Policy synergy for responding to the multifaceted global and domestic challenges is the key to success in sustaining the momentum for economic recovery. Inter-agency coordination was strengthened further in 2016, both at the national and sub-national levels.
INFOGRAPHICS: PART III
POLICY MIX RESPONSES

POLICY MIX RESPONSES
- GOVERNMENT
- BANK INDONESIA
- FINANCIAL SERVICE AUTHORITY

SHORT-TERM RESPONSE
- FISCAL
- MONETARY
- MACRO PRUDENTIAL
- MICRO PRUDENTIAL
- PAYMENT SYSTEM

POLICY FOCUS
- Economy Deceleration Risk Mitigation
- Maintain macroeconomic and financial system stability
- Strengthen economic structure through increasing efficient and productivity
- Managing macroeconomics policy well in supporting sustainability growth

LONG-TERM RESPONSE
- Issued and circulated new emission of Rupiah year 2016
- Set CCB at 0%
- Lowered Policy Rate
- Lowered Policy Rate
- Lowered Policy Rate

BANK INDONESIA POLICY 2016

APRIL - MAY
- Improved regulation on JIBOR offered rate (effective June 1, 2016)
- Expanded currency for swap transaction hedging transaction with Bank Indonesia
- Set CCB at 0%

JUNE - JULY
- Lowered Policy Rate
- Increased lower limit of - LFR target (effective in August 2016)
- Relaxed LTV/FTV ratio (effective in August 2016)

AUGUST
- Introduced BI 7DRR rate
- Changed interest rate corridor became symmetric and narrower
The macroeconomic policy in 2016 was directed at mitigating economic risks triggered by unfavorable global conditions. The response involved four areas of policy focus. First, to mitigate the risk of slowing economic growth by strengthening the role of domestic demand as a source of economic growth. Second, to maintain the economic stability and financial system stability that has been maintained and has become a foothold for economic growth. Third, to reinforce the economic structure through improvements in efficiency and productivity in order to continue to improve the competitiveness of the economy in the medium and long term. Fourth, to manage various policies pursued to remain within the corridor of sound macroeconomic policy to support the sustainability of economic growth.

The macroeconomic policy direction was pursued through policy synergy between the Government, Bank Indonesia, and the Financial Services Authority. This synergy was implemented in a policy mix bringing together fiscal, monetary, macroprudential, microprudential, payment system, and structural policies. The policy mix was not only directed to mitigate short-term cyclical risks, but also to strengthen the economic structure in the medium and long term. Consistent efforts to strengthen the economic structure were pursued in line with the commitment to build a more competitive and resilient national economy in the medium and long term. Related to that, in 2016, Bank Indonesia lowered the policy rate as much as six times reaching 150 bps and created a new policy interest rate, the Bank Indonesia 7-Day (Reverse) Repo Rate (BI7DRR) became 4.75% at the end of 2016. In addition, Bank Indonesia also announced a further 1.0% reduction in the rupiah primary statutory reserve requirement (RR) to 6.50% in February 2016.

The monetary policy Bank Indonesia was also supported by the exchange rate policy to keep rupiah movement in line with its fundamental values. The exchange rate policy was also supported by more robust management of foreign currency demand and supply by bringing back the twice-a-week FX swap auctions, relaxation of the rules for hedging swap transactions with Bank Indonesia with an expanded selection of currencies, and implementing rules for minimum debt rating. Efforts to strengthen the resilience of the external sector were also pursued by maintaining an adequate level of international reserves as a first line of defence and strengthening international financial safety net cooperation as the second line of defence.

The monetary policy direction was also strengthened by reformulation of the monetary policy operational framework, carried out by switching the policy rate from the BI Rate to the BI7DRR, effective on 19 August 2016. In addition to the policy interest rate change, Bank Indonesia
also reinforced the monetary operations strategy by maintaining a symmetrical Inter-Bank Money Market (PUAB) and narrower interest rate corridor in interbank rates in which the lower limit (the Deposit Facility/DF Rate) and the upper limit (Lending Facility/LF Rate) are each 75 bps below and above the BI7DRR. The principal objectives of these policy measures were three-fold: to strengthen monetary policy signals, boost the effectiveness of monetary policy transmission, and encourage financial market deepening.

Reformulation of the monetary policy operation framework was also accompanied by the acceleration of financial market deepening on both the rupiah and forex money markets. Bank Indonesia introduced the General Master Repo Agreement (GRMA) to promote activity in repo market transactions by improving the capacity of repo market participants. The GRMA is aimed particularly at small-asset banks, insurance companies, pension institutions, and financing institutions. Bank Indonesia also bolstered the credibility of the Jakarta Interbank Offered Rate (JIBOR) as a benchmark interest rate on the money market by encouraging increased trading frequency, introducing a hittable quasi-quotation mechanism, and extending the tenor to create liquidity in longer tenors.

In 2016, further support for the Bank Indonesia policy mix came from macroprudential policy. The macroprudential policy direction is focused on strengthening bank intermediation while maintaining the stability of the preserved financial system and mitigating potentially rising credit risks. Bank Indonesia again loosen the Loan to Value (LTV) or Financing to Value (FTV) ratio to boost property loans in 2016. Bank Indonesia also updated the Loan to Funding Ratio (LFR) rules by adjusting the lower limit of the LFR target from 78% to 80% to encourage banking interest in extending lending. In addition, Bank Indonesia introduced an obligation for lending by commercial banks to micro, small, and medium enterprises (MSMEs) to be phased in, starting with 10% of total credit in 2016 and subsequently to be increased to a minimum of 20% by the end of 2018. In further action, Bank Indonesia reset the Countercyclical Capital Buffer (CCB) to 0% after considering the economic development and systemic risk of credit growth.

The policy of Bank Indonesia in the payment system was focused on strengthening the payment system infrastructure. Following the smooth launching of Bank Indonesia Second Generation Real Time Gross Settlement (BI-RTGS) and Bank Indonesia National Clearing System (SKNBI), Bank Indonesia improved the system service features by implementing bulk payments service on 2 May 2016 and lowered the nominal fund transfer limit through the RTGS effective from 1 July 2016. Bank Indonesia also launched the National Payment Gateway (NPG) to serve as the infrastructure for integration of various payment channels in order to facilitate electronic payment transactions. In doing so, Bank Indonesia also extended support for the National Non-Cash Movement (GNNT). To bring about financial inclusion, Bank Indonesia continued to expand its financial access by initiating several Digital Financial Services (DFS) pilot projects in several regions. In coordination with the Ministry of Social Affairs, Bank Indonesia also conducted the integration of the non-cash payment system with the Family Hope Program (PKH), a government program for direct cash transfers to underprivileged families. Meanwhile, the policy for management of rupiah currency was still directed to meet the need of money in the community in sufficient quantities, in appropriate denominations, timely manner, and in quality fit for circulation to reach the remote and front of the territory of the Republic of Indonesia (NKRI).

In regard to finance, Bank Indonesia pursued the policy mix by continuing to forge closer coordination with the Government and other stakeholders. Policy coordination was focused on accelerating structural reforms to support sustainable economic growth. Related to that, coordination with the government was done to oversee the implementation of the Economic Policy Packages (PKE) through the PKE Implementation Task Force. The policy synergy with the Government has also been implemented through a number of initiatives to improve logistics efficiency, strengthen the competitiveness of urban areas as a source of new growth (smart city), develop maritime infrastructure, and improve the competitiveness of manufactured products.

In regard to finance, Bank Indonesia maintained coordination with the Ministry of Finance, the Financial
Services Authority, and the Indonesian Deposit Insurance Corporation within the forum of the Financial System Stability Committee (KSSK) to safeguard financial system stability, especially in the prevention and handling of the crisis. To support the KSSK function as mandated by the Financial System Crisis Prevention and Resolution Act (UU PPKPS), Bank Indonesia also strengthened bilateral coordination with the Financial Services Authority and the Deposit Insurance Corporation within the macro-microprudential framework. Coordination were also pursued by the Financial Services Authority in efforts to foster the deepening of financial market and financial inclusions. In addition, further actions in policy coordination for inflation control at the central and regional levels through the container of the Inflation Monitoring and Control Team (TPI) and the Regional Inflation Control Teams (TPIDs) was also being pursued.

Overall, the policy mix pursued by the Government and Bank Indonesia managed to strengthen the resilience of domestic economy, amidst still less favorable global conditions. These positive developments were affirmed by improved economic growth and macroeconomic stability and stable financial system stability. The economic growth of 2016 increased to 5.0% and was accompanied by a fairly low inflation at 3.02%, a reduction in the current account deficit to 1.8% of GDP, and a steady rupiah exchange rate. The stability of the financial system was also sustained underpinned by sound banking resilience and a fairly stable domestic financial market. For the future, the policy mix already in place will be strengthened to support the continuing process of strengthening the national economy.
Array of accommodative policies pursued by Bank Indonesia in 2016 were focused on optimizing the potential for economic recovery while consistently safeguarding macroeconomic stability. Monetary policy easing was buttressed by firmly established economic stability in 2016. Such positive outcome created space toward monetary policy easing that in turn was expected to capitalize the momentum economy recovery. In 2016, monetary policy had been eased with the policy rate cut by 150 bps as well as reduction of the rupiah statutory reserve ratio by 1.0% to 6.5% and further supported by reformulation of the monetary policy operation framework to enhance effectiveness of monetary policy transmission.
In 2016, Bank Indonesia’s monetary policy was directed towards creating space for economic recovery amid the ongoing high level of uncertainty in the global economy, while consistently maintaining economic stability. This monetary policy direction was pursued after consideration of the firmly established economic stability that represents a positive outcome of the consistent implementation of the previously fostered policies. Thus, various indicators of economic stability showed improvement, such as steady and low inflation in 2016 that came within the targeting range, the reduction in the current account deficit to a sound and steady level, and subdued movement in the rupiah exchange rate. In turn, the prudently managed macroeconomic stability afforded Bank Indonesia to relax the monetary policy stance in support of economic recovery.

Furthermore, Bank Indonesia overcome dynamic policy challenges by implementing of policy mix, governing monetary policy through interest rates and reserve requirement and further supported by macroprudential and payment system policies. Along that line, exchange rate policy was established to sustain exchange rate movements around its fundamental value in order to support external sector resilience, as an important condition to achieve inflation target. Accordingly, monetary policy easing was expected to optimize economic growth that had been hampered by suboptimal performance of the private sector. Thus, monetary policy easing was carried out with prudently measured aggregates and timing in view of persistently high risk of global uncertainties, including the impact from uncertainty over the planned hike of the FFR.

Accordingly, the Bank Indonesia policy rate had been lowered by 150 bps over the course of the year. This was done under two distinct operational frameworks. In the first half of 2016, Bank Indonesia lowered the BI Rate, the policy rate at the time, by 100 bps over four rate cuts of 25 bps in January, February, March, and June respectively. Thus, after the implementation of policy reformulation in the second half of 2016, Bank Indonesia revised the BI7DRR, the new policy rate, downwards by a total of 50 bps over two rate cuts at 25 bps, each in September and October 2016. Hence, the policy rate reduction was aimed to manage future inflation to move within the target range of 4.0%±1% in 2016-2017 and 3.5%±1% in 2018 in conjunction with effort to support economic recovery.

Another substantial accommodative policy was taken by further easing of the rupiah statutory reserve requirement. Following a 0.5% reduction at the end of 2015, the rupiah statutory reserve requirement was lowered by a further 1.0% in February 2016 to 6.5%. The measure was taken as further support to improve monetary policy transmission.

Further support for the policies governing the policy interest rate and the reserve requirement came from exchange rate policy. The thrust of the exchange rate policy was to preserve exchange rate movement in line with fundamentals, in a manner consistent with achievement
of the future inflation target. In 2016, exchange rate policy stayed underway within the corridor of the free-floating exchange rate system. As such, the free-floating exchange rate system has been a reliable mechanism for absorbing shocks by realigning the external sector to its fundamental in the aftermath of the past financial turmoil. Yet, Bank Indonesia pursued further actions in order to maintain the inflation target through reduction of excess volatility of the exchange rate in the view that excess volatility may increase adverse expectation over exchange rate movement and inflation.

