid foreign capital inflows, solid domestic economic fundamentals, and heightened expectations of a ratings upgrade to investment grade. Meanwhile, the performance of the stock market since the beginning of the year also continued to improve, as indicated by the increase in the IHSG to 3,703 at the end of 2010. This increase was related to the large inflows of foreign capital, favorable macroeconomic conditions and relatively promising financial prospects for listed companies compared to their regional peers. In the money market, transmission of interest rates also progressed better. Higher short-term money market liquidity, among other things, originated from Bank Indonesia's efforts to maintain stability of the exchange rate in addition to government spending expansion.

Amid improving economic performance, there were nonetheless a number of challenges in formulating policy. These challenges are rapid inflows of foreign capital, high excess liquidity, rising inflationary pressures, a lack of efficiency and competitiveness in the nation's banking sector, in addition to some problems in the real sector. These various challenges complicate macroeconomic and monetary policy responses and made it necessary to overcome some challenges at once, namely: (1) keep inflation within its targeted range, (2) control foreign capital inflows so they benefit the economy and do not

cause economic instability, (3) control domestic excess liquidity to meet the needs of domestic demand and prevent the economy from overheating, (4) increase efficiency, resilience and competitiveness of the banking system and (5) overcome various problems in the real sector.

The first challenge for the economy is the rapid foreign capital inflows. This is of course closely related to the ongoing global economic recovery. Basically as Indonesia is a “small open economy” changes in the global economy can influence the domestic economy. This is shown by the integration of the domestic money market with the international money market, which proved to be quite a challenge for Indonesia’s external economic stability, as it is now attracting rapid inflows of foreign capital. As explained in previous chapter, after the 2008 global economic crisis, capital flows to emerging market countries rose rapidly. The “push factors” of this capital inflows are in the form of excess global liquidity and the slow recovery of developed nations. Meanwhile the “pull factors” are in the form of high economic growth, large interest rate differentials, and expectations of currency appreciation.

More specifically, factors encouraging the rapid capital inflows to emerging market countries were strong expectations that low interest rate policy would continue to be adopted by developed nations and the continuation of quantitative easing by the United States (QE part II). This coupled with fact that emerging market countries is starting to tighten their monetary policy pushed sentiment that the dollar would weaken. This development, in turn, increased flows of capital into assets which offered higher returns in emerging market countries, including Indonesia.

The rapid capital inflows into emerging market countries, including Indonesia, can have both positive and negative impacts. In principle, foreign capital inflows are still needed as one of the sources of economic financing. From one aspect, these foreign capital inflows can be beneficial for funding investment and development. Furthermore, foreign capital inflows can also spur development of the financial market through increasing the potential economic growth via more efficient capital allocation. From another aspect, however, rapid foreign capital inflows can potentially disrupt efforts to achieve macroeconomic and financial system stability. On the macro side, rapid foreign capital inflows can give rise to fairly significant exchange rate appreciation which, in turn, can put pressure on the balance of payments.

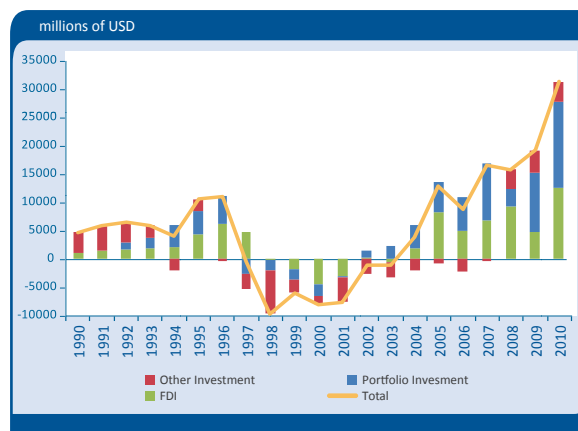


Chart 3.1 Structure of Foreign Capital Flow

In this regard, foreign exchange intervention policy and optimization of foreign exchange reserves in a number of countries have caused the impact to the currency appreciation to vary from one country to another.

The dominant role of portfolio investment in capital and financial transactions needs to be managed well, such that it gives a positive impact on domestic financing both in the medium and long term, as well as minimizing short term fluctuations (Chart 3.1). The risk from portfolio investment mainly arises when there is capital reversal which push exchange rate depreciation and in the end also push inflationary pressures. In the current global condition in which doubts still remain over the economic recovery process, sustainable inflows of foreign capital to Indonesia are expected to continue.

The rapid inflows of foreign capital and Indonesia’s continuously improving economic fundamentals have resulted in rupiah appreciation in 2010. The strengthening of the rupiah was also driven by the balanced forex supply and demand in the domestic market along with greater investor risk appetite. On one side, rupiah appreciation can help reduce inflationary pressures through lower prices of imported goods. But on the other side, rupiah appreciation also potentially increases pressures on the current account due to increased imports.

Other problems related to the rapid inflows of foreign capital are the condition of the domestic money market which has a limited choice of financial instruments, such that the options for placing funds are few. To overcome this problem, efforts need to be made to strengthen the financial market by developing financial market products until there are a good selection of financial instruments

which can be used for short, medium and long term investment, hedging, along with risk diversification. Development of such products is expected to minimize the negative impact from the rapid inflows of foreign capital and excess liquidity.

Another challenge faced is the excess liquidity in the banking system.⁴⁴ In a condition of excess liquidity, the rapid inflows of foreign capital can also cause a further increase in excess liquidity. Excess liquidity in the banking system can even destabilize the economy such that it is necessary for it to be managed optimally. The challenge is how the liquidity can be channeled to fund productive business sectors and help develop the economy as a whole. To address this issue, the central bank needs to make use of various policy instruments which can control liquidity, either those which are permanent in nature or temporary. Besides that, policy coordination with the government is vital to manage excess liquidity originating from the government's financial operations. This is important considering the increasing size of the state budget spending originating from foreign exchange revenue will increase liquidity in the economy. This coordination is also needed in terms of adding instruments necessary to utilize excess liquidity. Thus the excess liquidity can be used to finance investment activities in the real sector. In the last few years, especially after the 2008 global economic crisis, excess liquidity has continued to increase. The average ratio of excess liquidity to third party funds in the banking sector continue to increase to 22% at the end of 2010.⁴⁵ Excess liquidity in the banking sector shows that the role of banks in spurring economic growth is not yet optimal.

Excess liquidity originally owed its roots to the handling of the economic crisis, i.e. the provision of Bank Indonesia Liquidity Credits in 1997/1998 due to the withdrawal of public funds from the banking system on a massive scale. Thereafter, the excess liquidity also originates from the decline in Reserve Requirement (RR) in 2008 and the economy's limited ability to absorb excess liquidity. In the last few years, the increase in liquidity in the banking sector mainly stems from the expansion of government accounts (period 2006-2009) and exchange rate stabilization policy. The supply of liquidity in the money market which surpassed demand impacted on the position

of Open Market Operations (OMO) which continued to increase, although Bank Indonesia has absorbed some of the liquidity through RR.

The persisting excess liquidity in the banking sector, if not handled well, will have negative ramifications for the economy. The excess liquidity may potentially cause large monetary changes (in credit and money in circulation/ M2) which later can lead to higher inflationary pressures when the excess liquidity is channeled to commercial loans, especially if supply cannot balanced out higher consumption funded by these loans. Research by Saxegaard (2006) shows that excess liquidity in Africa disturbed monetary policy transmission.⁴⁶ From other studies conducted by Agénor, Aizenman and Hoffmaister (2004), it is known that in the case of excess liquidity, monetary authority efforts to increase aggregate demand have proven to be very ineffective.⁴⁷ In Europe, fears of the potential impact of excess liquidity on higher inflationary pressure in the medium term have been identified by Trichet (2004).⁴⁸

Besides these two challenges mentioned above, the economy also faced higher inflationary pressures. In the reporting year, the intensity of disturbances from the supply side, especially prices of foodstuffs rose sharply due to unfavorable weather both globally and domestically. Hence, the prices of food commodities on both the global and domestic markets rose dramatically. Basic foodstuff commodities such as rice and spices contributed significantly to the volatile food inflation in 2010 (Chart 3.2). Besides the higher inflation contributed by volatile food, inflation stemming from administered prices also rose. This owes to the government's policy to hike the prices of strategic goods or services such as basic electricity tariffs for households.⁴⁹

Inflationary pressures originating from non-fundamental factors can give second round effects due to higher inflationary expectations, if this pressure is not addressed then it will result in fundamental inflationary pressures

44 Banking liquidity as reflected in current assets such as cash, reserve in BI and OMO, while economic liquidity is reflected in bank's liability + currency.

