

POLICY RESPONSE

MAINTAINING STABILITY AND STIMULATING GROWTH WITH POLICY MIX



PART III POLICY RESPONSE

During 2015, the economy faced three macroeconomic policy challenges that demanded be properly managed. The first policy challenge concerned the efforts to safeguard macroeconomic and financial system stability amid heightened uncertainties on global financial markets. These uncertainties arose primarily from the uncertainty over monetary policy normalization in the United States, concerns over the fiscal negotiations with Greece, and the unexpected devaluation of the yuan. The uncertainty on global markets triggered risk-off behavior by investors that led to contraction in foreign capital inflows on the domestic financial market. This was accompanied by stronger downward pressure on the rupiah that had to be managed carefully to avoid negative impact on the macroeconomic stability.

The second challenge concerned efforts to bolster growth in a domestic economy in slowdown from the fallout of weakening global economic growth. The global economic slowdown accompanied by continuing decline in commodity prices led to significant pressure on performance of export and resource-based sectors of the economy. This pressure even spread to non-resource sectors. The potential for prolonged slowdown in domestic economic growth had to be mitigated in order to nurture positive sentiment for the domestic economic outlook. In view of the prolonged global economic slowdown, efforts to bolster economic growth by stimulating domestic demand would be key to the economic recovery process in the short-term. The third policy challenge concerned the need to accelerate implementation of structural reforms. The various structural problems in the domestic economy had escalated the negative impact of external shocks on both macroeconomic stability and domestic economic growth. It therefore became vital to step up the implementation of structural reforms in order to reinforce the foundations of the Indonesian economy as a basis for creating sustainable economic growth.

To address these challenges, Bank Indonesia and the Government continued to strengthen synergy in macroeconomic policy management. The policy mix pursued by Bank Indonesia focused on measures to safeguard macroeconomic and financial system stability. This policy mix was also reinforced by close coordination between Bank Indonesia, the central and regional governments, and other authorities. To generate momentum for stronger economic growth, Bank Indonesia pursued measures that involve the use of accommodative macroprudential policies. This policy was implemented in synergy with an increased fiscal stimulus by the Government to accelerate the process for recovery of economic growth. In addition, the Government and Bank Indonesia worked tirelessly to strengthen coordination in accelerating the pace of structural reforms. In this regard, the Government launched the Economic Policy Packages I-VIII, a series of policies aimed at speeding up improvements to infrastructure and enhancing greater domestic economic competitiveness. The Government's efforts to accelerate structural reforms were also supported by Bank Indonesia policies for building greater resilience and efficiency in the domestic economy.

From Bank Indonesia side, the measures for safeguarding macroeconomic stability focused on bringing inflation back to the inflation target, curbing the current account deficit to a more prudent level, and managing the stability of the rupiah exchange rate. Against this background, Bank Indonesia worked throughout 2015 to strengthen the monetary policy mix through policy actions involving interest rates, the exchange rate, monetary operations, capital flows management, and strengthening the buffer of international reserves. In the meantime, Bank Indonesia also undertook a selective relaxation of macroprudential policies and lowered the statutory reserve requirement aimed at generating momentum for economic growth. These policies sought to expand capacity of bank financing by providing additional liquidity to boost lending. The relaxation on macroprudential and monetary policies involved measured actions that took into account their impacts on the financial system stability. As an effort to support structural reform, Bank Indonesia took further actions for deepening of the financial market, improvement of financial inclusion, and strengthening of the payment system. In financial marketing deepening, the objective was to create a resilient and efficient financial market. Alongside this, the financial inclusion policy sought to improve access to economic financing, while payment

system policy focused on strengthening the payment system infrastructure in order to bring about a secure, reliable, and efficient payment system with the requisite capacity to support economic efficiency.

The thrust of interest rate policy, like before, was on achievement of the inflation target, reduction of the current account deficit, and safeguarding exchange rate stability. Regarding inflation, the tight bias interest rate policy focused on managing inflation expectations and domestic demand in order to bring down inflation quickly to within the targeted range of 4±1%. With inflation expectations still running high in early 2015, Bank Indonesia (BI) kept the BI Rate on hold at 7.75% in January 2015. In February 2015, Bank Indonesia brought the BI Rate back to the level before the increase of BI Rate in November 2014. This normalization was achieved by lowering the BI Rate by 25 bps after assessing that projected inflation at the end of 2015 would be back on the target. Bank Indonesia kept the BI Rate steady at 7.50% until the end of 2015. Bank Indonesia on one hand confident that the interest rate at the prescribed level remained commensurate with efforts to curb domestic demand and imports in order to bring down the current account deficit to a more prudent level. The reduction in the current account deficit in turn lowered domestic demand for foreign currencies. On the other hand, Bank Indonesia also regarded the prescribed interest rate as sufficiently competitive to attract a greater supply of foreign currency, mainly through foreign capital inflows. This combination was expected to relieve excessive downward pressure on the rupiah fuelled by mounting uncertainties on global financial markets. The interest rate policy proved effective in safeguarding macroeconomic stability as reflected in inflation held to within the 2015 inflation targeting range of 4±1%, a reduction in the current account deficit to about 2% of GDP, and the strengthening of the rupiah during the fourth quarter of 2015.

This achievement in inflation also owes much to intensified coordination among agencies under the Inflation Monitoring and Controlling Team (TPI) and Regional Inflation Monitoring and Controlling Teams (TPIDs) that curbed inflation within the 2015 target range of 4±1%. Inflation in 2015 was recorded at 3.35%, down sharply from the inflation of 2014 that reached 8.36%. The more robust coordination ensured the smooth operation of distribution and supply amid the impact of the El Nino, thus safeguarding price stability in volatile foods. This success was also reflected in the subdued inflation over the 2015 Eid-ul-Fitr festive season, which came below the average inflation for the period over the previous four years. The mild volatile foods supported by stability in administered prices prompted a decline in inflation expectations with the result that in 2015, core inflation fell to 3.95% compared to 4.93% in 2014.

The tight bias monetary policy also sought to mitigate the impact of divergence in global monetary policies that has triggered a shift and increased volatility of capital flows into emerging market economies, including Indonesia. The interest rate policy was sufficient to lift some of the pressure for depreciation of the exchange rate, although external influences remained dominant. Global pressures mounted in the third quarter of 2015 with growing sentiment over the increase in the FFR and a surprise devaluation of the yuan. These developments put limits on room for manoeuvre in monetary policy and therefore necessitated support from exchange rate policy and management of international reserves. For this purpose, Bank Indonesia worked in synergy with the Government to launch the Economic Policy Package I on 9 September 2015 and the Economic Policy Package II on 30 September 2015. In these policy packages, Bank Indonesia launched a series of policies for safeguarding the rupiah exchange rate built on the three pillars of: (i) maintaining a stable exchange rate for the rupiah (ii) bolstering management of rupiah liquidity, and (iii) reinforcing the management of foreign exchange supply and demand.

Bank Indonesia stayed constantly active on the market to maintain the stability of the rupiah. Bank Indonesia intervened on the spot and forward markets to create equilibrium between demand and supply of foreign currency, thus curbing volatility in the rupiah exchange rate. In September 2015, Bank Indonesia acted to bolster supply and demand for foreign exchange by changing the frequency of FX Swap auctions from twice to once a week, reducing the limit on foreign currency purchases supported by underlying documents, and issuing foreign currency Bank Indonesia Securities (SBBIs). Meanwhile, to strengthen the management of rupiah liquidity, Bank Indonesia made adjustments to the auction mechanism for open market operations (OMOs) by switching from variable rate tenders (VRTs) to fixed rate tenders (FRTs). The range of OMO instruments was diversified further with variations in tenor that include: i) 3 and 6-month Bank Indonesia Certificates of Deposit (SDBIs), ii) 9 and 12-month Bank Indonesia Certificates (SBIs), and iii) Government Securities reverse repo with a 2-week tenor. The added range of monetary operations (MO) instruments, besides strengthening liquidity management, also sought to create a term structure for MO interest rates consistent with the monetary policy stance in order to strengthen policy signals on the money market.

In 2015, Bank Indonesia also announced policies aimed at providing more fundamental support for rupiah exchange rate stability. On 1 January 2015, Bank Indonesia began implementing rules on the application of prudence principle in non-bank corporate external debt management. In a concurrent measure to reduce domestic transactions that make use of foreign currencies and thus also increase foreign exchange demand, Bank Indonesia launched a policy for mandatory use of the rupiah currency within the territory of the Republic of Indonesia. This policy reduced the volume of foreign exchange transactions among residents that had previously been conducted in foreign currencies. Other coordination with the Government involved measures to encourage longer retention of export proceeds within Indonesia. The Government provided an incentive by reducing the tax on time deposit interest paid by exporters who willing to hold their export proceeds in domestic banks. This measure is expected to attract export proceeds previously parked abroad, and in doing so strengthen international reserves.

Strengthening the buffer of international reserves also formed part of the Bank Indonesia strategy for readiness to cope with sudden shocks arising from external sentiment. While ensuring adequate international reserves as a first line of defense, Bank Indonesia also strengthened the international financial safety net as a second line of defense. The second line of defense facilities consist of regional cooperation on financial arrangements and bilateral cooperation with partner nations, including the following: the ASEAN Swap Arrangement (ASA), the Chiang Mai Initiative Multilateralization (CMIM), and the Bilateral Swap Arrangement (BSA) between Bank Indonesia and the Bank of Japan (BoJ). Bank Indonesia also collaborates under Bilateral Currency Swap Arrangements (BSCAs) with the Bank of Korea (BOK), the People's Bank of China (PBoC), and the Reserve Bank of Australia (RBA) to promote bilateral trade using the local currencies of both nations party to such agreements. The BI-PBoC BCSA may also be used to meet short-term liquidity needs. The series of policies put in place to stabilize the exchange rate and buttress lines of defense succeeded in calming the jitters of market actors and foreign investors, enabling rupiah depreciation to be managed more effectively compared to peer nations.

To help gaining momentum for economic growth, Bank Indonesia pursued accommodative macroprudential policies during 2015. In June 2015, Bank Indonesia relaxed macroprudential policy by raising the Loan to Value (LTV) ratio or Financing to Value (FTV) ratio for property loans and lowering down payments for motor vehicle credit. To expand the funding basis for banking intermediation, Bank Indonesia took measures to encourage the issuance of securities now factored into the Loan to Funding Ratio (LFR) that has replaced the Loan to Deposit Ratio (LDR). The introduction of the LFR will provide the banking system with greater room for intermediation, which will not rely solely on bank deposit (DPK). In a subsequent action to promote lending to MSMEs, Bank Indonesia introduced an incentive of an increased limit for the LFR target for banks able to meet a target for lending to MSMEs while maintaining a prudent NPLs ratio. This relaxation of macroprudential policy was envisaged to spur a recovery in credit growth, which had fallen to a low of 9.7% (yoy) in July 2015. To support these efforts for recovery in credit growth, Bank Indonesia also lowered

the primary reserve requirement in rupiah from 8% to 7.5% with effect from 1 December 2015. For the full year, credit growth ultimately reached 10.4% (yoy) while economic growth came to 4.79%.

To support more sustainable economic growth, Bank Indonesia also worked actively to coordinate with the Government in implementing structural reforms. Structural reform policies focused on measures to improve infrastructure, strengthen competitiveness, and achieve food, energy, and water security, as well as on sustainable development financing. To put these policies into place, the Government announced the series of phase I-VIII economic policy packages. Not only did Bank Indonesia extend support for the design of these economic policy packages, but it also held a number of National Coordinating Forums to develop a common vision elaborated in a concrete strategy for development of priority sectors. In the National Coordination Forums, the priority sectors on which discussions focused were development of a maritime-based economy in Ambon, energy security in Balikpapan, and development of the industry and tourism sectors in Yogyakarta.

To support structural reforms, Bank Indonesia was also active in promoting financial market deepening and financial inclusion. Financial market deepening was carried out by expanding the scope of market actors, adding to the variety of financial market instruments and promoting efficient price formation. At the same time, to improve public access to financial services, financial market deepening also involved the payment system with measures such as Digital Financial Services, as well as development of the MSMEs sector. MSMEs development will not only provide greater access to financing from financial institutions, but also promote equitable distribution of economic activity and benefits. MSME development was also brought into alignment with the Nine Priority Programs (Nawa Cita) launched by the Government to bolster leading sectors. Consistent with development of leading sectors, Bank Indonesia also played a role as a counterpart in the People's Business Credit (KUR) Policy Committee to support the channelling of Government-subsidised credit.

To support the growing scale of economic activity. Bank Indonesia also took action to reinforce the infrastructure of the payment system. In 2015, Bank Indonesia launched the Second Generation BI-RTGS, the Second Generation BI-SSSS, and the Second Generation SKNBI. This is intended to improve security, reliability, and speed in settlement of transactions for greater efficiency and to provide optimum support for the economy. Bank Indonesia also kept working to promote the use of noncash payment instruments in transactions in order to improve security and efficiency. Under a later initiative for promoting financial literacy and inclusion, Bank Indonesia also expanded the reach of the Digital Financial Services (DFS) programme, which represents part of the National Non-Cash Movement (GNNT). Alongside these measures, Bank Indonesia supported cash payments by continually ensuring the availability of sufficient volume of rupiah currency in a range of denominations. The quality of rupiah currency in circulation has been improved under the clean money policy, even in the remote areas of the nation. The drive to circulation and provision of rupiah currency in border regions was intensified under reforms for currency distribution and cash services for implementation of mandatory use of the rupiah within the territory of the Republic of Indonesia.

Consistent implementation of these various policies mix proved capable of safeguarding the performance of the Indonesian economy amid a range of external sector shocks. The positive performance in the economy was reflected in steady improvement in macroeconomic and financial system stability and the onset of recovery in domestic economic growth. Improved macroeconomic stability was indicated by achievement of the 2015 inflation target of 4±1%, a reduction in the current account deficit to about 2% of GDP, and control retained over stability in the rupiah, which even gained value during the fourth quarter of 2015. Regarding the financial system, banking system resilience stayed robust, bolstered by high levels of capital adequacy and supported by a range of macroprudential policies. Economic growth also began gaining momentum for recovery during the second half of 2015.

Looking forward, the positive effect of the various policies implemented thus far will provide support for economic recovery in 2016. There is confidence that the economic policy packages I to VIII launched by the Government will provide stronger assurance for business in embarking on greater investment and expansion of their business activities. Meanwhile, support from Bank Indonesia policies in making prudent use of the room for monetary policy easing and accommodative macroprudential policies will provide added thrust for the momentum of economic recovery. Strengthened by the results of structural reforms, the momentum for economic recovery is expected to create a robust basis for the Indonesian economy to achieve sustainable growth in 2016 and build greater capacity for withstanding external shocks.





Monetary policy in 2015 was consistently directed towards maintaining macroeconomic stability amidst a range of serious challenges. In addition, monetary policy was supported by increasingly transparent and effective communication in order to emphasise Bank Indonesia's avowed commitment.



Chapter 11

Monetary Policy

Monetary policy in 2015 was directed towards mitigating the undesirable effects of ubiquitous global economic uncertainty on macroeconomic stability. To that end, Bank Indonesia adopted a tight-bias monetary policy stance, underpinned by rupiah stabilization policy. Congruous with maintained macroeconomic stability, Bank Indonesia prudently eased its monetary policy stance in order to stimulate the domestic economy. The disciplined and prudent monetary policy stance adopted by Bank Indonesia preserved macroeconomic stability while providing sufficient space for economic recovery, reflecting inflation that returned to its target corridor, a narrower current account deficit, rupiah stability and increased domestic economic momentum. Monetary policy in 2015 was directed towards mitigating the undesirable effects of ubiquitous global economic uncertainty on macroeconomic stability. To that end, Bank Indonesia adopted a tight-bias monetary policy stance, underpinned by rupiah stabilization policy. Congruous with maintained macroeconomic stability, Bank Indonesia prudently eased its monetary policy stance in order to stimulate the domestic economy. The disciplined and prudent monetary policy stance adopted by Bank Indonesia preserved macroeconomic stability while providing sufficient space for economic recovery, reflecting inflation that returned to its target corridor, a narrower current account deficit, rupiah stability and increased domestic economic momentum.

Monetary policy, which was geared towards maintaining macroeconomic stability, faced a number of onerous challenges in 2015. Growing uncertainty blighted global financial markets due to the proposed Federal Funds Rate (FFR) hike by the Federal Reserve, while monetary policy in other advanced countries tended to remain accommodative, which compounded depreciatory pressures on the rupiah. Consequently, the rupiah depreciated against the U.S. dollar from the beginning of 2015 until September of the same year. Strong and persistent pressures on the rupiah subsequently exacerbated inflationary pressures and triggered financial system instability. In addition, sustained exchange rate depreciation pressures undermined sentiment in terms of the domestic economic outlook, which was moderating as a result of unconducive global economic conditions. Under such circumstances, measures to maintain macroeconomic stability in order to successfully improve the perception of sustainable economic growth became imperative because any decline in the outlook could have derailed rupiah stability.

Monetary policy in 2015 was focused on mitigating short-term currency risk and controlling macroeconomic stability. Furthermore, monetary policy aimed to alleviate excessive pressures on the rupiah, while maintaining rupiah stability in accordance with its fundamental value., This consistent strategy returned inflation to within the target corridor set for 2015-2017, namely 4±1%, and narrowed the current account deficit to a healthier level. As has been reported previously, Consumer Price Index (CPI) recorded comparatively high inflation in 2014 at 8.36% (yoy) due to a series of fuel price hikes. Meanwhile, the current account deficit was considered relatively wide in 2014 at 3.1% of GDP due to dwindling global demand and sliding international commodity prices. Consequently, Bank Indonesia instituted measures to control macroeconomic stability as a prerequisite for strengthening the structure

of the domestic economy to be more solid and resilient. Macroeconomic stabilization was achieved through policies on interest rates, the reserve requirement, open market operations, exchange rates, and capital flows, while supporting financial market deepening.

The tight-bias monetary policy stance was maintained until October 2015 and was shored up by a rupiah stabilization policy package. The BI Rate was held at 7.50% from February until yearend 2015. The tight-bias stance was also supported by a rupiah stabilization policy package in September 2015, containing three salient pillars, namely stabilising the rupiah consistent with the currency's fundamental value, strengthening rupiah liquidity management, including the term structure of open market operations, as well as strengthening foreign exchange supply and demand management. Accelerating financial market deepening further supported the rupiah stabilization policy package.

Mitigating the impact of moderating economic growth on economic stability, the primary reserve requirement in rupiah was lowered. Accordingly, the reserve requirement was reduced by 0.5% to 7.50% on 1st December 2015. The domestic slowdown and rupiah depreciation triggered economic instability, reflecting a build-up of corporate risk that ultimately eroded investment. Furthermore, weaker corporate performance prompted an accumulation of risk in the banking sector. In addition, economic moderation narrowed fiscal space to stimulate growth. Addressing the potential economic slump, Bank Indonesia sought the appropriate policy response to maintain the favourable perception held by economic players. Consequently, Bank Indonesia lowered the primary reserve requirement in rupiah because looser monetary policy through a BI Rate reduction was considered too risky against the inauspicious backdrop of widespread global uncertainty, which could have led to a potential foreign capital reversal and heightened depreciatory pressures on the rupiah.

Close coordination with the Government and other related authorities supported the monetary policy stance adopted, while maintaining economic stability and propping up the economic recovery. Inflation in 2015 was controlled within the target corridor of 4±1% at 3.35% (yoy). Moreover, the current account deficit also narrowed to a healthier 2.1% of GDP, which bolstered external sector resilience. Meanwhile, rupiah depreciation was successfully mitigated and the currency even rebounded during the final quarter of the reporting year. Macroeconomic stability was further supported by sufficient liquidity in the economy in line with demand, indicated by slower broad money (M2) growth as the domestic economy moderated. Lending rates and deposit rates were also lowered, consistent with weaker demand due to the economic downshift.

11.1. INTEREST RATE POLICY AND THE RESERVE REQUIREMENT

Bank Indonesia's interest rate policy in 2015 was consistently directed towards hitting the inflation target for 2015-2017 of 4±1% as well as narrowing the current account deficit to a healthier level. Measures to control inflation to within the target corridor were pivotal in 2015 considering that inflation had skyrocketed to 8.36% in 2014, far exceeding the target of 4.5±1%.¹ In addition, efforts to narrow the current account deficit to a sounder level were also the focus of policy in 2015 due to the large 3.1% of GDP deficit recorded in 2014.

Low inflation at the beginning of 2015 was conducive to lowering the BI Rate in February. Several indicators at the beginning of the year evidenced dissipating inflationary pressures after the fuel price hike that took place in November 2014. Furthermore, the inflation expectations of consumers and retailers were noted to follow a downward trend during the first quarter of 2015. The Consensus Forecast also confirmed lower inflation expectations amongst economic players, returning to the target corridor of 4±1% by the end of 2015. Against such a favourable backdrop, Bank Indonesia decided to lower its policy rate 25 bps in February 2015 to 7.50%, accompanied by a 25 bps reduction to the Deposit Facility rate, while the Lending Facility rate was held at 8.00%.

Growing global uncertainty affected global capital flows and heightened domestic macroeconomic instability again in the third quarter of 2015 due to the planned FFR hike. Global uncertainty peaked in August 2015 after the People's Bank of China (PBoC) unexpectedly devalued the yuan in order to stimulate the flagging economy. Escalating global risk ultimately forced investors to seek perceived safe haven assets and reduce placements in emerging market countries. Such conditions placed intense pressures on emerging market currencies, including the rupiah. Consequently, the rupiah followed a depreciating trend in 2015, peaking in the third quarter.

Measures to mitigate rupiah depreciation were intensified in order to maintain macroeconomic stability and sustainable economic growth. Excessive rupiah depreciation could have amplified inflationary pressures, undermined corporate performance and disrupted financial system stability, while damaging sentiment in terms of the deteriorating domestic economic outlook. Therefore, it became imperative for the related authorities to introduce measures to maintain positive investor perception in economic sustainability despite the intense depreciatory exchange rate pressures being felt. Concerns on economic prospects will further increase the risks to the economy and thus placed even more pressure on the rupiah (Diagram 11.1).

Bank Indonesia responded to the unfavourable conditions by directing interest rate policy to mitigate the risk on rupiah depreciation and control macroeconomic stability in general. Monetary policy was refocused on alleviating excessive exchange rate pressures, thereby maintaining rupiah stability in accordance with its fundamental value. The move was also consistent with efforts to lower inflation to within the target corridor of 4±1% in 2015-2017 as well as manage the current account deficit to a healthier level. To that end, Bank Indonesia held the BI Rate at a level of 7.50% until December 2015, while maintaining the Deposit Facility and Lending Facility rates at 5.50% and 8.00% respectively. Bank Indonesia policy to hold the BI Rate and Standing Facilities Rate was taken paying due consideration to the persistently high level of short-term global risk.