Exchange rate policy was reinforced by numerous measures to improve the demand and the supply side of the forex market. To this end, Bank Indonesia reinstated the twice-weekly frequency of FX swap auctions and relaxed the regulation concerning hedging swap transactions with Bank Indonesia. Accordingly, it was expected that both policies would be able to enhance foreign currency liquidity management that in due course would restraint movement in the exchange rate.

Likewise, Bank Indonesia also reinforced the forex market demand and supply structure by accommodating hedging needs for economic activities conducted in non-US dollar currencies. For this purpose, Bank Indonesia expanded the selection of currencies accepted in hedging swap transactions with Bank Indonesia. In doing so, relaxation of the regulation concerning hedging swap transactions has enabled banks to arrange swaps both in US dollars as well as non-US dollar currencies, in correspondent with the related underlying transaction documents. Under this policy, banks can take advantage of conducting hedging swap transactions with Bank Indonesia in multiple currencies. Hence, it was expected that such policy would provide adequate support for foreign currency liquidity management and to minimize exchange rate risk.

The decision to relax the regulation concerning hedging swap transactions in non-US dollar currencies came against the background of identified potential of the substantial use of non-US dollar currencies in economic transactions between Indonesia with main trading partners and investors. Data on international trade in 2016 shows that ASEAN countries other than Singapore, as an international trade hub, constitute the leading destination for Indonesian exports, followed by Japan, the United States, and China. Conversely, the most important source of Indonesian imports is China, followed by ASEAN and Singapore. Furthermore, the International Investment Position statistics also indicates that Indonesia’s major investors and creditors are dominated by Asian countries.

As such, several non-US dollar currencies have been identified as having potential for use in domestic forex transactions, including euro (EUR), yen (JPY), and renminbi (CNY/CNH). Of these three currencies, the renminbi has charted the highest growth in transaction value. This is consistent with a global market trend reported in the BIS Triennial Survey, in which the turnover of global renminbi transactions doubled to USD202 billion over a period of three years (2013-2016). In 2016, the CNY became the 8th most traded currency globally, up from the number 9 position in 2013. Moreover, the domestic market also witnessed a significant rise in CNY transaction volume over the past year, as shown by the doubling transactions volume of the CNY against the rupiah and US dollar relative to previous year.

The exchange rate policy was also geared by a policy for managing external debt to mitigate exchange rate risk. In doing so, Bank Indonesia launched the Bank Indonesia Regulation (PBI) No. 16/21/PBI/2014 concerning Implementation of Prudential Principles in Managing External Debt of Non-bank Corporations (KPPK) for companies intending to issue or draw on new external borrowings. Accordingly, since 1 January 2016 corporate entities are required to submit information on compliance with the minimum credit rating. Furthermore, the regulation also stipulates a minimum credit rating equivalent to BB-, issued by a rating agency recognized by Bank Indonesia. As a result, significant progress took place in compliance with the minimum credit rating. In December 2016, 32.8% of corporate entities subject to the reporting obligation had provided information about their credit rating, increase from just 7.9% in January 2016.

Moreover, support for the exchange rate policy also came from measures to promote the use of local currency settlement (LCS). This policy was introduced to endorse the settlement of commercial transactions as take part of broader measures to mitigate exchange rate risk and to reduce dependency on a single currency. Accordingly, on 23 December 2016, Bank Indonesia, the Bank of Thailand, and Bank Negara Malaysia reached agreement in Bangkok, Thailand, on the establishment of a collaborative framework to promote settlement in bilateral trade and direct investment with the use of local currencies. The agreement among these central banks is expected to reduce the cost of transactions, as they will be conducted using direct quotation without the added burden of cross-currency conversion from local currency to the US dollar and then to the intended national currency. This will bring about diversification away from local currency dependence on a single currency, while developing regional money markets, and opening access to active participation by commercial
entities among the countries that have signed up to the LCS arrangement.

Another support to the exchange rate policy came from efforts to boost international reserves as a “first line of defense” strategy. The upgrade of international reserves is crucial to mitigate the impact of global uncertainty that brings along risks destabilising the exchange rate that may in turn disrupting macroeconomic stability. At the end of 2016, the international reserves position reached USD116.4 billion, significantly higher than those of USD105.9 billion at the end of 2015 (Chart 11.1). At this level, the December 2016 reserve position was sufficient to fund 8.8 months of imports or equivalent to 8.4 months of imports and servicing of official external debt, well above the 3 months of imports that represents the international standard for adequacy.

The building of stronger international reserves was supported by reinforcing “the second line of defense”, involving an enhanced role for the international financial safety net. As such, Indonesia has several facilities for a “second line of defense”, consisting of a regional financial arrangement and bilateral cooperation with several partner countries. These facilities include the ASEAN Swap Arrangement (ASA), the Chiang Mai Initiative Multilateralization (CMIM) and the Bank Indonesia-Bank of Japan Bilateral Swap Arrangement (Table 11.1).

Within the regional context, Bank Indonesia also collaborates with ASEAN countries in the ASEAN Swap Arrangement (ASA) valued at USD2 billion and effective until 2017. The ASA can be used to help meet the short-term liquidity needs of member countries coming under pressure in the balance of payments. During the 2015–2017 period, Bank Indonesia is the Agent Bank acting as coordinator for implementing the ASA if any participating member submits an activation request to draw on the facility.

Bank Indonesia also has a BSA with the Bank of Japan (BoJ). This collaboration comprises a rupiah to US dollar currency swap arrangement between Japan and Indonesia. This arrangement has been made to overcome liquidity difficulties arising from problems in the balance of payments and short-term liquidity. The USD22.76 billion BSA was first signed on 17 February 2013 and most recently on 12 December 2016 for an effective period of three years.

Bank Indonesia has also forged closer cooperation under Bilateral Currency Swap Arrangements (BCSAs) with the People’s Bank of China (PBoC), the Bank of Korea (BOK), and the Reserve Bank of Australia (RBA). The BCSA scheme is designed to promote bilateral trade and to provide guarantees for settlement of transactions in the local currencies of the two countries involved. For Indonesia, it is envisaged that these arrangements will scale back the dependence on the US dollar and thus create greater stability in the rupiah exchange rate. Additionally, a further objective in the BCSA with the PBoC is to provide a solution for short-term liquidity needs in order to maintain financial market stability. The BCSA between Bank Indonesia and the PBoC was first signed on 23 March 2009 and is worth 100 billion Chinese yuan, equivalent to Rp175 trillion. Likewise, the BCSA between BI and the BOK, with a value of Rp115 trillion, was signed in 2014 and expires in 2017. Similarly, the BCSA between BI and the RBA, signed on 15 December 2015, enables swap transactions to be carried out in the local currencies of the two countries up to a value of 10 billion Australian dollars, equivalent to Rp100 trillion. This agreement may also be employed for other purposes as agreed by both parties.

**11.3. FINANCIAL MARKET DEEPENING**

In 2016, Bank Indonesia pursued multifaceted actions to promote the deepening of the rupiah and foreign exchange money markets. These measures were crucial because market deepening would help maintain stability during times of turmoil, while creating a more efficient money market and strengthening the effectiveness of monetary policy transmission. From a broader perspective, a deeper money market was envisaged as an alternative sustainable funding source for national development.

Efforts for further deepening of the rupiah and forex money markets were performed by taking the structure of market liquidity as well as the management of the domestic banking system into careful consideration. The key issues included:...
are that the rupiah liquidity was spread unevenly among individual banks, despite the aggregate liquidity surplus in the banking system. Additionally, the money market was still thin and bank liquidity management preferences tended to operate on a short-term horizon. Meanwhile, the forex market also had a limited level of transactions compared to other countries in the region, even though volume was on an upward trend.

Evidently, on the rupiah money market, average transaction volume in 2016 reached Rp12.5 trillion per day. Thus, most transactions on the rupiah money market were uncollateralized, mostly through interbank money market, while only the remainder were collateralized through the repo market. In addition, interbank money market transactions were dominated by short tenures such as overnight (O/N) and less than 1-week transactions. The repo market, on the other hand, was dominated by transactions with tenures less than 1-month. According to the BIS data, forex market transactions recorded a daily turnover of about USD5 billion during 2016. Nonetheless, this figure did not adequately represent the level of domestic economic activity and was smaller than forex turnover in neighbouring countries such as Malaysia and Thailand.

<table>
<thead>
<tr>
<th>No</th>
<th>Facility Type</th>
<th>Purpose</th>
<th>Value</th>
<th>Signing of Agreement</th>
<th>Validity Period</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ASEAN Swap Arrangement</td>
<td>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.</td>
<td>USD2 billion (maximum facility that can be drawn by Indonesia amounted to USD600 million)</td>
<td>16 November 2015</td>
<td>2 years</td>
<td>Extension several times since the first signing on 15 November 2005</td>
</tr>
<tr>
<td>2</td>
<td>CMIM</td>
<td>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</td>
<td>USD240 billion (maximum facility that can be drawn by Indonesia amounted to USD22.76 billion)</td>
<td>17 July 2014</td>
<td>Unlimited</td>
<td>Amendment of the agreement for the provision of CMIM. The preliminary agreement was signed in March 2010</td>
</tr>
<tr>
<td>3</td>
<td>Bilateral Swap Arrangement Bi-BOJ</td>
<td>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.</td>
<td>USD22.76 billion</td>
<td>12 December 2016</td>
<td>3 years</td>
<td>Extension several times after the first signing in February 2003, with an increase in the value and type of facilities</td>
</tr>
<tr>
<td>4</td>
<td>Bilateral Currency Swap Arrangement Bi-PBoC</td>
<td>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 availability of short-term foreign currency liquidity for the stabilization of financial markets, and other purposes as agreed by both parties.</td>
<td>CNY100 billion (equiv. to Rp175 trillion)</td>
<td>1 October 2013</td>
<td>3 years</td>
<td>The first signing in March 2009</td>
</tr>
<tr>
<td>5</td>
<td>Bilateral Currency Swap Arrangement Bi-BOK</td>
<td>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.</td>
<td>CNY100 billion (equiv. to Rp175 trillion)</td>
<td>6 March 2014</td>
<td>3 years</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Bilateral Currency Swap Arrangement Bi-RBA</td>
<td>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.</td>
<td>AUD10 billion (equiv. to Rp100 trillion)</td>
<td>15 December 2015</td>
<td>3 years</td>
<td></td>
</tr>
</tbody>
</table>

Source: Bank Indonesia
Furthermore, domestic forex transactions were dominated by spot instruments (62%), followed by swaps and forwards. Additionally, short-tenures transactions continued to be dominated by derivatives, despite the steadily rising proportion of derivative transactions has been a positive contribution to forex market deepening in recent years.

Against the background, the policy for deepening of the rupiah money market was implemented in various measures for development of the repo market. In keeping with the launching of the BIDRR as the policy rate, Bank Indonesia became more active in building the capacity of repo market participants by holding various focus group discussions (FGDs) and workshops on development of the rupiah money market as well as of the repo market. Furthermore, Bank Indonesia also provided facilitation and accelerated consensus building and endorsed the signing of the Global Master Repo Agreement (GMRA) contract for more rapid implementation of repo transactions and to attract more participants into the repo market. As such, the total number of banks signed up for the Indonesia GMRA in 2016 reached 74, while 44 banks were active in transactions on the repo market.

In order to develop the repo market, Bank Indonesia also encouraged banks to build up the necessary stock or portfolio of securities to serve as instruments for conducting repo transactions. Moreover, Bank Indonesia issued regulations for the trading of negotiable certificates of deposit (NCDs) while preparing to regulate transactions of commercial paper (CP). These measures began reaping positive results for rupiah money market development. Repo market transactions recorded increased volume in 2016, accompanied by decline in repo interest rates across nearly all tenures (Chart 11.2 and Table 11.2).

Moreover, Bank Indonesia also managed to strengthen the credibility of the JIBOR as a benchmark interest rate. In the first half of 2016, Bank Indonesia extended the window for the tradable quotation mechanism, lengthened tenurers in order to create liquidity in longer terms, and increased transaction amounts. These steps comprised part of a broader effort to achieve greater increases in the liquidity and frequency of trading. Thus, initial identification also shows that these measures in combination with the reduction in the policy rate contributed to downward movement in the JIBOR at the end of 2016 (Chart 11.3).