45 Excess liquidity is defined as liquid assets in the banking system after deducting liquidity needs.

46 Saxegaard, "Excess Liquidity and Effectiveness of Monetary Policy: Evidence from Sub-Saharan Africa", IMF Working Paper, WP/06/115, 2006.

47 Agénor, Aizenman dan Hoffmaister, "The Credit Crunch in East Asia: What Can Bank Excess Liquid Assets Tell Us?", Journal of International Money and Finance, Vol. 23, 2004, pages. 27-49.

48 Trichet, Jean-Claude, "Introductory Statement," Testimony before the Committee on Economic and Monetary Affairs of the European Parliament, presentation of the European Central Bank's Annual Report, 2003.

49 Group > 900 kVA.

(core inflation). This can not only push inflation to a higher level, but can potentially slow the pace of future economic growth, reduce the people's purchasing power as well as reduce economic competitiveness. Increased demand that is not balanced by sufficient response on the supply side would also result in greater fundamental inflationary pressures. A number of aspects found in these structural problems include, among others, a potential lack of responsiveness on the supply side toward higher demand. For that, structural policy needs to be strengthened to increase the capability of the supply side in responding to higher demand.

When responding to supply side inflationary pressures, if the central bank is credible, then an aggressive monetary policy response is not necessary. If the disturbances are only temporary in nature and the central bank is credible an increase in volatile food inflation, originating from supply side disturbances will not have a large impact on inflationary expectations. Nonetheless, if the disturbances continue then inflationary pressures coming from the supply side will have an impact on expectations. To anticipate this matter, the central bank needs to undertake tighter monetary policy in a more pro-active manner to control inflationary expectations and put the brakes on the continued inflationary impact. In this regard, central bank communications to the public has become increasingly important.

From the banking perspective, the challenge faced is the relatively low competitiveness of domestic banks, either from the aspect of efficiency, capital or assets. On a regional scale, Indonesia's banking competitiveness from the aspect of efficiency, capital or assets is still lower on a regional comparison. Based on Bank Indonesia and Bank Scope data at the end of 2009, the cost-to-income ratio and Net Interest Margin (NIM) in Indonesia stood at 81.6% and 5.8% respectively. Meanwhile, for Singapore, Malaysia, Thailand and Philippines, the cost-to-income ratio was in the 32.7% - 73.1% range and the NIM was in the 2.3% - 4.5% range. This suggests an intermediary problem which if overcome could lead to an increase in loans and, eventually, brisker economic growth. Besides that, the role of the banking sector in extending loans needs to be carried out carefully, selectively, productively and prospectively. These characteristics are essential to

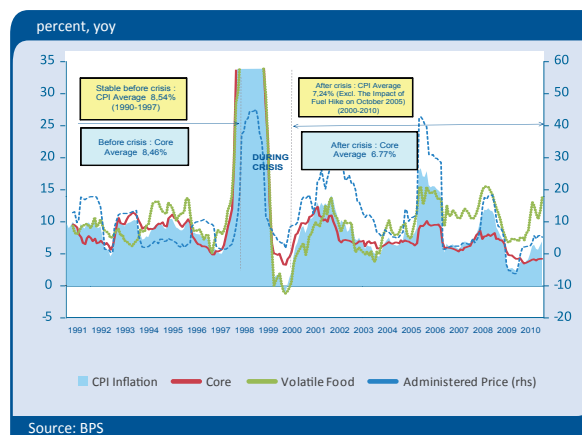


Chart 3.2 Inflation

the prudential nature of banks, a precondition of financial stability. In a condition of excess liquidity, the role of banks in spurring economic growth is still low. This is reflected in Indonesia's loans to GDP ratio in 2010 of only 26%, only slightly higher than 2009's figure of 25.7%.

Other challenges faced by the banking sector is how competitive the Indonesian banking sector can be compared with other ASEAN banks especially since liberalization of the banking sector will become effective in 2020 (ASEAN People's Economy (MEA)). For that, banks must be more competitive and have greater resilience. This can be done through, among other things, higher capital to allow for expansion but with due regard to precautionary principle.

In the real sector, the main challenge faced is how to overcome problems in increasing economic capacity. Bank Indonesia research shows that, besides caused by low capital accumulation and low productivity, the less-than-optimal rate of increasing economic capacity is also caused by "most binding constraints" in the economy. The five main problem areas are R&D, quality of education and health, technology mastery, and the lack of an adequate supply of infrastructure and energy. Further details on problems in the real sector and the necessary measures which need to be taken are explained further in sub-chapter 3.5. If this problem can be overcome, then brisker economic growth can be achieved through higher investment.

3.2

Policy Mix for Macroeconomic Stability

The dynamics of the Indonesian economy as previously expounded upon have implications on the monetary policy which needs to be taken. The various challenges place Bank Indonesia in a trilema: that is whether to maintain price stability, exchange rate stability, and/or stability of the financial system. The greater the importance of the need to stabilize the financial system in order to safeguard overall economic stability is proven by the global crisis in 2008, when price and output stability did not guarantee stability of the financial system. Prior to the global crisis, the general academic view and that of the central bank was that achievement of price and output stability would increase stability of the financial system.

Nonetheless, the global crisis shows that controlled inflation and output can actually encourage financial market players to take excessive risks which, in turn, lead to a more vulnerable financial system. In certain conditions, monetary policy can be used to increase stability of the financial system by controlling the pace of loans expansion and reducing excessive risk taking. Nonetheless, the use of monetary policy for these purposes can also hamper efforts in achieving stable prices and output. As an example, the recent rush of foreign capital flows into emerging market countries, besides potentially putting pressures on domestic currencies to appreciate, also potentially encourage excessive risk taking behavior and a credit market bubble. Monetary policy through increasing interest rates aimed at lessening the risk of a bubble can actually encourage inflows of foreign capital as well as strengthen the exchange rate. In a condition like this, the policy needed is macroprudential policy.

In practice, there are no countries at an extreme point of this trilema, i.e. that they can fulfill the three

trilema policy goals to the maximum extent. In general, emerging market countries choose to be in the middle of the trilema, that is with controllable exchange rate movements, but, at the same time, still trying to safeguard monetary stability and stability of the financial system. In this regard, efforts to safeguard stability of the exchange rate and stability of the financial system are undertaken to be in line with efforts to maintain price stability. With domestic financial market relatively closed, heightening inflationary pressures can be more easily responded to through tighter monetary policy by hiking interest rates. Nonetheless, with a domestic financial market integrated with the international financial market, hikes in interest rates can increase the speed of foreign capital inflows which then causes rupiah appreciation and affects the equilibrium of the financial system.

■ The Necessity for a Policy Mix

In consideration of the various challenges and trilema as mentioned above, interest rate policy, which in a normal situation can be used as a monetary policy instrument, is not sufficient and must be supplemented with various other policy instruments. Therefore, Bank Indonesia formulated a monetary and macroprudential policy mix which include a policy mix for both internal and external stability. The mix of instruments for internal stability is based on future inflation and macroeconomic projections, as well as excess liquidity. Meanwhile, the policy mix for external stability is based on an exchange rate consistent with macroeconomic conditions. Bank Indonesia in 2010 has already adopted a policy mix containing four policies such as: interest rate policy (BI rate), exchange rate policy, macroprudential policy to manage domestic liquidity and macroprudential policy to handle foreign capital inflows.