Mitigating the effect of economic moderation on macroeconomic stability, Bank Indonesia also lowered the primary reserve requirement in rupiah. In November 2015, Bank Indonesia decided to reduce the primary reserve requirement in rupiah from 8.0% to 7.50%, effective from 1st December 2015. The reserve requirement was lowered in line with stronger macroeconomic stability, which provided space to loosen monetary policy. Nonetheless, due to

Diagram 11.1. Economic Challenges in Weakening Rupiah Period



¹ High inflation was primarily attributable to the fuel price hike in November 2014.

lingering uncertainty on global financial markets, primarily the result of the proposed FFR hike and monetary policy divergence in Europe, Japan and China, Bank Indonesia prudently eased monetary policy. The reserve requirement was lowered because easing monetary policy through reductions to the BI Rate was considered too risky against the inauspicious backdrop of widespread global uncertainty, which could have led to a potential foreign capital reversal and heightened depreciatory pressures on the rupiah. In that context, looser monetary policy through a lower primary reserve requirement was expected to enhance bank financing capacity in order to support economic activities that had shown signs of picking up since the third quarter.

11.2. EXCHANGE RATE POLICY

To maintain macroeconomic stability, monetary policy is supported by exchange rate policy, which aims to maintain exchange rate stability in line with its fundamental value. In that context, Bank Indonesia consistently maintains the exchange rate in line with the forward-looking inflation target and in accordance with the supply and demand of foreign exchange on the market based on economic and financial market fundamentals. Exchange rate stability in critical to control inflation on a downward trend, especially when depreciatory pressures heighten. Through anchored inflation expectations, the pass-through effect of exchange rate depreciation can be controlled. In addition, exchange rate stability also restores confidence in the economic outlook of Indonesia.²

Bank Indonesia constantly stabilize the rupiah in line with its fundamental value in order to maintain macroeconomic and financial system stability. Measured foreign exchange market intervention is necessary to dampen shocks that appear from supply and demand imbalances. Bank Indonesia follows a dual intervention strategy, namely rupiah stabilization through selling actions on the foreign exchange market accompanied by purchases of tradable government securities (SBN) on the secondary market. Dual intervention strategy not only supports rupiah exchange rate stability but also safeguards adequate rupiah liquidity. The policy also reinforces Bank Indonesia's SBN holdings as a monetary policy instrument. Exchange rate policy is further supported by a maintained position of international reserve assets as a first line of defense in response to growing global uncertainty.

Bank Indonesia intensified exchange rate stabilization policy during 2015 in response to escalating depreciatory pressures, particularly in the third quarter. Accordingly, Bank Indonesia released a set of measures to help stabilize the rupiah (Table 11.1). The policy package

Table 11.1. Policy Package 9th September and 30th September					
Policy	Strategy				
Maintaining Rupiah Exchange Rate Stability	 Control of the volatility of the exchange rate The purchase of government securities in the secondary market Forward intervention to balance supply and demand in the forward market 				
Strengthening Rupiah Liquidity Management	 Adjustment on OMO auction mechanism of form variable rate tender (VRT) into fixed rate tender (FRT) Adjustment on OMO auction pricing Issuance of SDBI tenor of 3 months and 6 months Issuance of SBI tenor 9 months and 12 months Issuance of government securities based on RR tenor 2 weeks 				
Strengthening Foreign Exchange Supply and Demand Management	 Lowering the limit of foreign exchange purchases by proving the underlying documents Strengthening policies to manage demand and supply of foreign currency in the forward market Adjustment of FX swap auction frequency from 2 times per week to 1 time per week Adjustment FX TD auction mechanism from a variable rate tender (VRT) into fixed rate tender (FRT adjusting pricing and tenor extension up to 3 months Issuance of Securities Bank Indonesia (SBBI) foreign exchange Reduction of the minimum holding period for SBI to 1 week Strengthening information Foreign Exchange Flows (LLD) Coordination with the Government on granting tax incentives to exporters deposits that stores Exp Proceeds (DHE) in Indonesian banks or converting into rupiah 				

² A full discussion on the rupiah exchange rate is presented in Chapter 5, Exchange Rate.

was also synergic with the policies introduced by the Government to maintain domestic economic momentum. The aforementioned panoply of policy measures was implemented immediately, which effectively supported macroeconomic stability as well as sustainable and inclusive economic growth.

Strengthening Rupiah Liquidity Management and Developing Open Market Operation (OMO) Instruments

Rupiah liquidity was controlled through BI monetary policy in order to support the desired policy direction. Monetary operations are used to manage liquidity and balance demand and supply, while transmitting monetary policy to financial market rates. Liquidity management is achieved through monetary operations in the form of open market operations (OMO) and standing facilities. During the first half of 2015, Bank Indonesia undertook a number of measures to strenghthen monetary operations, including simplifying OMO auctions by terminating 9-month Bank Indonesia Certificates (SBI) and instead holding the inaugural auction of 9-month Bank Indonesia Certificates of Deposit (SDBI). The use of SBN held by Bank Indonesia was also optimised through reverse repo SBN and by reducing the frequency of SDBI auctions from six times to twice monthly.

Congruent with the direction of monetary operations, Bank Indonesia constantly strengthened liquidity management to support efforts to stabilize the rupiah. To that end, Bank Indonesia adjusted the pricing of OMO auctions, changed the mechanism from a variable rate tender (VRT) to a fixed rate tender (FRT), released SDBI of three and six months as well as issued 2-week reverse repo SBN and reissued tenors of 9 and 12 months. The pricing and mechanism of OMO auctions were adjusted to strengthen rupiah liquidity management and, therefore, support rupiah stabilization. Pricing was adjusted by raising OMO interest rates to mitigate excess rupiah liquidity in foreign exchange transactions that could heighten pressures on rupiah exchange rates. Meanwhile, the OMO auction mechanism was changed from VRT to FRT in order to strengthen policy signals from Bank Indonesia in terms of rupiah liquidity management. The change to the auction mechanism is only temporary and will be reviewed in due course. In addition to managing liquidity, the measures were also taken to maintain consistency and strengthen monetary policy signals. In that context, Bank Indonesia designed the term structure of monetary operation instruments in pursuance of the monetary policy direction adopted.

Chart 11.1. / N

Monetary Operation Instruments Outstanding



During the first half of 2015, the position of monetary operations tended to increase on the year earlier but subsequently declined thereafter in the second semester compared to the same period of the previous year. The average position of monetary operations (MO) in the first half of 2015 increased 11% on the first semester of 2014 (Chart 11.1). Monetary operations were strengthened during that time by simplifying the OMO auctions through the termination of 9-month SBI and release of 9-month SDBI. Bank Indonesia also optimised the use of the SBN held through reverse repo SBN, while reducing the frequency of SDBI auctions from six times to twice per month. Nonetheless, the average MO position in the second semester was down around 35% on the same period of the previous year. Tighter rupiah and foreign currency liquidity management from August 2015 supported exchange rate stabilization policy. After August

Chart 11.2. / The Duration o







2015, the duration of monetary operations was increased but not to the level achieved at the beginning of the year. The duration of monetary operations was extended because of a decline in daily surplus liquidity in the banking system along with seasonal factors, which made the banks more conservative in terms of maintaining their short-term liquidity (Chart 11.2 and Chart 11.3).

Strengthening Foreign Currency Supply and Demand Management

One pillar of the exchange rate stabilization package issued by Bank Indonesia contained a set of measures to manage the supply and demand of foreign currency. The policy included reducing the limit on purchasing foreign currency with an underlying document, honing policy to manage foreign currency supply and demand on the spot and forward markets, optimizing foreign currency time deposits, optimising FX Swaps, issuing Foreign Currency Bank Indonesia Securities (SBBI), lowering the minimum holding period of SBI to one week, and strengthening the information on Foreign Exchange Flow (LLD). In addition, Bank Indonesia also coordinated with the Government to provide tax breaks on time deposit rates to exporters that deposit their export earnings at domestic banks or convert their export proceeds into rupiah.

Policy to lower the upper limit on purchasing a foreign currency without an underlying document was instituted in August 2015. Accordingly, the limit on foreign currency purchases through spot transactions without an underlying document was reduced from USD100 thousand to USD25 thousand or equivalent per customer per month. The policy was taken in order to control demand for foreign currency not involved with the real economy. Therefore, transactions associated with the real economy (with an underlying document), such as import payments, paying school fees, the cost of medicaments overseas and servicing external debt, were not restricted.

Subsequently, in September 2015, Bank Indonesia strengthened policy to manage supply and demand of foreign currencies on the forward market. The policy aimed to encourage forward selling transactions and clarify underlying forward buys. Forward selling transactions were encouraged by raising the maximum limit with an underlying asset from USD1 million to USD5 million per transactions per customer. Furthermore, the scope of underlying assets for forward transactions (residents and non-residents) and spot selling (rupiah transfers to non-residents) was extended to include proof of ownership of foreign currency domestically or abroad.

Managing the supply and demand of foreign currency was further strengthened by optimizing foreign currency term deposits. The absorption of liquidity was optimised by extending the auction window time, refining the auction method and stipulating the pricing as well as increasing the number of tenors available. The window time was extended on overnight foreign currency term deposit auctions from 14:00-15:00 WIB to 14:00-16:00 WIB in order to optimize the potential utilisation of foreign currency liquidity by domestic banks. In addition, Bank Indonesia also refined the auction mechanism, stipulated the pricing and made additional, longer tenors available, namely three months, in order to lengthen the absorption of foreign currency term deposits. The auction mechanism was changed from a variable rate tender (VRT) to a fixed rate tender (FRT) to communicate policy stance with greater rapidity. FRT implementation and the stipulation of pricing in line with the market rate had favourable impacts, reflecting increases in foreign currency term deposit transactions and the number of auction participants.

FX Swap instruments were also optimized in order to guarantee the availability of hedging instruments and to support liquidity management in order to balance the supply and demand of rupiah and foreign currencies. In September 2015, as part of the measures to strengthen the policy mix of Bank Indonesia, a 12-month tenor was added to complement the existing FX Swap tenors of 1, 3, and 6 months. The move ensured the availability of hedging instruments for the banking industry and corporate sector. To support liquidity management, Bank Indonesia also adjusted auction frequency and the number of outstanding FX Swaps at certain times. In the near term, the strategy temporarily raised the swap rate, which quickly returned to normal after the market adjusted.

Issuing Bank Indonesia Foreign Exchange Bills (SBBI) and shortening the minimum holding period for SBI were subsequent policy measures instituted. Not only was the policy introduced to manage the supply and demand of foreign currencies but also to strengthen financial market deepening. SBBI is a tradeable instrument with tenors of 6 and 12 months. Issuances of tradable SBBI supported financial market deepening efforts through development of the secondary market. Meanwhile, policy to shorten the minimum holding period of SBI from one month to one week was taken to boost non-resident investor interest in placements in Indonesia. Greater non-resident investment would support foreign currency liquidity management, enhance the effectiveness of monetary operations and accelerate financial market deepening.

In addition to the policies that were implemented to influence the balance between supply and demand of foreign currency directly, Bank Indonesia also strengthened the corresponding information infrastructure. The policy aimed to enhance the effectiveness of LLD management, in particular that related to transparency and information availability. Pursuant to Act No. 24 of 1999 concerning LLD and the Exchange Rate System, Bank Indonesia is authorised to requested information and data on the LLD from residents. In that context, various efforts to strengthen the information contained in the LLD reports were required from Bank Indonesia. One main feature was that Bank Indonesia now requires users of foreign exchange to comprehensively report such use with supporting documentation for transactions exceeding a certain threshold. Consequently, in addition to submitting information, customers with payments and receipts above a certain limit that influence bank checking accounts offshore are required to enclose supporting documentation to the bank.

Bank Indonesia also coordinated with the Government to provide a tax incentive on time deposit rates for exporters that deposit their export earnings at banks in Indonesia or convert their export proceeds into rupiah. The policy is contained in Government Regulations No. 123 of 2015 as an amendment to Government Regulation No. 131 of 2000 concerning Income Tax on Time Deposit and Savings Deposit Interest as well as Discounted Bank Indonesia Certificates (SBI). The progressive incentive is determined by the duration of the placement or full conversion into rupiah. The reduction in income tax on term deposits is to 0% for USD denominated time deposits of more than six months and for rupiah time deposits with a minimum maturity period of six months.

Strengthening International Reserve Adequacy

Bank Indonesia policy to strengthen the supply and demand of foreign exchange was also supported by measures to maintain the position of international reserve as first and second lines of defense. International reserve is a buffer to anticipate shocks that could undermine economic resilience. Accordingly, it became increasingly important to bolster the position of international reserve in 2015 in order to mitigate spiralling global economic uncertainty. By yearend 2015, the position of international reserve was adequate to maintain external resilience despite decreasing on the year earlier (Chart 11.4). The position of international reserve at the end of 2015 stood at USD105.9 billion, down from USD111.9 billion at the end of 2014. The decline stemmed from increased payments to service public external debt as well as rupiah stabilization policy, which eroded foreign exchange reserves but underpinned macroeconomic and financial system stability. Despite the decline, the level of international reserve at the end of 2015 was still equivalent to 7.4 months of imports and servicing public external debt, which is well above international adequacy standards of three months and the average position of reserve assets maintained by peer countries.³



3 The International Monetary Fund (IMF) stipulates international adequacy standards of around three months of imports.

Tab	Table 11.2. Bank Indonesia's Swap Arrangements								
No	Facility Type	Purpose	Value	Signing of Agreement	Validity Period	Explanation			
1	ASEAN Swap Arrangement	Multilateral cooperation in the form of swap between the USD/yen/ euro and local currency ten ASEAN countries, aiming to provide short-term liquidity support for member countries experiencing balance of payments problems.	USD2 billion (maximum facility that can be drawn by Indonesia amounted to USD600 million)	16 November 2015	2 years	Extension several times since the first signing on November 15, 2005.			
2	СМІМ	Multilateral cooperation in the form of swaps between USD and ASEAN+3 currencies, aims to overcome liquidity problems due to problems of balance of payment and short-term liquidity in the region.	USD240 billion (maximum facility that can be drawn by Indonesia amounted to USD22.76 billion)	17 July 2014	Unlimited	Amendment of the agreement for the provision of CMIM. The preliminary agreement was signed in March 2010.			
3	Bilateral Swap Arrangement BI-BoJ	Bilateral cooperation in the form of a swap between USD and rupiah, aims to prevent and overcome the difficulties of short-term foreign currency liquidity.	USD22.76 billion	12 December 2013	3 years	Extension several times after the first signing in February 2003, with an increase in the value and type of facilities.			
4	Bilateral Currency Swap Arrangement BI-PBoC	Bilateral financial cooperation in the form of swap CNY and the rupiah, aims to increase trade and direct investment between Indonesia and China, to support the avability of short-term foreign currency liquidity for the stabilization of financial markets, and other purposes as agreed by both parties.	CNY100 billion (equivalent to Rp175 trillion)	1 October 2013	3 years	Extension. The first signing in March 2009.			
5	Bilateral Currency Swap Arrangement BI-BOK	Bilateral financial cooperation in the form of swap KRW and IDR, aims to increase bilateral trade between Indonesia and Korea, as well as to strengthening the financial cooperation for the economic development in both countries.	KRW10.7 trillion/ Rp115 trillion (equivalent to USD10 billion)	6 March 2014	3 years				
6	Bilateral Currency Swap Arrangement BI-RBA	Bilateral financial cooperation in the form of swap AUD and rupiah, aims to increase bilateral trade between Indonesia and Australia, and other purposes as agreed by both parties.	AUD10 billion (equivalent to Rp100 trillion)	15 December 2015	3 years				

Reserve assets were reinforced by the international financial safety net (second line of defense) through regional financial arrangements as well as strategic partnerships with trade partners. Such facilities include the ASEAN Swap Arrangement (ASA), the Chiang Mai Initiative Multilateralization (CMIM) and the Bank Indonesia-Bank of Japan (BoJ) Bilateral Swap Arrangement (BSA) (Table 11.2).

Regionally, Bank Indonesia has entered into a swap arrangement with ASEAN member states in the form of the ASEAN Swap Arrangement (ASA), totalling USD2 billion. On 17th November 2015, the governors of ASEAN central banks extended the arrangement through to 2017. ASA can help meet short-term liquidity requirements for member nations that experience BOP pressures. For the period from 2015-2017, Bank Indonesia is acting as an Agent Bank to coordinate ASEAN Swap Arrangement (ASA) implementation when a participating member activates the facility.

Bank Indonesia has also agreed Bilateral Currency Swap Arrangements (BCSA) with the People's Bank of China (PBoC), Bank of Korea (BOK) and Reserve Bank of Australia (RBA). The arrangements aim to promote bilateral trade and guarantee transaction settlement using home currencies between both signatory countries. To that end, the arrangements are expected to reduce dependence on the U.S. dollar as the vehicle currency, thereby creating rupiah stability. Furthermore, the BCSA with the PBoC can also be utilised to overcome short-term liquidity shortfalls and thus maintain financial market stability. The BI-BOK BCSA, signed in 2014, is valued at Rp115 trillion and shall remain effective until 2017. Meanwhile, the BI-RBA BCSA was signed on 15th December 2015 and facilitates swap transactions denominated in home currencies to the tune of AUD10 billion, equivalent to Rp100 trillion.

11.3. MONEY MARKET AND FOREIGN EXCHANGE MARKET DEEPENING

Efforts to deepen and develop the domestic financial markets were enhanced. Financial market dynamics over the past year have demonstrated the importance of deep and liquid markets in order to absorb external and internal shocks. Financial market deepening includes a broad market base, diverse instruments, and efficient pricing. The financial market deepening program also focused on facilitating business players develop their businesses through convenient forms of financing.

The Financial Market Deepening Blueprint was prepared as a guideline for the improvement and development of financial market structure for the upcoming 5-10 years. The Blueprint contains guidance for money market development programs along with the foreign exchange market, sharia financial markets and bond market (coordinative). Financial market development shall be achieved through five salient strategies, namely the development of instruments and the investor base, strengthening regulations and standardisation, infrastructure development, institutional strengthening as well as effective education and dissemination. Development based on the five strategies is expected to create deeper, more liquid and efficient financial markets, thus supporting monetary policy effectiveness, financial system stability and economic development financing (Diagram 11.2).

Financial market development encompasses the conventional and sharia rupiah money markets and foreign exchange markets. For the rupiah money market, the market deepening strategy includes development of the collateralised market to ensure liquidity availability, price efficiency and establishment of the term structure, while expanding interbank access on the uncollateralised or interbank money market and developing money market instruments as a source of liquidity for market players. On the foreign exchange market, however, the market deepening strategy will be focused on diversifying foreign currency instruments and interest rate derivatives. The magnitude of the foreign exchange market deepening strategy will promote foreign currency derivative transactions as an effective and efficient hedging instrument. Furthermore, foreign exchange market deepening will also support market player participation and diversification to help balance the supply and demand of foreign exchange. In addition, foreign exchange transaction transparency and efficiency will be enhanced through market infrastructure development. To develop the sharia economy and financial markets, Bank Indonesia is implementing a strategy to broaden sharia financial market share, to develop sharia financial market instruments and to optimize social funds and empower the real sector.

Coordination between the Government and Financial Services Authority (OJK) will be strengthened in order to develop the corporate bond and government bond markets. Coordination between Bank Indonesia and the Government will emphasise short-term government bond development along with transaction infrastructure and issuances of various bond instruments. Meanwhile, Bank Indonesia coordination with the OJK shall be focused on honing supporting regulations for issuances of corporate bonds, including state-owned enterprises. Supporting such



efforts, integrated infrastructure is also being prepared for corporate bond transactions.

Foreign exchange market regulations were relaxed to support nonbank corporate hedging activity in pursuance of applying prudential principles in the management of external debt. Deregulation affected derivative transactions between banks and residents as well as nonresidents in accordance with Bank Indonesia Regulation (PBI) No. 17/6/PBI/2015 and PBI No. 17/7/PBI/2015. The underlying assets used for foreign exchange transactions by domestic parties were expanded to include financing for trade and investment activities. In addition, derivative transaction liquidity was increased by repealing the minimum tenor requirements for non-resident derivative transactions. Moreover, Cross Currency Swap (CCS) transactions were explicitly included in the derivative transactions regulated, thereby creating greater flexibility for market players to hedge.

Banks were also given more space to manage their intraday foreign exchange position, allowing greater freedom to provide hedging instruments to market players. The regulation requiring banks to maintain a net open position (NOP) every 30 minutes was also repealed through PBI No. 17/5/PBI/2015, dated 29th May 2015, as the fourth amendment to PBI No. 5/13/PBI/2003 concerning the Net Open Position (NOP) of Commercial Banks. By repealing the 30-minute NOP regulation, banks offering foreign exchange transaction services to their customers now enjoy more convenience in terms of managing their position and more flexibility with regards to the squaring position, which was extended until the end of the day. The policy is expected to reduce rupiah intraday volatility.

Efforts to promote hedging activity were also directed at state-owned enterprises with the active involvement of the Government. Accordingly, Bank Indonesia, the Government and law enforcement agreed that the financial consequences of hedging transactions were not to be borne by the state while the transactions were performed consistently, consequentially and accountably pursuant to prevailing regulations. In the second quarter of 2015, the national government-owned electricity company, PT Perusahaan Listrik Negara (Persero), and the stateowned energy company, PT Pertamina (Persero), facilitated by Bank Indonesia, signed hedging facilities (forex line) with three state-owned banks, namely PT Bank Mandiri (Persero) Tbk, PT Bank Negara Indonesia (Persero) Tbk, and PT Bank Rakyat Indonesia (Persero) Tbk. The signing is expected to expand the use of hedging facilities by other state-owned enterprises and private corporations in order to manage currency risk. Intensive socialisation of hedging policy was also provided with the active involvement of the stakeholders in order to enhance the utilisation of hedging facilities. To that end, Bank Indonesia, in conjunction with the Audit Board of the Republic of Indonesia, the Finance and Development Supervisory Agency, the National Police of the Republic of Indonesia, Public Prosecution Service of the Republic of Indonesia, Ministry of Finance and Ministry of State-Owned Enterprises, organised a national seminar entitled "Hedging as an Instrument of Public and Private Financial Governance" at the beginning of May 2015.