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2015</th>
<th>2016</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERBANK Rate (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- O/N Interbank</td>
<td>5.8%</td>
<td>4.8%</td>
<td>-103 bps</td>
</tr>
<tr>
<td>- 1-Week Interbank</td>
<td>6.1%</td>
<td>5.5%</td>
<td>-64 bps</td>
</tr>
<tr>
<td>- 1-Month Interbank</td>
<td>7.1%</td>
<td>6.5%</td>
<td>-63 bps</td>
</tr>
<tr>
<td>Average Daily Volume (Rp Billion)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Overnight Interbank</td>
<td>6,843</td>
<td>7,155</td>
<td>4.4%</td>
</tr>
<tr>
<td>- Total Interbank</td>
<td>11,625</td>
<td>11,746</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

| INTERBANK REPO Rate (%)   |      |      |        |
| - O/N Repo               | n.a. | 4.7% | n.a.   |
| - 1-Week Repo            | 6.2% | 5.4% | -74 bps |
| - 1-Month Repo           | 6.9% | 6.1% | -77 bps |
| Average Daily Volume (Rp Billion) |      |      |        |
| - Total Repo             | 596  | 735  | 19%    |

Source: Bank Indonesia
Along that line, further attempt to promote the deepening of the foreign money market was done by providing facilities for hedging transactions. Hence, forward transactions were made easier with the aid of net settlement for unwind, early termination, and rollover transactions. The purpose of these facilities was to accommodate the operation of hedging in the domestic banking system in keeping with the Bank Indonesia regulation that prescribes mandatory hedging for domestic corporate entities holding net external debt. Concurrently, Bank Indonesia also held dissemination sessions about hedging, followed by FX Line memoranda signed by 7 SOEs with state-owned banks. In parallel, the ongoing efforts were coupled by continual promotion to the use of derivative instruments for hedging against exchange rate risk. This hedging included conventional transactions, such as plain vanilla (forwards, swaps, and options) and structured products, such as call spread options, and those based in sharia principles (sharia hedging).

Overall, the various measures for money market deepening were set within the context of Bank Indonesia’s effort to develop a financial market ecosystem. This was important given that a deep, liquid, and efficient financial market plays a crucial role in supporting monetary policy transmission, financial system stability, and financing for the economy. Hence, development of the financial market ecosystem is set out in the policy framework built around 7 pillars/subsystems (Diagram 11.1).

Correspondingly, several actions were set in support of the domestic financial market ecosystem. These include: (i) enforcement of Bank Indonesia Regulation Number 18/11/PBI/2016 concerning the Money Market, expected to be followed by regulation of the money market and its infrastructure; (ii) improvements of the JIBOR by imposing regulation to strengthen the credibility of the benchmark rate; (iii) improvements to the market code of conduct by adopting international best practice in conjunction with the Indonesian Foreign Exchange Market Committee (IFEMC); and (iv) expansion of the forex money market through Bank Indonesia Regulation Number 18/18/PBI/2016 concerning Foreign Currency against Rupiah Transactions between Banks and Domestic Parties and Bank Indonesia Regulation Number 18/19/PBI/2016 concerning Foreign Currency against Rupiah Transactions between Banks and Foreign Parties. Accordingly, these provisions permit banks to offer a diversified range of efficient hedging instruments and were adopted to gear for corporate hedging needs in keeping with the obligation of companies to arrange hedging with domestic banks to cover external debt and liability exposures.

Another strategic effort to sustain financial market ecosystem development was accomplished by setting up financial market infrastructure, including advancement of the transaction and reporting systems. Furthermore, development of financial market infrastructure covers, among others, development of financial technology (fintech) along with development of the Central Clearing Counterparty (CCP) roadmap. As such, the objective of CCP development is to minimize transaction risks on financial markets by preventing default on settlement that could trigger a systemic domino effect and to prevent the imposition of tariffs under the margining rule scheme adopted by advanced economies.

Thus, development of the financial market ecosystem was also supported by establishment of the Coordination Forum for Development Financing through Financial Markets (FK-PPPK). In this forum, Bank Indonesia, the Financial Services Authority, and the Ministry of Finance will work in synergy for more integrated operation of various policies.

**Diagram 11.1. Ecosystem of Financial Market Development**

Source: Bank Indonesia
In the bond market, stock market, money market, and forex market. Furthermore, market participants will also be engaged in forums for coordination and communication forums through their participation in the Indonesia Foreign Exchange Market Committee (IFEMC) and the Association Cambiste Internationale (ACI) professional association.

In addition to developing the conventional financial market, Bank Indonesia also promoted transaction activity with the use of sharia-compliant financial instruments as an effort to build and expand the sharia-compliant financial market. Part of this involves conducting interbank repo transactions with the use of sharia-compliant underlying financial instruments. Interbank repo transactions have been conducted with Islamic government bonds (Sharia Government Securities/SBSN) since 2014, prior to establishment of the Bank Indonesia regulation on sharia-compliant repo transactions in 2015. Onward, after Bank Indonesia issued the regulation for sharia-compliant repos, at least thirteen sharia repo transactions were conducted throughout 2016.

Subsequently, Bank Indonesia also issued a regulation on hedging transactions based on sharia principles in 2016. This policy is set forth in Bank Indonesia Regulation Number 18/2/PBI/2016 concerning Hedging Transactions Based on Sharia Principles (Sharia Hedging). The regulation is consistent with efforts in mitigating risks of uncertainty from exchange rate movements, including in sharia finance. Accordingly, the underlying transactions for sharia hedging may comprise transactions from all activities in the trade of goods and services at home and abroad and/or investment in the form of direct investment, portfolio investment, finance, capital, as well as other investment at home and abroad.

11.4. MONETARY POLICY TRANSMISSION

Interest Rate Channel

Throughout 2016, Bank Indonesia had embarked on expansionary monetary policy through the policy rate cuts and the lowering the rupiah statutory reserve ratio. Under the circumstances, such measures were effectively transmitted through the interest rate channel, as clearly observed from coherent movement between policy rate and the overnight (O/N) interest rate channel. Evidently, at the end of December 2016, the O/N interbank rate was recorded at 4.2%, lower by 155 bps from the level at the start of January 2016 and nearly comparable to the 150-bps decline in the policy rate (Chart 11.4).

Within the year, in the day-to-day dynamics, the rupiah O/N interbank rate had a temporary surged in response to temporary pressure from increased liquidity demand. At the end of September 2016, the O/N interbank rate mounted temporarily due to liquidity pressures towards the end of the first phase of the tax amnesty, which widened the spread between the O/N interbank rate and the Deposit Facility (DF) rate (Chart 11.5). Accordingly, Bank Indonesia responded to the increase in the O/N interbank rate by carrying a solid monetary operations strategy to sufficiently curb excessive increases in the O/N interbank rate.

Furthermore, concordance between the policy rate with the O/N interbank rate movement was also attained through the Bank Indonesia operational strategy. During 2016, Bank Indonesia consistently managed a loose-bias net liquidity in the banking system due to the slowdown in bank lending and reduction in the rupiah statutory reserve...
ratio. The Bank Indonesia monetary operations involved absorption of increased liquidity through various monetary instruments. Nevertheless, such contractive policy has resulted in the increase of monetary operations daily position from Rp324.3 trillion in 2015 to Rp332.0 trillion in 2016 (Chart 11.6). Furthermore, the abundant liquidity on the market allowed banks to maintain low daily precautionary liquidity, resulting in decline in the bank DF/S position at Bank Indonesia from average daily volume of Rp103.5 trillion in 2015 to Rp82.6 trillion in 2016.

As such, domestic bank continued to favor short-tenure instruments during 2016, as observed in bank activity on the interbank money market and the composition of monetary operations instruments. Interbank transaction continued to be dominated by interbank transactions in the overnight tenure, which accounted for 54%-67% of total volume on the interbank money market. Similarly, bank preferences for liquidity placements in MO instruments were also dominated by short-tenure MO instruments, such as deposit facilities, term deposits, and reverse repo of government securities. On that account, MO instrument duration tended to shorten during seasonal demand for outflows of cash currency while it would lengthen once cash currency was returned to the banking system. Other than the currency flows, the duration of MO instruments also increased well beyond the seasonal trend due to a change in the MO strategy and expectation of benchmark rate reduction in the second half of 2016 (Chart 11.7). Furthermore, towards the end of the year, in anticipation of a rise in public cash needs, banks shorten the duration of their liquidity placements in MO instruments.

Evidently, the downward trend in the O/N interbank rate was transmitted on to time deposit rates. In 2016, time deposit rates were reduced by 122 bps to 6.72% on a year on year basis. Accordingly, deposit rates declined for all tenures, ranging from 1 to 12 months (Charts 11.8 and 11.9). With the revised of the deposit rates, loan interest rates were also declined, albeit in lesser magnitude. At the end of 2016, the weighted average loan rate was recorded at 12.04%, lower by 79 bps than those of 12.83% in the previous year (Chart 11.9). The lesser reduction in loan interest rates relatively to the decline in deposit rates represented risk aversion towards escalation of credit risk throughout 2016. Hence, banks tend to opt for consolidation and defer from lowering interest rates.

Yet, interest rates for all types of loans moved downwards, albeit in varying magnitude. Compared to the end of 2015, interest rate of the working capital, investment, and consumption credit dropped by 110 bps, 91 bps, and 29 bps to 11.36%, 11.21% and 13.59% respectively. For consumption credit, the smaller decline in consumption credit, the smaller decline in consumption
credit rates was largely explained by the higher credit risk for consumption credit relative to the average credit risk in the banking industry.

Consequently, the steeper decline in deposit rates relative to that of loan interest rates widened the spread between deposit and lending rates. During 2016, the bank interest rate spread widened by 532 bps relative to those of 489 bps in the previous year (Chart 11.9). Thus, the interest rate spread in Indonesia was far greater than the those in other neighbouring countries, such as those of 1.6%-2.0% in Malaysia and Singapore.

**Liquidity Channel Transmission**

The base money (M0) grew at 4.6% in 2016 and was significantly increased from those of 3% in the previous year. The higher M0 growth was driven by significant expansion in the secondary statutory reserves position, contained primarily by Bank Indonesia Certificates (SBIs) and Bank Indonesia Certificates of Deposit (SDBIs). Along this line, growth in currency in circulation (currency outside banks/COB and cash in vaults/CIV) remained muted at 4.4% or far below the 11.0% growth in 2015 (Chart 11.10). According to its affecting factors, the more vibrant M0 growth in 2016 was driven by significant increases in net foreign assets (NFA) and net domestic assets (NDA) relative to the last year. Thus, the increase in the NFA from early 2016 was consistent with the increase in international reserves. Meanwhile, the more aggressive NDA growth was spurred primarily by the increased allocation of bank liquidity in monetary policy instruments.

Furthermore, expansion of the narrow money (M1) and broad money (M2) signified the expansion in economic
liquidity in 2016. M1 growth strengthened from 12.0% in 2015 to 17.3% in 2016. The higher M1 growth was buoyed mainly by an increase in rupiah demand deposits, while growth in cash currency failed to gather momentum. Thus, cash currency grew by 8.2% in 2016, significantly lower to those of 12% (yoy) in 2015 (Chart 11.11). Meanwhile, growth in rupiah time deposits during 2016 reached 24.5%, ahead of the 2015 growth recorded at 12.1%.

Thus, higher M1 growth contributed to a rise in M2 growth in 2016. M2 growth strengthened from 8.9% in the preceding year to 10.0% in 2016 (Chart 11.12). At the same time, more rapid growth in M2 was driven to a considerable extent by M1 growth, given that growth in quasi-money slowed from 8.4% in 2015 to 7.9% in 2016. The decline in quasi-money growth is explained primarily by negative growth in foreign currency deposits in the banking system (including time deposits, savings deposits, and demand deposits), while rupiah deposits, as the biggest component of quasi-money, recorded increased growth (Chart 11.13). Hence, rupiah time deposits recorded 8.85 growth in 2016, higher to those of 7.6% growth in 2015.