In general, the instruments mix for internal stability is basically a mix of instruments used to stabilize prices and to manage domestic demand. This includes an interest rate and macroprudential response aimed at the inflation target while also taking into consideration monetary and financial system stability in addition to economic conditions in general. Meanwhile, the instrument mix for external stability is in the form of a mix of instruments to manage inflows of foreign capital and achieve exchange rate stability. This internal and external policy mix also needs support from banking policy and government policy.

In relation to interest rate policy, Bank Indonesia has already been using the BI Rate as an operating monetary target since adopting an Inflation Targeting Framework in July 2005. The BI Rate is aimed at achieving the inflation target meanwhile taking into account economic growth and financial system stability. Thus, the setting of the BI Rate always takes into consideration 5 main factors, namely: (i) projected inflation two years ahead and its consistency with the inflation target, (ii) projected economic growth two years ahead, (iii) projected exchange rate and influencing factors (including foreign capital flows), (iv) developments in interest rates and bank loans, and (v) asset valuation in the financial sector. The first two factors are needed to maintain consistency between the BI Rate and the attainment of the inflation target by also taking into account its impact on economic growth. Meanwhile, the last three factors are needed to ensure monetary stability and financial system stability, and also to assess the monetary policy transmission mechanism.

Besides Indonesia, the use of interest rate policy in conducting monetary policy has been frequently adopted by central banks of other emerging market countries, in line with the wider adoption of ITF since the 1990s. Monetary targets which were often used by central banks as an operation target have since been largely abandoned, while the use of interest rates as an operation target has become the common practice. Many central banks use short term interest rates as an operational target, with the monetary policy stance announced through a reference interest rate. With this development, the setting of interest rates has already become a main policy in conducting monetary policy in many countries. Until the global crisis in 2008, monetary policy refer to the setting of short term interest rates by the monetary authority. From the results of a study undertaken by Ho (2008) which covered 17 countries, 9

countries used interest rates as an operational target in conducting monetary policy.⁵⁰ Meanwhile, although in a formal sense, a number of countries still used quantity targeting as an operational target, yet in practice the monetary authority still scrutinized movements in short term interest rates.

■ The Role of a Stable Exchange Rate

After experiencing the currency crisis in the 1990s, many emerging market countries formally implemented floating exchange rate systems. Indonesia is included among these countries since August 1997. One of the arguments which support the use of a floating exchange rate system is that the exchange rate can act as a shock absorber and play a part in maintaining the external equilibrium of an economy. Besides that, experience garnered from the currency crisis gives rise to one particular view that a fixed rate exchange system is highly vulnerable to currency crisis. Nonetheless, what happened, in practice, was that countries which formally adopted floating exchange rate systems did not let their exchange rates be completely determined by the market. In other words, these countries still tried to maintain exchange rate stability. This phenomenon can be seen from the relatively limited exchange rate fluctuations and accumulation of foreign exchange reserves in each country. Countries which fully implement floating exchange rate systems in theory should not actually need large foreign exchange reserves. In contrast, countries which do not let their exchange rates move beyond certain limits need sufficient foreign exchange reserves to reach their objectives.

There are a number of reasons why countries which formally adopt floating exchange rate systems do not allow their exchange rates to be fully determined by the market – a phenomenon which is appropriately called the “fear of floating”. The first reason, is the fear of the inflationary impact from exchange rate depreciation in countries with high pass-through effect. This makes these countries reluctant to allow their currencies to depreciate. Secondly, countries which have large liabilities in foreign currencies try to avoid significant depreciation of their currencies since it can result in contraction through balance-sheet effects from depreciation. Thirdly, the experience (of many countries) that there is high political cost in the case of a currency crisis resulted in strong

50 Corrinne Ho, “Implementing Monetary Policy in the 2000s: Operating Procedures in Asia and Beyond”, Monetary and Economic Department, BIS Working Papers No.253, June 2008.

opposition to allow a nation's currency to depreciate sharply. Fourthly, exchange rate appreciation can lower export competitiveness and lead to higher imports.

Exchange rate appreciation due to rapid capital inflows amid strengthening domestic demand will, in turn, put pressure on the current account. Brisk currency appreciation can cause the current account to more quickly slip into a large scale deficit. Sharp and large currency appreciation can potentially weaken exports competitiveness such that overseas demand for exported goods will decline, while, at the same time, boosting imports. The combination of weaker exports and higher imports can, in turn, wipe out the external balance. Currency appreciation will cause net exports to decline, such that the current account will fall into deficit. This can potentially trigger macro instability because the exchange rate can then reverse and experience sharp depreciation as a correction mechanism for the current account deficit which has occurred.

Foreign exchange intervention is the most common option for central banks to maintain exchange rate stability. Nonetheless, in many countries interest rate policy is also used as an instrument to maintain exchange rate stability. This mainly occurs in countries having credibility problem or in countries adopting inflation targeting with high exchange rate pass-through. The fact that emerging market countries - which tend to have a relatively high exchange rate pass-through and relatively low credibility – use interest rates to safeguard exchange rate stability other than as a response to inflationary pressures, may be one explanation as to why interest rate volatility in

emerging markets is relatively high (Calvo and Reinhart, 2002).⁵¹

Brisk and long-lasting currency appreciation especially due to the significant role of investment portfolios stemming from foreign capital inflows, can also have implications on the sustainability of the current account. Nevertheless a deficit in the current account can still be maintained as long as it is supported by sustainable and long lasting capital flows. Because of that, if the current account deficit cannot be avoided, a structural policy is needed to encourage long term inflows of foreign capital, especially in the form of direct investment.

In Indonesia, Bank Indonesia's exchange rate policy is directed in such a way to make sure that rupiah appreciation is stable and consistent with macroeconomic developments. Amid rapid foreign capital inflows and appreciation pressures in 2010, Bank Indonesia undertook exchange rate stability policy to minimize exchange rate volatility. Nonetheless, in view of the complexity of the problems faced, intervention policy is viewed as insufficient and needs to be complemented by adoption of macroprudential policy. In this regard, Bank Indonesia has implemented macroprudential policy in the form of One Month Holding Period (OMHP) for SBI purchases since June 2010. Besides macroprudential policy, BI also endeavored in a number of other policy options to address the rapid pace of foreign capital inflows as explained in the following sub chapter.

51 Calvo and Reinhart, "Fear of Floating", The Quarterly Journal of Economics, Vol. 117, No. 2, May 2002, page. 379-408.

3.3

Conceptual Framework of Policy Response to Address Rapid Foreign Capital Inflows

The main challenges in relation to capital inflows are how to optimize the use of these capital inflows and to reduce the risks they posed. Response on how to address foreign capital inflows depended upon: (i) the characteristics of the foreign capital inflows (public versus private, Foreign Direct Investment (FDI) versus portfolio, fixed income or equity); (ii) their time period (temporary versus persistent); (iii) the impact on the central bank's balance sheet; and (iv) the dynamics of external debt and the economic cycle (Ghosh et al, 2008).⁵² To understand the importance of different responses needed in accordance to the source of pressure on the balance of payments, Ghosh et al (2008) have arranged a taxonomy which can be used as a reference to differentiate between these responses (Chart 3.3).