The Jakarta Interbank Offered Rate (JIBOR) mechanism was also honed. Most recently, JIBOR was refined through PBI No. 17/2/PBI/2015, dated 26th March 2015, concerning the Interbank Offered Rate. The regulation stipulates that JIBOR shall be based on the indicative interest rate submitted by contributor banks. Seeking to increase JIBOR creditability, since 1st April 2015, Bank Indonesia has required contributor banks to accept transaction requests from other contributor banks in order to borrow and/or lend rupiah at the indicative rate submitted, while meeting the prevailing requirements, otherwise known as the hittable JIBOR.

The refinements to JIBOR are expected to enhance efficiency and reduce financial transaction complexity because all market/economic players are using the same reference rates for all tenors. Furthermore, the money market reference rate for tenors of less than one year shall also complement the yield of government bonds (SUN) with a maturity period of 2-30 years, thereby creating a more credible yield curve, namely from overnight to 30 years. A credible yield curve is important for the monetary transmission channel as it contains market expectations of future economic conditions. In addition, a credible yield curve will encourage new instruments on the market, thus providing alternatives for business owners to expand their businesses and for investors to diversify their portfolios. Accelerating sharia financial industry development, Bank Indonesia honed the regulation concerning the sharia interbank money market (PUAS) and facilitated agreement on the Sharia Mini Master Repo Agreement (MRA). Accordingly, Bank Indonesia issued PBI No. 17/4/PBI/2015, dated 27th April 2015, regarding the Sharia Interbank Money Market. The regulation expands alternative ways for sharia banks to meet their liquidity requirements through repurchase agreements for sharia-compliant securities, known as Sharia Repo. Sharia repo expands the types of transactions available to Islamic banks, hence complementing the existing sharia instruments, including Interbank Mudharabah Investment Certificates (SIMA) and Sharia-Compliant Commodity Trading Certificates (SiKA). On 2nd July 2015, eighteen Islamic banks agreed to use a Sharia Mini Master Repo Agreement (MRA) as a reference document for sharia-compliant repo transactions. The agreement was made paying due consideration to the large untapped potential of the sharia financial industry in Indonesia, where liquidity management remains suboptimal. Therefore, the agreement is expected to enhance liquidity management in the industry, in particular for Islamic banks, while increasing transactions on the sukuk market and sharia interbank money market, which will ultimately expedite financial market deepening.

11.4. MONETARY POLICY TRANSMISSION

The Interest Rate Channel

The rupiah overnight interbank rate experienced a number of significant, albeit temporary, spikes in 2015 before approaching the Deposit Facility (DF) rate again in line with abundant daily liquidity. The interbank rate peaked in September 2015 (Chart 11.5). In that period, the increase in the overnight interbank rate was accompanied by higher rates of longer tenors. For example, the 1-week rupiah interbank rate, which is usually around 6%, jumped to 6.5%. Similarly, the 1-month rate climbed from 6.5% to 8%. In the same month, the swap premium also soared to around 18% for tenors of one month due to a surge in demand for hedging from the corporate sector along with a shift in the supply and demand structure of the rupiah interbank money market. Notwithstanding, the swap premium returned to around 8% by the end of October 2015. Furthermore, relatively loose daily liquidity drove the overnight (O/N) interbank rate back to normal after the dramatic increase. The relatively high level of liquidity was reflected in the average volume of DF placements during the second half of the year, totalling Rp97.2 trillion per day, while the O/N interbank money

Chart 11.5.

Overnight Interbank Call Money Rate





market volume was just Rp6.9 trillion per day. Loose daily liquidity was linked to conservative banks towards yearend as surplus liquidity evaporated and uncertainty blighted global financial markets. In addition, volatility on the interbank money market and swap market was mutually exacerbating.⁴

The undulations of the overnight interbank rate were mirrored by other tenors (non-O/N) with a wider spread as the term premium and risk premium rose. Escalating volatility on the overnight interbank money market throughout 2015 occasioned a wider spread between the overnight and non-overnight rates. Heightened volatility created uncertain bank costs, leading to a higher term premium and affected rates on longer tenors. The (absolute) spread between the overnight and 1-week interbank rates averaged 15bps from January until 21st August 2015, jumping to 46bps thereafter from 24th August until 31st December 2015. In terms of the risk premium, interbank money market heterogeneity, in particular regarding asset size, created market segmentation, which influenced the risk premium of non-O/N interbank rates. Banks engaged in lending had to calculate the credit risk and funding liquidity risk of the borrowing bank amidst domestic bank heterogeneity. Furthermore, relatively minimal market liquidity for non-O/N interbank transactions tended to raise the risk premium of such transactions, hence widening the spread between O/N and non-O/N rates. In 2015, average daily transaction value of 2-week tenor and tenor of longer than 2 weeks were

4 Due to suboptimal arbitration between liquidity on the interbank money market and FX swap market as a result of institutional arrangements in the banking sector. Institutional arrangements include credit lines and different desk functions of the interbank money market and FX swap market. respectively just Rp1.1 trillion, or 9.45% of total interbank money market transactions, and Rp263 billion, or 2.26% of the total (Chart 11.6 and Chart 11.7).

Lower time deposit rates until the third quarter of 2015 were not only the result of loose liquidity but also due to corrections to high rates maintained in 2014 stemming from tighter competition. In 2015, time deposit rates were lowered 84bps to 7.94% as competition amongst banks to attract deposits eased in line with persistently strong deposit growth through to the third quarter and fewer credit disbursements. A greater reduction to deposit rates than lending rates led to a wider interest rate spread in 2015, increasing from 417bps the year earlier to 489bps. The interest rate spread in Indonesia was much broader than that reported the region, such as Malaysia and Singapore, where 1.6-2.0% was normal (Chart 11.8).







Chart 11.10. / M2 Growth and Its Components



The reduction to deposit rates was followed by lower lending rates but of less magnitude and with a lag. The lesser magnitude of change was attributed to high credit risk as non-performing loans (NPLs) tracked an upward trend in 2015. Meanwhile, the lag was due to internal bank processes that require a certain amount of time after lowering the deposit rate. The weighted average lending rate at the end of 2015 was recorded at 12.83%, down 12 bps from 12.95% at the end of 2014. All loan types experienced lower rates of varying magnitude. Compared to the end of 2014, the rate on working capital loans was lowered 33 bps to 12.46% and the rate on investment loans was reduced 24 bps to 12.12%, contrasting the 30 bps hike in the rate on consumer loans to 13.88%. The varying degrees of magnitude, especially the increase to the rate on consumer loans, was the result of higher nonperforming loans (NPLs) than the industry average.

The Liquidity Channel

Growth of narrow money (M0) slowed significantly in 2015 from 11.77% in December 2014 to 2.99%. The slowdown was caused by weaker growth of the secondary reserve requirement, which was met through SBI and SDBI, as well as lower bank demand deposits held at Bank Indonesia due to a reduction in the primary reserve requirement implemented in December 2015 and weaker deposit growth. Meanwhile, growth of Currency Outside Banks (COB) accelerated on the previous year. Based on its affecting factors, slower M0 growth was attributed to weaker growth of Net Foreign Assets (NFA) due to rupiah stabilization measures and Net Domestic Assets (NDA) as a result of a lower position of open market operations to meet bank liquidity requirements amidst limited expansion of government accounts (Chart 11.9).



Chart 11.11. Growth M1 and Its Components





Demand Deposit Growth and Its Components



Congruent with slower M0 growth, broad money (M2) growth also decelerated despite robust M1 growth. M2 growth fell from 11.95% in 2014 to 8.95% in 2015, with guasi-money contributing to the decline (Chart 11.10). Quasi-money growth decreased from 13.90% the year earlier to 8.37% in 2015, contrasting M1 growth that nearly doubled from 6.22% in 2014 to 12.00% in 2015. Solid M1 growth was supported by rupiah demand deposits and demand for currency (Chart 11.11 and Chart 11.12). Meanwhile, slower quasi-money growth, which precipitated the decline in M2, was the result of rupiah time deposits as the dominant component (Chart 11.13). Rupiah time deposit growth in 2015 was recorded at 7.55%, down significantly from 24.32% in 2014 because of economic moderation and the falling trend of deposit rates.





Based on the affecting factors of money supply, weaker M2 growth was due to Net Foreign Assets (NFA) and Net Domestic Assets (NDA). NFA growth slowed significantly from 9.3% last year to 3.0% due primarily to rupiah stabilization measures that eroded the NFA of Bank Indonesia. In contrast, the NFA of commercial banks recorded positive growth (Chart 11.14), consistent with the decrease in loans received from non-residents. NDA growth also slowed during the reporting period from 12.9% to 11.1% due to weaker credit growth, which decelerated from 11.6% to 10.45% over the same period as a result of economic moderation coupled with tight-bias monetary policy. Slower credit growth affected nearly all economic sectors, particularly the manufacturing industry, trade, agriculture and construction. Conversely, credit extended to the utilities sector grew significantly in 2015. Nonetheless, the contribution of the utilities sector to



Chart 11.15. M2 Velocity







total credit was relatively small and thus failed to stimulate overall credit growth in 2015.

In general, liquidity in the economy was consistent with economic demand. Against a backdrop of slower M2 growth in 2015 due to domestic economic moderation, the velocity of M2 remained relatively stable. Such conditions are indicative of adequate liquidity to support domestic economic growth without triggering additional priceside pressures (Chart 11.15). Meanwhile, the M2 money multiplier increased slightly at yearend 2015, primarily due to the reduction in the rupiah primary reserve requirement. If the lower reserve requirement is omitted, however, the M2 money multiplier was relatively stable (Chart 11.16).





Bank Indonesia favoured accommodative macroprudential policy throughout 2015 in order to avert deeper economic moderation. To that end, Bank Indonesia loosened the loan-to-value ratio (LTV) and financing-to-value ratio (FTV) for credit and housing loans.



Chapter 12

Macroprudential Policy

In 2015, Bank Indonesia adopted accommodative macroprudential policy to address the issue of slowing credit growth and to safeguard the stability of the financial system. This macroprudential policy included: easing the regulation for giving property and motor vehicle loans, expanding the funding sources for banking intermediation through the Loans to Funding Ratio (LFR) regulation, policies to promote loans to micro small, and medium sized enterprises (MSMEs) and policies to lessen excessive procyclical banking behavior through countercyclical buffer (CCB).

A stable and sustainable economy needs a fairly sizeable contribution from the financial system. Global economic growth which continued to slow in 2015 has already led to heightened risks in the domestic financial system, especially those originating from uncertainties surrounding global economic recovery, falling commodity prices, and the monetary policy responses divergence of several major central banks. From the domestic side, declines in foreign capital inflows along with heightened pressures on the exchange rate - which led to weaker corporate performance - also put pressures on the performance of the financial system. Nevertheless, amid the heightened risks either from global or domestic economic factors, the soundness of the financial system was still maintained in general. The preservation of stability in the financial system played an important role in the development of the intermediation function, an increase in financing, and brought about greater resilience toward facing economic shocks.

As a response to the strong pressure on the stability of the financial system due to the slowdown in economic growth, Bank Indonesia adopted macroprudential policy in 2015 which was accommodative and countercyclical in the framework of supporting the economy and ensuring stability of the financial system. This macroprudential policy is part of Bank Indonesia's policy mix strategy in the framework of responding to global and domestic economic challenges. Macroprudential policy has an important role in preventing and reducing systemic risk which can affect the stability of the financial system. As such, macroprudential policy was focused on safeguarding the resilience of the financial system, supporting the establishment of a balanced and high quality intermediation function, in addition to improving access and efficiency of the financial system.

In June 2015, Bank Indonesia raised the Loan to Value (LTV) ratio or the Financing to Value (FTV) ratio for property loans and reduced the down payment for motor vehicle loans which was expected to increase the demand for loans in the property and automotive sectors. Then, in an effort to give more room to banks to conduct lending activities, Bank Indonesia expanded the funding sources for banking intermediation through the issuance of securities which were included in the Loan to Funding Ratio (LFR) such that banks did not just rely on deposits. Furthermore, Bank Indonesia also continued to encourage the development of MSMEs by providing incentives and disincentives for banks in reaching targets for channelling MSMEs loans. Besides that, Bank Indonesia also issued a regulation on the CCB toward the end of 2015 to strengthen the capital of banks and therefore mitigate systemic risk.

Besides the policies stated above, Bank Indonesia also regularly undertook surveillance and assessments toward financial system stability in the framework of identifying the sources of vulnerabilities and imbalances, especially in the large-sized banks. Based on the findings from these assessments, Bank Indonesia undertook thematic tests and compliance checks. Thematic tests were undertaken to evaluate and further research banking conditions and practices which may potentially create systemic risks. Compliance checks, meanwhile, were directed toward confirming that banks were already in compliance with various regulations issued by Bank Indonesia. Besides that, Bank Indonesia also improved coordination with the related authorities, either those undertaken bilaterally or through the Financial System Stability Coordination Forum (FKSSK), especially in regard to mitigating and handling crises.

The less stringent macroprudential policy stance - which had already been prepared for since the beginning of the year - was able to anticipate the fairly strong pressures on financial system stability in 2015. The maintenance of financial system stability was reflected in the Financial System Stability Index (FSSI) which still stood at a normal level (that is at 0.93 or slightly above its level in 2014 of 0.79). This index reading was still far below the crisis threshold of 2.0. The stability of the financial system was in line with the strong resilience of the banking sector which was indicated in the banks' capital adequacy ratios amid both slowing credit growth and bank financing. This resilience was also supported by the expansion of the state budget and various fiscal stimulus initiatives which were undertaken by the government in 2015.

12.1. EASING OF THE LOAN/FINANCING TO VALUE RATIO (LTV/FTV) REGULATION

The first macroprudential policy easing measure taken by Bank Indonesia in 2015 was the loosening of LTV/ FTV for property loans and down payments for motor vehicle loans. This policy was contained in Bank Indonesia Regulation (PBI) No.17/10/PBI/2015 concerning the Loan to Value (LTV) Ratio or the Financing to Value (FTV) Ratio for Loans or Financing of Property and Down Payments for Loans or Financing of Motor Vehicles. The goal of easing LTV/FTV policy and down payments was to encourage recovery of the economy whose growth had slowed, especially through increasing loans/financing to the property and automotive sectors, including funding by using sharia principles. Despite the loosening of LTV/FTV policies and down payments, the concept of prudence was still applied by associating credit or financing easing with meeting the Non-Performing Loans (NPLs) or Non-Performing Financing (NPF) ratio.

This easing covered several matters, especially related to the level of the LTV/FTV ratio with an increase of 10% in all property components namely landed houses, apartments and house-shops/house-offices or for first home ownership, or second or third. Also, the level of the LTV/ FTV ratio was differentiated based on the sharia financing agreement, that is the same ratio for murabahah and istisna' agreements whereas for musyarakah mutanagisah (MMQ) and ijarah muntahiya bittamlik (IMBT) agreements the level is 5% higher for property type > 70. As such, the LTV/FTV ratio ranged from 65% until 90% with the ratio becoming higher for smaller types of property and for first home ownership (Table 12.1). By contrast, for larger types of property and post first home ownership, then the ratio will be smaller. For motor vehicle loans, meanwhile, the magnitude of the reduction in the down payment is the same at 5% for 2 wheel vehicles and 3 or more wheel vehicles which are classified as non-productive (Table 12.2).

Easing of this regulation allowed banks to apply a higher LTV/FTV ratio on loans extended to their customers. This provision is applicable for banks which have NPLs ratio for total loans and NPLs ratio for property loans of less than 5%. The same is true if banks reduce down payments for motor vehicle loans/financing (KKB). For banks which have NPLs ratio higher than the stipulated level, then the level of the LTV/FTV ratio used by banks is reduced by 10% for property loans and sharia financing with *murabahah* and

Table 12.2. Downpayments on Automotive Loans

Turne of Makiela	Bank			
Type of Vehicle	Conventional	Sharia		
Two Wheelers	20%	20%		
Non-productive three wheelers or more	25%	25%		
Productive three wheelers or more	20%	30%		

istisna' agreements while for sharia financing with MMQ and IMBT agreements the ratio is unchanged.

In relation to the pre-purchase of property (indent), the LTV/FTV requirement is unchanged. This reflects the concept of prudence which is adopted by Bank Indonesia. Banks can only give loans or financing for property which is sold on an indent basis for first home loans/financing and where there is a cooperation agreement between the bank and the developer who must be able to complete the property in accordance with the agreement. Besides that, the developer must also provide guarantees, which either originates from the developer itself or another party if the property cannot be completed and/or handed over in accordance with the agreement.

Easing of the LTV/FTV policy was able to arrest the slowdown in property loans growth (Chart 12.1). For real estate loans, meanwhile, growth had accelerated to 21.1% by the end of 2015, or up quite significantly from its lowest level in March 2015 of 13.6% (yoy). Nonetheless, the impact of reducing the size of the down payment for motor vehicle loans has yet to be felt, whereby its growth had continued to slow up to the end of 2015 (Chart 12.2). The slowing growth in motor vehicle loans owed to the decline in the private consumption of secondary goods,

Table 12.1. / LTV Ratio Property Credit and Sharia Property FTV Financing

Conventional and Sharia Property Credit (Murabahah and Istishna' Agreement)				Sharia Pro	operty Credit (MI	VIQ and IMBT)	
Turne of Duo worth (m ²)	Conventional and Sharia Property Credit			Sharia Property Credit			
Type of Property (m ²)	1	II	III	Type of Property (m ²)	I	II	111
Landed House				Landed House			
Type >70	80%	70%	60%	Туре >70	85%	75%	65%
Туре 22-70	-	80%	70%	Туре 22-70	-	80%	70%
Type ≤ 21	-	-	-	Type ≤ 21	-	-	-
Apartment				Apartment			
Type >70	80%	70%	60%	Type >70	85%	75%	65%
Туре 22-70	90%	80%	70%	Туре 22-70	90%	80%	70%
Type ≤ 21	-	80%	70%	Type ≤ 21	-	80%	70%
Shop House/Office House	-	80%	70%	Shop House/Office House	-	80%	70%



a slowdown in production activity and weaker business activities in line with the slowdown in economic growth in 2015.

12.2. EXPANSION OF INTERMEDIATION FUNDING SOURCES THROUGH THE LOAN TO FUNDING RATIO (LFR) REGULATION

Besides easing the LTV/FTV regulation and down payments to increase the demand for property loans and motor vehicle loans, Bank Indonesia also made efforts to boost the capacity of bank intermediation. Bank Indonesia expanded the funding sources for bank intermediation by issuing securities which are included in the calculation of the LFR such that banks do not have to rely only on



deposits.¹ Previously, the Loan to Deposit Ratio (LDR) was used as a performance indicator for bank intermediation and determining the bank intermediation target range used by Bank Indonesia. The use of the LFR indicator to replace the LDR will provide banks with more room to channel loans although with an unchanged target range.

Bank Indonesia saw that it was necessary to expand the funding components for intermediation after initially only including deposits. Expanding the funding components for intermediation became effective on 1 August 2015, by including the securities issued by a bank. Widening the scope of funding sources will give banks more room to expand their lending activities. Bank Indonesia sets the criteria for the securities issued by a bank which can be included in the LFR, namely issuances in the form of medium-term notes (MTN), floating rate notes (FRN), and bonds besides subordinated bonds. These three types of securities must be offered through limited public offerings and have ratings from rating agencies at investment grade at least. Besides that, these securities must be owned by nonbank investors and administered by institutions authorised to give custodian services and settlement of securities transactions.

The target range for the LFR set by Bank Indonesia is the same as the LDR target range which it replaced, that is 78% as the lower limit and 92% as the upper limit. In the event that a bank's LFR falls outside of this range, then Bank Indonesia imposes disincentives in the form of additional statutory reserves which must be deposited at Bank Indonesia. The parameter for disincentives at the lower end (LFR < 78%) is 0.1 and the parameter for disincentives at the upper end (LFR > 92% and CAR < 14%) is 0.2 which are each multiplied by the difference of the bank's LFR and the target, and then multiplied with the deposits of each bank to obtain the figure for the additional amount of reserves requirement. Furthermore, Bank Indonesia also provided incentives by easing the LFR upper limit to 94% for banks which achieve the micro, small and medium enterprises (MSMEs) loans target and have good credit quality, i.e. a NPLs to total loans ratio (gross) < 5% and a NPLs ratio for MSMEs loans (gross) < 5%.

Based on the evaluation up to the end of 2015, the amount of securities which had already been issued by banks experienced an increase after the implementation of the LFR provisions (Chart 12.3). Besides that, extending the coverage of financial intermediation from deposits to

¹ Contained in PBI No.17/11/PBI/2015 concerning Changes to PBI No.15/15/PBI/2013 on Statutory Reserves for Commercial Banks in Rupiah and in Foreign Exchange for Conventional Commercial Banks.





funding also lowered the LFR level (lower than the LDR) thereby giving banks more room to channel more loans (Chart 12.4). Nevertheless, in the same period there was also a slowdown in the growth of banks' deposits with growth in deposits less than the credit growth. This was reflected in the overall slowdown in the economy which reduced corporate earnings and household incomes such that since October 2015 the LFR has increased on the back of a decline in savings.

12.3. POLICIES TO SUPPORT THE DEVELOPMENT OF MSMES

Policies for the development of MSMEs were undertaken to help Bank Indonesia to achieve its goal of controlling inflation from the supply side and also to attain a more balanced intermediation function in the banking sector. The strategy to develop MSMEs was implemented through two main approaches, namely extending and deepening financial infrastructure as well as increasing the capacity of MSMEs. This strategy was realized through various programs such as improving regulations, improving the access to finance for MSMEs, and increasing the capacity of MSMEs.

In line with the enactment of PBI No.17/11/PBI/2015, improvements were also made to PBI No.17/12/PBI/2015 concerning Amendments to PBI No.14/22/PBI/2012 concerning Lending or Financing by Commercial Banks and Technical Assistance in the Framework of the Development of Micro, Small and Medium Enterprises. Completion of this regulation embodies the mix between policies to develop MSMEs and macroprudential policies. For banks which can achieve their MSMEs loans target quicker than expected with a maintained NPLs ratio, they will get flexibility on the LFR upper limit. By contrast, banks which are unable to achieve their MSMEs loans target and/or have a NPLs ratio of 5% or more, they will be given disincentives in the form of a reduced remuneration rate (on reserve requirement) by 0.5% plus 0.1 times the difference between the MSMEs loans ratio which has been set and that reached by the bank. For banks which can achieve their MSMEs loans target yet have a NPLs ratio of 5% or more, their remuneration rate will only be reduced by 0.5%. Besides that, for banks which channel loans/ financing to MSMEs they will also be given incentives in the form of training for MSMEs account officers (AO), training for micro and small enterprises (MSEs), facilitating the use of credit ratings for small and medium enterprises (SMEs), the publication of banks' successes, and giving awards to banks.