By factors, the more optimistic growth in M2 was driven by stronger growth in NFA. During 2016, NFA growth reached 14.0%, driven by the effect of the rise in international reserves and representing a sharp increase over 3.0% recorded in the preceding year. On the other hand, growth in NDA slowed from 11.1% in 2015 to 8.7% in 2016, mainly because of a drop-in credit growth from 10.5% in 2015 to 7.9% in 2016.

Chart 11.13. Quasi Components Contribution to M2 Growth

Gra/ﬁk 11.19

Kontribusi Komponen Kuasi pada M2

Percent, yoy

Source : Bank Indonesia
Since the adoption of the Inflation Targeting Framework (ITF) in July 2005, the role of interest rates has played a pivotal role in monetary policy transmission in Indonesia. Following the adoption of the framework, the BI rate was launched as the policy rate to respond to the future inflation. In practice, the BI rate served as a benchmark around which the overnight (O/N) interest rate, as the operational policy target, should fluctuate. In concept, the O/N interbank rate movements will be transmitted to longer tenure rates, as a precondition of further policy transmission into the real sector and inflation as overriding objective of monetary policy.

In the aftermath of the global financial crisis in 2008-2009, monetary policy came under new challenges. On one hand, excess liquidity on the interbank money market due to monetary easing pursued by advanced countries prompted significant increases in foreign capital inflows to emerging market economies, including Indonesia. These inflows of foreign capital then created excess liquidity on the interbank money market and brought interbank rates to very low levels, particularly in the O/N tenure. On the other hand, reductions of the BI Rate were unlikely due to considerable pressures on domestic inflation and the current account deficit. Eventually, these developments led to a greater divergence between the BI Rate and the O/N interbank rate (Chart 1). In 2008, the BI Rate still extended well to the O/N interbank rate. By early 2016, however, the difference had widened and the policy rate had become equivalent to the monetary operations rate in the 12-month tenure. This was considerable as an adverse development, as it would impair the signalling and transmission of monetary policy.

Bank Indonesia responded to this development by reformulating its monetary policy operation framework. The reformulation had three main objectives. First, to strengthen monetary policy signals. Second, to improve the effectiveness of monetary policy transmission through interest rate channel. Third, to promote financial market deepening by increasing the frequency of transactions as well as guiding the interest rate term structure on the interbank money market for the 3-month to 12-month tenures.

Correspondingly, the reformulation was guided by four principles. First, the reformulation would not change the monetary policy operation framework, as Bank Indonesia would continue using the ITF. Second, the reformulation would not change the concurrent monetary policy stance. Third, the reformulation would relate the policy rate to tradable monetary instruments. Fourth, interest rates for operational targets would be determined based on considerations that may be influenced by the policy rate.

Hence, on 19 August 2016, the reformulation of the monetary policy operation framework was effectively launched with the changeover in the policy rate from the BI Rate to the BI 7-day (Reverse) Repo Rate (BI7DRR). The changeover would not change the monetary policy stance because the two policy rates, the BI Rate and the BI7DRR, would remain within the same term structure in keeping inflation on course with the inflation target. The difference would only lie in instrument tenure, in which the BI Rate was equivalent to 12-month monetary instruments and the BI7DRR is equivalent to 7-day monetary instruments. In turn, this difference in tenure would imply a difference between interest rate levels on 19 August 2016, i.e. between 5.25% for 7-day tenor instruments on which the BI7DRR is based and 6.50% for 12-month monetary instruments equivalent to the BI Rate (Chart 2).

Aside from the change in the policy rate, Bank Indonesia strengthened its monetary operations strategy by maintaining a symmetrical and narrower corridor for interbank rates. Accordingly, the lower limit of the corridor (the deposit facility/DF rate) and the upper limit (lending facility/LF rate) are 75 bps below and above the BI7DRR (Chart 3). The reformulation of the monetary policy operation framework was accompanied by measures to accelerate the money market deepening through
less frequent auctions for open market operations (OMOs) as well as strengthened communication through announcements of the regular OMO auction schedule. Furthermore, Bank Indonesia also coordinated actions with the Government, the Financial Services Authority, the Indonesian Deposit Insurance Corporation, and other stakeholders to strengthen the functioning of the recently adopted monetary operation framework.

Hence, a post-implementation evaluation indicated that the reformulation of the monetary policy operation framework has met with positive response. Stakeholders, such as investors, economic analysts, the public, and the media perceived that the implementation of the BI7DRR provided clarity over the monetary policy stance. Moreover, consistency in implementing the new framework would bring positive impact on strengthening policy credibility and would invaluable in supporting the effectiveness of monetary policy transmission. Henceforward, enhancement of the monetary operating strategy as well as the deepening of the financial market will be steadily pursued to improve the effectiveness of monetary policy transmission.
Bank Indonesia implemented accommodative macroprudential policy in 2016 as a countercyclical instrument. This policy is intended to counter the economic slowdown and to boost loans growth in order to contribute towards hastening domestic economic recovery while maintaining stability of the financial system. The macroprudential policy instruments included loosening of the Loan to Value ratio (LTV)/Financing to Value ratio (FTV) regulation for property loans/financing, increasing the lower limit of the Loan to Funding ratio (LFR) target, maintaining the rate of countercyclical capital buffer (CCB), and encouraging lending to micro, small and medium enterprises (MSMEs). Macroprudential policy implementation was also strengthened by risk management of the financial system, especially banking, through macroprudential surveillance and supervision.
The macroprudential policy stance in 2016 was synergized with a easing-bias monetary policy stance to boost domestic economic recovery. In 2016, Bank Indonesia continued its accommodative macroprudential policy as a countercyclical instrument while maintaining financial system stability. This policy was intended to withstand the slowdown whilst also boosting loan growth in order to hasten domestic economic recovery. The sustainability and consistency of the policy mix are very important in maintaining economic growth momentum. This is because the transmission of both monetary and macroprudential policy requires a time lag to be fully transmitted so that it can affect economic activity.

Bank Indonesia made use of a number of macroprudential policy instruments to encourage loan growth in 2016. Notably, Bank Indonesia carried on its policy of loosening the Loan to Value (LTV) or Financing to Value (FTV) ratio in August 2016. This policy easing was done by raising the LTV/FTV ratio for housing loan/financing (KPR). To this end, it was expected that demand for loans could be boosted, especially in the property sector. To encourage banks to channel new loans, Bank Indonesia then raised the lower limit of the Loan to Funding Ratio (LFR) target. At the same time, Bank Indonesia also maintained the rate of the Countercyclical Capital Buffer (CCB) at 0% to respond to economic developments and systemic risk from loan growth. Efforts to boost loan growth were also done through the development of micro, small and medium enterprises (MSMEs) by using two main approaches, that is by encouraging the loan supply to MSMEs whilst also raising the capacity of MSMEs to improve demand for bank loans.

To support the effectiveness of policy implementation and strengthen risk management in the financial system, Bank Indonesia also conducted macroprudential surveillance and supervision. In the macroprudential supervision framework, Bank Indonesia regularly carried out surveillance and assessment of the financial industry. These efforts were focused on systemic risk and stress testing of the resilience of financial institutions. Furthermore, based on the results of the surveillance and assessment, Bank Indonesia regulated and supervised financial services institutions on a macro level in a bid to safeguard stability of the financial system with low systemic risk.

12.1. EASING OF LOAN/FINANCING TO VALUE RATIO POLICY

The prolonged sluggish performance of the property sector encouraged Bank Indonesia to continue easing the LTV which had previously been done in 2015. The downturn in the property sector was, among other, reflected in a slowdown in the property sales and prices, and also accompanied by reduced demand for both housing and apartment loans (KPR and KPA). In response to this slowdown, Bank Indonesia loosened its macroprudential policy in 2015 by raising the LTV/FTV ratio for property loans/financing.

The easing of LTV/FTV in 2015 was able to restrain the decline in housing loans or financing given by banks. However, the policy was not strong enough to boost loan or financing growth was needed. Hence necessitated further policy easing. This further easing was, in turn, expected to encourage loan or financing growth in property sector although close regard is still given to the prudential principle. Increased activity in the property sector is fairly strategic since it has a contagion effect on the quite large number of supporting sectors which, in turn, can promote the recovery of economic growth. To that end, Bank Indonesia loosened its LTV/FTV policy by issuing Bank Indonesia Regulation Number 18/16/PBI/2016 concerning the Loan to Value (LTV) Ratio for Property Loans, the Financing to Value (FTV) Ratio for Property Financing and the Down Payment for Motor Vehicle Loans or Financing.

The LTV/FTV policy easing in 2016 covered several matters, especially in terms of LTV/FTV ratio and tiering for property loans or financing. The LTV/FTV ratio was increased by 5% to 15% for all property groups: landed houses, flats and shop-houses or home offices as well as for first, second, third (and so on) house ownership. The LTV/FTV ratio for sharia financing was different based on the agreement, i.e. the same ratio applies for the murabahah and istishna’ agreements while for the musyarakah mutanaqisah agreement (MMQ) and ijarah muntahiya bittamlik (IMBT) it is 5% higher for landed residential property type > 70 and type 22–70 houses, as well as for flats type > 70. As such, the range of the LTV/FTV ratio became 75% until 90% with a higher ratio for smaller property type and first-time ownership. By contrast, for larger property types and for

1. Through Bank Indonesia Regulation Number 17/10/PBI/2015 concerning the Loan to Value (LTV) Ratio or the Financing to Value (FTV) Ratio for Property Loans or Financing and the Down payment for Motor Vehicle Loans or Financing
2. Murabahah is a financing agreement for goods which fixes the purchase price with both the buyer and seller agreeing upon the markup (profit). Istishna’ is a financing agreement for goods made to certain specifications with certain criteria and conditions agreed upon by the buyer (mustashni’) and the seller or maker (shani’).
3. Musyarakah mutanaq is a hajmusyarakah financing for which the ownership of the asset (goods) or capital of one party (isyani) diminishes gradually due to purchases by the other party. Ijarah muntahiya bittamlik is the agreement for making funds available in order to transfer the right to use or benefit from a good or service based on a lease with the option to transfer the ownership of the good.
ownership of second (and so on) properties, the rate of the LTV/FTV ratio will be lower (Table 12.1).

Adopting the prudential principle, banks may apply a higher LTV/FTV ratio if the debtor has low credit risk. The credit risk indicator is reflected in the net ratio of non-performing loan/financing to total loan/financing and in the net ratio of non-performing property loan/financing to total property loan/financing less than 5%. Meanwhile, for banks which have a ratio of non-performing loan/financing that exceeds the stipulated level, then they are obliged to use a stricter LTV/FTV ratio. The additional loan (top up) by commercial banks and new financing by sharia banks (BUS or UUS) which is in addition to previous financing continue to use the same LTV/FTV ratio as long as property loans or financing is still performing. Meanwhile, for loan or financing for off-plan/pivot property purchases is permitted up to the order of the second facility with periodic disbursement.

Continued easing of LTV/FTV policy in 2016 led to higher growth in property loans. After LTV easing in August 2016, housing loan growth rose to 7.7% in December 2016 from 7.0% at the end of 2015 (Chart 12.1). Construction loan growth climbed to 21.5% from 19.5% in 2015. At the same time, real estate loan growth also started to show an increase, as reached 21.8% in late 2016, slightly higher than the growth recorded in 2015 of 21.1%. By type, property loan growth for residential houses of type 22-70, type > 70, flats/apartments< 21, and shop-houses/house-offices started to increase (Chart 12.2). The increase in property loan growth was not yet significant, because the impact of LTV/FTV policy easing still needed more time to be fully transmitted.