Case 1. Capital Inflows Responding to Current Account Financing Needs. Capital flows are helping to finance the country's current account deficit. Although the net BOP pressure is negative, the dependency on capital flows might raise concerns about debt sustainability and the country's exposure to the risk of sudden stops (particularly if these are non-FDI flows). The premise is that capital flows are responding to the country's demand for external savings. Thus, if there are concerns about capital inflows, economic policies should a priori be geared to reducing the current account imbalance and cooling the economy. In Case 2, Capital Inflows is in Search of Yield. In contrast to Case 1, here the "tail wags the dog"—rather than responding to the country's current account financing needs, net total capital flows are assumed to be driven by supply-side factors (i.e., abundant liquidity in search of yield). Such inflows are complicating macroeconomic

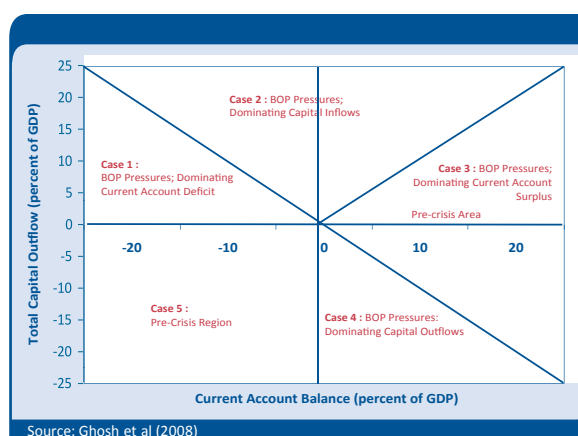


Chart 3.3 Conceptual Taxonomy of Balance of Payment Pressures

management and policies would need to be geared toward reducing these capital.

Case 3. BOP Pressures from Current Account Surplus. In this case, capital inflows are assumed to be less important than the current account surplus; in fact, the surplus could be accompanied by small capital outflows and still represent positive BOP pressures. If the current account surplus is excessive, then policies should seek to narrow it. By contrast, if the current account surplus is considered appropriate, then policies to encourage capital outflows would be useful. In case 4, current account surplus is offset by outflows. Meanwhile, case 5 reflects large capital outflows and current account deficits, perhaps portending a capital account crisis.

Based on the taxonomy in Chart 3.3, the economy of most emerging market countries in 2010 was experiencing case 2, in which rapid foreign capital inflows are driven by abundant foreign liquidity in search of

⁵² Ghosh, Atish, et al, "Capital Inflows and Balance of Payments," Policy Development, Review and Research Department, IMF Policy Discussion Paper, June 2008.

higher returns. As revealed by Ghosh et al (2008), each scenario needs a different policy response. In case 2, the nominal exchange rate can be given room for limited appreciation. Nonetheless, it needs to be remembered that limited periodic appreciation can give rise to currency appreciation expectations which, in turn, attract larger inflows of foreign capital. Conversely, significant currency appreciation can reduce the rapidity of foreign capital inflows because investment in this country will become more expensive.

In the condition where foreign capital inflows are mostly driven by the search for higher returns, sterilization through raising interest rates will actually encourage brisker inflows of foreign capital. In this regard, if there is an increase in inflationary pressure then policy other than through hiking interest rates needs to be taken, among others through quantitative tightening, letting the nominal exchange rate appreciate, and tight fiscal policy. If these policies are also considered ineffective in controlling inflationary pressures which originate from rapid inflows of foreign capital, then the management of foreign capital inflows becomes one policy option which can be taken.

Considering the impact of foreign capital inflows on the economy and domestic financial system, a number of countries have already adopted various policies to manage foreign capital inflows in order to get maximum benefit. Policy choices taken by emerging market countries in managing inflows of foreign capital can be categorized as follows:

1. Unsterilized Intervention and Sterilized Intervention

Intervention can be done in two ways; that is without sterilization (unsterilized intervention) and with sterilization (sterilized intervention). Unsterilized intervention is intervention in the form of foreign currency purchases by the central bank which are not accompanied by efforts to reabsorb the increase in base money arising from this policy. Unsterilized intervention is aimed at preventing nominal appreciation of the exchange rate. This policy is akin to loose monetary policy, pushing domestic nominal and real interest rates lower and thus encouraging loans growth. Nonetheless, in the event that the domestic economy is growing too fast, then such intervention will give rise to inflationary pressures and create the risk of credit and asset price bubble. As such, although it can prevent nominal

exchange rate appreciation, unsterilized intervention cannot prevent real exchange rate appreciation.

Meanwhile, sterilized intervention is intervention which is opposite to unsterilized intervention. Intervention with sterilization does not permit an increase in base money thus increase in liquidity is reabsorbed through open market operations. This policy, besides being able to prevent nominal exchange rate appreciation can also prevent heightened inflationary pressures. Nonetheless, this policy is not effective in stopping inflows of foreign capital and results in higher and sustained capital inflows in addition to forcing the central bank to undertake intervention in even larger amounts. Besides that, sterilized intervention, also encourages accumulation of forex reserves which can be useful as self insurance. However, this also causes central bank monetary operations to experience higher costs given the difference in interest rate levels. Thus in order to reduce the negative spread as well as impact from USD depreciation, a number of countries have already diversified their foreign exchange reserves. The strategy of shifting the placement of funds to other emerging market countries or in the form of “neutral” assets like precious metals has been done by South Korea and shall possibly be followed by Philippines, China, India and Bangladesh. In practice, complete sterilization is very difficult to achieve. What is generally performed are partial sterilization, meaning it could potentially induce higher inflationary pressures. This policy has often been carried out by emerging market countries including China and other emerging market countries in Asia.

2. Macroprudential Policy to Manage Foreign Capital Flows

Besides intervention policy to prevent exchange rate appreciation, a number of countries also adopted macroprudential policy with the aim of stemming inflows of foreign capital. A number of emerging market countries which carried out this policy includes Brazil, Peru, Korea and China. The central bank of Brazil undertook tighter monetary policy by increasing RR on saving deposits from 15% to 20% and RR for demand deposits from 8% to 12%. The policy - which was effective as of 6th December 2010 - was intended to rein in the pace of consumer loans growth and prevent a credit bubble.

The People’s Bank of China (PBoC) carried out macroprudential policy by increasing RR selectively (limited to the 6 largest banks) and gradually, the increase

was done on 4 occasions in 2010 until it reached 17.5%. This increase is meant to strike a balance between efforts to squeeze excess liquidity and a desire to maintain growth. Meanwhile, the central bank of Peru also adopted a number of macroprudential policies, among others by increasing RR on 30th September 2010, for both the domestic and foreign currencies to 9% from 8.5%, and by increasing the marginal requirement (MR) on savings in local currency to 25% from 15%, while savings in foreign currencies was raised to 55% from 50%. Turkey also took similar measures, i.e. increasing RR by 50 bps to 9.5% for local currency and to 5.0% for foreign currencies.

The Bank of Korea (BoK) adopted a number of macroprudential policies which included tightening limits on derivative transactions, so that the forward position of foreign exchange for domestic banks and foreign bank became 50% and 250% of bank capital respectively (it was previously 300%). BOK also limits the use of foreign currency loans to only companies which operate overseas. Besides that, BoK also tightened the ratio of mid-to-long term foreign exchange financing to 100% from 90% for local banks and also limiting the ratio of foreign currencies hedging to underlying transactions to 125% from previously 100%.

3. Capital Controls

In response to rapid inflows of foreign capital, the application of capital controls is one possible policy response which can be taken by countries which experience rapid inflows of foreign capital. Historically, capital controls have been implemented in a number of countries since the 1990s such as China, Brazil and Colombia. With the recent rapid inflows of foreign capital to emerging market countries, capital controls have been becoming more popular. Brazil, Thailand and a number of emerging market countries have again adopted capital controls or given the idea serious thought. Capital controls currently being adopted are mainly aimed at slowing currency appreciation.

Brazil imposed taxes on foreign capital inflows for purchases of fixed income notes and equity amounting to 2% starting October 2009, then increases the tax on fixed income notes to 6%. Brazil also increased tax for foreign investors from 0.38% to 6% (on margin deposits for the futures market) in October 2010. Meanwhile, Thailand reimposed 15% withholding taxes on interest and capital gains for foreign ownership of government bonds effective as of 13th October 2010.