In order to increase the capacity of MSEs to provide financial information so they can access financing from financial institutions, Bank Indonesia cooperated with the Indonesian Institute of Accountants (IAI) to develop a simple financial statements module for MSEs. This module consists of General Guidelines, Technical Guidelines and a training module for Recording Financial Transactions of Individual MSEs and Small Business Enterprises which are Not a Legal Entity. These activities are a followup of the Recording Financial Transactions for MSEs program which was initiated by Bank Indonesia in 2014. Besides that, to make it easier for MSEs to produce simple financial statements, Bank Indonesia has also developed tools/prototype of an early Recording Financial Transactions application which can be accessed by android smartphones and can be downloaded for free from Playstore. The development of early tools/prototype refers to the Technical Guidelines and the Recording Financial Transactions Training Module which had already been developed previously, along with simulations for a number of MSEs and Bank Partner Financial Consultants (KKMB) for further improvement.

In increasing financing in the agricultural sector and as a follow-up from the study undertaken in 2014, Bank Indonesia undertook a value chain financing (VCF) pilot project. This value chain financing program is intended to identify key success factors for VCF financing so that it can be adopted on a wider scale. In the pilot project, restructuring of the value chain was undertaken, including restructuring of planting patterns, institutions, markets and financing which is expected to improve the ability of farmers to access financing. At the end of the pilot project, commercial loans were already channelled on the basis of the VCF scheme to Bank Indonesia's target clusters. The key success factors from the value chain financing included: (i) the involvement of all players in the value chain, (ii) the existence of a structured market, (iii) the adoption of production systems based on market demand, (iv) the application of collective production with the application of technology (planting methods, good agricultural practices, post-harvest processing), (v) assistance for value chain players, and (vi) rural financial services.

In 2015, the development of clusters was still based on staple food commodities or commodities which had become a source of inflationary pressure. The determination of the target clusters was undertaken through the framework of supporting the realisation of Bank Indonesia's main task, namely price stability, especially of volatile food commodities. Bank Indonesia has already managed to replicate three business models for staple foods clusters (red chili peppers, onions and beef cattle) in four provinces, namely Lampung, East Kalimantan, Gorontalo, and South Sulawesi. Besides that, in a bid to promote implementation of the cluster development program, Bank Indonesia also carried out a performance awards program (championship) for staple foods clusters. This program is one way to internalize the importance of the role of Regional Government (Pemda) in developing clusters in an attempt to help control inflation in the regions. From this program, clusters of staple food commodities/the best performing commodities (which were the source of inflation spread across 43 regional Bank Indonesia Representative Offices) were chosen, either founded by Bank Indonesia, Pemda/Dinas or through Pemda cooperation with other parties. Evaluation of the performance of the clusters is based on a number

of factors, including social capital, partnerships and networking, competency and expertise, market access, and infrastructure support.

Besides that, Bank Indonesia also completed several studies in 2015, including a study on the strategy to increase the competiveness of MSMEs in facing ASEAN Economic Community (AEC) 2015 and a study related to the goal of increasing the financial access of the poor in either rural or coastal areas. With the enactment of AEC 2015, which is aimed at forming a single market, single production base, a highly competitive region, as well as equitable and globally integrated economic development, it is necessary to determine the position of Indonesian MSMEs relative to the MSMEs of other ASEAN countries, along with strategies to boost the competiveness of MSMEs in facing AEC 2015. The findings of our studies show that to increase the contribution of Indonesian MSMEs in AEC, the performance of Indonesian MSMEs needs to be improved from the aspect of productivity, the contribution towards exports, participation in the global and regional production networks along with the contribution to value added. As such, several factors determining the competiveness of MSMEs need to be improved, whether they are internal factors (human resources, productivity, marketing, innovation) or external (ease of doing business, access to finance and capital, market access, infrastructure and macroeconomic conditions). Besides that, a paradigm shift is needed in policy formulation related to MSMEs, which initially was more concerned with social welfare (excessive protection) toward a greater focus on the business approach through facilitation to gain access. This is because MSMEs need access to inputs (raw materials, human resources, capital goods), as well as financing and markets for the products or services produced.

To improve financial access for those in the fisheries sector who are still unbanked, Bank Indonesia undertook a study on the potential for the unbanked people's finances in coastal areas. The study was conducted at two locations: Demak (Central Java) and North Gorontalo (Gorontalo). Among other things, the study was aimed at identifying business development needs as well as the ways to access financing. The findings of the study show that the existence of unbanked community businesses in coastal areas needs an improvement in the quality and character of the people. As an example, a paradigm change is needed in the people's thinking so they can control their consumptive lifestyles and recognize the importance of saving a portion of their business income for business development. Besides that, efforts are needed to continuously empower and mentor businesses to overcome problems related to the fisheries sector, namely developing alternative livelihoods during bad seasons, improving access to capital, technology and information, as well as global markets, along with developing community institutions through cooperatives. In regard to financial access, financial institutions are needed which are able to reach the people with both savings and loans products which do not involve difficult or complicated procedures.

In the framework of improving financial access for people living in rural or coastal areas, the presence of financial institutions which are able to reach the people in those areas also plays an important role. As such, Bank Indonesia is working with the Asia-Pacific Rural and Agricultural Credit Association (APRACA) to undertake the project "Documenting Global Best Practices on Sustainable Models of Pro-Poor Rural Financial Services in Developing Countries" which is an International Fund for the Agricultural Development (IFAD) project. This project is aimed at developing financial services for people in the agriculture and fisheries sectors and sustained through the application of best practices in accordance with the norms of Indonesian society. The best practices criteria is determined based on inclusion criteria as designated by APRACA, including the products offered (savings and financing), scope, collateral, innovation and good governance.

In its early stage, the best practices of providers of financial services/financing schemes in a number of areas in Indonesia have already been identified. These include the Micro Agribusiness Financial Institution (LKMA) Pincuran Bonjo in West Sumatra, BMT Sidogiri in East Java, and KUD Mina Samudera in Banten. The advantages of these best practices include institutions founded on local initiatives and local resources, independency and showing good performance. The developed financial services include savings which meet the people's needs and loans which do not always require collateral but utilize public figures as guarantors or are made under a system of joint responsibility. These best practices will be implemented in a pilot project in the district of Parigi Moutong (Central Sulawesi) and in the district of West Lombok (West Nusa Tenggara).

It is believed that around 50% of MSMEs in Indonesia are owned by women with generally smaller and informal businesses. This number is quite significant if the businesses are developed and have the potential to propel national economic growth. As such, Bank Indonesia is working with the International Finance Corporation (IFC) to undertake a study on women entrepreneurs in Indonesia. This study is aimed at analysing the health of MSMEs, especially those owned by women, the obstacles encountered, along with giving recommendations to stakeholders. In general, MSMEs face a number of challenges related to their informal status along with limited sources of long-term capital. Nevertheless, the challenges for women entrepreneurs also stem from time limitations related to the dual role of women in business and family. Besides that, women entrepreneurs are also less familiar with technology, especially information technology and communications. To overcome this problem, it is recommended that among other things the process for awarding business licences to women entrepreneurs should be eased, tax deductions should be given to new entrepreneurs, as well as training and financial education, including the adoption of mobile banking which can facilitate access to financial services for women entrepreneurs.

12.4. MANDATORY FORMATION OF COUNTERCYCLICAL BUFFER

Toward the end of 2015, Bank Indonesia issued a policy which was aimed at safeguarding the stability of the financial system namely the Countercyclical Buffer (CCB). This policy is one of the instruments which is aimed at preventing the occurrence of systemic risk due to the excessive channelling of loans through the establishment of an additional CCB's capital buffer. This matter was related to procyclical banking behavior, i.e. the excessive channelling of loans at times when the economy is in an expansionary phase and, by contrast, a lack of lending at times when the economy is in a contractionary phase. As a result, procyclical behavior during the economic expansion phase can heighten potential credit risk. This is reflected in the increase in NPLs in the economy's contractionary phase.

To overcome this problem, policies are needed to improve the resilience of banks. This resiliency can be achieved by reducing the amount of loans channelled in the economy's expansionary phase and forming additional capital that can be used by banks to cover losses that may occur when an economy is in a contractionary phase.

In the framework of strengthening the resiliency of banks in regard to capital, the Basel Committee on Banking Supervision (BCBS) has already introduced additional capital buffers, namely a conservation buffer, CCB and capital surcharge.² The CCB is an additional capital which is aimed at procyclical bank lending behavior and raising banking resiliency. CCB policy tends to be time varying: i.e. the CCB rate can change in accordance with macroeconomic conditions and the financial system. The formation of additional CCB capital is done in the expansionary phase, especially when it is believed there exists potential systemic risk from excessive credit growth. Meanwhile, the release of additional CCB capital which has already been formed by banks can be done during the contractionary phase so it can be used in part to support bank lending and recoup losses. Chart 12.5 illustrates the formation and the release of the CCB buffer. As for the CCB rate, it is in the range of 0–2.5% from the Risk-Weighted Assets.

Referring to the BCBS guidelines concerning implementation of CCB and also a study of CCB implementation which has already been carried out by Bank Indonesia, PBI No.17/22/PBI/2015 dated 28 December 2015 concerning the Obligation to Form a Countercyclical Buffer has already been issued. This policy needs to be implemented in Indonesia considering the procyclical behavior in Indonesia's economic growth and bank lending (Chart 12.6).

The decision to implement CCB is not seen as mechanical in the sense that it is not only supported by information from primary and secondary indicators which are quantitative in nature, but also combined with qualitative judgements. The main indicator is a guide which is used to calculate the CCB rate. The main indicator which will be used is the credit to GDP gap. Meanwhile, the complementary indicators come in the form of supporting information which includes the financial cycle, macroeconomic indicators, bank indicators, and asset prices. It is obligatory for CCB to be formed by conventional banks and sharia banks, including foreign banks.

The formation of additional CCB capital is carried out together with the capital conservation buffer and capital surcharge which are fulfilled with the Common Equity Tier



1 – CET 1 component. The formation of this third buffer is undertaken after fulfilling Capital Adequacy requirements in line with the risk profile.³ Evaluation of the magnitude and timing of CCB is done by Bank Indonesia at least once in six months. In PBI No.17/22/PBI/2015 concerning the Mandatory Formation of Countercyclical Buffer, Bank Indonesia set the CCB rate at 0% as of 1 January 2016, such that banks have not yet needed to form additional CCB capital.

12.5. SURVEILLANCE AND MACROPRUDENTIAL TESTS

To help achieve macroeconomic stability and maintain stability of the financial system, Bank Indonesia has undertaken surveillance of the financial system and macroprudential tests of banks on a regular basis. Surveillance and assessments of the stability of the financial system were carried out to identify the sources of vulnerabilities and imbalances, especially at large banks, which can create systemic risk. The tests done included thematic tests and compliance tests on macro-prudential regulations and other Bank Indonesia regulations.

The thematic tests carried out by Bank Indonesia were aimed at gathering information as a basis for further examining banking conditions and practices which may potentially create systemic risks. These tests were based on specific information concerning inherent bank risks. Such risks, if they accumulate, can have an impact not

² The conservation buffer is additional capital which functions as a buffer in the event of losses during a crisis, while capital surcharges are additional capital which serves to mitigate the negative impact on the stability of the financial system and the economy should banks fail which has a systemic impact through increasing the ability of banks to absorb losses. The conservation buffer applies to banks classified as Commercial Banks Based on Business Activities (BUKU) 3 and BUKU 4, while capital surcharges apply to banks deemed to have a systemic impact (Domestic Systemically Important Bank, D-SIB).

³ The explanation of commercial banks' capital can be seen in regulations which govern the Capital Adequacy of banks.



only on banks individually but may also potentially create a further impact, either on other banks or on the banking industry overall. Meanwhile, compliance checks were conducted in the framework of assessing the compliance of banks in implementing and complying with various regulations issued by Bank Indonesia. During 2015, Bank Indonesia already conducted tests on a number of large banks to assess the latest economic conditions. One of the things observed was related to the trend in the volatility of the rupiah/U.S. dollar exchange rate. Although currencies weakened relative to the U.S. dollar across the globe, Bank Indonesia was particularly concerned by the reasons for the rupiah/U.S. dollar exchange rate volatility. This is because the impact of exchange rate volatility on the domestic economy is quite significant. Besides thematic tests related to exchange rate volatility, tests were also conducted to ascertain the resilience of bank liquidity, along with the readiness of banks to undertake stress tests.

In carrying out tests on banks, Bank Indonesia coordinated with the Financial Services Authority (OJK) as the regulatory and supervisory authority in regard to microprudential matters. The sound cooperation between Bank Indonesia and OJK was undertaken via the Macro and Micro Coordination Forum which is continuously improved through the process of sharing information. Besides that, coordination and policy alignment was also carried out in the framework of taking supervisory action against banks which could potentially pose a systemic risk.





Noncash toll payments were just one part of the National Noncash Movement (GNNT) that has, hitherto, successfully increased transaction speed and efficiency. Moving forward, Bank Indonesia shall consistently encourage various electronification initiatives throughout the economy.



Chapter 13

Payment System and Currency Management Policy

Bank Indonesia's payment system policy in 2015 focused on strengthening of infrastructure, including through the implementation of the Bank Indonesia-Real Time Gross Settlement (BI-RTGS) and Bank Indonesia-Scripless Securities Settlement System (BI-SSSS) Generation II as well as the Bank Indonesia National Clearing System (SKNBI) Generation II and the electronification of payments. Bank Indonesia also sought to encourage the obligation to use rupiah currency while in Indonesian territory and reinforced its supervision of this by coordinating with the relevant agencies. In addition, the reform of cash distribution and cash services was also taken to provide rupiah in sufficient quantities, high quality, appropriate denominations, and a timely manner. These measures were backed by the clean money policy and efforts to combat the distribution of counterfeit money. Payment system infrastructure strengthening policy was Bank Indonesia's main concern in 2015. This was intended to boost the security and reliability of payment systems, enabling them to operate more smoothly and efficiently. Infrastructure strengthening policy was pursued through the implementation of BI-RTGS and BI-SSSS Generation II as well as SKNBI Generation II. The reliability of these systems was an important factor in the improved speed and accuracy of transaction settlements by means of payment systems.

Bank Indonesia also encouraged the expansion of public access to payment system, as well as the establishment of maximum transaction charges to be imposed on the public, in an effort to improve the efficiency of payment system. Meanwhile, in order to maintain public confidence in the system and non-cash payment instruments, Bank Indonesia consistently encouraged the payment system industry to always pay attention to aspects of consumer protection. Through these policies, the public was able to enjoy the benefits of using non-cash to payment instruments as well as become accustomed to use noncash payment instruments in the transaction which is the main goal of the National Non-Cash Movement (GNNT).

Bank Indonesia's measures in the field of currency management referred to Law Number 7 of 2011 concerning The Currency, and the application of these measures were based on three policy pillars. These pillars were the availability of good quality and reliable of rupiah currency in circulation, the secure and optimal of rupiah currency processing and distribution, as well as excellent cash services. Bank Indonesia consistently strove to meet the demand for currency fit for circulation in order to support economic activities across the territory of the Republic of Indonesia. It is well known that supplying currency in sufficient quantities and a variety of denominations, maintaining the quality of this currency as fit for circulation, and ensuring that it reaches all areas of Indonesia's vast geographical expanse, presents a challenge to Bank Indonesia in carrying out its currency management duties. Besides that, to maintain public confidence in the rupiah currency as a payment instrument, Bank Indonesia faces with the challenge of an increasing circulation of counterfeit money, especially in areas with high levels of economic activity.

These challenges in currency management should be addressed with concrete effort of Bank Indonesia by taking various rupiah currency management policies. In 2015, these policies included maintaining the sufficiency of its cash position. Furthermore, reforms to the way in which currency distribution and cash services were an important aspect for Bank Indonesia in its gradual expansion of the availability of good quality rupiah currency to all parts of Indonesia. To this end, the role of banks and cash in transit operators continued to be optimized in support of Bank Indonesia's efforts to circulate currency effectively. Similarly, effort to strengthening coordination with ministries/institutions and cooperation with state-owned enterprises were also very important, in particular to maintain the smooth distribution of currency to all areas in Indonesia.

To maintain the quality of currency in circulation in the society, Bank Indonesia had pursued policies to improve the quality standards of rupiah currency deposited by banks. This policy resulted in a rise in the amount of currency unfit for circulation which was destroyed by Bank Indonesia. This policy was undertaken while paying due regard to the sufficiency of Bank Indonesia's cash position and maintaining the supply of printed currency from Perum Peruri (The Indonesian Government Security Printing and Minting Corp.). In terms of consumer protection, Bank Indonesia accelerated efforts aimed at familiarizing the public with the characteristics of authentic currency, in terms of both frequency and range of activities, including media and public activities. This range of activities was expected to result in the public becoming more adept at recognizing the characteristics of authentic currency. The activities were also aimed at getting the public to avoid using counterfeit currency. Moreover, to contain the spread of counterfeit currency, Bank Indonesia sought to enhance the compliance of banks in reporting the finding of counterfeit money to Bank Indonesia. Bank Indonesia also coordinated with the Indonesian National Police and other law enforcement agencies in disclosing cases of counterfeit currency distribution to serve as a deterrent for those contemplating becoming involved in the crime of counterfeit money production.

13.1. PAYMENT SYSTEM POLICY

The payment system is the infrastructure of the financial system whose smooth operation needs to be maintained in order to support transactions by the public, government and business. To that end, the role of payment systems is very strategic in supporting the stability of the monetary and financial systems. As the authority in the area of payment systems, Bank Indonesia consistently takes policies that support the realization of payment systems that are secure, reliable and efficient. These policies include strengthening infrastructure to improve the security and reliability of payment system, as well as expanding access to payment system to improve efficiency
through non-cash instruments. In addition, Bank Indonesia and the payment system industry have also made various efforts to improve public confidence, and convenience to the public, in performing transactions using payment systems by paying attention to the issue of consumer protection.

The Implementation of Payment System Infrastructure Strengthening in Bank Indonesia

Infrastructure strengthening is intended to bring about secure, efficient, and smooth payments systems with different types of services and an ever greater accessibility for the wider community. To enhance the retail payment system infrastructure, Bank Indonesia is implementing gradually the SKNBI Generation II. SKNBI Generation II uses the latest technology and international standards in order to accommodate cross-border transactions while paying due regard to the issue of consumer protection. SKNBI Generation II also improves transaction speeds by increasing the number of times fund transfers can be settled in a day from four to five. In addition, the existence of a Service Level Agreement (SLA), or time limit for delivering funds through SKNBI, also enhances consumer protection.

Based on its development phases, SKNBI Generation II is divided into two stages. The first phase is for the development of existing services (individual fund transfer services and individual debit clearing services). The second phase, meanwhile, is for the development of multiple credit transfer and multiple debit transfer services for servicing the public's regular payments needs. The first phase of SKNBI Generation II was implemented in June 2015, while the second phase will be implemented in the first quarter of 2016.

Besides SKNBI Generation II, the development of payment systems have also been realized through the implementation of three Generation II major Indonesian financial infrastructure systems. The first of these is BI-RTGS which is a high value transfer and settlement system (high value payment system). The second is BI-SSSS which is a system for the settlement and administration of securities, especially Government Securities (SBN) and Bank Indonesia Securities (SBBI), while the third system is the Bank Indonesia-Electronic Trading Platform (BI-ETP) which is a transaction system for SBN, SBBI and Money Market auctions (trading platform). All three of these updated systems were implemented on November 16, 2015. The implementation of these three systems marks a new era in the operation of payment systems in Indonesia. This new era in payment system operations represents a response to ever evolving business and technological needs. These business needs are associated with the development of more efficient liquidity management, an increasing diversity of securities, and convenience in performing transactions. Meanwhile, the use of the latest hardware and software infrastructure as well as standardized messages is to accommodate the latest technology, as is the updating of the BI-RTGS and BI-SSSS Generation I systems which were already 10 years old. With specific regard to message standardization, which sees the adoption of the ISO 15022 message format as the international standard for payment systems, participants will find it easier to make interconnections between the BI-RTGS, BI-SSSS and BI-ETP Generation II systems and the related internal systems of each participant, extending also at a later stage to cross-border interconnections. With the shift from Generation I to Generation II, the reliability of the infrastructure and operation of the BI-RTGS and BI-SSSS systems is expected to improve, thereby enhancing the efficiency of these systems and making it easier for Bank Indonesia and the Government to make policy changes with respect to carrying out SBN transactions and administration.

Developments in the Technical Development Stages of the National Payment Gateway (NPG)

The development of information technology has had a positive impact on electronic retail payment systems. This impact is evident from the use of non-cash payment instruments, such as Card-Based Payment Instruments (CBPIs) and Electronic Money, which grows significantly from year to year. Even though in terms of numbers, volume and value, CBPIs and electronic money transactions are growing, these instruments are still not fully able to meet the needs of the public. This is due to the fact that the electronic retail payment infrastructure in Indonesia is not yet at an optimal level. This is reflected, among other things, in the ongoing fragmentation of retail payment system service providers, whereby these providers are unable to provide an equivalent service to the other. Furthermore, each of these payment system service providers also has members that are not connected to each other (Picture 13.1). Such a situation causes limitations and inequality in public access to payment system services.

Implementation of electronic retail payment system infrastructure is still not efficient given that the

Picture 13.1.

Digital Financial Services Development



interconnections and interoperability among payment service providers do not occur effectively. The existence of multiple switching service operators that are not connected results in banks/operators having to become a member of all the existing switching operators. Meanwhile, the presence of various payment channels that are not inter-operational leads to the public only being able to enjoy limited services. This situation also makes it difficult for Bank Indonesia to access and administer retail payment system transaction data and information in a comprehensive manner. As the central bank, its ability to carry out supervision, risk mitigation, and policy decisions pertaining to payment systems and the stability of the financial system is thus compromised. The data of retail payment systems are not yet available, among others, including CBPIs transaction data (local and international), electronic banking transaction data (e-banking), and electronic commerce transaction data (e-commerce).

Consider these issues, Bank Indonesia plans to develop a National Payment Gateway (NPG) with the aim of integrating various payment channels to facilitate electronic payment transactions. The NPG implementation plan has involved a series of in-depth studies and has drawn lessons from the best practices of other countries. At present, policy research being conducted includes a comparative analysis of thirteen sample countries that have implemented an NPG. The formulation of an NPG implementation policy in Indonesia requires meticulousness and prudence in addressing existing payment gateways (switching), both domestic and global. As the authority, Bank Indonesia still gives due consideration to existing switching providers with a view to creating healthy competition, cost efficiency in the processing of payment transactions, as well as innovative services that support the needs of the public. To this end, Bank Indonesia feels that the use of the currently available retail payment infrastructure should be streamlined and optimized.