### Table 12.1. LTV Ratio for Property Credit and FTV Ratio for Sharia Property Financing

<table>
<thead>
<tr>
<th>Conventional and Sharia Property Credit (Murabahah and Istishna' Agreement)</th>
<th>Sharia Property Credit</th>
<th></th>
<th></th>
<th>LTV Ratio</th>
<th>I</th>
<th>II</th>
<th>III etc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Property (m²)</td>
<td>Sharia Property Credit</td>
<td></td>
<td></td>
<td>LTV Ratio</td>
<td>I</td>
<td>II</td>
<td>III etc</td>
</tr>
<tr>
<td>Landed House</td>
<td>Type &gt; 70</td>
<td>85%</td>
<td>80%</td>
<td>75%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type 22 - 70</td>
<td>-</td>
<td>85%</td>
<td>80%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type ≤ 21</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apartment</td>
<td>Type &gt; 70</td>
<td>85%</td>
<td>80%</td>
<td>75%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type 22 - 70</td>
<td>90%</td>
<td>85%</td>
<td>80%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Type ≤ 21</td>
<td>-</td>
<td>85%</td>
<td>80%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shop House/Office House</td>
<td>-</td>
<td>85%</td>
<td>80%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Sharia Property Credit (MMQ and IMBT) | Type of Property (m²) | Sharia Property Financing | | | LTV Ratio | I | II | III etc |
|---|---|---|---|---|---|---|---|
| | Type of Property (m²) | Sharia Property Financing | | | LTV Ratio | I | II | III etc |
| Landed House | Type > 70 | 90% | 85% | 80% |
| | Type 22 - 70 | - | 90% | 85% |
| | Type ≤ 21 | - | - | - |
| Apartment | Type > 70 | 90% | 85% | 80% |
| | Type 22 - 70 | 90% | 85% | 80% |
| | Type ≤ 21 | 90% | 85% | 80% |
| Shop House/Office House | - | 85% | 80% |

Source: Bank Indonesia

### Chart 12.1. Growth of Property Credit

The fact that loan growth remains weak indicates that the role of banking in channelling loans is not yet optimal. Judging from the LFR policy, there are still many banks with have a LFR below 78% and which have also recorded relatively low loan growth in the last five years. Basically, the potential of banks with LFR < 78% to increase lending is quite large since they have good liquidity and strong capital. Nonetheless, the desire for these banks to channel loans is relatively low because of either business model factors or risk appetite in regard to their funds allocation strategy.
To persuade banks with \( LFR < 78\% \) to channel loans, Bank Indonesia raised the lower limit of the LFR target from 78\% to 80\%, with the upper limit unchanged at 92\% (Chart 12.3). This policy was intended to encourage banks which still have a low LFR to channel more loans. For banks that cannot achieve the LFR target range, they shall be subject to disincentives in the form of additional statutory reserve requirements (RR) such that this policy is known as RR-LFR. The changes in this policy were contained in Bank Indonesia Regulation Number 18/14/PBI/2016 concerning the Fourth Amendment to Bank Indonesia Regulation Number 15/15/PBI/2013 concerning the Statutory Reserves of Commercial Banks in Rupiah and Foreign Currencies for Conventional Commercial Banks, which became effective on 24 August 2016.

12.3. POLICIES TO PROMOTE DEVELOPMENT OF MICRO, SMALL, AND MEDIUM ENTERPRISES

MSMEs play an important role in Indonesia’s economic structure because they account for nearly 97\% of the workforce. Nonetheless, the financial support which is channelled to MSMEs only amounts to 6.9\% of GDP, or the lowest compared to other ASEAN countries such as Malaysia, Thailand, and Cambodia. Besides that, only 23.1\% of MSMEs have been recorded as having access to bank financing. To support the growth of MSMEs, the government has made efforts to empower MSMEs through various policies to improve competitiveness. This policy includes increasing business capacity and performance, strengthening and expanding the role of business support information systems, as well as improving the business climate.

The government has implemented several policy strategies aimed to improve the competitiveness of MSMEs. Firstly, the quality of human resources has been improved through training and mentoring. Secondly, access to financing has been improved and financing schemes have been expanded through the channelling of the People’s Business Credit (KUR). Thirdly, there has been a development on value added products and marketing reach, through expanding the application of technology and the integration of marketing facilities and the distribution system both in the domestic and exports market. Fourth, institutional efforts have been strengthened through investment partnerships based on backward-forward linkages. Fifth, there has been a focus on the ease of doing business, as well as business certainty and protection, through the harmonization of sectoral and regional licensing, as well as reducing the types, costs and time involved in the licensing process.

Concerning its implementation, the government issued several Economic Policy Packages to support the development of MSMEs. For example, to improve the financing access of MSMEs, the government issued Economic Policy Package IV concerning the provision of low-cost financing to MSMEs. The government lowered interest rates on KUR to 12\% and expanded the scope of KUR receivers both individuals or businesses, covering productive enterprises, prospective Indonesian migrant workers (TKI), family members of employees or TKI with fixed incomes, and laid-off workers. Policies regarding the channelling of KUR were continued in 2016 by lowering KUR interest rates to 9\% with a disbursement target of R\( 100 \) trillion. The government also issued Economic Policy...
This award was intended to encourage, inspire, and hasten ‘Appreciation of Performance in the Inflation Control. Bank Indonesia had already developed 169 target clusters a significant contribution on inflation and is conducted done through the commodity-based approach which has and implement the development model. Besides that, requires the involvement of several parties to identify and implement the development model. Besides that, the MSMEs development program was also undertaken through cluster development to support food availability and control inflation. The development of clusters was done through the commodity-based approach which has a significant contribution on inflation and is conducted comprehensively from upstream to downstream. By 2016, Bank Indonesia had already developed 169 target clusters which were scattered throughout Indonesia. In appreciation of those efforts, Bank Indonesia presented awards through ‘Appreciation of Performance in the Inflation Control Program’ to government and Bank Indonesia target clusters. This award was intended to encourage, inspire, and hasten the replication of development program of commodities contributing to inflation by using the cluster approach.

The strategy to increase financing and financial access for MSMEs was done through policy, infrastructure, and capacity strengthening. One of Bank Indonesia’s policies to promote MSMEs access to financing was the minimum loan ratio to MSMEs at 20% for commercial banks. This ratio must be met by banks gradually with a minimum ratio of 10% at the end of 2016 and rising to 15% at the end of 2017. To improve the effectiveness of this policy, incentives and disincentives are given to banks. For those who can meet the requirements more quickly are given the incentive of having the upper limit of the LFR eased from 92% to 94%. While those who cannot meet the requirements are subject to disincentive by having a reduction in the remuneration rate of their current accounts in rupiah statutory reserves.

Furthermore, to inspire and encourage banks to channel loans to MSMEs, Bank Indonesia gave awards to banks who showed effort supporting MSMEs. Meanwhile, to improve the human resources capacity of banks, Bank Indonesia gave incentives by providing training for Account Officers and/or Credit Officers. This training was intended to provide insights to MSMEs business profile, especially for banks expertise in lending to the MSMEs.

Nonetheless, financing to MSMEs has not evenly distributed and focused on certain economic sectors. The distribution of financing to MSMEs is still dominated by the trade sector, while financing to agriculture and fishery sectors is still low. Concerning this, Bank Indonesia seeks to improve the access to finance through development of financial services for the people in agriculture and fishery sectors. The development of financial services products was done based on the results of pilot studies conducted in certain areas. These financial services products were savings and loans which do not always require collateral because they can take advantage of public figures as guarantors or use a joint liability system. This financing scheme can be used by financial institutions in providing financing to MSME in the agriculture and fishery sectors. Other efforts to improve financial access in the agriculture sector include utilization of the Warehouse Receipt System. The utilization of warehouse receipts as collateral in financing can improve the accessibility of

---

5. As set forth in Bank Indonesia Regulation (PBI) Number 14/22/PBI/2012 as amended by PBI Number 17/12/PBI/2015 concerning the Channeling of Credit or Financing by Commercial Banks and Technical Assistant in the framework of Developing Micro, Small and Medium Enterprises.

6. Study “Improving Access to Financial Services among Coastal Communities in the Fishing Sector” and study project “Documenting Global Best Practices on Sustainable Models of Pro-Poor Rural Financial Services in Developing Countries” which was carried out by Bank Indonesia in cooperation with the Asia-Pacific Regional Conference on Rural Finance and Community Development (APRACA).
farmers to financial institutions. In its implementation, the successful utilization of Warehouse Receipt System requires the role of management and commitment of the government, which is supported by development of the warehouse receipt information system.

Efforts to promote better financial access for MSMEs were also done by developing infrastructure through the provision of standardized financial transaction records. Through the financial transactions recording program, micro and small enterprises (MSEs) are encouraged to prepare financial statements. Bank Indonesia has already developed the Financial Information Recording Application (APIK) which is a smart phone based (android) application to record financial transactions. The development of this application is part of the financial transaction recording program and serves to make it easier for MSEs to produce simple financial reports. These financial reports can be used to accessing financing from financial institutions. Going forward, APIK will be used as a guide to prepare a simple, systematic and standardized financial statement as well as implemented in the nationwide.

Given that not all MSMEs have market access or are connected with wider supply chain, Bank Indonesia facilitated the marketing of MSME products both online and offline. These efforts include holding exhibitions to showcase MSME products to wider market, especially at the national level. One example was the ‘Indonesia Creative Works’ exhibition in which 35 premium MSMEs participated. This, in turn, opened up market access for MSME products in the national market, especially the upper middle segment. Through these activities, MSMEs could be motivated and stimulated to innovate high quality products with high sales value, enabling them to make a bigger contribution to the economy and create more job opportunities. Going forward, efforts to develop markets will be undertaken through e-commerce so that MSMEs can reach a wider market.

The importance of cooperation and coordination with various parties in empowering MSMEs is considered important to overcome the complexity of MSME problems. The implementation of MSME development programs carried out by the government, Bank Indonesia or other parties requires cross-sectoral coordination. The government and Bank Indonesia along with related stakeholders have already synergized the programs through ‘Synergy Action for the People’s Economy’ activities launched on April 11, 2016 in Brebes, Central Java. These activities were intended to expand the implementation of the programs that have been developed, which among others, is carried out through a pilot project of cluster down streaming (shallots commodity), which was integrated with programs such as marketing, financing, and electronification. Besides that, to increase the effectiveness of cooperation in the development of MSME, Bank Indonesia signed a Memorandum of Understanding with several Ministries/Agencies. In 2016, Bank Indonesia signed a Memorandum of Understanding with the Indonesian Credit Guarantee Corporation (Jamkrindo), which among other things will exchange MSMEs database data/information and implement the concept of MSME credit ratings. Meanwhile, to broaden MSMEs access to Global Value Chain, Bank Indonesia played an active role in several international forums, including AFI, RCEP, APRACA, and ASEAN. In addition to understand the latest issues concerning the development of MSME, the involvement of Bank Indonesia in these forums can connect Indonesian MSMEs to global markets.

12.4. COUNTERCYCLICAL CAPITAL BUFFER POLICY

The procyclicality of banking industry is one source of vulnerability in the financial system which needs to be concerned. As a response toward banking procyclicality behaviour, where banks tend to be overly expansive during economic boom and overly contractive during recession, Bank Indonesia implemented CCB policy. This policy is intended to prevent an increase in systemic risk which comes from excessive loan growth whilst also anticipating potential bank losses. CCB policy was issued by Bank Indonesia through Bank Indonesia Regulation Number 17/22/PBI/2015 concerning the Obligation to Form a Countercyclical Buffer which effectively implemented on January 1, 2016. This policy requires banks to form an additional capital buffer during the period of expansion in order to restraint the loan expansion, while in the period of contraction, the reduction/release of the additional capital buffer CCB already formed by banks can support higher bank lending. Bank Indonesia evaluates the rate and timing of the CCB implementation on a regular basis (at least once every six months).

Amid relatively sluggish economic conditions and weak bank intermediation, Bank Indonesia set the amount of the additional capital CCB at 0%. Based on the evaluation results of CCB rate in May and November 2016, Bank Indonesia maintained the CCB at 0%. This has been considering that

---

Bank Indonesia is involved in the SME Finance Working Group (SMEFWG) in the Alliance for Financial Inclusion (AFI), the Regional Comprehensive Economic Partnership Working Group on Economic and Technical Cooperation (RCEP WGECTC), the Asia-Pacific Regional Conference on Rural Finance and Community Development (APRACA), and the ASEAN Coordinating Committee on Micro, Small and Medium Enterprises (ACCMSME).
there was still no indication of excessive loan growth which can potentially create systemic risk in Indonesia, as shown by the Credit to GDP gap as the main CCB indicator (Charts 12.4 and 12.5). This is also consistent with the decelerating loan growth up until the end of 2016. With the CCB set at 0% it is expected that banks can improve their intermediation function to support economic recovery.