Up to now the exact conditions when capital controls need to be adopted and in what form they are most effective is still a matter of debate. A study by Ostry et al (2010) tries to provide guidance on the adoption of capital controls. This study in essence finds that in response to rapid inflows of foreign capital, capital controls can be implemented if other policy choices, that is policies on the exchange rate, foreign exchange reserves, interest rates, sterilization, fiscal and prudential regulations have already been attempted.⁵³

Capital controls can be implemented at various levels, starting from general capital controls which cover all types of foreign capital inflows (with no differentiation based on maturity, currency composition, and debt-versus-equity) to capital control which are applied to specific instruments, or differentiated based on the time period of the foreign capital inflows. Currently, most capital control policy implemented by emerging market are limited to only those controlling short term capital flows which are deemed more risky. A number of countries focus more on fixed income instruments and not on equity (portfolio or FDI), although equity can also be volatile and short term in nature, as is the case with fixed income instruments.

The implementation of capital controls should give consideration to other factors beyond macroeconomic and financial aspects, such as the actual effectiveness of the capital controls. One counter argument against capital controls is the difficulty in applying them, especially in countries whose institutions are still relatively weak compared to institutions in developed countries. In the case that institutions are weak, investors can easily avoid capital controls. Other factors which need to be considered are the multilateral impact from adopting such capital controls, such as retaliatory measures by other countries, which, in turn, bring about inefficient investment allocations among countries.

Thus far, studies on the effectiveness of capital controls have not yet shown conclusive results (Ostry et al, 2010). In general, capital controls only have a very small impact in reducing the total volume of foreign capital inflows and limiting currency appreciation. However, capital controls can be effective in changing the maturity structure and composition of the capital flows from being short-term in nature to long term. From another aspect, prudential policy in the form of capital control can be effective in

53 Ostry, Jonathan; Ghosh, Atish R; Habermeier, Karl, "Capital Inflows: The Role of Controls", International Monetary Fund, 19 February 2010.

reducing the risk that arises from rapid inflows of foreign capital such as currency mismatch or maturity mismatch. Nonetheless, although capital controls can be effective in changing the maturity structure and composition of the capital inflows, the impact will be short-lived because market players can quickly find way to avoid these capital controls.

Chile's experience in implementing a limited Unremunerated Reserve Requirement (URR) to short-term fixed income instruments shows that capital controls are only effective in influencing composition, not the total volume. Capital controls will be effective if supported by other policies such as maintaining exchange rate flexibility in two directions to reduce speculative inflows, fiscal consolidation, along with broadening the monitoring and supervision of the finance sector.

4. Liberalization of Capital Outflows (Selected Capital Outflow)

Destination countries for foreign capital flows can also liberalize rules which restrict capital outflows. Relaxation of policies designed to restrict the ability of residents to invest overseas can reduce currency appreciation pressures arising from increased foreign capital inflows. Period with high foreign capital inflows can become momentum to continue loosening rules governing outflow transaction. Nonetheless, the act to lift the outflow restriction very much depends on the fulfillment of various capital account liberalization conditions, including sufficient availability of macroprudential regulations and accurate implementation of risk management procedure.

In February 2010, the Thailand authorities relaxed foreign exchange controls which had been issued in 2007. This policy allowed Thai investors to invest overseas, either in the form of FDI or portfolio investment. Before that on August 2009, Thailand had already given more flexibility to exporters and importers in regard to risk management. The central bank of Thailand viewed that since Thailand is in the mid of rapid foreign capital inflows, therefore it was a suitable time to relax exchange rate regulations related to residents' overseas investment, foreign exchange hedging transactions and corporate treasury center.

5. Optimizing Foreign Exchange Reserves

The accumulation of foreign exchange reserves is one of the policy chosen by emerging market countries as self insurance against the risk of capital reversals (Aizenman,

2009).⁵⁴ Compared to the risk of default in developed countries, default risk in developing countries tends to be bigger. This risk translate into higher interest rates demanded by investors on debts issued by developing countries [Frankel, 2010].⁵⁵ In the period when the domestic financial market is still relatively closed toward foreign capital inflows, foreign exchange reserves are seen as a form of self insurance against shocks in trade flows. Nonetheless, with the greater integration between financial markets of developing countries and the global financial market, foreign exchange reserves are not only intended as a form of self insurance against shocks in trade flows, but also as a form of self insurance against the risk of a reversal in foreign capital flows. Considering the large amount of short term foreign capital during 'boom' periods, the piling up of foreign exchange reserves to provide full insurance against the risk of a reversal in capital flows is very expensive. Because of that, no country has complete self insurance. Therefore, foreign exchange reserves can only reduce the risk arising from a reversal in capital flows, but cannot eliminate it.

The experience of emerging market Asia during the 1997/1998 crisis shows the extent of the cost that must be carried by the economy if there is no self insurance in the event of a large capital reversal.⁵⁶ The crisis in Asia was an important lesson for emerging market countries to raise their levels of accumulated foreign reserves. A high level of foreign exchange reserves can be useful to increase the resilience of a country's economy when there are shocks to the global or domestic financial market. With a high level of foreign exchange reserves, there is greater support to minimize the impact of any possible domestic demand shocks in the event of a sudden and large capital outflow.⁵⁷ When a sudden and large capital outflow occur then the transactional value on the balance of payments will automatically experience a decline considering the amount of outflows are far greater compared to the inflows. This decline will then lead to a decline in domestic demand which, in turn, will impact economic growth.

54 Aizenman, Joshua, "Hoarding International Reserves Versus Pigovian Tax-Cum Subsidy Scheme, Reflection on deleveraging Crisis of 2008-2009, and a Cost Benefit Analysis", UCSC NBER, December 2010.

55 Frankel, Jeffrey A, "Monetary Policy in Emerging Market a Survey", NBER Working Paper, 2010.

56 Barro (2002), as an example, believes that the currency and banking crises in Asia emerging market countries in 1997/1998 resulted in lower economic growth of 3% per year for five years.

57 Sudden stop is defined as the condition when an amount of foreign capital inflows decline drastically. This condition if followed by a reversal in capital flows on a large scale will cause the capital account to decline drastically and possibly trigger a crisis.

3.4

The Conceptual Framework of Monetary Policy and Macroprudential Integration

One policy perspective found from rapid changes in financial sector behavior and financial crisis phenomenon, which finally transmitted financial risk in a global manner, was that attaining macroeconomic stability was not only related to monetary stability, but that it also interacted with stability of the financial system. Empirical facts show that economic achievements in the ‘great moderation’ period in the years 1987 until 2007 did not automatically isolate the global economy from the onrush of the crisis which was triggered by weakness in the financial sector.⁵⁸ These facts are contrary to the conventional view that monetary stability supports financial stability. Furthermore, the main proponents of this view consider that monetary or price stability is a sufficient condition of financial stability (Schwartz, 1995).⁵⁹

The fact that monetary stability does not automatically guarantee stability of the financial system is in line with the proposition which says that the successes of the central bank in controlling inflation can trigger excessively optimistic perceptions from market players toward future economic developments. This inaccurate perception results in miscalculation of asset valuation which can have a negative impact in the future. Borio et al. (2001) shows that a combination from higher asset prices, fairly brisk economic growth and low inflation – included in the context of the stabilization program, can trigger excessive expectations toward future economic development.⁶⁰ Furthermore, overly optimistic expectations can drastically increase activity in the asset and credit

markets, surpassing the potential level which is based on higher productivity, ultimately pushing up asset prices significantly and tending to boost economic activity and inflationary pressures.