The results of benchmarking against other countries reveal that, in essence, there are two groups of infrastructure topologies used to support an NPG, a centralized model and distributed model. Whichever model is to be used, Bank Indonesia has the authority to determine the operational model as well as the institutions which will become operators. In general, the completion of the NPG implementation in Indonesia will be divided into four phases, beginning with the releasing of a basic NPG policy in 2016, which will be followed by the development of the first phase, then with an NPG service coverage expansion policy, and ending with the final phase of development.

In 2015, Bank Indonesia completed more than 80% of the preparation of the NPG design concept including the definition, functions and service coverage of the NPG, the NPG development phases, development priorities, ownership and operation of the NPG, as well as various development methods that will be employed. This NPG design concept will serve as a reference for Bank Indonesia and the payment system industry in developing a range of payment transaction services for the public that are integrated in line with the needs of the national economy. With the emergence of the NPG, retails payment systems in Indonesia are expected to become more efficient, secure and reliable, while of course prioritizing national interests. As the regulator, Bank Indonesia will regulate prices, brands as well as mechanisms in line with its authority as the payment system authority.

Financial Inclusion

Bank Indonesia's Financial Inclusion policy in 2015 was a continuation of its 2014 policy whereby it focused on financial education, the formulation of supporting measures/regulations, as well as intermediary facilities and distribution channels. The measures formulated by Bank Indonesia were intended to improve and expand public access to financial institutions. Results of a World Bank survey showed the level of financial inclusion in Indonesia in 2014 to be at 36.1%, up from the 2011 of 19.6% (Picture 13.2).¹ Compared to other countries in the area, this figure was still relatively low compared to the level of financial

¹ Global Findex, World Bank, 2015.





Source: Global Findex – World Bank, 2014

inclusion in East Asia and the Pacific which stood aat 69.0%.

Meanwhile, the level of financial literacy among the Indonesian public was still classified as low to moderate, as seen in a number of indicators.² First, the level of public recognition of financial institutions stood at 35.2. Of all financial institutions, the most recognized by the public were Banks (76.0%), followed by Post Offices (63.0%), Cooperatives (59.0%), and Pawnshops (58.9%). Second, the level of public knowledge of basic financial concepts (the concepts of inflation, insurance, interest, and investments/shares) stood at 54.5. Third, the attitude of the public towards financial management, as measured by their attitude towards saving and attitude towards looking at the future, was not spontaneous in nature and was always oriented towards achievements, with a value of 61.2. Fourth, public behavior in financial management, as measured by the aspects of financial planning, financial oversight, avoiding excessive expenditure, covering unexpected expenses, planning for the future, utilizing information, living self-sufficiently and product selection had a value of 63.1.

As an early step in improving financial literacy among the public, Bank Indonesia formulated a Financial Inclusion (FI) education strategy to act as a guideline in providing financial education to the public. This FI strategy comprises the following three pillars: (i) policies that analyze of the implementation of FI education program, assessments of survey results, roadmaps, and monitoring; (ii) a program consists of a) materials grouped into financial attitudes, behavior and knowledge, b) materials for publication in the media, including print, electronic, and social media, c) FI education mechanisms in the form of campaigns/ dissemination of information, Training of Trainer (ToT), and Training of Beneficiary (ToB); (iii) FI education targets, namely the public and influencers. In its execution, the FI education strategy was more focused on mass educational activities by means of campaigns and dissemination of information, both directly to the public and through print, electronic, and social media. During 2015, Bank Indonesia in cooperation with relevant ministries/institutions carried out a range of FI education programs, such as financial education for: Indonesian migrant workers (TKI) and prospective migrant workers (in conjunction with the National Agency for the Placement and Protection of Indonesian Migrant Workers (BNP2TKI, the Ministry of Manpower, the World Bank, ILO, Tifa, and banks), inhabitants of outlying islands, pupils and students, housewives, farmers/fishermen/small traders, recipients of government aid, and micro, small, and medium enterprises (MSMEs) entrepreneurs.

Efforts to improve financial literacy were also realized through the Digital Financial Services (DFS) program. The development of this program, which was launched in July 2014, was quite good with the emergence of DFS in all provinces of Indonesia. The increasing proliferation of DFS

² Survey on Financial Inclusion in Indonesia, Bank Indonesia, 2015.

was reflected in a rising number of DFS operating banks and DFS agents. Up to December 2015, there were 5 DFS operating banks and as many as 69,548 DFS agents serving the public in 461 regencies/cities (Chart 13.1). The number of holders of electronic money has reached 1,145,486 people who between them held Rp43.1 billion in funds. There were various types of transactions performed by people through DFS agents. The most common was electronic cash deposits (top-ups) accounting for 44.8% of total transactions, followed by person to account transfers (44.7%), and routine payment transactions (6.2%). The average transaction value through DFS agents was Rp44,891, with an average largest transaction - the initial transaction (initial deposit) - of Rp380,917, and the average smallest transaction, in the form of a top-up, of Rp27,398 (Chart 13.2). The average value of transactions through DFS agents was in accordance with the outline of how much unbanked people could afford to spend.

In 2015, various programs were also conducted to improve financial access for the public by using a community approach, one of them targeting the Muslim community through a strategy of Islamic Financial Inclusion. In this case, Bank Indonesia conducted a pilot project involving three telecommunications company (telco) as DFS operators and pesantren (Islamic boarding school) communities as DFS agents. The considerations given for involving these telco in the trial included that the telco are accustomed to serving the mass market, excel in communication technology, and have electronic money applications that integrate with mobile phone numbers. Meanwhile, the considerations given for involving the pesantren included that they are well known as influencers, have communities and business units with experience in servicing the payment of *zakat*, *infaq*,



Digital Financial Services Development

Chart 13.1.

Electronic Money Holder Digital Financial Services Program



sadaqah (ZIS - religious tax, donations, charity) as well as microfinance transactions in the vicinity of the pesantren. In terms of products, electronic money is a perfect instrument to use for attracting the Muslim community to engage in DFS transactions, bearing in mind that electronic money does not involve the element of interest, which is deemed to result in usury (*riba*), and therefore does not contravene Islamic principles. The components of this pilot project formed part of Bank Indonesia's efforts to synergize its policy of expanding financial access by focusing on the development of DFS as a point of access, using electronification policies to develop the DFS ecosystem.

Bank Indonesia also assisted the Government with the distribution of non-cash social assistance to the public (Government to Person) through Digital Financial Services (DFS) and Post Offices. The distribution of Prosperous Family Savings Program (PSKS) aid has benefits for the government, operators, and recipients alike. The government benefits in terms of increased transparency, cost efficiency, and precision targeting. Meanwhile, operators benefit in terms of the emergence of new markets for product development, and increased revenues from transaction fees. As for recipients, they also benefit in terms of lower fund withdrawal fees, greater time efficiency in withdrawing aid funds, and greater connectedness with banks to facilitate the saving of money and improve security in the saving of money. At the macro level, the distribution of non-cash social aid will have an impact in stimulating local economic growth, improving financial inclusion, improving the public's quality of life, and reducing poverty in the long-term.

Follow-up to the Implementation of the National Non-Cash Movement (GNNT)

In addition to the expansion of the Digital Financial Services (DFS), an electronification program was carried out in the framework of improving financial literacy. Bank Indonesia prepared an electronification roadmap in support of the National Non-Cash Movement (GNNT) which was launched in August 2014. The purpose of this roadmap is to provide direction and guidance to all stakeholders in support of the electronification program.³ The increase in non-cash transactions through the electronification program has had a positive impact on the economy. The assessment results show that the increase in non-cash transactions of 10% correlated to a rise in consumer spending of 0.5%. Consumer spending, meanwhile, is a contributor to economic growth, thereby increasing the prospect of a virtuous cycle between noncash transactions and economic growth.⁴

Bank Indonesia collaborated with ministries/institutions and other relevant authorities to increase the number of non-cash retail transactions among the public, especially with the use of electronic money instruments. Bank Indonesia has signed 45 manuscripts of Memorandum of Understandings (MoU) and Cooperation Agreements with Ministries/Institutions, both at the central and regional levels. As a follow-up measure to these MoUs, Bank Indonesia, together with the Indonesian Ministry of Manpower and the National Agency for the Placement and Protection of Indonesian Migrant Workers (BNP2TKI), implemented the use of non-cash transactions and the expansion of financial access in the placement and protection of migrant workers (TKI). In addition to measures carried out in Indonesia, Bank Indonesia also encouraged the use of non-cash instruments through formal remittance channels for remittances of migrant workers from abroad. Through these actions, the entire process of TKI fund transactions and administration is expected to be more efficient and transparent.

A number of electronification programs were implemented, the benefits of which were immediately felt by the public in 2015. Electronification in the transport sector was carried out, among other ways, by the implementation of e-tickets for the TransJakarta busway system and KAI Commuter Jabodetabek/KCJ (Greater Jakarta Commuter Trains), as well as the implementation of e-parking, in cooperation with the Jakarta Government Department of Transportation, in several areas that already had electronic parking terminals (TPE). Meanwhile, with regard to the implementation of electronification in the regions, these included electronic-based retribution payments (e-retribusi) in traditional markets in Palembang, the Bandung smart card (electronic money - still in the first phase - for shopping, parking and bus tickets, which will be further developed for the payment of health and education services, in Bandung), the transfer of Civil Servant salaries in Banjarmasin, the transfer of contract employee salaries in all Central Kalimantan Government agencies, Regional Development Banks Bali Mobile (the payment of tax and retributions to the Denpasar city administration through mobile banking), and e-ticketing at the Galala-Poka crossing in Ambon.

To raise public awareness for the use of non-cash transactions in 2015. Bank Indonesia also held the National Non-Cash Movement (GNNT) festival. The GNNT festival promoted the theme of "Love Non-cash, Love the Rupiah" through various interactive activities and payment system services and product displays aimed at enhancing public understanding of the issue. The inspiration behind promoting the expansion of non-cash transactions was also apparent in a number of initiatives carried out in various regions through Bank Indonesia Regional Representative Offices, including the implementation of a Less Cash Society (LCS) at various universities, such as Sultan Ageng Tirtayasa University (Serang) and Pattimura University (Ambon). Socialization and education were also done to the officers and staff in ministries/institutions, Local Governments, and the public at large.

Implementation of Chip Technology and a Six-Digit Online PIN for ATM/Debit Cards

In order to realize secure payment systems, Bank Indonesia applied a policy of implementation of chip and technology a 6-digit online PIN on the ATM/Debit cards. The use of a chip card for ATM/Debit was based on considerations that there had been a decrease in fraudulent transactions involving credit cards since they were fitted with chips in early 2010. The use of a chip was also an effort to prevent the falsifying and skimming of cards, while the implementation of the 6-digit online PIN sought to improve security, particularly in cases of lost and stolen cards. In addition, these actions were also intended to encourage efficiency through interoperability and increase the self-sufficiency of national industry.

³ The definition of electronification is a unified and integrated effort to transform payments from using cash to non-cash. The purpose of electronification is to transform all payment methods from manual to electronic, transform most payment mechanisms from physical to digital, and change limited access into widespread access (inclusive).

⁴ Global Insight (2003). The Virtuous Circle: Electronic Payments and Economics Growth. San Francisco: Visa International.

Bank Indonesia issued a number of provisions to support the implementation of the chip technology and 6-digit online PIN for ATM/Debit cards. The first of these provisions was outlined in Bank Indonesia's Circular Letter No.17/51/DKSP governing changes to withdrawal and transfer limits via ATM machines.⁵ For those ATM cards with a magnetic stripe, the maximum daily limit for cash withdrawals is Rp10,000,000 and the maximum daily limit on interbank transfers is Rp25,000,000. Meanwhile, for those ATM cards with chip technology, the maximum daily limit for cash withdrawals is Rp15,000,000 and the maximum daily limit on interbank transfers is Rp50,000,000. The second of the provisions was outlined in Bank Indonesia Circular Letter No.17/52/DKSP containing adjustments to the schedule for the implementation of national standards on chip technology and the 6-digit online PIN for ATM/ Debit card transactions.⁶ The implementation of the chip technology, which was previously scheduled for no later than December 31, 2015, was extended to no later than December 31, 2021. Meanwhile, the implementation of the 6-digit online PIN for ATM/debit cards that use a magnetic stripe was extended to no later than June 30, 2017. For the application of chip technology, all ATM/ Debit cards issued by issuers Indonesia, along with their supporting facilities, shall use national standard chip technology no later than December 31, 2021. Issuers can still use magnetic stripe technology for deposit accounts with a maximum balance of Rp5,000,000 based on a written agreement between the issuer and customer.

These provisions form part of Bank Indonesia's measures to consistently encourage the use of non-cash instruments by the public at a low cost. Adjustments to the schedule for the implementation of national standards on ATM/ Debit cards were made by taking into consideration the fact that the majority of ATM/Debit card operators were not yet fully ready to implement national standards on chip technology and the 6-digit online PIN. To encourage greater readiness, Bank Indonesia is providing incentives for using cards with chip technology in the form of an increase in the maximum limit on cash withdrawals and transfers for ATM/Debit cards.

Implementation of the Regulation Obliging the Use of Rupiah in the Territory of the Republic of Indonesia (NKRI)

In the context of the policy mix, the Regulation obliging the use of the rupiah in the territory of the Republic of Indonesia has effectively managed to uphold the sovereignty of the rupiah as the currency of the Republic of Indonesia. Since the enactment of this regulation in July 2015, the number of domestic non-cash transactions using the U.S. dollar has begun to decline sharply.⁷ This indicates that the obligation to use the rupiah in the territory of the Republic of Indonesia has had a positive impact in supporting efforts to manage the demand for foreign currency and the stability of the rupiah. This is also reflected in the results of a survey on perceptions regarding this regulation, using a sample of Travel Agencies in four areas - Batam, Jakarta, Surabaya, and Bali. In general, almost all the sample companies surveyed already knew about Law No. 7 of 2011 and the enforcement of the provision on the Obligation to Use the Rupiah in the Territory of the Republic of Indonesia, as issued by Bank Indonesia. In terms of price quotations, the majority of the travel agents sampled in Jakarta and Bali provided these in foreign currency. Conversely, the majority of the travel agents sampled in Batam and Surabaya did not provide price quotations in foreign currency. The main reason that price quotations were still being provided in foreign currency was that the exchange rate of the rupiah to foreign currency was constantly fluctuating or unstable, and another reason was to accommodate foreign customers. Revenues in foreign currencies during the three months after the implementation of the Bank Indonesia regulation showed a decline, whereas revenues in rupiah showed an increase. Furthermore, the travel agencies sampled expressed their willingness to list their travel prices, both domestically and abroad, in rupiah.

With respect to the implementation of the regulation obliging the use of the rupiah, Bank Indonesia coordinated with, and disseminated information to, the Coordinating Ministry of Economic Affairs, Ministry of Finance, Ministry of Energy and Mineral Resources, Ministry of Foreign Affairs, Ministry of Religious Affairs, Ministry of Transportation, Ministry of Industry, Ministry of Tourism and Creative Economy, the Financial Services Authority, the Investment Coordinating Board, the Commodity Futures Trading Supervisory Agency, Ministry of Communications and Information, and related associations. Coordination

⁵ Bank Indonesia Circular Letter No. 17/51/DKSP, dated December 30, 2015, regarding the Third Amendment to Bank Indonesia Circular Letter No. 11/10/DASP, dated April 13, 2009, regarding Operations of Card-Based Payment Instruments.

⁶ Bank Indonesia Circular Letter No.17/52/DKSP, dated 30 December 2015, regarding the Implementation of National Standards on Chip Technology and the Use of a 6 (Six) Digit Online Personal Identification Number for ATM and/or Debit cards.

⁷ Bank Indonesia Regulation No. 17/3/PBI/2015 and Bank Indonesia Circular Letter No. 17/11/DKSP on the Obligation to Use the Rupiah in the Territory of the Republic of Indonesia.

and dissemination was carried out in relation to strategic infrastructure projects, reference rates, transaction activities in the industrial sector, trade, financial services, oil and gas, transportation, and Hajj pilgrimages.

Payment System Consumer Protection

Bank Indonesia continues to enhance consumer protection in terms of payment systems. According to the provisions in Bank Indonesia Regulation No.16/1/PBI/2014 and Bank Indonesia Circular Letter No.16/16/DKSP, consumer protection is to be provided by Bank Indonesia in the form of education, consultation and facilitation for each individual who uses the services of a payment system, such as ATM card and credit card holders. The scope of consumer protection for those who use payment systems extends to fund withdrawal/transfer instruments, fund transfer activities, Card-Based Payment Instruments (CBPIs), electronic money, and the provision/depositing of rupiah currency.

As of December 2015, Bank Indonesia had received 1,870 customer complaints in the year. The majority of these were related to credit cards, with 1,361 complaints or 75.0% of the total. This was followed by complaints about ATM/Debit cards with 195 complaints or 10.7% of the total, and complaints about fund transfers with 188 complaints or 10.4% of the total (Chart 13.3). Customer complaints submitted to Bank Indonesia concerned payment system products used by parties other than the owner, the misuse of data - such as skimming, phishing or vishing - and credit card billing ethics.

In addition to receiving customer complaints, Bank Indonesia also received requests for information related to various payment system issues and products. Over 2015, Bank Indonesia received and followed up on 23,377 such requests for information. The majority of these requests for information were related to the obligation to use the rupiah in Indonesian territory, with 17,810 requests or 76.2% of the total (Chart 13.4). This was followed by requests for information related to the provision and depositing of money, with 3,067 requests (13.1%), and requests for information about fund transfers, with 595 requests (2.2%).

To raise public awareness, Bank Indonesia also held events to disseminate information on consumer protection in payment system services in several cities in Indonesia like Solo, Aceh, and Mataram. With respect to non-cash transactions, the GNNT Festival was held with the theme of "Love Non-cash, Love the Rupiah", in which 13 payment Chart 13.3. Portions of Complaint on Payment System

3.9% 10.4% 10.7% 5.0% Credit Card Credit Card

system service operating banks, 1 payment system innovation developing company, and 1 Non-Bank Foreign Exchange Business (KUPVA BB) participated. This event was held to encourage the public to use non-cash payment instruments and, at the same time, to encourage all parties to use the rupiah, as the currency of the Republic of Indonesia, for all daily transactions.

Bank Indonesia also improved consumer protection, in the operating of the SKNBI Generation II system, through its fee and time policy. This was done through provisions on time limits for the forwarding of funds to customers and maximum transaction fees that banks can impose on customers. For SKNBI, the time limits for the forwarding of funds are 2 hours after acceptance and 2 hours after the settlement of the funds in the bank account. Banks have to immediately forward a fund transfer instruction to



Bank Indonesia within 2 hours of the bank receiving the fund transfer instruction from a customer, and the bank receiving the funds is required to forward the fund transfer to the customer's account within 2 hours after the SKNBI fund settlement. Meanwhile, with relation to the setting of a maximum upper limit on SKNBI fund transfer fees which may be imposed by banks on customers, this amount was set at Rp5,000 per transaction, while the transaction fee charged by Bank Indonesia on participants was set at Rp750 per transaction. In addition to consumer protection aspects, the establishment of fund transfer also considered the cost recovery from the implementation and operation of the systems concerned.

As to the imposition of a fee per transaction in the BI-SSSS Generation II system, the highest fee that can be charged for a BI-RTGS system single credit transaction is Rp23,000 (Table 13.1). Furthermore, in order to enhance customer protection through transparency and to encourage efficiency on the part of Participants, Bank Indonesia also imposed a maximum fund transfer fee through the BI-RTGS system that banks can charge customers of Rp35,000. In addition, Bank Indonesia also required Banks that provide fund transfer services through the BI-RTGS system to inform all customers of the fees that apply to them, including the fees imposed by Bank Indonesia on Participants as well as the size of fees imposed by Banks on their customers.

Implementation of the Interconnection of Bank Indonesia's Government electronic Banking (BIG-eB)

One of the tasks of Bank Indonesia as the central bank is to provide specialized banking services to strategic partners,

Table 13.1. Transaction Tariff of BI RTGS Generation II System						
Type of Fee	6.30 AM until 10.00 AM	10.00 AM until 14.00 PM	14.00 AM until CUT OFF			
Single Credit Transaction	Rp9,000	Rp18,000	Rp23,000			
Multiple Credit Transactions	Rp35,000	Rp35,000	Rp50,000			
Single credit inter-Participants Transactions for customers in terms of TSA	Rp0	Rp0	Rp0			

including the Government in this case the Ministry of Finance, the Deposit Insurance Corporation, and the Financial Services Authority. The services provided are primarily in the form of current account management as well as providing an electronic and online facility that can be used to obtain information and process financial transactions. This electronic facility, known as BIG-eB, can now be accessed by the Ministry of Finance.

To provide service excellence to its strategic partners, Bank Indonesia continued to e develop the BIG-eB after conducting a review of the business process and performance requirements of BIG-eB, both from the perspective of customers and Bank Indonesia. In general, the objectives of the development of BIG-eB are: (i) to support the process of collecting financial information more quickly and accurately by customers in the context of forecasting and preparing financial statements; (ii) to improve the efficiency and effectiveness of customer transaction settlements, particularly through the implementation of the Treasury Single Account (TSA) by the Ministry of Finance; (iii) to mitigate operational risks associated with the settlement of customer transactions and improve good governance in Bank Indonesia through the use of secure and reliable information technology; and (iv) to support the policies and credibility of Bank Indonesia, as well as strengthen cooperation and coordination among agencies.

In 2015, various developments to BIG-eB took place. These developments included: (i) additional types of transactions in order to accommodate the clearing transaction settlement process, as well as foreign exchange and future date transfers; (ii) additional types of reports to meet the various information needs of customers and application providers; and (iii) infrastructure capacity building in order to improve service performance. Moreover, consideration is currently being given to expanding BI's internet banking access so that it can be used by multiple users, rather than just by the Ministry of Finance.

The Use of Central Bank Money (CeBM)

The use of Central Bank Money (CeBM) constitutes one of the recommendations in the Principles for Financial Market Infrastructures (PFMIs) issued by the Bank for International Settlement (BIS) and the International Organization of Securities Commissions (IOSCO). The use of CeBM is aimed to mitigate the possibility of credit risk and liquidity risk arising in the execution of fund settlements on securities transactions. Credit risk arises because of the possibility of default by payment banks on their obligations, while liquidity risk arises if, after the settlement of payment obligations, the participant or operator is unable to change the assets from the payment bank into other liquid assets.