12.5. SUPERVISION AND INSPECTION BY BANK INDONESIA

In order to prevent and reduce systemic risk, promote a balanced and high quality banking intermediation, as well as improve the efficiency of financial system and access to finance, Bank Indonesia conducts macroprudential regulation and supervision. Macroprudential regulatory instruments related with strengthening the resilience of capital, the optimal management of banking intermediation, and the fulfillment of adequate liquidity. Meanwhile, macroprudential supervision is conducted through the surveillance and inspection of banks and other institutions which have interconnectedness to banks. Basically, surveillance is carried out to identify the potential systemic risk posed by financial sector components, including financial institutions, non-financial companies, households and their interconnections.

There are several tools used by Bank Indonesia to support the optimal surveillance process, including granular stress test, bank industry ratings, risk register, and assessment of the interconnectedness of corporate groups. Besides the series of assessments, Bank Indonesia has also conducted indirect supervision (off-site) concerning the implementation of macroprudential policy of banking industry, including the reserve requirements related to LFR, LTV and CCB regulations. This supervision, besides ensuring the compliance of banks with prevailing rules, is also intended to identify potential systemic risks arising from banking transactions which tend to be procyclical. If needed, the results of off-site supervision can be followed up by the direct inspection (on-site) of certain banks which are considered to have significant risk exposure or a systemic impact. The inspection undertaken may be thematic or conducted in order to ensure the compliance to Bank Indonesia regulations.

In 2016, Bank Indonesia conducted a thematic inspection of several banks particularly in banking liquidity, implementation of LTV policy, card based payment instrument (APMK), and money market brokers. The inspection of liquidity was primarily intended to assess the impact of macroeconomic conditions on the resilience of bank liquidity which may potentially create systemic risks, assess the response of banks toward Bank Indonesia’s monetary policy, as well as get a closer look on the interconnectedness among banks through their asset and liability positions. The inspection of LTV, meanwhile, was intended to assess the response of banks toward LTV policy, identify constraints in expanding property loans, as well as the compliance of banks with LTV ratio regulation. Meanwhile, the inspection of APMK aimed at, among other things, evaluating the readiness of banks toward implementing national standards for chips technology and 6-digits online PIN, along with evaluating the compliance of banks in regard to payments system regulations, especially APMK and electronic money. The inspection of money

---

8 The granular stress test assesses in more detail the sensitivity of bank resilience towards macroeconomic variables by paying attention to the individual aspects of banks that are relevant.
market broker activities was primarily intended to check the aspects of compliance and the pricing mechanism in money market transactions through money market broker.

From the results of the liquidity inspection it can be concluded that the liquidity condition of banking industry is generally adequate and better than in 2015, especially after the easing of statutory reserve requirements. Nonetheless, the impact of additional liquidity in supporting the credit growth still needs more time amid the bank’s internal consolidation process. Meanwhile, further easing of LTV policy in August 2016 has obtained a positive response from banks by making adjustments to their internal policies.

The estimated growth in property loans will be seen in the next periods in line with the optimism of growing public consumption and recovery of domestic economic growth. Meanwhile, from the results of the inspection related to APMK, it can be concluded that nearly all banks which issued APMK were able to implement 6-digits online PIN before June 2017. The inspection results of some money market brokers in 2016 presented that, in general, there was no money market broker activity which violated Bank Indonesia regulations, although some points were needed to be concerned in order to improve the performance and governance of money market broker.

The results of the macroprudential supervision and inspection presented that property loan growth that is not yet optimal in some banks is due to several factors. These factors may originate either internally or externally from a bank’s perspective, namely the lethargic demand for loans as the economic activity hampered, earlier loans repayment by existing debtors through refinancing by other banks at lower interest rates, instalment programs from developers with 1-3 years of down payments (DP) period so that demand for new loans will emerge after the DP instalments are completed, gradual cash payment programs, along with the internal consolidation of banks to mitigate credit risk.

The slow growth in property loans was also reflected in the Residential Property Price Index (IHPR) which has slowed since the end of 2014 (Chart 12.6). In the period 2010 – 2013, the increase of IHPR tended to be high with average growth over 9% and peaking in quarter III 2013 at 13.5%. Then toward the end of 2014, growth in the IHPR tended to slow. This has been the case up to now as economic growth has been sluggish.

The ongoing slow growth in property loans has seemingly also been affected by the increasing trend of property purchases in cash through gradual instalments. Purchases made by cash instalments are a way to purchase property by making direct cash payments to the developer over a period, from one until three years, and with interest rates adjusted to the instalment period. Although the purchase of property by using bank loans accounted for 76.4% of total purchases in average, this figure declined to 72.2% at the end of 2014. Meanwhile, property purchases made using cash instalments increased to 18.8%, with the remaining purchases in cash reached 9.0% (Chart 12.7). Nonetheless in quarter IV 2016, the share of property purchases through bank loans rose to 77.2% while the cash instalments declined to 15.9%, and the rest of 6.9% of the total purchases made in cash. This was in line with the rising growth in property loans in December 2016 at 7.7%, or higher than its growth pace in December 2015 at 7.0%.
CHAPTER 13
Payment System and Currency Management Policy

Bank Indonesia’s payment system policy in 2016 were geared towards on improving the payment system’s infrastructure that could operate efficiently, seamlessly, securely, and reliably. Policies were also made to improve financial access, especially for the unbanked people, by promoting the use of cashless instruments, which include use of electronic payments for Government social assistance distribution. Bank Indonesia also implemented policies to facilitate the payment system technologies innovation and anticipate the increase in financial transactions through the payment systems. Meanwhile, Bank Indonesia’s currency management policy continued on ensuring that the rupiah will always be available in sufficient quantities appropriate denominations, and can be distributed throughout Indonesia territory in a timely manner. Other policies include expanding the money distribution network and strengthening the partnership with other state agencies in distributing the rupiah to even the most remote and outermost regions of the country.
Bank Indonesia’s payment system policy has consistently strived to improve efficiency, security, seamless operation, and reliability of the national payment system. For 2016, the payment system policy still focusing on strengthening the payment system’s infrastructures as a continuation from previous year. Bank Indonesia also continued to promote National Non-Cash Movement (GNNT) and improve financial inclusion through the use of electronic payments with Digital Financial Services (DFS), in the distribution of Government social assistance. Along with the upward trend of financial technologies (fintech) in payment system area, groundwork policies were also laid out to facilitate that innovation. The policies taken throughout 2016 evidently able to provide support on the well maintain payment system performance.

Bank Indonesia policy in strengthening national payment system’s infrastructure has brought it up to international standards. Both the Bank Indonesia Real-Time Gross Settlement (BI-RTGS) system and the Bank Indonesia Scripless Securities Settlement System (BI-SSSS) have been assessed as meeting the standards specified in the Principles for Financial Market Infrastructures (PFMIs), thus ensuring that the systems are now even more reliable and secure. Bank Indonesia has also improved the National Clearing System (SKNBI) by providing bulk payment services for credit transfers and direct debits. The use of Central Bank Money (CeBM) for more secure and seamless settlements of securities transactions has also been promoted, upon recommendation from the Bank for International Settlement (BIS) and the International Organization of Securities Commission (IOSCO).

Furthermore, Bank Indonesia has continued to improve the security and efficiency of cashless payments, both electronic and card-based, by launching the National Payment Gateway (NPG) in 2016, which integrates all channel of cashless payment systems. Specifically for the security of Card-Based Payments Instruments (CBPIs), Bank Indonesia has continued to require the use of ATM/debit cards that comply with the National Standard of Indonesian Chip Card Specification (NSICCS). Cashless payments have been encouraged as a means to improve financial inclusion by using card-based electronic payments for the distribution of Government social assistance. For this matter, Bank Indonesia has continued to facilitate the setting up of digital financial agencies throughout the country to carry out the cashless social assistance distribution. This method, despite of improving efficiency of the disbursement, also open financial access for unbanking people.

Bank Indonesia’s currency management policy, meanwhile, has consistently focused on ensuring that the rupiah will always be available in sufficient quantities and appropriate denominations, quality fit for circulation and it can be distributed throughout the country in a timely manner. The rupiah’s availability is crucial for all the transactions and payments that enable the economy activity, and for that matter, Bank Indonesia had in 2016 pursued up to seven policies relating to currency management. The policies include those to improve the money distribution and to provide more cash distribution points to reach all regions in the country, including remote and outermost regions of the country. Bank Indonesia also issued seven new rupiah banknotes and four new rupiah coins in 2016 as stipulated by the Currency Act. These new rupiah banknotes and coins are expected to strengthen the rupiah’s security features, and thus the currency’s overall quality as a legal tender.

### 13.1. PAYMENT SYSTEM POLICY

In 2016, payment system policies are geared towards strengthening the infrastructures and improving its overall efficiency, security, seamless operation, and reliability. Continuous improvement of the payment system was needed to facilitate the increasing amount of transactions as the economy grows, also to facilitate the latest innovation in financial technologies (fintech). The strengthening of payment system’s infrastructure also needed to support Digital Financial Services (DFS), and thus achieve more financial inclusion. Meanwhile, concerns regarding consumer protection have also been addressed to maintain the public’s trust in using the national payment system services.

#### Improving the Payment System Infrastructure

Bank Indonesia’s policy that continuously and consistently improving the payment system infrastructure has led to both the second generations of the BI-RTGS and the BI-SSSS of fitting international standards. Bank Indonesia performed self assessment on the BI-RTGS Generation II as a Systemically Important Payment System (SIPS) and the BI-SSSS Generation II as a Central Securities Depository / Securities Settlement System (CSD/SSS), using the BIS’s PFMIs as reference. The assessment showed the BI-RTGS in general already fit with the PFMI’s standard, whereas 17 principles fit the rank as observed, while Principle 19 of Tiered Participation was considered not applicable to the system (Table 13.1). Similarly, 19 principles of BI-SSSS were ranked as observed, while 3 principles –Principle 10 of Physical Deliveries, Principle 19 of Tiered Participation, and Principle 20 of FMI Links- were considered not applicable to the system.
Both the BI-RTGS and the BI-SSSS are essentially the systemically important infrastructures of Indonesia’s financial system. The BI-RTGS is the only high value payment system infrastructure in Indonesia, with 144 financial institutions connected to it as participants. Banks make up 97% of these financial institutions (Chart 13.1), and considering the dominant role of banks in Indonesia’s financial system, the seamless operation and reliability of the BI-RTGS significantly affects the financial system’s stability. Meanwhile, the BI-SSSS is the sole administration system for government securities in Indonesia. All records and settlements, for both the primary and secondary markets of Indonesian Government Bonds (SBN) and Sharia-based Government Bonds (SBSN), and those issued by Bank Indonesia, Bank Indonesia Certificates (SBI) and Bank Indonesia Deposit Certificates (SDBI), are processed by the BI-SSSS. Nowadays, BI-SSSS has 174 participants, consisting of banks, nonbank institutions, and securities sub-registry agencies (Chart 13.2).

Both the BI-RTGS and the BI-SSSS are essentially the systemically important infrastructures of Indonesia’s financial system. The BI-RTGS is the only high value payment system infrastructure in Indonesia, with 144 financial institutions connected to it as participants. Banks make up 97% of these financial institutions (Chart 13.1), and considering the dominant role of banks in Indonesia’s financial system, the seamless operation and reliability of the BI-RTGS significantly affects the financial system’s stability. Meanwhile, the BI-SSSS is the sole administration system for government securities in Indonesia. All records and settlements, for both the primary and secondary markets of Indonesian Government Bonds (SBN) and Sharia-based Government Bonds (SBSN), and those issued by Bank Indonesia, Bank Indonesia Certificates (SBI) and Bank Indonesia Deposit Certificates (SDBI), are processed by the BI-SSSS. Nowadays, BI-SSSS has 174 participants, consisting of banks, nonbank institutions, and securities sub-registry agencies (Chart 13.2).
initial period of a cut-off warning, the settlement request will automatically be cancelled by the system.