The facts and ideas above imply that causality between achieving monetary stability and stability of the finance system are not automatic. For that, policy formulation by the central bank must weigh up the strategic roles of monetary policy and the financial system together. (See Box: 3.1. The Framework For Financial System Stability). The dynamics in financial crisis shows that monetary policy needs to be directed more toward anticipating the risk of macroeconomic instability stemming from the financial system. The implication of this matter is that healthy macroeconomic management must also take into account stability of the financial system as a foundation for forming a sustainable macroeconomic environment.

Because of that, strengthening the monetary stability and financial system stability framework is expected to become an optimal policy strategy given that reaching monetary stability and financial system stability are preconditions for attaining sustainable economic growth, in the long term. With this perceptive, in order to strengthen monetary stability and financial system stability framework the central bank must be more flexible and creative in responding to uncertainties in the economy. This flexibility is not only related to aligning preferences to try to control inflation and manage economic activities on a macro scale, but also to related to placing the appropriate role of financial system stability.

With this background, one issue which comes forth is related to how to define the mandate to safeguard stability of the financial system in the framework of

58 In general, the period of great moderation is related to the period of minimal volatility, i.e. low inflation and a moderate business cycle.

59 Schwartz, A, “Why Financial Stability Depends On Price Stability”, Economic Affairs, 1995. page 21-25

60 Borio, C., Furfine, C., Lowe, P, “Procyclicality of the Financial System and Financial Stability: Issue and Policy Options”. BIS Working Papers, No 1, 2001. page 1-57.

monetary policy. One alternative monetary policy format which can be devised is by continuing to make price stability as the key element in influencing the monetary policy response. Yet, the context of price stability expands by also accommodating financial stability indicators and having a long-term forward looking horizon. Another alternative policy format is to place management of financial system stability as one of the mandates of monetary policy, besides maintaining price stability.

Regarding the last alternative mentioned above, Svensson (2010) stated that there is a tight connection between achieving monetary stability and financial system stability.⁶¹ Stability of the financial system directly influences the financial markets, and the condition of the financial markets will influence the effectiveness of the monetary policy transmission mechanism. If there are problems in the financial markets, this matter can drastically influence real economic activity, as in the case of a financial crisis. Meanwhile, monetary policy also impacts banks' balance sheet and asset prices, which then impacts the stability of the financial system. Nonetheless, although related, both policies have conceptual differences, either viewed from the objective, the instruments used and the authorities which are responsible. Other than that, as argued by Blinder (2010) and Nyberg (2010), these conceptual differences do not overlook the benefit if a large portion of the responsibility to maintain financial system stability policy falls onto the central bank.^{62,63}

61 Svensson, L. E, "Monetary Policy and Financial Markets at the Effective Lower Bound". *Journal of Money, Credit and Banking*, No.42, 2010. page 229–242.

62 Blinder, A, "How Central Should the Central Bank Be?", *Journal of Economic Literature*, No.48(1), 2010. page 123-133.

63 Lars Nyberg and Tom Andersson "Monetary and Financial Stability from a Central Bank Perspective" *Economic Review* No.2, 2010, page 29-43.

■ The Role of Macroprudential Policy

As previously mentioned, the urgency to strengthen the framework for monetary stability and financial system stability has implications that healthy macroeconomic management must also take into account financial stability as the foundation for forming a sustainable macroeconomic environment. In this regard, strong financial infrastructure accompanied by sufficient examination and oversight are the main conditions which must be fulfilled in the context of domestic market integration in an increasingly complex financial system. Borio (2003) stated that the regulatory framework or macroprudential policy needed to be strengthened because it can minimize risk when the financial markets come under heavy pressure for lengthy period. This could cause a slump in real output in the economy.⁶⁴

Conceptually, macroprudential policy is a regulatory prudential instrument which is used to achieve stability in the overall financial system, and not just the individual wellbeing of financial institutions. As such, macroprudential policy is used to minimize the boom-bust cycle in the supply of credit and liquidity which can cause economic instability. With its role in maintaining the stability of financial intermediation, macroprudential policy is able to support the objective of monetary policy which is to maintain price and output stability.

There are two important dimensions to macroprudential policy. Firstly, the cross-section dimension, which shifts the focus from prudential regulation for individual financial institutions to regulation for the overall

64 Borio, C, "Towards a Macroprudential Framework for Financial Supervision and Regulation?", *BIS Working Papers*, No.128, February 2003.

Table 3.1 Macroprudential Policy in Various Countries

Instrument	Country
Weighted Risk Adjustment in Capital Regulation (increase or decrease weighted risk)	India, Indonesia, Malaysia, Estonia, Ireland, Portugal, Norway
Countercyclical Provisioning Application (increase provision to certain loan such as loan to big debtor)	China, India
Loan to value ratio limitation	China, Hongkong, Korea, Singapore, Malaysia, Thailand, Bulgaria, Norway, Portugal, Romania
Credit limitation to certain sectors	Korea, Malaysia, Philippines, Singapore, Thailand, Romania
Change in Reserve Requirement	China, India, Indonesia, Korea, Malaysia, Finland, Estonia

Source: Borio and Shim (2007), Hannoun (2010).

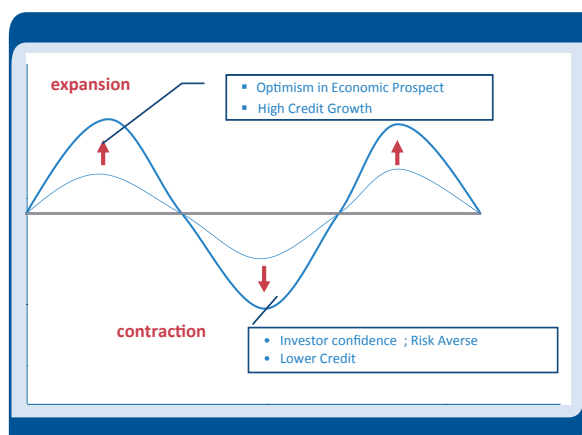


Chart 3.4 Monetary and Macroprudential Policy to Mitigate Procyclicality

financial system. History of financial crisis shows that the majority of financial crises that occur were not due to problems of individual banks which then spread to the entire financial system. Rather, the majority of crises have occurred due to exposure from macrofinances imbalances which were generally conducted by the majority of financial system players. Thus, a more holistic view toward the financial system and its relationship with the macroeconomy from various aspects is very much needed.

The second dimension is the time-series dimension, i.e. the macroprudential policy aimed at reducing the risk of excessive pro-cyclicality in the financial system.⁶⁵ In this context, macroprudential policy must be designed so as to be able to eliminate – or at least mitigate - pro-cyclicality. The principal to do this is to encourage financial institutions to prepare sufficient buffers during the good times and how to use these buffers when the economy deteriorates.

In line with the different challenges in the financial sector, especially after the global financial crisis in 2008/2009, many central banks used macroprudential policy instruments in a wider sense. In relation to this, a number of instruments which previously were better known as microprudential instrument (like loan-loss

provisioning requirements, or loan-to-value) or monetary instruments (like reserve requirement) were also used to prevent systemic risk and maintain stability of the financial system. Policy instrument used was not the type focused on efforts to address risk of individual banks. As such, this policy instrument can be categorized as a macroprudential policy instrument. A number of macroprudential policy instruments which were used by a number of countries can be seen in Table 3.1.

■ Integration of Monetary and Macroprudential Policy

To strengthen the framework for monetary stability and financial system stability, integration of monetary and macroprudential policy is needed. As known, the main goal of monetary policy is to maintain price stability. To reach that goal, the central bank usually uses interest rates policy as its main instrument. Nonetheless, maintaining price stability is not enough to guarantee the achievement of macroeconomic stability because the financial system which is procyclical in nature can cause excessive fluctuations in the economy. Meanwhile, the goal of macroprudential policy is to guarantee the resilience of the overall financial system in the effort to support financial intermediation services in the economy in general. With its counter cyclical role, macroprudential policy can support the monetary policy goal to safeguard price stability and output.