In line with this situation, Bank Indonesia implemented the use of CeBM for the settlement of securities transactions in the capital market on June 18, 2015. The use of CeBM is allocated for Government Securities (SBN) and non-SBN transactions initiated by custodian banks (Table 13.2). In this regard, Bank Indonesia together with the Financial Services Authority (OJK), Indonesian Central Securities Depository (KSEI), and capital market participants in the custodian bank group have implemented the first phase of CeBM use. In the first phase, all custodian banks are required to perform fund settlements with KSEI through the BI-RTGS system for all capital market transactions in rupiah currency. The inauguration of the first phase of CeBM use, which took place on June 29, 2015, represents a new chapter in Indonesia's financial system. The use of the BI-RTGS system for capital market transaction fund settlements between KSEI participants and KSEI itself (as the Central Securities Depository (CSD) operator for stocks, corporate bonds and other securities issued by the private business sector) also represents a fulfilment of one of the international standards required in adherence to the principles for financial market infrastructures, known as PFMIs.

With the use of CeBM, fund depositing and withdrawal activities in the framework of securities transaction settlements in the capital market by custodian banks, which to date have only been performed through five

payment banks, in the future will be performed by the transfer of funds between the checking account of banks and the checking account of KSEI in the BI-RTGS system. Another advantage of this mechanism is the creation of competitive neutrality in that every bank can perform capital market transaction settlements and are not dependent on a specific payment bank. In addition, the use of CeBM will improve liquidity management efficiency for each bank because there is no need to have an account at another institution for the purpose of capital market transaction settlements.

Strengthening of Legal Aspects in Payment System Operations by BI

Provisions of BI-RTGS and BI-SSSS Generation II

Certain legal aspects needed to be strengthened to support the development and operation of the BI-ETP, BI-RTGS, and BI-SSSS Generation II systems. As a legal basis for the operation of the three systems and in the context of adjustments to provisions on the size of transaction fees, price caps, and the transparency of information in the use of the BI-RTGS and BI-SSSS Generation II systems, Bank Indonesia issued Bank Indonesia Regulation No. 17/18/PBI/2015 on Transaction Operations, Securities Administration, and Immediate Fund Settlements. This regulation was also supported by Bank Indonesia Circular Letter No. 17/30/DPSP regarding the Execution of Immediate Fund Settlements through the Bank Indonesia - Real Time Gross Settlement System. In addition, to accommodate the development of monetary operations

Table 13.2. Stages of Development of Use CEBM for Settlement of Securities Transactions in Capital Market

	Securitie	es in USD	Securities in IDR					
C-BEST Participant	SBN	Non-SBN	SBN	Non-SBN				
Hybrid 1 → implemented on June 18, 2015								
Custodian Bank	Х	Х	V	V				
Securities Company	×	×	×	×				
Hybrid 2 \rightarrow implemented in the first quarter of 2016								
Custodian Bank	×	×	V	V				
Securities Company	×	×	V	×				
Hybrid 3 → Further study								
Custodian Bank	×	×	V	V				
Securities Company	×	×	V	V				
Full CeBM → Further study								
Custodian Bank	V	V	V	V				
Securities Company	V	V	V	V				

Hybrid: Combines the use of CeBM and CoBM to settle the funding of securities transactions based on denominated securities, types of securities and participants with the implementation of the BI-RTGS.

Full CeBM: The settlement of all securities transactions in foreign currency and IDR in the capital markets using CeBM.

transactions and transactions in financial markets, as well as the use of infrastructure under development for transactions in financial markets, Bank Indonesia also updated its provisions regarding the auction and administration of Government Securities by issuing Bank Indonesia Regulation No. 17/19/PBI/2015 regarding the Second Amendment to Bank Indonesia Regulation No. 10/13/PBI/2008 concerning the Auction and Administration of Government Securities.

Provisions of SKNBI Generation II

To provide a legal umbrella to the operation of fund transfers and clearing scheduled through the implementation of SKNBI Generation II, Bank Indonesia issued Bank Indonesia Regulation No. 17/9/PBI/2015 on the Operation of Fund Transfers and Clearing Scheduled by Bank Indonesia. The main points of improvement in the administration of SKNBI Generation II include: (i) the expansion of membership access so as not to be limited to Commercial Banks; (ii) the addition of services for routine transactions; (iii) the centralization of check clearing Services; and (iv) the enhancement of protection for SKNBI participating customers. In the initial stage of the implementation of SKNBI Generation II, which took effect on June 5, 2015, the operating of SKNBI was limited to fund transfer services and check clearing services, while participation was limited to banks. For the next stage, SKNBI services included Regular Payment Services and Regular Billing Services, while membership was extended to fund transfer operators as well as banks.

13.2. CURRENCY MANAGEMENT PERFORMANCE

Bank Indonesia's mission when it comes to currency management is to meet the rupiah currency needs of society by providing currency in sufficient quantities, in appropriate denominations, in a timely manner and in a condition fit for circulation. In order to execute this mission as well as to fulfil the mandate of Law No. 7 of 2011 on the Currency, Bank Indonesia carries out six stages of rupiah currency management. These stages are the planning, printing, issuing, circulating, revoking and withdrawing, as well as destroying. Bank Indonesia is the institution authorized to make issuance, circulation, as well as the revocation and withdrawal. Meanwhile, the planning, printing, and destroying are carried out by Bank Indonesia in coordination with the Government. In addition, developments in macroeconomic conditions and financial markets also played an important role in Bank

Indonesia's implementation of currency management policies during 2015.

Broadly speaking, Bank Indonesia pursued five rupiah currency management policies in 2015. Firstly, it sought to maintain the adequacy of its cash position. Second, it sought to improve the quality of rupiah currency in society (clean money policy). Third, it sought to expand its currency and cash services distribution network. Fourth, it sought to enhance its communication with the public regarding the Characteristics of Authentic Rupiah Currency. And fifth, it sought to prevent, counter and combat the production and distribution of counterfeit rupiah currency.

Maintaining the Sufficiency of Bank Indonesia's Cash Position

In order to meet the demand for currency withdrawals from banks in 2015, Bank Indonesia took measures to maintain the sufficiency of its cash position at all Bank Indonesia offices, both head offices and regional. As in 2014, Bank Indonesia set a cash position adequacy level using the National Iron Stock (ISN) amount indicator of 20% of projected Currency in Circulation (UYD) of the current year and Minimum Cash to the value of 1.5 months of bank withdrawals (outflow).⁸ Bank Indonesia's cash position ratio stood at an average of 5.1 months of outflow over the course of 2015, up from the previous year's figure of an average of 3.1 months of outflow.

Bank Indonesia's success in maintaining the sufficiency of its cash position at all its offices was achieved through the pursuance of several policies. On the supply side, Perum Peruri (The Indonesian Government Security Printing and Minting Corp) printed an amount of currency in accordance with the amount set by Bank Indonesia. Similarly, in terms of the timing of currency deliveries, Perum Peruri managed to align its printing output with the needs of Bank Indonesia, which increased especially before religious holiday periods. Perum Peruri undertook to meet Bank Indonesia's need for printed currency by modernizing its currency printing equipment, adding a banknote production line, and optimizing its working times. In addition, the smooth distribution of money

⁸ Minimum cash refers to the minimum supply of cash that must be maintained at all offices of Bank Indonesia, assuming that no cash deposits are made by banks in Bank Indonesia. Factors that need to be taken into account in setting the minimum cash level include distribution and transportation as well as the supply of Perfectly Printed Money (HCS) by Perum Peruri (The Indonesian Government Security Printing and Minting Corp).

between Bank Indonesia's offices was also an important factor in maintaining the sufficiency of its cash position. In this regard, Bank Indonesia continued to improve its cooperation with business entities that operate modes of transportation, such as *PT Kereta Api Indonesia* (National Railway Company), *PT Pelayaran Nasional Indonesia* (National Shipping Company), and other private entities.

On the demand side, since 2011 Bank Indonesia has applied a policy whereby currency withdrawals and/ or deposits by banks through Bank Indonesia are to be conducted after banks have engaged in Interbank Cash Exchange (TUKAB).⁹ Such transactions are carried out between one bank and another as well as with the mediation of Bank Indonesia through the dropshot mechanism.¹⁰ This policy has had a positive impact on banks in accelerating the availability of rupiah currency in the right denominations. As for Bank Indonesia, the policy has resulted in increased currency management efficiency. Ultimately, Bank Indonesia has been able to manage the growth in withdrawals and deposits of rupiah currency by banks, regardless of economic or cyclical factors (seasonal factors).

During 2015, Bank Indonesia distributed rupiah currency to all its offices to the value of Rp240.4 trillion, an increase of 44.4% on the previous year's figure of Rp166.5 trillion. The largest share of this money was distributed to the Head Office of Bank Indonesia to ensure the availability of cash there, given the large volume of withdrawals by banks, the majority of which are headquartered in Jakarta. As for the regions, the largest share of money distributed to ensure the availability of cash was in the Bank Indonesia offices of North Sumatra Province, South Sumatra Province, and East Java Province, each at around Rp20 trillion.

The adequate availability of rupiah currency was also reflected in the fulfilment of the withdrawal of currency during the period of Ramadan/ Eid al-Fitr and Christmas/ end of year holidays in 2015. As much as Rp140.0 trillion in currency was withdrawn in the Ramadan/Eid al-Fitr period, or 111.8% of cash needs based on the projection of banks. This high realization stemmed mainly from increases in the realization of withdrawals of Rp100,000 and Rp50,000 banknotes. Similarly, in the 2015 Christmas and end of year holiday period, actual withdrawals of currency reached Rp85.6 trillion, or 106.0% of cash needs based on the banks' projection.

Improving the Quality of Currency in Circulation in Society (Clean Money Policy)

The availability of cash at all offices of Bank Indonesia in sufficient quantities served as the launchpad for Bank Indonesia to implement policies to improve the quality of currency in circulation in the community. One of these policies was to improve the soil level of money deposited by banks in Bank Indonesia and processed by Bank Indonesia. This effort to improve soil levels meant that that there was a surge in the amount of currency unfit for circulation that had to be destroyed by Bank Indonesia. To anticipate these conditions, Bank Indonesia started to modernize cash-related equipment in 2015, thereby enhancing the capacity for processing rupiah currency.¹¹ During 2015, Rp160.25 trillion worth of money not fit for circulation was destroyed, up 43.6% over the previous year. The effect of this was that a greater proportion of cash withdrawals consisted of good quality currency (perfectly printed money from Perum Peruri).

Efforts to enhance the quality of currency in circulation in society were also undertaken through an increase in the amount of money exchanged and frequency of money exchanges by means of mobile cash units.¹² These activities were conducted by Bank Indonesia in cooperation with various other parties such as ministries and related agencies, as well as banks. In addition, the expansion of collaborations with banks in opening Cash Custodians in areas previously unreached by Bank Indonesia's cash services also served as a factor driving the improved quality of currency in society.¹³ Results of a survey conducted in 2015 on the quality of currency in circulation in several towns in border areas and remote regions

⁹ TUKAB is the activity that covers demand, supply and exchange of fit notes and coins (ULE) providing the needs of nominal amount and/or denomination in accordance with the Bank Indonesia regulation

¹⁰ Dropshots is a payment policy of currency fit in circulation (ULE) from bank deposits to the same bank (deposit bank) or to other bank. Bank Indonesia does not make detailed circulation and sorting on ULE deposits from the bank. In this particular activities, payments made by Bank Indonesia to the bank are made in one transparent plastic packaging (10 bundles, each bundle consist of 10 packs) which remains intact, sealed and with the label of paying bank

¹¹ The modernization of cash-related equipment consisted of the replacement and addition of cash-related equipment in the form of 26 Banknote Sorting Machines with Shredder (MSUK-R) and 14 Banknote Shredding Machines (MRUK).

¹² Mobile Cash is a cash exchange service provided by cash work units at the Head Office and Regional Representative Offices (KPwDN-BI) to the public, banks and other parties using specific means of transportation.

¹³ Cash Custodian is the activity in entrusted cash owned by Bank Indonesia to a bank appointed with agreement to fulfill banks' cash requirement in order to meet demand for cash of the people in remote areas.

showed a currency quality index in these towns of 6.8, higher than the initially predicted figure of 4.

Expansion of Currency Distribution Network and Cash Services

One of the measures announced in the Architecture of Bank Indonesia's Strategic Function (AFSBI) 2014-2024 in the field of rupiah currency management was the reform of currency distribution network and cash services. This was based on considerations as to how best to expedite Bank Indonesia's mission of meeting currency needs in sufficient quantities in all parts of Indonesia, with the appropriate denominations, in a timely manner, of good quality and in a cost efficient way. Reforms would be made on a multiyear basis with the goal of currency and cash services networks covering the entire territory of Indonesia by 2019. In broad terms, these measures included expanding the role of Bank Indonesia as mandated by the Currency Law and enhancing forms of cooperation with banks and business entities in the area of currency processing services. The results of this action aimed at the reform of currency and cash services distribution networks included infrastructure development (capacity building), as well as improving currency management and business models.

Currency management infrastructure development undertaken over the course of 2015 saw an expansion in the number of Bank Indonesia offices and the Cash

Managing Bank and Office Member of Cash Custodian

Table 13.3.

Custodians (Table 13.3). The first policy pursued in 2015 was the October opening of a Bank Indonesia office in the province of West Sulawesi, one of the functions of which is currency management. The second policy in the same year was the addition of 6 new Cash Custodians in Tanjung Pandan (June), Serang (August), Batu Licin (August), Dumai (November), Tanjung Selor (December), and Pare-Pare (December), as well as the closing of 1 Cash Custodian in the West Sulawesi town of Mamuju (September). Thus, by the end of 2015, there were a total of 35 Cash Custodians in Indonesia, many of which are located in Sumatra and eastern Indonesia (Picture 13.3). This represented an additional 5 Cash Custodians compared to the 2014 total. These thirty-five Cash Custodians in Indonesia were managed by 14 commercial banks which extending to 368 commercial bank branches. This figure represented an increase over the previous year, when there were 12 managing commercial banks extending to 267 commercial bank branches.

To improve governance and compliance with the terms of operation of Cash Custodians, Bank Indonesia periodically conducted monitoring, both off-site - through its requirements that relevant reports be submitted - as well as on-site - through direct inspections of Cash Custodian managing banks. The purpose of this monitoring was to ensure that the way Cash Custodians were being operated was in compliance with cooperation agreements entered into by Bank Indonesia and the Managing Banks. In addition, the monitoring was also aimed at evaluating the performance of the Managing Banks and ensuring that

Managing Bank	Number of Cash Custodian	Location and Number of Bank
Mandiri	9	Rantau Prapat (14 bank anggota), Toli-Toli (4), Tahuna (4), Gorontalo (14), Sorong (13), Timika (11), Biak (5), Tanjung Pinang (13), Tanjung Pandan (10)
Negara Indonesia	5	Gunung Sitoli (5), Luwuk (8), Muaro Bungo (19), Bau-Bau (7), and Padang Sidempuan (12)
Rakyat Indonesia	4	Lubuk Linggau (12), Sampit (7), Waingapu (3), Dumai (15)
Kalimantan Barat	3	Sintang (14), Ketapang (12), Singkawang (10)
Kalimantan Tengah	2	Muara Teweh (6) and Pangkalan Bun (12)
Kalimantan Timur	2	Sangatta (11), Tanjung Selor (3)
Nusa Tenggara Timur	2	Maumere (4) and Atambua (4)
Sulawesi Selatan & wesi Barat	2	Palopo (13), Pare-Pare (7)
Sulawesi Utara	1	Kotamobagu (6)
Sumsel Babel	1	Prabumulih (22)
Nusa Tenggara Barat	1	Bima (6)
Papua & Papua Barat	1	Merauke (8)
Jabar & Banten	1	Serang (40)
Kalimantan Selatan	1	Batulicin (14)
l: 14 Banks	35 bank offices	368 bank office member
	Mandiri Negara Indonesia Rakyat Indonesia Kalimantan Barat Kalimantan Tengah Kalimantan Timur Nusa Tenggara Timur Sulawesi Selatan & vesi Barat Sulawesi Utara Sumsel Babel Nusa Tenggara Barat Papua & Papua Barat Jabar & Banten Kalimantan Selatan	Managing BankCash CustodianMandiri9Negara Indonesia5Rakyat Indonesia4Kalimantan Barat3Kalimantan Tengah2Kalimantan Timur2Nusa Tenggara Timur2Sulawesi Selatan & vesi Barat2Sulawesi Utara1Sulawesi Utara1Sunsel Babel1Nusa Tenggara Barat1Sulawesi Abel1Kalimantan Selatan1





the physical amount of currency kept in the Managing Banks was consistent with the amounts reported to Bank Indonesia. In general, the results of inspections showed that Cash Custodians were being operated properly and in accordance with the cooperation agreements with Bank Indonesia. Among the aspects that could be improved are rupiah currency exchange services to the public, the storage and separation of currency being held as Custodial Cash from cash actually belonging to the managing bank in the cash vault of the managing bank, and the submission of periodic reports to Bank Indonesia.

Enhancing Public Communication concerning the Characteristics of Authentic Rupiah Currency

To raise public awareness regarding the characteristics of authentic rupiah currency, Bank Indonesia organized public communication activities on an ongoing basis through disseminating information to a variety of different groups in society. These groups included cash handlers (such as bank tellers and minimart cashiers), academics/ students, law enforcement officers and the general public. These dissemination activities were done face to face, by participating in development exhibitions in the regions, as well as through folk/traditional art. In addition, material on the characteristics of authentic rupiah currency now forms part of the syllabus for Central Bank studies at the secondary education and college level nationwide.

In 2015, public communication activities were expanded with the broadcast of a Public Service Announcement (PSA) on the Characteristics of Authentic Rupiah (*3D* "*Dilihat – Diraba – Diterawang*"), or 'Look, Touch, Examine'

on several national TV channels and social media. The public is also now able to download an educational video about the Characteristics of Authentic Rupiah which includes a tutorial on the general features of the rupiah and how to verify its authenticity. Bank Indonesia also set up a rupiah mini-site on the Bank Indonesia website with information about the characteristics of the rupiah, preventing and combating the crime of rupiah counterfeiting, educational activities and games for children, as well as a variety of other interactive games about the rupiah. This material can be downloaded in the form of leaflets and booklets corresponding to the particular user group, which includes the general public, banks and cash handlers, as well as law enforcement officers.

Preventing and Combating the Distribution of Counterfeit Rupiah Currency

To prevent and combat the distribution of counterfeit rupiah currency, Bank Indonesia supported the Indonesian National Police in its task of fighting against the circulation of counterfeit currency. This support took the form of the provision of an analysis laboratory for rupiah currency suspected of being fake as well as access to the Bank Indonesia Counterfeit Analysis Center (BI-CAC) information system. The laboratory is used to examine evidence, in the form of suspected counterfeit rupiah, uncovered by the Indonesian National Police, and also to examine any rupiah discovered of dubious authenticity upon request from a bank to clarify its status. A laboratory analysis can identify the signs of counterfeit rupiah, from the type of paper and ink used to the printing technique used. Meanwhile, the BI-CAC information system is used as the central database for counterfeit rupiah in support of the duties of the Police in disclosing counterfeit currency production and distribution networks. The results of laboratory and BI-CAC examinations also serve as important input for Bank Indonesia when it comes to improve the quality of security features of rupiah currency to be issued in the future. The presence of BI-CAC also supports Bank Indonesia's mandate, based on the Currency Law, of having the authority to certify the authenticity of rupiah. In line with this mandate, Bank Indonesia frequently provides human resources to give expert testimony in court cases of rupiah counterfeiting. Law enforcement efforts against those accused of counterfeiting rupiah currency were consistently undertaken by Bank Indonesia in coordination with the relevant law enforcement agencies (National Police and Attorney General). These efforts sought to prosecute alleged perpetrators of counterfeiting to the maximum extent, so as to serve as a deterrent to potential counterfeiters as well as any other people tempted to get involved in the creation and/or distribution of counterfeit currency. Several criminal cases of counterfeiting were tried in 2014-2015, with heavy sentences handed down by Courts, including cases in Jember, East Nusa Tenggara, and Merauke. In performing its duties in the field of currency management, in particular the distribution of currency and cash services, Bank Indonesia faced with a number of challenges given the geography of Indonesia as a vast archipelago. One of the biggest challenges related to the distribution of money is the limited availability of regular modes and lines of transport which results in a low level of inter-regional connectivity. This is exacerbated by frequently changing weather and climatic conditions. Meanwhile, one of the challenges related to the provision of cash services is that there are still many remote areas, border regions and outlying islands as yet unreached by Bank Indonesia's cash services. These challenges means that the circulation of currency fit for circulation is uneven in Indonesia which, in turn, adversely affects the quality of currency circulating in these regions, much of it having a high soil level.

To address these challenges, Bank Indonesia has consistently taken measures to improve its currency management business model, in particular with regard to the distribution of currency and cash services. These measures, among others, include the following: First, Bank Indonesia has cooperated with commercial banks since 1993 to open Cash Custodians in areas with developing economies. The prevailing business model is for Bank Indonesia to deliver money to banks managing Cash Custodians. The managing banks and member banks, meanwhile, jointly incur the costs of operating the Cash Custodian. Second, Bank Indonesia has cooperated with the Small Denomination Currency Exchange Company (PPUPK) and other relevant parties from 2005 to 2008. The business model in effect was for the PPUPK and other parties to obtain a fee from Bank Indonesia whereby the public did not incur the cost of exchanging small denominations of currency. Third, Bank Indonesia transferred the obligation for sorting currency to commercial banks, with the implementation of an updated policy on deposits and withdrawals by commercial banks in 2007.¹ With this updated policy, the previous policy, whereby commercial banks had been able to deposit both currency fit for circulation (ULE) and currency unfit for circulation (UTLE) in Bank Indonesia, became invalid.

The updated policy stipulated that banks must sort rupiah currency into ULE and UTLE. Furthermore, ULE must be prioritized for exchanging with other banks through the Interbank Cash Exchange mechanism (TUKAB). If after the TUKAB mechanism has been used, there remains an excess of ULE, then both the excess ULE and any UTLE can be deposited in Bank Indonesia.

In improving its currency management business model, Bank Indonesia conducted a study of international best practices of currency management as performed by several other central banks. The central banks which formed the focus of the study were from developing countries with similar economic conditions and geographical characteristics to Indonesia. In addition, currency management business models of central banks in developed countries have also been used as a reference for Bank Indonesia in improving its own currency management business model. Best practices in currency management in several central banks are focused on two business models, the currency distribution business model and the cash services business model.