Bank Indonesia has also provided measures to mitigate any operational risks to the Bi-RTGS and Bi-SSSS. The infrastructure of both systems consist of a Central Node, the Bi-RTGS Central Node (RCN) and the Bi-SSSS Central Node (SCN), at Bank Indonesia as the service provider, and a Participant Platform, a Bi-RTGS Participant Platform (RPP) and/or a Bi-SSSS Participant Platform (SPP), at each participant’s location. To mitigate operational risks at Bank Indonesia’s side, both the RCN and the SCN have implemented full redundancy measures, and each has a Disaster Recovery Center separate from their respective main data center. Meanwhile, to mitigate operational risks at the participant’s side, participants could, in the event of problems with the RPP or SPP, request time extensions or use the guest bank facility provided by Bank Indonesia, to ensure settlements are completed by the end of the day.

Bank Indonesia on May 2, 2016 also launched the second stage of Bank Indonesia National Clearing System (SKNBI) Generation II, which provides more features, particularly in bulk payment. The SKNBI’s services now include fund transfers, debit note clearings, regular payments, and regular billings. The latter two, regular payments and regular billings, are new features to the SKNBI, which makes it possible to carry out bulk payments, such as payroll payments, social aid payments, and the disbursement of regional budget expenditures. Bulk payments had by the end of 2016 amounted to 104,530 transactions worth Rp1.1 trillion. Other improvements to the SKNBI include affirming wire transfers as the default transfer method for non-securities transactions, and improving the system’s consumer protection aspects. Regarding wire transfers, Bank Indonesia had updated regulations on wire transfers, which will come into effect on April 1, 2017.

Bank Indonesia also improved the Bank Indonesia Government Electronic Banking (BIG-eB) system. In 2016, the BIG-eB was classified as a critical application, requiring a 100% availability rate and a maximum tolerable period of disruption of only 60 minutes. Improvements to the BIG-eB include: (i) adding new interconnected transaction features of foreign currency fund transfers, clearings, and future date to the Ministry of Finance’s State Treasury and Budget System; (ii) adding a customized feature of displaying real-time exchange rate information for the Ministry of Finance’s foreign currency transactions; (iii) adding a feature for cancelling transactions in implementation of Business Contingency Plan (BCP) for banking services; and (iv) developing the system’s infrastructure of data centers and data recovery centers.

Meanwhile, to mitigate settlement risks and to improve compliance with international standards specified in the PFMIs, Bank Indonesia has been encouraging the use of Central Bank Money (CeBM) for the securities settlements in Indonesia’s capital markets. The CeBM was launched in 2015, and has since been used by custodian banks for the settlements of Indonesian Government Bonds (SBN) and other securities. In 2016, securities companies began using the CeBM as well, for the settlements of SBNs. The daily average use of the CeBM had in 2016 reached 67% of the total Rp11.3 trillion in securities trading. The CeBM has also been used for mutual fund subscriptions, averaging at a daily Rp303 billion worth of CeBMs used for the purpose.¹ Bank Indonesia has continued working with the Financial Services Authority (OJK), the Indonesian Central Securities Depository (KSEI), and the Indonesian Securities Underwriting and Clearing (KPEI) to fully implement the use of the CeBM for all settlements by securities companies.

Improvements to the payment system infrastructure also included the setting up of an integrated database of securities investors, which Bank Indonesia and the Ministry of Finance had begun to implement the intergration by providing investors in the corporate stock and bond markets with Investor Single Identity Numbers. Since 2016, investors of Indonesian Government Bonds (SBN) and Bank Indonesia Certificates (SBI), have been provided with Investor Single Identity Numbers as well, which are then administered through the Bi-SSSS. Bank Indonesia has appointed the KSEI to generate the Investor Single Identity Numbers with reference to the Single Investor Identification (SID) already used in the capital markets. The use of Investor Single Identity Numbers is expected to improve market policy-making, as all the information of investors, their securities ownership, and their trading activities, as administered through the Central Depository and Book Entry Settlement System (C-BEST) and the Bi-SSSS, are now consolidated. Bank Indonesia has also been working with the OJK in developing an electronic trading platform to integrate the SBN secondary market.

**Developing the National Payment Gateway (NPG)**

Bank Indonesia’s National Payment Gateway (NPG) is meant to improve the efficiency and security of retail transactions, and assert the sovereignty of Indonesia’s payment system. The NPG was developed following the lack of adequate infrastructure for variety of cashless payment systems that had become available in Indonesia, which consist of

---

¹ Subscription funds are investor funds pooled by mutual fund selling agents and then transferred to custodian banks for settlements.
ATM/debit cards, credit cards, or electronic money. The existing infrastructure was deemed to be inefficient, due to the limited interconnectivity and interoperability between service providers, while security also became a concern, as transactional data were administered bilaterally between network providers. Not all debit transactions were processed within the country as well, placing the sovereignty of the national payment system in question.

To address these issues, Bank Indonesia developed the NPG as part of the national payment system. The NPG consists of system standards, switching, and system services developed according to specified rules and arrangements, and intended to integrate the various payment instruments and payment channels in the country that facilitate the transfer of funds from its sender to its recipient.

Bank Indonesia had in 2016 decided to develop the NPG based on the interconnected switch model.² The model was chosen as it was considered the most suitable to optimize the existing payment system infrastructure, and would maintain competition, efficiency, product and service innovation among existing switching equipment manufacturers. In Indonesia’s model, the NPG would be operated by Standards Agency, Switching Agency, and Services Agency.³ It is fully supported by all parties connected to the system, including issuers, acquirers, payment gateway providers, and other parties authorized by Bank Indonesia (Diagram 13.1). In its implementation, the NPG’s Standards Agency will be an expansion of the Standards Administration and Implementation Agency, which currently administers ATM/debit cards. The NPG’s Switching Agency, which manages domestic routing, will be carried out by existing ATM switching network providers.⁴

In developing and implementing the NPG, Bank Indonesia has always taken the industry into consideration. Focus Group Discussions were held in preparing the NPG’s technical aspects and developing a proof of concept, while the high level management meetings were also held to prepare memorandums of understanding for the NPG and discuss its institutional aspects.

The NPG’s implementation roadmap will be carried out in several phases, with full completion expected in 2021. Milestones of the roadmap include issuing the required regulations for the NPG, implementing interconnectivity of debit cards and interoperability of electronic money, and setting up the NPG’s institutional agencies. There are already planned in the future development of NPG to include an Electronic Billing/Invoice Payment

---

² There are several implementations of switching: single switch, super switch, hub-spoke, and interconnected switches.

³ The Standards Agency ensures the system’s interconnectivity and interoperability by specifying and administering the standards for instruments, payment channels, switching, and security. The Services Agency provides common functions and services to improve the system’s security, efficient operation, risk management, consumer protection, and access to the system’s services.

⁴ The process of finding paths within a network connecting senders to recipients.
and Presentment (EBIPPP) system, and expand the NPG’s services for online payments, issued domestic credit cards, and processing domestic transactions for international principals.

A Memorandum of Understanding (MoU) for the Interconnectivity of Domestic Debit Cards was signed at the end of 2016 between principals, while another MoU for the interconnectivity system and interoperability of debit cards and electronic money was also signed between four major card issuers/acquirers commanding 75% of the local market. The MoUs reflect the commitment from industry players in implementing the NPG, which is expected to further promote a cashless society and financial inclusion in the country, as well as encourage more innovation of payment instruments and services.

**Financial Inclusion and National Non-Cash Movement**

Bank Indonesia has continued promoting financial inclusion through the payment systems, gaining even more momentum as President of the Republic of Indonesia launched the National Strategy on financial inclusion on November 18, 2016. Financial inclusion has been a priority program for the Indonesian government, ever since then-Vice-President Boediono drafted a document on the subject in 2012 for the 1st ASEAN Conference on Financial Inclusion, which was then made official with Presidential Regulation No.82/2016 on the National Strategy on Financial Inclusion being issued on September 1, 2016.

Financial inclusion ensures that everyone has access to formal financial services in a timely, seamless, and secure manner, and that are affordable according to everyone needs and capabilities, so as to help improve their welfare. Those in particular need of financial inclusion are low-income families, small and micro businesses, and others that are still struggling against poverty or unemployment, which may include migrant workers and households in remote and outermost regions. The National Strategy on Financial Inclusion is based on five principles: financial education, property rights, facilities for intermediary and financial distribution channels, financial services for public sector, and consumer protection. The principles themselves are supported by relevant policies and regulations, financial infrastructure and information technology, and effective organization and mechanisms for implementation.

Meanwhile, as a follow up to the President’s direction that the Government social assistance be distributed in cashless form through banking system, Bank Indonesia has since 2016 been promoting the use of electronic money for the Government social assistance distribution, setting up a business model wherein the aid disbursements can be carried out using just a single bank account and a single payment card. This electronic payments model has proven to add beneficial value to the recipients, the disbursing agencies, and the Indonesian government, and has managed to fulfill the aid program’s six principles of “being disbursed to the proper recipients, in appropriate amounts, at optimum prices, in a timely manner, with proper administration, and in good quality.” Bank Indonesia together with the Ministry for Social Affairs had in 2016 initiated the use of Digital Financial Services (DFS) for the distribution of Government social assistance to 695,000 low-income families in 20 provinces, and the distribution of food aid through the Association of State Owned Banks (Himbara). The cashless social aid distribution is expected to be carried out in another 44 regencies/cities, and will include food aid and tuition aid for students.

Bank Indonesia has also established other partnerships in using Digital Financial Services to promote cashless payments and improve financial inclusion. On May 26, 2016, Bank Indonesia and the Ministry for Rural Areas, Underdeveloped Regions and Transmigration Affairs signed a Memorandum of Understanding (MoU) on Improving Financial Access and Using Electronic Payments for Aid Disbursements to Develop and Empower Rural Areas, Underdeveloped Regions, and Transmigration Clusters. The MoU was followed up with the establishment of a digital village pilot project at the Sindangjawa, Cirebon, wherein setting up DFS agencies to administer the village’s funds.

Bank Indonesia also promoted the use of Digital Financial Services at Islamic boarding schools and their surrounding neighborhoods, as well as reaching out to migrant worker communities and their families through the use of digital remittance services. The transportation sector was also a focus, by promoting the use of electronic toll collection, electronic ticketing and electronic parking services. Bank Indonesia developed the smart city concept in order to develop cashless payment ecosystems. Some of cities and regions have implementing smart city concepts as can be seen in the Jakarta One payment card, Bandung’s Smart Card, Makassar’s Smart Card, North Sumatra’s (Sumut) Electronic Payment and Purchase (SEPP) card, and the fishermen community’s Integrated Financial Services Card (Lantera).

Several events were also held in several cities throughout the country to promote cashless payments and improve the public’s awareness on consumer protection issues, a particular program: “Ekonomi Kerakyatan” was launched in Brebes, a National Consumers Day event was held in Jakarta,
and a Payment System public awareness campaign for students and academics was held in Semarang. Wrapping up 2016, Bank Indonesia held a series of events themed the “Smart Money Wave” in Banjarmasin, Makassar, Medan, and Semarang. The events were aimed at millennials, who tend to have a more open communication style and more adept with newer technologies, and so took on forms that more suitable for the millenial generation, such as workshops, video and blogging competitions, and netizen social gatherings.

Implementation of Chip Technology and Six-Digit-PIN in Debit Cards

Bank Indonesia has continued to improve the security of cashless payments by requiring all ATM/debit cards to comply with the National Standard of Indonesian Chip Card Specification (NSICCS) by January 1, 2022. The implementation timeline begins on July 1, 2017, with all debit card issuers having prepared host and backend systems for the NSICCS, and all ATM/debit cards having been secured with a six-digit Personal Identification Number (PIN). The implementation of the NSICCS is then expected to gradually increase, reaching 30% compliance by January 1, 2019, 50% compliance by January 1, 2020, 80% compliance by January 1, 2021, and finally full compliance by January 1, 2022.

It was showed that in 2016, 19.5% of Automated Teller Machines (ATMs) and 20.0% of Electronic Data Capture (EDC) can already process NSICCS-compliant ATM/debit cards, while 0.6% of ATM/debit cards have already been equipped with NSICCS-compliant chips. Challenges in implementing the NSICCS has mainly been lack of understanding from banks related to the infrastructure upgrades needed to comply with the NSICCS. Bank Indonesia is continuously informing and assisting the banks to meet the NSICCS implementation targets.