Integration of monetary policy and macroprudential policy is illustrated in Chart 3.4. As an example, macroprudential policy can be aimed at tightening capital and liquidity requirements when the economy is in an upswing, thus encouraging banks to reduce loans growth in efforts to maintain future resilience in the event that the economy weakens. In such a condition, efforts to maintain resilience of the banking system will simultaneously support the goals of monetary policy to stabilize the supply of credit. As such, the goal of macroprudential policy—with its countercyclical nature—will form a type of synergy with the goals of monetary policy in reducing economic fluctuations.

⁶⁵ Borio C; Shim, "What Can Macroprudential Policy do to Support Monetary Policy?" (BIS) Monetary and Economic Department No. 242, December 2007.

3.5

Structural Policy to Support Sustainable Economic Growth

As previously explained, monetary stability and financial system stability are both needed to support sustainable economic growth. However, these requirements alone are not sufficient, a number of factors which can increase economic capacity are also needed. For that, various policies are needed to overcome problems in boosting economic capacity. Capital growth and higher productivity are key to a balanced improvement for supply and demand. With this balance, higher economic growth can take place in line with lower inflation and macroeconomic stability.

The future economy will be affected by factors such as structural policy, global economic and financial conditions as well as macroeconomic policy (Diagram 3.1). Structural policy through strengthening of fundamental factors —infrastructure, increasing human resource quality,

along with R&D — play a role in raising capacity of the economy to grow in the long term, especially when done by improving weak points which remain a major obstacle for the economy. On the other hand, demand side policy is also necessary to manage developments on the demand side so as to be always in line with the process of capacity development. Conducive developments on the demand side also form an important requirement in supporting business certainty. An optimal balance between supply side policy (structural) and demand side policy will result in sustainable economic growth.

Strengthening of the foundation of the economic structure is a necessary condition for raising productivity and economic efficiency. Hence, it can also increase the return on investment of both private players and public institutions making them more competitive. If an increase

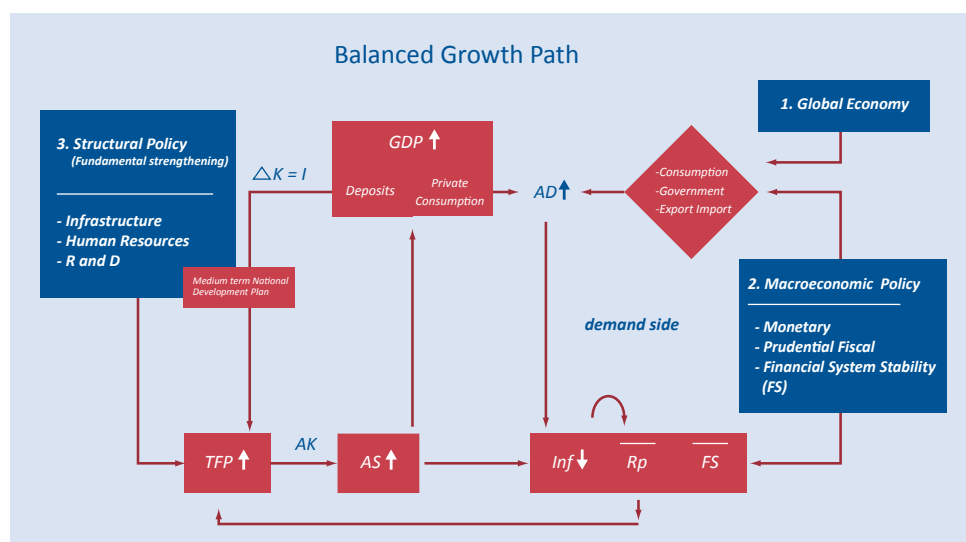


Diagram 3.1 Balanced Growth Path

in capacity and productivity can be achieved, the supply side will be able to respond to accelerated growth from the demand side such that it does not cause inflationary pressures. Structural policy plays a role in increasing the capacity of the economy to grow in the long run, especially by improving weak points which are a major obstacle for the economy. The five main problems are:

- i. Low capacity in technology and Science for innovation purposes and R&D;
- ii. Below standard education and healthcare system;
- iii. Insufficient mastery of information technology and communications;
- iv. Insufficient transportation infrastructure and distribution; and
- v. Insufficient and unsustainable supply of energy (such as electricity).

These five problems if resolved will result in faster economic growth through increased investment. Nevertheless to overcome the main problems needs the support and role of the government. Improvement of the economic foundation depends upon overcoming the weak points which are still a major obstacle in the economy. Overcoming these main weak points can result in higher productivity in the tradables sector such that there is economic convergence to a more prosperous peer group. Increased economic capacity will increase the people's income and cultivate savings which is needed to support investment. Besides that, increasing economic capacity will also maintain continuity of the people's income and consumption.

Based on Survey on Trade Competitiveness and Investment undertaken by Bappenas, infrastructure is one

of the very important factors in influencing investment.⁶⁶ This is in line with the World Bank study as mentioned by Staub et al (2008). This study shows that investment in infrastructure contributes significantly to economic growth in East Asia.⁶⁷ Seen from the type of infrastructure, the electricity sector is the most important factor, compared to other types of infrastructure. Based on this, the main step needed is to speed up the infrastructure development closely related to efforts to raise production capacity and boost the economy.

From the trade perspective, exchange rate depreciation cannot be depended upon to increase competitiveness. Product with high added value is greatly needed to promote exports. In this regard, we need to give attention to the dynamics of Indonesia's economic growth structure. Sectors absorbing a lot of workforce and facilitating technology expertise, especially the manufacturing industry, are providing an increasingly smaller contribution. In contrast, faster growth is taking place in the natural resources sector where added value is lower and in non-tradable sectors like telecommunications. In the future, product quality with high added value is very much needed to push exports such that we do not only rely on exports of natural resources.

In general, the increase in Indonesia's competitiveness vis-à-vis 58 countries improved in 2010 compared to the previous 5 years (Chart 3.5). This mainly owes to improvements in the macro environment (enabling environment for growth). Nonetheless, in regard to competitiveness in infrastructure and business (fundamental support for growth), the position of Indonesia's competitiveness was still far behind a number of neighboring countries, namely Malaysia and Singapore. The weakest point of Indonesia's competitiveness is the poor quality and lack of infrastructure, either intangible (education, health, science and technology) or tangible (basic infrastructure and technology). Besides that, Indonesia's improved productivity and efficiency gains still trail behind other countries. The poor tangible and intangible infrastructure is the main weak point in Indonesia's economy in 2010. Reformation on human resource policies is crucial to bring the Indonesian economy toward a knowledge-based economy. With human capital reform policies, Indonesia would be able to avoid the middle-income trap, a phenomenon where

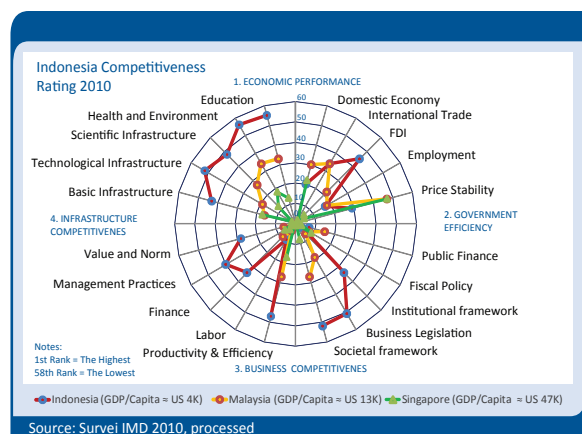


Chart 3.5 Indonesia Competitiveness Rate 2010

⁶⁶ Bappenas, 2008.

⁶⁷ Straub, Stephane, and others, "Infrastructure and Economic Growth in East Asia," The World Bank, April 2008.

developing countries are unable to become high income countries.