The currency distribution business model in several central banks, is broadly divided into two parts, namely distribution networks and delivery of cash. The currency distribution network model adopted by the central banks generally consists of three forms. First, cash is distributed entirely by the central bank through a network of branches in the territory of the country concerned. Central banks that distribute currency autonomously include those in



¹ Bank Indonesia Circular Letter Number 9/37/DPU, dated December 27, 2007 on Deposits and Withdrawals of Rupiah Currency by Commercial Banks in/from Bank Indonesia, which was repealed and replaced with Bank Indonesia Circular Letter Number 13/9/DPU, dated April 5, 2011 on Deposits and Withdrawals of Rupiah Currency by Commercial Banks in/from Bank Indonesia.



the Philippines, China, Saudi Arabia, Thailand, and Japan. Second, cash is distributed by utilizing other parties, examples of which include Malaysia which uses MEPS (Malaysian Electronic Payment System), Norway which uses Nokas (Norsk Kontantservice), as well as Australia and the UK which utilize cash in transit/CIT companies. Third, is a combination of using the central bank office network and other parties. Central banks which apply this model include India with a Currency Chest and Small Coin Deposits, the United States with a Cash Deposit, Strategic Inventory and Custodial Inventory, and Canada with a Regional Deposit Center. This third model is also applied by Bank Indonesia as exemplified by the role played by Cash Custodians. The application of this business model in Indonesia is due to the fact that Bank Indonesia's office network is unable to reach all of Indonesia's territory directly, owing in part to the limited availability of regular modes and lines of transport to various parts of the country.

The second aspect of the currency distribution business model is the delivery of currency. Depending on the structure of the currency distribution network, the delivery of currency is categorized into one of two forms, either that carried out by the central bank's internal office network or that carried out by other institutions/facilities in cooperation with the central bank.² In other words, it is the structure of the distribution network that affects and determines the way currency is delivered to a particular location. Examples of central banks that deliver currency autonomously include the Philippines, Thailand, Japan, India, China, and Indonesia. In contrast, central banks that appoint other institutions/facilities to deliver currency include the U.S. (*CiT*), the U.K. (*CiT*), Malaysia (MEPS), Canada (*CiT*), Norway (*CiT*), and Australia (*CiT*).

Bank Indonesia currently uses an autonomous currency delivery model in consideration of the fact that it is able to exercise complete supervision of the process in this way, and that the frequency and amount of its currency deliveries can be more flexible in line with the prevailing dynamics of economic developments. However, this results in less efficient distribution costs and requires contracts or cooperation with transport service providers.

Meanwhile, the cash services business model, in broad terms, also consists of two forms, namely cash services operated by central banks themselves and the delegation by central banks of all cash services to another party. Cash services operated by central banks are further divided into two types, cash services only provided to banks (for example in Thailand, China, Canada, and the U.S.), and cash services provided to banks and the retail sector (for example in the Philippines and Indonesia). Meanwhile, central banks that delegate all cash services to another party but only to banks include Norway, Malaysia, the U.K., and the Netherlands.

The main factor underlying the use of this model is that Bank Indonesia can exercise direct supervision of its cash service activities. However, the use of this

² The Central Bank internal office network mechanism applied by Bank Indonesia is by means of Cash Depot Offices (Kantor Depo Kas/ KDK). In this case, Bank Indonesia's Head Office transfers money directly (remittances) to 11 KDK and 4 Regional Representative Offices (KPwDN-BI). Subsequently, these 11 KDK transfer the money to other KPwDN-BI. The modes of transport used for these activities are trucks, trains, passenger ships, cargo ships, and aircraft.



KT: Commercial Bank as the organizer of Cash Custodian

model requires a lot of resources and infrastructure to reach all parts of Indonesia. Studies of best practices in currency management in various countries have served as a consideration for Bank Indonesia in improving its currency management activities, particularly with relation to currency and cash service distribution networks. However, the fact that Indonesia is a vast archipelago with continually growing regional economies also needs to be taken into consideration. With respect to this, a number of measures have been prepared for developing the distribution of currency and cash services. First, the banking industry has been encouraged to play a greater role in expanding the coverage and operational efficiency of currency distribution. Second, cash-related infrastructure has been strengthened to increase the effectiveness of distribution throughout Indonesia. Third, the relationship pattern with the banking industry in terms of cash-related activities has been improved.

Reforms to the currency distribution networks and cash service began with a pilot project in 2015 involving four activities. The first activity was the provision of Mobile Cash on a wholesale basis by Cash Custodian managing banks in Merauke, Waingapu and Prabumulih, as well as the provision of a Mobile Cash unit by a Cash in Transit (CiT) company in the province of Bali.³ The second activity was the dissemination of improvements to the Cash Custodian business model, including the possibility of granting financial schemes to Cash Custodian

3 Mobile Cash on a wholesale basis is a currency exchange service intended for other parties besides the public, such as Commercial Banks, Rural Banks, retailers and so forth, whose coverage extends to remote and outlying areas of the Republic of Indonesia.

managing banks. Aspects underlying the improvements to this business model included enhancing cash area infrastructure and security standards, promoting the role of money exchange service counters in Cash Custodians, encouraging the absorption of currency unfit for circulation, and improving the quality of money sorting. The third activity was the distribution of currency from Bank Indonesia offices to Cash Custodians and vice-versa (dropping/fetching), as performed by Cash Custodian managing banks in Merauke and Prabumulih. The fourth activity was the distribution of currency between Bank Indonesia Cash Offices, specifically from the Lampung Regional Representative Office (KPw) to the Bengkulu Regional Representative Office (KPw) in the context of optimizing distribution lines and encouraging the formation of a Cash Depot Office (KDK) in KPw Lampung.

Through these reforms to currency distribution network and cash service being pursued by Bank Indonesia, it is expected that by 2019 Bank Indonesia's cash service coverage will reach all areas of Indonesia.⁴ Such an achievement cannot be viewed in isolation, and is thanks in part to the increasing role of industry, both banks and other business entities, in operating currency processing services. In turn, the increased role of industry is also

⁴ The coverage of currency and cash service distribution networks is calculated using a method based on the number of towns and regencies served by Bank Indonesia offices and Cash Custodians, as well as travel time and available modes of transportation. For example, the coverage of the Aceh Province Regional Representative Office extends to 4 towns/regencies, namely Banda Aceh, Aceh Besar, Sabang Town, and Aceh Jaya.

stimulated by improvements to currency management business models, to which end Bank Indonesia will continue to issue regulations on the execution of currency processing by banks as well as other currency processing operating service companies. This is aimed at standardizing the processing of currency by all parties in order to improve protection of and service to the public. In addition, the possibility of granting financial schemes to industries that perform currency distribution and provide cash services is being examined (Picture 1).





In response to the economic challenges that surfaced in 2015, Bank Indonesia strengthened policy coordination with the Government and other relevant authorities. Such coordination has proven to maintain macroeconomic stability despite extensive uncertainty, while simultaneously creating economic growth momentum.



Chapter 14

Policy Coordination

The complexity and interconnectedness of economic dynamics throughout 2015 compelled Bank Indonesia to strengthen its coordination of policies with both central and local Government and other appropriate regulatory authorities. Bank Indonesia also strengthened its coordination with other central banks and multinational agencies through its participation in international cooperation forums. This policy coordination was carried out within the corridors of maintaining macroeconomic stability, fostering the momentum for growth, and expediting structural reforms.

Despite continued uncertainties with the global economy, Bank Indonesia has maintained stable macroeconomic performance throughout 2015 through strengthening its policy coordination with the Indonesian government and other related authorities. The macroeconomic stability was reflected in the inflation rate remaining within its target range. Volatilities on the Indonesian rupiah exchange rate, due to uncertainties with the Federal Reserve normalizing its policies, the devaluation of the Chinese currency by the People's Bank of China (PBoC), and the limited supply of foreign currencies, was eventually moderated as well, as the Indonesian government issued its series of economic policy packages. Nevertheless, efforts to prevent and manage risks to maintain stability in the financial systems continue to be carried out, due to the fact that potential risks remain within the global financial markets and from the divergent monetary policies between countries.

The coordination between Bank Indonesia and the Indonesian government was carried out across various policy sectors. Apart from maintaining macroeconomic stability, the policy coordination was also focused on fostering the momentum for growth through the coordination of macroprudential policies, particularly those aimed at improving the performance of such real sectors as trade, construction, and manufacturing. Bank Indonesia participated in the Indonesian government's programs of facilitating bank credits, developing micro, small, and medium enterprises (MSMEs), developing the maritime and fisheries sector, and encouraging entrepreneurships. The coordination was carried out in line with a series of Indonesian government's economic policy packages. Furthermore, Bank Indonesia also supported efforts of keeping the momentum of growth by coordinating a secure, reliable and efficient payment system, and money supply management system for the economy.

The final focus of the policy coordination was implementing structural reforms, particularly in deepening the financial market, facilitating the development of the real sector, and further developing the country's payment system and currency management system. Deepening the financial market is expected to improve the economic structure's sustainability through the financial markets, being carried out prudently to maintain stability of the financial system. Developing the real sector was focused on Indonesia's maritime, food security, energy infrastructure, manufacturing, and tourism sectors. Meanwhile, further developing the payment system and currency management system was focused on expanding services to all reaches of Indonesia, which was carried out together with the Ministry of Transportation and the Indonesian National Armed Forces.

14.1. POLICY COORDINATION TO MAINTAIN MACROECONOMIC STABILITY

Bank Indonesia managed to maintain macroeconomic stability through the coordination of its policies regarding inflation, currency exchange rates, and the financial system, with other authorities both within Indonesia and abroad.

Coordination of Policies on Inflation

The inflation rate of consumer prices at 3.35% for 2015, which is within its target range, was achieved through the concerted efforts and policies between Bank Indonesia and the Indonesian government. Inflation of administered prices and volatile food prices, were in particular the focus of Inflation Monitoring and Controlling Team (TPI) and Regional Inflation Monitoring and Controlling Team (TPID) throughout 2015. This was in line with the Indonesian government's energy sector reform, which included the price administration of fuel, electricity, and gas (LPG). Meanwhile, regarding food prices, efforts were carried out to secure supply, improve distribution, further develop market information, and manage market expectations.

The support and contribution of local administrations in managing inflation in the regions further improved, as can be seen in the increasing number of TPID established and programs implemented to secure supply, improve distribution, and effectively manage price information. By the end of 2015, 442 TPID had been established, comprising 34 provincial TPID and 408 regency/city TPID throughout Indonesia. This is an increase from a total of 396 TPID in 2014. With the increasing number of TPID, policy coordination becomes even more crucial, which entitles the TPID National Working Group (Pokjanas TPID) a more significant role in administering inflation management policies between the central government and the regions.

Meanwhile, the coordination of policies regarding inflation between Bank Indonesia, the Indonesian government and local administrations, is conducted through the TPID National Coordinating Meeting (Rakornas TPID), the highest coordination forum outlining inflation management strategies to meet the national inflation target. The main focus of the 2015 Rakornas TPID was optimizing the role of local administrations in maintaining market price stability through expediting infrastructure development and improving market regulations in the regions. This focus is based on the Indonesian government's intention to increase spending on infrastructure that supports its programs of achieving food security and improving logistics and the distribution of goods throughout the country, which requires the participation of the regions. Indeed, the 2015 Rakornas TPID, the sixth of its kind and the first to be convened directly by the President, stressed the importance of managing inflation through active participation and synergy of programs.

As a follow-up of the 2015 Rakornas TPID, an Inflation Control Roadmap has been formulated, outlining national strategies regarding inflation through 2018. The Inflation Control Roadmap also outlines the structural problems relating to inflation management that needs to be addressed, which includes: (i) the local economy's limited capacity to expand, (ii) an overly-dependence on exports of natural resources and imports of raw material, (iii) food production prone to market supply disruptions, (iv) inefficient market structures, (v) an overly-dependence on fuel and gas imports for energy supply, (vi) poor inter-regional connectivity, and (vii) uncertainties in the global economy affecting currency stability. With regards to all these issues, it is therefore clear that inflation management requires the proper planning, coordination, and participation of all stakeholders, be it the central government or the regions.

The Inflation Control Roadmap provides a single reference for policy coordination, while taking into account regional characteristics, and also includes procedures for the identification of issues, medium-term and long-term recommendations, as well as the support and role of Bank Indonesia, the national government, and local administrations (Picture 14.1). The Inflation Control Roadmap is furthermore expected to become a reference for the Indonesian Government Work Plan and Regional Government Work Plan.

The policy coordination between Bank Indonesia and the Indonesian government relating to the Inflation Control Roadmap has been included in the Indonesian government's first economic policy packages. Bank Indonesia had also issued its own policy package to complement the Indonesian government's economic policy packages, outlining policies in maintaining macroeconomic stability, with a particular focus on inflation management (Picture 14.2).

Coordination of Policies on Currency Exchange Rates

Throughout 2015, the global economic situation had presented many challenges to Indonesia's economy. Global growth was on a slowdown, while uncertainties in the world's financial markets increased due to speculations on the timing of the Federal Funds Rate (FFR) policy and the unexpected devaluation of yuan. As a result, volatility on Indonesia's rupiah currency and turbulences in the domestic financial markets increased, potentially risking macroeconomic stability. The coordination of policies between Bank Indonesia, the Indonesian government and other related authorities, particularly on stabilizing currency exchange rates, was therefore crucial in maintaining broader macroeconomic stability.

The synergy of policies on stabilizing currency exchange rates can be observed in the Indonesian government's first two economic policy packages. Bank Indonesia







issued policy package to complement the government's first economic policy package, focusing particularly on stabilizing the Indonesian rupiah's exchange rate. The policy packages outlined that volatility on the rupiah would be managed together, and carried out through Bank Indonesia purchasing Indonesian Government securities (SBN) in the secondary market. The first economic policy package also outlined coordination in managing the supply and demand of foreign currencies (Picture 14.2).

Coordination in stabilizing currency exchange rates was further carried out with the Indonesian government's second economic policy package. Stabilizing currency exchange rates was even the focus of the policy package as uncertainties on the regional money markets from expectations on the FFR and from China's devaluation further increased. Among the joint policies in the second policy package was tax incentives for exporters that deposit or exchange their export revenues at local banks. Indonesia's Foreign Currency Exchange Flows Report was also improved to better monitor market dynamics, as well as to better meet requirements on transparency and public access to information.

Coordination of Policies on Financial System Stability

Apart from problems with the currency exchange rates, the stability of Indonesia's financial system as a whole was in fact under increasing risks as the world economy in 2015 still saw imbalances in its recovery, weak commodity prices, and divergent policy instruments taken by overseas central bank and monetary authorities as response to uncertainty due to upcoming FFR hike. Bank Indonesia therefore strengthened its coordination with other related authorities regarding the stability of the financial system, focusing in particular on crisis prevention and resolution measures through the Coordination of Financial System Stability (FKSSK). The FKSSK itself had been established since 2012, and comprises Bank Indonesia, the Ministry of Finance, the Financial Services Authority (OJK), and the Deposit Insurance Corporation (LPS).

Consultations and coordination within the FKSSK became more effective, both at the technical level through the Deputies' Meeting forum, and at the board level where the latest updates on the stability of the financial system are assessed and joint recommendations are formulated. This can be seen through the formation of five working groups to better carry out the FKSSK's three main tasks on surveillance for crisis prevention, formulating policy options for crisis management, and formulating guidelines for crisis management.¹

¹ The FKSSK's Working Group I and II are tasked with crisis surveillance and prevention, which include formulating indicators to assess the financial system's stability, improving surveillance on the financial system, and managing the exchange of data and information. Working Group III and IV are tasked with formulating policy options for crisis management, which include improving the standard operating procedures to activate the International Financial Safety Net (IFSN) and improving the frameworks for bank crisis resolution. Working Group V, meanwhile, updates crisis management mechanisms in the crisis binder and formulates guidelines for the Financial System Assessment Program (FSAP).

To further improve its effectiveness, the FKSSK on December 23, 2015 carried out its main agenda for the year of running a simulation of its decision-making protocols during a crisis. The simulation's particular focus was evaluating and ensuring that the requirements on the legal procedures for each institution carrying out the Crisis Management Protocols, the crisis binders, and communication procedures were all adequately fulfilled. The FKSSK's 2015 simulation was furthermore distinct from those conducted in previous years, as it was carried out to evaluate the requirements and practicality of a bill on the Financial System Safety Net (JPSK), particularly on the decision-making process of determining whether a crisis has happened, and how to manage banks under crisis, as outlined in the bill. Bank Indonesia's role was also evaluated, particularly on the contribution in assessing the stability of the financial system. The decision-making process that was evaluated in the simulation included: (i) deciding whether impacts from pressures on the currency exchange rate and the financial system has caused their status to be abnormal, (ii) deciding whether to provide short-term liquidity loans to banks experiencing liquidity problems, (iii) deciding whether a bank with liquidity problems has systemic effects, (iv) deciding policy options to lift pressures on the currency exchange rate and the financial system, and (v) finding solutions for failing banks with systemic effects but unfit for Bank Indonesia's liquidity aid.

Apart from strengthening the coordination mechanisms between institutions, Bank Indonesia also worked together in formulating the legal frameworks for crisis management. Both the Bank Indonesia Law and the OJK Law mention that the JPSK Law is the primary legal reference for anticipating and managing any financial system crisis. For this, a bill on the JPSK was thus deliberated and passed into law by the end of 2015. The new JPSK Law outlines the coordination required to monitor and maintain the stability of the financial system, how to manage when the financial system stability is abnormal, and how to manage problematic banks with systemic effects during both normal and abnormal situations.

14.2. POLICY COORDINATION TO SUSTAIN MOMENTUM FOR GROWTH

The momentum for growth must be continuously maintained for the longer-term sustainability of Indonesia's economy, and is even more urgent during such uncertain times of the world economy still reeling to recover from a slowdown. Policy coordination between Bank Indonesia, the national government and local administrations, particularly on macroprudential matters, on the payment system, and on the money supply management, is crucial in the efforts to maintain the momentum for growth.

Coordination of Policies on Growth and Macroprudential Issues

As Indonesia's economy in 2015 experienced a downturn due to declining commodity prices taking a toll on exports, strengthening the domestic real sector and local micro, small, and medium enterprises (MSMEs) was realized as a way out from this situation and revive growth. Stronger policy coordination in the real sector between the Indonesian government and Bank Indonesia was thus needed, and Bank Indonesia, in reference to the Indonesian government's "Nawa Cita" Nine Priority Programs, had begun efforts to support growth of the planned priority sectors throughout the country. Bank Indonesia also participated as a counterpart in the policy committee for the People's Business Credit (KUR) program, helping to evaluate the KUR disbursements for 2014, and providing recommendations for the KUR disbursements in 2015, as outlined in Presidential Decree No. 14/2015 on the Policy Committee for MSMEs Financing, which was issued on May 7, 2015. The Committee followed this up by issuing policies to ease the loan-to-value ratio on mortgages and the down-payments for motor vehicle loans, all of which are expected to stimulate small business activities in the trade, construction and manufacturing sectors.

Bank Indonesia, together with the Ministry of Maritime Affairs and Fisheries, also improved access to financing for MSMEs in the fisheries industry, which is among the Indonesian government's main priority sectors. Financial service facilitators were provided to MSMEs in the maritime sector, assisting them in obtaining credit, introducing less cash financial services to them, and improving the exchange of data and information among the MSMEs. All of this were implementations of the Memorandum of Understanding (MoU) No. 17/1/NK.KKP/ GBI/2015 and No.07/MEN-KKP/KB/IX/2015 on Capacity Building and Empowerment for the Maritime and Fisheries Sector, signed between Bank Indonesia and the Ministry of Maritime Affairs and Fisheries on September 10, 2015.

Meanwhile, policies regarding entrepreneurship were for 2015 mainly aimed at encouraging the start-up and growth of local entrepreneurs, through business incubator programs and improving cooperation between stakeholders. An example of this was the follow-up implementation to MoU No. 16/2/GBI/DPAU/NK on Developing Economic Self-Reliance for Islamic Boarding Schools and Improving Less Cash Services at the Ministry of Religious Affairs, signed between Bank Indonesia and the Ministry of Religious Affairs on November 5, 2014. The MoU outlined the development of economic self-reliance and entrepreneurship for Islamic boarding schools through sharia-based economic activities and business incubators, as well as facilitating the setting up of entrepreneurship pioneer projects with consultation services, access to financing, and access to the market.

The entrepreneurship programs were also developed for the penitentiary system, through MoU No. 16/1/ GBI/DPAU/NK on the Cooperation to Develop Economic Self-Reliance for the Penitentiary System, signed between Bank Indonesia and the Ministry of Law and Human Rights on September 18, 2014. Technical assistance were provided for both prison officers and prisoners, to cultivate economically valuable agricultural products.

Regarding policies to develop the agriculture sector, Bank Indonesia and the Ministry of Agriculture signed MoU No. 17/2A/NK/GBI/2015 and No. 11/MoU/HK.230/M/12/2015 on December 2, 2015 that outlined: (i) improving the business capacity of the agricultural industry, particularly of commodities that affect inflation, (ii) improving the access to financing for agricultural MSMEs and farmer communities, (iii) building the capacity of agricultural facilitators and financing agencies, (iv) encouraging less cash services, data exchange and information sharing in the agricultural sector, (v) and improving public awareness programs for each task. Bank Indonesia also carried out particular efforts to keep the price of chili peppers at check, by supporting the Ministry of Agriculture program of cultivating chili peppers during the dry season, which was initially launched in East Nusa Tenggara, West Kalimantan, West Java, and North Maluku. The program was then expanded to Bank Indonesia's agricultural business incubator clusters in South Sulawesi, East Java, West Nusa Tenggara, and the Bangka-Belitung Islands.

All the previously mentioned joint policies from Bank Indonesia and the Indonesian government to maintain the momentum for growth were carried out in line with the government's series of economic policy packages, which for 2015 had totalled to eight economic policy packages (Table 14.1). In the first economic policy package, policies to maintain the momentum for growth included expediting the implementation of national priority programs, expediting government spending, and facilitating investments in the property sector. The second economic policy package included such policies as facilitating investments in industrial zones and lifting value-added taxes on the imports of transport vehicles to stimulate growth in the transportation sector. The third economic policy package provided incentives on electricity rates for labor-intensive and less-competitive industries, as well as interest rate cuts and expanding KUR loan. Policies to maintain momentum for growth continued with the fourth economic policy package, in the form of facilitating credit for export oriented and labor intensive MSMEs that are prone to lay offs. The fifth economic policy package provided tax incentives on asset revaluation and eliminated any double taxation on collective contracts for real estate investment funds (KIK DIRE). Incentives were also provided for eight Special Economic Zones (SEZs) in the sixth economic policy package.

In December 2015, the Indonesian government continued its package of policies to maintain the momentum for growth. The seventh economic policy package provided tax incentives for labor-intensive industries and income tax incentives for workers in those labor intensive industries. Lastly, the eighth economic policy package provided incentives for the construction of new oil refineries and lifting import duties on aircraft spare parts.

Bank Indonesia's policy coordination with other related authorities to maintain the momentum for growth was also carried out within the context of international cooperation. Realizing the crucial role of investments as an engine for growth, Bank Indonesia had supported the Indonesian government's pitch in international cooperation forums to focus on the financing of infrastructure projects in emerging markets. Bank Indonesia had in this context participated actively in the formation of the Islamic Investment Infrastructure Bank or the World Islamic Investment Bank (WIIB) to support the financing of infrastructure projects in Islamic Development Bank (IDB) member countries.

Bank Indonesia also supported the Indonesian government in the formation of the G20's Global Infrastructure Hub (GIH), which is expected to act as an information center for infrastructure investments. Indonesia also committed to the G20's growth strategy, which is a comprehensive strategy to ensure robust, sustainable and inclusive growth. For this, Bank Indonesia and the Ministry of Finance participated actively in the final drafting of the G20's Adjusted Growth Strategy, which is the commitment of G20 member countries to maintain the momentum for growth within their own economies, and bolster cooperation to stimulate global economic growth.

Table 14.1. G	Table 14.1. Government Economic Policy Packages in Promoting Economic Growth							
Package Vol. I Sept 9, 2015	Package Vol. II Sept 29, 2015	Package Vol. III Oct 7, 2015	Package Vol. IV Oct 15, 2015	Package Vol. V Oct 23, 2015	Package Vol. VI Nov 5, 2015	Package Vol. VII Dec 4, 2015	Package Vol. VIII Dec 21, 2015	
Budget Disbrusment	 Providing incentives for industrial zones VAT Exemption for import of transportation vehicles 	 Electricity incentive for labor-Intensive industries with weak competitiveness The decline in interest rates and expansion of KUR receivers 	 Credit facilities for export oriented SMEs from LPEI Encourage access KUR 	 Tax Incentives for Assets Revaluation Elimination of Double Taxation On Collective Contracts Real Estate Investment Trusts (REITS) 	 Developing Special Economic Zones Providing tax incentives in Special Economic Zones 	 Two years income tax incentives for workers in labor incentives and export oriented industries. Tax incentives for labor intensive industries 	 Incentive for construction of new oil refineries for energy security Incentives for air transportation services industry 	

Coordination of Policies on the Payment System and Money Supply Management

The momentum for growth requires such support as an optimal and reliable payment system, which is attainable through cross-institutional policy coordination between related ministries and other authorities. In this context, Bank Indonesia, together with the Ministry of Finance, the Ministry of Communication and Informatics, the Ministry of Trade, and the Financial Services Authority (OJK), established the Indonesian Payment System Forum (FSPI). The FSPI, formed by Bank Indonesia Governor Decree No. 17/3/KEP.GBI/2015 on August 25, 2015, directs strategic policies concerning the payment system, synchronizes policies and regulations between institutions, coordinates initiatives and programs relating to the payment system, fosters innovations for the payment system, and gives advice on educational and public awareness programs of the payment system.

Besides acting as a coordinating forum for institutions and authorities related to the payment system, the FSPI also caters to the interests of industry stakeholders on policies and regulations regarding the payment system. Industry stakeholders, as well as the academia, related professionals, and other ministries may serve as discussion partners providing input, advice and assessments on the payment system, in meetings at FSPI's secretariat office in Bank Indonesia.

Apart from setting up the FSPI, other efforts in coordinating policies on the payment system and money supply management include An MoU in March 2015 between Bank Indonesia Governor and the Head of the Financial Transaction Report and Analysis Center (PPATK), on the Prevention and Eradication of Crimes in Money Laundering and Terrorism Financing. The MoU, a revision of a similar MoU in 2010, outlines cooperation in information sharing and improving the information system, in formulating regulations and guidelines on compliance audits, on engaging in public awareness programs, and in the training and assigning Bank Indonesia officials to the PPATK.

Regarding audits of financial transactions, Bank Indonesia will coordinate with the PPATK in enforcing compliance on the reporting of financial transactions according to existing laws on the prevention and eradication of crimes in money laundering and terrorism financing, as well as conducting joint audits. Meanwhile, in regard to improving institutional competence, Bank Indonesia and the PPATK had provided educational and training sessions for each of their officials both separately and jointly. These training sessions include workshops on legislations against crimes in money laundering and terrorism financing, as well as preparatory workshops for the mutual evaluation of the Financial Action Task Force (FATF).

Bank Indonesia and the PPATK as members of the Anti-Money-Laundering Committee have also been cooperating in formulating legal measures to freeze funds of suspected terrorists according to Law No. 9/2013 on Anti-Terrorism-Financing, and coordinating the National Risk Assessment (NRA) involving law enforcers, intelligence agencies, financial institutions, and other authorities. The NRA identifies and analyses risks from money laundering and terrorism financing, to then mitigate those risks through the formulation and enforcement of relevant policy measures and regulations.

Meanwhile, regarding the money supply management, Bank Indonesia has coordinated with other institutions to follow-up Bank Indonesia Regulation (PBI) No.17/3/ PBI/2015 on the Use of the Rupiah Currency within the

No	Institution / Agency	Coordination Topic			
1	Financial Services Authority	Insurance companies, mutual funds, and financing companies			
2	Ministry of Foreign Affairs	Extraterritorial region and international institutions			
3	Ministry of Religion	Cost of Haji and Umrah			
4	Ministry of Transportation	Strategic infrastructure and transactions on land, sea, and air			
5	Ministry of Industry	The standard reference exchange rate and the textile industry			
6	Ministry of Tourism and Creative Economy	Hospitality and tour and travel			
7	Directorate of Renewable Energy and Energy Conservation	Strategic infrastructure and quotation Feed-in Tariff (FIT)			
8	Directorate of Oil and Gas and SKK Migas	Mapping of upstream oil and gas transactions			
9	Directorate of Electricity	Strategic infrastructure and PT PLN with vendor contracts			
10	Regulatory Agency for Downstream Oil and Gas (BPH Migas)	Freight rate fixing natural gas through pipelines			
11	Directorate General of Taxation	Bookkeeping and Tax			
12	Directorate General of Customs and Excise	Duty free shops			
13	Capital Investment Coordinating Board	Foreign investment in Indonesia			
14	Supervisory Board and the Commodity Futures Trading	Recapitulation futures products traded on the inside and / or outside futures exchange $% \left({{\left[{{{\rm{T}}_{\rm{T}}} \right]}_{\rm{T}}} \right)$			

territory of the Republic of Indonesia. In 2015, a total of 26 accords on the matter had been reached between Bank Indonesia's Regional Offices with their counterpart Regional Police Offices, agreeing on cooperation in carrying out each other's relevant tasks and authorities (Table 14.2). The accords are follow-ups to the "Accord on the Cooperation to Support Bank Indonesia's Tasks and Authorities" signed between Bank Indonesia Governor and the National Police Chief on September 1, 2014, as well as the "Guidelines on the Law Enforcement against Crimes relating to the Payment System and Currency Exchange" signed between Deputy Governor of Bank Indonesia and Chief of the Crime Investigation Agency National Police on September 24, 2014, the "Guidelines on Enforcing the Use of the Rupiah Currency within the Indonesian Jurisdiction and against Crimes relating to the Use of the Rupiah Currency" signed between Bank Indonesia Deputy Governor and Chief of the National Police Crime Unit on November 20, 2015, the "Guidelines on Security Measures for Bank Indonesia and State Valuables" signed between Deputy Governor of Bank Indonesia and Chief of the National Police Mobile Brigade Corps on February 23, 2015, and the "Guidelines on the Supervision of Money-Transporting Security Companies" signed between Deputy Governor of Bank Indonesia and Chief of the Security Maintenance Agency of the National Police on February 26, 2015.

Bank Indonesia had also coordinated with the authorities of other countries through international forums to improve the payment system and the money supply management. The forums include the 2015 Financial Sector Reform and Strengthening (FIRST) Initiative Consultative Group Meeting, the Association of South-East Asian Nations (ASEAN), Working Committee on Payment and Settlement System's (WCPSS) coordination on National Risk Assessment, and the World Bank's Technical Assistance for the Financial Inclusion Support Framework. Bank Indonesia had on the regional scale been particularly active in the ASEAN WCPSS, which for 2015 had focused on improving the region's payment systems to facilitate the liberalization of goods, services, capital, and investments for the ASEAN Economic Community (AEC). This was done by developing the infrastructure for high-value payment systems so that the payment system infrastructure in ASEAN's BCLMV member countries (Brunei Darussalam, Cambodia, Lao PDR, Myanmar and Vietnam) will be on par with those in the ASEAN 5 (Indonesia, Malaysia, the Philippines, Singapore, and Thailand).

Bank Indonesia had also initiated bilateral arrangements regarding the payment system with other countries to facilitate more trade and investments. The bilateral arrangements include developing the necessary payment system infrastructure to facilitate cross-border trade and investment settlements using local currencies. The use of local currencies is expected to reduce the current dependency on the U.S. dollar for cross-border transactions, as well as benefit from less conversion rates and fees.

Regional cooperation through ASEAN's WPCSS also concerned retail transactions, focusing on improving the efficiency of transactions by using card-based payments.² Policies relating to this matter include setting transaction

² Card-based payments for retail transactions are currently managed by international financial service providers.

fees, lifting regulations that are not beneficial to consumers and lifting regulations limiting the operation of domestic service providers. ASEAN's WCPSS also prepared other initiatives relating to the payment systems for member countries to implement after 2015 in achieving ASEAN's 2025 vision.

Bank Indonesia also cooperated with other central banks and international agencies on institutional capacity building regarding payment systems. In particular, Bank Indonesia had worked together with the World Bank on technical assistance programs relating to the Financial Sector Reform and Strengthening Initiative (FIRST), focusing on improving Indonesia's payment system infrastructure in aspects of its legal and regulatory framework, payment system oversight, development of a remittance system, and innovation in payment instruments.

Meanwhile, in preventing and addressing the problem of counterfeit money, Bank Indonesia had thoroughly engaged with other member institutions of the Coordinating Agency for the Eradication of Counterfeit Money (Botasupal).³ Coordination was carried out with the Indonesian Supreme Court, the OJK, and the PPATK, to strengthen law enforcement against crimes relating to counterfeit money and create a deterrent effect against such crimes.

Bank Indonesia also coordinated with the Ministry of Finance in the annual printing of paper money and minting of coins. This includes planning the rupiah denominations to be issued and each of their amounts, taking into account such macroeconomic variables as the year's estimate on inflation, economic growth and interest rate, as well as the denominations and amounts to be discontinued, replaced or destroyed.

Starting 2015, the printing of rupiah banknotes and minting of coins will be carried out under a multi-year term. For this, Bank Indonesia has coordinated with the Audit Board (BPK), the Public Procurement Agency (LKPP), and the State Minting Company (Perum Peruri), concurring that the multi-year printing of rupiah banknotes and minting of coins for 2015-2017, which had been approved by the Finance Ministry, as admissible, as long as risks concerning the material quality for the banknotes are addressed. Bank Indonesia also coordinated with the Ministry of Finance on the discontinuation, replacement and destroying of rupiah banknotes and coins. Information on the amount and nominal value of the rupiah currency discontinued, replaced and destroyed had been presented to the Ministry of Finance every quarter, and to the Ministry of Law and Human Rights once a year, before then being published in the year's State Gazette.

Bank Indonesia then coordinated with Indonesian Railways Company and Indonesian National Shipping to distribute the printed banknotes and minted coins, and with the National Police to provide security for the distribution.

Meanwhile, the Botasupal had held its coordination meeting in December 2015 to evaluate the year's efforts in preventing and addressing problems of counterfeit money, and formulate its programs and action plans for 2016 (Picture 14.3). Botasupal's assessment for 2015 concluded that further coordination is needed as the National Police had continued to uncover numerous crimes relating to counterfeit money, as well as increasing amounts of counterfeit money.

Bank Indonesia had conducted particular coordination with the Supreme Court outside the Botasupal forum, in continuing to providing relevant training for court justices. Such training sessions had been carried out with the Supreme Court for 13 years, with topics on banking as well as on the central bank's role and duties. For 2015, the issue of money supply management had been added to the training sessions, and held in four cities throughout the year: Palembang in March, Banjarmasin in May, Manado in August, and Semarang in October, with each

Picture 14.3. Coordinating Agency for Eradication of Counterfeit Money



³ The Botasupal was established by Presidential Regulation No. 123/2012 and comprises the State Intelligence Agency, the National Police, the Attorney General's Office, the Finance Ministry and Bank Indonesia.

session attended by 30 justices from the district, religious, administrative and military courts.

14.3. POLICY COORDINATION TO IMPLEMENT STRUCTURAL REFORM

Structural reform was among the priority agendas of the Indonesian government in 2015, prompting the coordination between Bank Indonesia and other related authorities in such policies as deepening the financing market, as well as reforms on the real sector, the payment system, and the currency management.

Coordination of Policies on the Financial Market Deepening

Deepening the financial market helps strengthen an economy's fundamentals by fostering macroeconomic stability and sustainable growth, and can be achieved by providing adequate liquidity, facilitating transactions, inducing normal market pricing, and minimizing risks.

As part of efforts in deepening the financial market, Bank Indonesia had in 2015 issued three regulations concerning foreign exchanges: on the transactions of foreign currencies and the rupiah between banks and local parties, on the transactions of foreign currencies and the rupiah between banks and foreign parties, and on the banking industry's foreign exchange net position.

The three regulations expand the definition of derivative transactions from previously only forward transactions, swaps and options, to include cross currency swap (CCS) transactions, which is an agreement between two parties to exchange funds and any related interests in different currencies. The regulations also expand the types of transactions considered as underlying, to include income and expense estimations for trade and investment activities. The minimum required period of one week for derivative transactions by foreign parties was also lifted, to improve certainty for the foreign parties in optimizing derivative transactions as hedging for their investments in Indonesia.

Meanwhile, coordination between Bank Indonesia and the Indonesian government was carried out with the government's first two economic policy packages, which had focused on deepening the financial market. Bank Indonesia issued forward market intervention policies to maintain the supply and demand balance in the financial market, and issued Bank Indonesia deposit notes and reverse repos for the Indonesian government's twoweek bonds to bolster rupiah liquidity in the money markets. Synergized, both policies are expected to provide positive sentiments for the rupiah currency in the money markets and mitigate potential risks from turbulences in the global economy. This is crucial in driving more sustainable growth amidst the still uncertain situation with the global economy. Overall, coordination of the policies are expected to support efforts in increasing the capacity of domestic trade and investments, by providing more flexibility in the transactions of market players, and thus deepen the financial market as well. The policies had been formulated and implemented prudently and in consideration of their possible impacts to the stability of the financial system, with banks strictly required to adhere to regulations on risk mitigation.

Coordination of Policies on Real Sector Reform

The Indonesian government had set several sectors as priorities in 2015, including the maritime sector, the energy and food sector, as well as the industry and tourism sector. These sectors, however, still needed to undergo structural reforms to be further developed into more resilient and sustainable engines of growth, and thus the coordination of policies to implement the reforms were equally important.

Among the coordination of policies to reform the maritime sector was a national coordination meeting between Bank Indonesia, the Indonesian government and local administrations, on May 25, 2015 in Ambon, Maluku. The meeting managed to build a common vision of reviving Indonesia's maritime based economy, and formulate concrete strategies and technical level measures to do so.

Indeed, developing a maritime based economy is ever more crucial in these challenging times for the world economy, as the economic potential from Indonesia's maritime resources is more than enough to drive higher and more inclusive growth. Indonesia's maritime resources has so far been under developed, as can be seen in the limited exports of fish and other sea produce, as well as the under-developed maritime processing industries. The sea has been considered an economic barrier, and has yet to become a major source of income. This is somewhat ironic as developing a maritime based economy has all the factors needed to drive more inclusive growth, increase prosperity, and improve the economy's structure. The coordinating meeting on policies to reform the maritime sector had agreed on four strategies to implement, namely: strengthening Indonesia's maritime integrity, managing Indonesia's maritime resources independently and in a sustainable manner, developing Indonesia's maritime infrastructure independently and in an integrated manner, developing human capital for the maritime sector and research on maritime technology, and developing a maritime based culture. All participants of the meeting then coordinated in the needed preparations to promptly implement the strategies.

The energy sector, particularly concerning its infrastructure, was another focus area for structural reform. A meeting to coordinate policies on reforming the energy sector was thus held on August 11, 2015 in Balikpapan, East Kalimantan. The meeting, attended by Bank Indonesia, the Ministry of Finance, the Ministry of Energy and Mineral Resources, the Ministry of Environment and Forestry, the State Electricity Company (PT PLN), the Special Task Force for Upstream Oil and Gas Business Activities (SKK Migas), the provincial administrations of Kalimantan, and the regency and city administrations of East Kalimantan, discussed the challenges and recommendations for both macroeconomic and sectoral policies, as well as financing strategies for energy infrastructure. Achieving energy resilience and independency was particularly important, to support industrialization and thus drive more sustainable and inclusive growth.

The Ministry of Finance provided several fiscal incentives to facilitate the development of energy infrastructure. Among the incentives was a tax holiday of longer tax exemption periods for renewable energy industries and refining industries. Tax allowances for mining industries, smelter industries and power plant companies were also given, in the form of cuts on net income tax, and shorter depreciation and amortization periods. Regarding energy infrastructure financing, the Indonesian government encouraged public-private partnership (PPP) schemes for the land acquisition process, project development, and project insurance through state infrastructure guarantor Indonesia Infrastructure Guarantee Fund.

The Ministry of Environment and Forestry, meanwhile, provided facilities relating to spatial regulations and permits for energy infrastructure projects. The Regional Spatial Plans (RTRW) for Kalimantan provinces had been revised to account for both infrastructure projects and forest areas, in accordance to the Indonesian President's directive that all forest areas of nature reserves, forest conservation areas and plantation areas can be used accordingly for infrastructure projects. The Ministry of Environment and Forestry had also expedited the needed principle permits under its authority for state electric company PT PLN's 35,000MW power plant projects.

The Ministry of Energy and Mineral Resources itself had also provided facilities for permits relating to energy infrastructure projects and other projects concerning Indonesia's energy mix needs. The ministry simplified the permit processing for renewable energy projects from previously 52 procedures to only 29. The oil-andgas and mining sectors saw similar permit processing procedures simplified. Power projects, meanwhile, saw simpler procedures in setting electric rates, as well as their guarantee periods extended to 25 years.

Structural reforms for Indonesia's industry and tourism sector, meanwhile, is aimed at improving their global competitiveness. A coordinating meeting on policies to reform the industry and tourism sector was held on November 13, 2105 in Yogyakarta, resulting in several policy measures to improve the sectors' competitiveness. Structural reforms for the industry sector in the form of deregulations and de-bureaucratization, relaxing the rules for investment, providing tax incentives for transport vehicles, and simplifying the land use permitting process, were all included in the Indonesian government's economic policy packages. Meanwhile, structural reforms to improve the tourism sector's competitiveness included lifting the visa requirements for 90 countries, facilitating a simpler custom clearance procedure for yachts tourism, and constructing new airports and seaports.

Other policies for structural reforms had been included in the Indonesian government's economic policy packages, and underwent coordination with Bank Indonesia. In the first economic policy package, the processing of business permits was simplified and setting up co-operatives was facilitated. The processing of investment permits in the industry and forestry sector were also simplified, in the second economic policy package. In the fourth economic policy packages, seven regulations concerning wages were issued, including on formulating the minimum wage, on the regional minimum wages, on the minimum wages by sectors, on wage structuring, on allowances on national days, on service fees, and on the basic cost of living. Meanwhile, the processing of permits for sharia-based banking products was simplified in the fifth economic policy package. Investments in water resource projects prior to the Supreme Court cancelling Law No.7/2004 on Water Resources was ascertained in the sixth policy

Table 14.3.

Government Economic Policy Packages Structural Reform

Package Vol. I Sept 9, 2015	Package Vol. II Sept 29, 2015	Package Vol. IV Oct 15, 2015	Package Vol. V Oct 23, 2015	Package Vol. VI Nov 5, 2015	Package Vol. VII Dec 4, 2015	Package Vol. VIII Dec 21, 2015
 Simplification of business license throught the local level Strengthening 	 Trimming the licensing processes of investment for industry as well as environmental 	 Remuneration Reform to provide business certainty 	 Permit Simplification for new Islamic banking products 	 Trimming licensing stages for import raw materials drug Regulatory 	 Trimming the stages and improving services of land certificate iccupace 	 Space utilization and land use reform through the One Map Policy
• Strengthening cooperative institutions	 Accelerate the process of tax allowance and tax holiday 			• Regulatory reform for water resources exploitation	issuance	

package, while the seventh economic policy package simplified the processing of land certificates. Lastly, the eighth economic policy package had formulated a One Map Policy for further structural reforms (Table 14.3).

Coordination of Policies on Reforms to the Payment Systems and Currency Management

Indonesia's Currency Law authorizes Bank Indonesia to coordinate with the Indonesian government in the three aspects of currency management, namely: the planning of currency, the printing of paper-notes and minting of coins, and the destruction of money. Structural reforms for the currency management focus on the distribution of money to all areas under the Indonesian jurisdiction.

For this, Bank Indonesia had worked together with the Ministry of Transportation and transportation businesses. Coordination with the Ministry of Transportation included ensuring the distribution of money, enforcing the use of the rupiah currency in all areas under Indonesian jurisdiction, promoting the national non-cash and inclusive financial access programs, ensuring the logistics and distribution of goods for inflation management and driving growth, information sharing, and conducting joint research (Picture 14.4). Coordination in ensuring the distribution of money, was in particular to ensure that the rupiah currency can be reliably transported at all times to all areas under Indonesian jurisdiction, thus ensuring as well the quality and integrity of the rupiah.

Bank Indonesia also worked together with the Coordinating Ministry for Human Development and Cultural Affairs and with the Indonesian Navy, to ensure that the distribution of the rupiah currency and its cash services are available even in the most remote areas and at Indonesia's land border, and thus achieve the goal of ensuring the distribution of the rupiah to all areas under Indonesian jurisdiction by 2019.









The Srikandi Dance portrays the intelligence, courage, and expertise of a soldier in using a variety of weapons to be victorious on the battlefield. Indonesia's economy must show similar characteristics to confront a future replete with challenges.