By using survey data from the Institute of Management Development Competitiveness Report (IMD), it can be confirmed that the main problems in Indonesia are in both tangible and intangible infrastructure, that is transportation and energy infrastructure, and in education, science and healthcare (human capital). In these areas, Indonesia is less competitive than either Malaysia or Singapore. The challenge to overcome these problems is also tougher since other countries are

continuing to make progress. However, structural policy which is directed to reduce these problems is expected to bring about significant gains in prosperity.

Based on the description above, it is important to formulate appropriate medium and long term strategies. Growth in capital, either physical capital or human capital, and productivity improvements remain key to balanced improvements on the aggregate supply and demand. The ideal condition expected would lead to higher GDP and lower inflation, which, in turn, would be accompanied by higher per capita incomes.

3.6

Conclusion

The Indonesian economy still faced a number of key challenges in 2010, namely rising inflation, rapid inflows of foreign capital, sizable excess liquidity, financial system problems and problems in the real sector. In line with the imbalances in the recovery of the global economy, foreign capital continued to flow into the country during the reporting year. Meanwhile, inflation, which up to the middle of the year was well under control, rose fairly sharply in the second half. In the banking sector, amid the sizable excess liquidity, the role of banks in promoting economic growth was still limited. Beside that, the competitiveness of banks from the aspect of efficiency, capital, and assets was still relatively low compared with its regional peers. Meanwhile, there remained various problems in increasing economic capacity in the real sector.

These challenges complicated monetary policy and the monetary authority was faced with a trilemma between exchange rate stability, price stability, and stability of the financial system. Because of that, to maintain a balanced economy, both internally and externally, the central bank could not only depend on one policy, but needed to use a policy mix. The policy mix to achieve an internal balance included, among others, interest rate policy and macroprudential policy. Meanwhile, the policy mix to achieve an external balance included, among others, exchange rate policy and macroprudential policy on foreign capital flows. The following chapter will explain Bank Indonesia's policy mix in 2010.

BOX 3.1: Framework for Financial System Stability

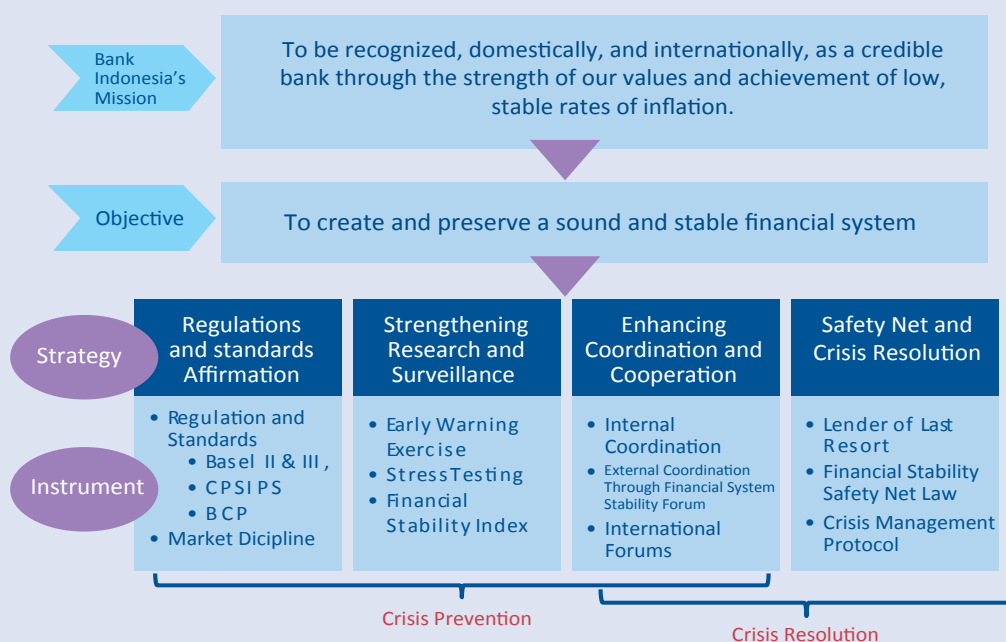
The economic crisis of 1997-1998 has given Indonesia a very valuable lesson in efforts to preserve the financial system stability (FSS). These efforts to safeguard FSS were carried out by employing crisis prevention methods, along with undertaking financial crisis resolution. Crisis avoidance was undertaken by reducing systemic risk, which is the risk of failure that not only relates to elements of the financial system, but also the financial system as a whole (Kaufman & Scott 2003).¹ Because of that, preserving FSS did not only depend upon micro prudential policy, but also needed macroprudential policy.

In this regard, Bank Indonesia undertook monitoring of the overall financial system by dividing monitoring aspects into three groups, i.e. monitoring risk in the

banking sector, monitoring risk in the corporate and household sectors, and monitoring risk in non bank financial institutions and the financial markets. All the above mentioned monitoring was aimed at attaining objective information regarding conditions of the financial system. For that, Bank Indonesia developed various macroprudential methods which used various micro prudential indicators, market indicators, and macroeconomic indicators. Besides that, Bank Indonesia also developed a number of methodologies which can be used to assess the condition of the financial system. This methods cover aspects of the financial system's resilience (stress testing), the probability of financial institutions default, financial institution interconnections with regard to risk in the financial system, and measurement of credit, liquidity and market risks. Assessment of the financial system condition is reported to the Board of Governors to provide input for devising banking policy and to offer recommendations to other financial system authorities (BAPEPAM-LK and LPS) in the

1 Kaufman, George G. and Kenneth E. Scott, "What Is Systemic Risk, and Do Bank Regulators Retard or Contribute to It?" The Independent Review, V. VII, No. 3, Winter 2003, pp. 371– 391.

Diagram 1. Financial System Stability Framework



CPSIPS = Core Principles for Systemically Important Payment Systems

BCP = Basel Core Principles

**) Financial System Safety Net Law will provide foundation for crisis resolution policy which is need a coordination among financial system authorities (BI, MoF, and The Indonesia Deposit Insurance Corporation). The Financial System Safety Net Law is currently undergoing drafting process.*

framework of preventing systemic risk or a crisis from occurring.

If a crisis cannot be avoided, then Bank Indonesia already has crisis management protocols - especially to handle problematic banks. For banks which are deemed not to have a systemic impact, Bank Indonesia follows Bank Indonesia regulations on Exit Policy (currently PBI No. 13/3/2011 dated 17th January 2011 on “Determining the Status and Measures for Bank Oversight”). If, however, the bank does have a systemic impact based on the potential impact of bank’s liquidation and the potential impact it has on the financial markets, infrastructure and the real sector, then this protocol involves coordination between Bank Indonesia, the Government and LPS.

Overall, efforts to safeguard FSS are contained in the Framework for Financial System Stability where it is mentioned that the mission and aims of Bank Indonesia in safeguarding FSS are respectively “Attaining and preserving rupiah stability through monetary stability and developing stability of the financial system for sustainable development”. It is also stated that Bank Indonesia should “Be active in creating and maintaining

a stable and healthy financial system”. For the above mentioned goal, Bank Indonesia is continually active in applying financial system regulations and standards with reference to valid international standards for the financial system, including through its membership in Financial Stability Board (FSB) and Basel Committee for Banking Supervision (BCBS).

More R&D is also being undertaken with development of various methodologies and financial system indicators that can evaluate the condition of the financial system objectively and in a timely manner. Considering that Bank Indonesia is not the only financial system authority, greater coordination and cooperation are very important. This coordination is needed to avoid and resolve crises. Currently, coordination between Bank Indonesia, The Finance Ministry and LPS in the framework of Safeguarding FSS is contained in the Note of Understanding dated 30th July 2010. To carry out the crisis resolution, Bank Indonesia functions as the Lender of Last Resort. Meanwhile, to provide coordination in relation to the crisis resolution, an adequate legal foundation is needed to help facilitate efforts in handling crises when needed.