Furthermore, Bank Indonesia has also issued several regulations relating to the NSICCS implementation, including Bank Indonesia Circular No.17/52/DKSP on the Implementation of the National Standard of Chip Technology and the Use of an Online Six-Digit Personal Identification Number for ATM/Debit Cards Issued in Indonesia. The circular regulates the implementation of a national standard for ATM/debit cards, and ensures that the implementation is carried out according to good governance and adheres to Indonesia’s national interests.

Compliance in Using the Rupiah

For national sovereignty reasons, Bank Indonesia issued the regulation to oblige the use of the Indonesian rupiah currency for all payments and transactions throughout the country. In its implementation, the obligation had significantly deduct the use of foreign currency in Indonesia since it came into effect on July 1, 2015 (Chart 13.3).\(^5\) Apart from sovereignty reasons, the obligation to use the rupiah had facilitated Bank Indonesia’s efforts in managing the demand for foreign currencies and maintaining the stability of the rupiah’s exchange rate. Certain transactions are still settled in foreign currencies as their contracts were agreed


---

**Chart 13.3. Development of Domestic Foreign Currency Transaction**

![Chart 13.3. Development of Domestic Foreign Currency Transaction](chart13_3.png)
upon before the regulation came into effect, while Bank Indonesia also has the discretion to exempt certain parties. Since February 2016, Bank Indonesia has been carrying out surveillances on the use of foreign currencies in the country, which includes monitoring transactions as well as price quotations. Results from the surveillance conclude that businesses have complied with the Act No.7/2011 on the Currency and Bank Indonesia's regulation to use of the rupiah. Several violations were found, particularly by hajj organizers, tour agents, and hotels, who were then given stern warning notices by Bank Indonesia as part of the administrative sanctions.

**Consumer Protection**

Bank Indonesia has consistently taken issues of consumer protection into consideration in order to maintain the public’s trust in cashless payment systems. Public awareness campaigns on consumer protection have been held, while consultation services have also been provided to the consumers. For 2016, Bank Indonesia had received 1,950 customer complaints, up 4.3% from the previous year, with 78% of the complaints relating to credit cards (Chart 13.4). The complaints had included instances of unauthorized use, cases of skimming and phishing, and harassments in debt collection.

Along with the framework of consumer protection, especially for credit card holders, in 2016 Bank Indonesia had cut the maximum interest rate for credit cards to 2.25% a month, or 26.95% a year, from previously 2.95% a month. The rate adjustment was in line with the latest circumstances in the economy, and is expected to improve efficiency among credit card issuers, as well as improve public acceptance towards credit cards. Bank Indonesia required credit card issuers to inform credit card holders the closing statements of their credit cards, as part of the consumer protection efforts.

Bank Indonesia has also been holding public awareness campaigns on consumer protection, particularly on fraud prevention when carrying out cashless transactions. Surveys on consumer protection in the payment systems have also been conducted, with most respondents feeling confident in using cashless payment services and transferring funds. Bank Indonesia has also been participating in setting up the national strategy on consumer protection, particularly in payment instruments and fund transfer of e-commerce transaction in the deliberation of Indonesia’s e-commerce roadmap.

**Strengthening Payment System Regulation**

In 2016, Bank Indonesia had issued several regulations to improve the operational aspects of the payment system. Among them was a new regulation to anticipate the latest developments in financial technologies (fintech). The regulation is expected to give guidance for fintech service providers in complying with Indonesia’s national interests and requirements on consumer protection, as well as with international standards and practices. The regulation on fintech was deemed particularly urgent, considering the financial industry’s rapid adoption rate of the fintech’s developments and fintech’s potential role in promoting financial inclusion (see Box 13.1).

Bank Indonesia also issued a new regulation on money changers. The regulation is expected to provide comprehensive guideline for money changers, and particularly to encourage and facilitate nonbank money changer to have the license issued by Bank Indonesia.

---

6 As stipulated in Bank Indonesia Regulation No. 16/1/PBI/2014 concerning Consumer Protection of Payment Services and Bank Indonesia Circular No. 16/16/ DKSP concerning the Procedures for Consumer Protection of Payment Services.

7 As stipulated in Bank Indonesia Circular NO.18/33/DKSP concerning the Fourth Amendement to Bank Indonesia Circular No.11/10/DASP issued on April 13, 2009, concerning the Implementation of Card-Based Payment Services.

8 Bank Indonesia Regulation No. 18/40/PBI/2016 concerning the Operational Procedures for Processing Payment Transactions.

9 Bank Indonesia Regulation No.18/20/PBI/2016 concerning nonbank Money Changers.
Bank Indonesia also amended previous regulations regarding electronic money and digital financial services. The amendments are expected to improve financial inclusion by facilitating the expansion of digital financial services and the cashless disbursements of government aid funds. Several existing regulations on digital financial services were relaxed, including the individual agents that can act as digital financial service providers, and simplify the customer due diligence (CDD).

Lastly, Bank Indonesia had issued a new regulation on wire transfers, that (i) reaffirms wire transfers as a means of payment by the transferring of non-securities funds; (ii) requires an effective date to be stated in a wire transfer instruction; (iii) requires sender of a wire transfer to complete all formal administrative procedures; (iv) authorizes banks discretion to withhold a wire transfer instruction on indications of fraud; and (v) limits the number of corrections of a wire transfer instruction. The new regulation is expected to improve the security and consumer protection aspects of wire transfers, thus promoting the use of wire transfer.

13.2. CURRENCY MANAGEMENT POLICY

Bank Indonesia’s mission regarding currency management is to fulfill the society’s need of rupiah currency by providing currency in sufficient quantities, appropriate denominations, timely manner, and in conditions fit for circulation. In order to accomplish this mission as mandated by the Act No.7/2011 on the Currency (Currency Act), Bank Indonesia carries out six stages of currency management: planning, printing, issuance, circulation, revocation-withdrawal, and destruction. The planning, printing, and destruction of the Rupiah is carried out by Bank Indonesia in coordination with the Government; while the issuance, circulation, revocation-withdrawal of the Rupiah is the sole mandate of Bank Indonesia.

To achieve the mission, in 2016, Bank Indonesia pursued seven policies for currency management, first, issued and circulated the rupiah banknotes and coins as stipulated by the Currency Act. Second, maintained the adequacy of Bank Indonesia’s cash position, third, improved the quality of rupiah (clean money policy). Fourth, expanded the currency and cash distribution network. Fifth, optimized the role of Cash Management Company. Sixth, enhance public communication regarding the characteristics of Authentic Rupiah Currency. Seventh, counter and combat the production and distribution of counterfeit rupiah currency.

Issuance and Circulate the Rupiah’s Banknotes and Coins

As stipulated in Currency Act No. 7/2011, the rupiah is the only legal tender in the Republic of Indonesia, and is among the symbols of national sovereignty. The Currency Act also specifies the certain characteristics for the rupiah currency. To comply with The Currency Act, Bank Indonesia as the sole institution which has mandate to issue, circulate, withdraw and revoke the currency, had program to issue 2016 Emission Year (EY) rupiah currency of all denominations that consist of seven banknotes and four coins.

The new rupiah banknotes and coins features the images of 12 national heroes as the main image on the front of respective currency denominations that represent the different regions of Indonesia. The images of national heroes is intended to express appreciation for the services these people rendered to Indonesia and to serve the heroic spirit and patriotic values especially for the youth of Indonesia. The new rupiah banknotes also features the images of traditional dances and landscape scenes represents Indonesia’s rich cultural and natural heritage.

Meanwhile, from technical aspects, the design of the new rupiah banknotes and coins are expected to ease the currency’s authenticity, and more difficult to counterfeit. Based on that, Bank Indonesia strengthened the security features of banknotes, such as enhanced color shifting effects of Optically Variable Ink (OVI), made the layout rainbow feature uniform, improved the effectiveness of latent image feature, enhanced design and uniformity of recto-verso, and strengthened Ultra Violet (UV) design features.

Maintaining the Sufficiency of Bank Indonesia’s Cash Position

In order to meet the demand for cash, Bank Indonesia always maintain the sufficiency of its cash position, both at head and regional representative offices. As in previous year, Bank Indonesia sets the cash position adequacy level using the National Iron Stock (ISN) indicator at 20% of the projected Currency in Circulation (UYD) of the current year, and the Minimum Cash to the value of 1.5 months.
of bank withdrawals (outflow) projection. For 2016, Bank Indonesia’s cash position ratio stood at an average of 5.1 months of cash outflow, which is relatively the same level of the previous year.

Bank Indonesia’s success in maintaining the sufficiency of its cash position was achieved through the pursuance of several policies. On the supply side, Bank Indonesia had closely coordinated with the Indonesian Government Security Printing and Minting Company (Perum Peruri) to ensure the amount of Rupiah printed as planned and set by Bank Indonesia. Perum Peruri undertook to meet Bank Indonesia’s need for printed currency by modernizing its currency printing equipment and optimized its working hours. In addition, the cash distribution between Bank Indonesia’s office was also an important factor in maintaining the sufficiency of cash position. Regarding to this, Bank Indonesia continued to improve the cooperation with the 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 transportation entities.

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

The adequate availability of Rupiah currency was also reflected in the fulfillment of withdrawal during the national religious holiday. Cash withdrawals during 2016’s Ramadan and Eid Al Fitr holidays amounted to Rp146.1 trillion or 91.1% from the society and banking demand projection. Meanwhile, cash withdrawals during 2016’s Christmas and New Year holidays amounted to Rp80.3 trillion or 91.4% from the society and banking demand projection. The increase of seasonal cash demand could be managed and fulfilled by Bank Indonesia.

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

The availability of good quality of cash plays important role in upholding the currency’s integrity as a symbol of national sovereignty. Bank Indonesia has raised the soil level of Rupiah which is considered fit for circulation (ULE), and since 2015 started to modernize cash processing equipment in the head office and regional representative offices to improve the quality of cash.

The higher soil level standard for rupiah means the amount of Rupiah banknotes considered unfit (UTLE) and must be destroyed had increased. In 2016, the destroyed UTLE increased by 16.2% in number of banknotes or increased by 31.6% in value compared to the previous year. This also means that the Rupiah in circulation is in good quality. In addition, since September 2016 Bank Indonesia accelerated the withdrawal of unfit money (UTLE) by using mobile cash services as well as enhance the collaboration with the banks.

Expansion of Currency Distribution Network and Cash Services

Bank Indonesia transformed cash distribution network and cash services. This policy aimed to accelerate the accomplishment of Bank Indonesia’s mission: to fulfill the rupiah currency needs by providing the currency in sufficient quantities, appropriate denominations, timely manner, fit for circulation, and in efficient way. These transformation programs has been executed continuously, with the objective is to have full coverage of currency distribution network throughout Indonesia. This means extended Bank Indonesia’s role in accordance with the Currency Act and enhance the cooperation with banks and Cash Management Company. In 2016, Bank Indonesia also initiated the cash infrastructure development and improved the business model of currency management.

In term of infrastructure development, Bank Indonesia added 27 cash custodians in 2016 as part of developing the cash infrastructure (Figure 13.1), to total 62 cash custodians available throughout the country. The additional cash
custodians has made Bank Indonesia’s cash services reach a total of 418 cities/municipalities, or 82% of the country compared to a coverage of 66% in the previous year (Table 13.2). The business model of the cash custodians were also improved, as such Bank Indonesia is providing financial assistance for their start-up and operational costs.

Bank Indonesia increased the frequency of mobile cash services to reach the remote area, through Bank Indonesia’s network as well as banks and other state agencies, such as the Ministry of Transportation, the Indonesian Navy, and the Air Patrol Unit. The increasing of mobile cash services is expected to fulfill the need of rupiah and improve the quality of money fit in circulation.

Bank Indonesia also evaluated the current cash distribution network and business model then adjusted to the new one based on existing condition. At the end, these transformation programs led to more efficient and effective cash distribution that can fulfill society demand on rupiah with a good quality, appropriate denominations, and in a timely manner.

Optimizing the Role of Cash Management Company (CMC)

The cash distribution involves the role of transport security services whose roles have been expanded to handle end to end cash services, called Cash Management Company (CMC). Initially, the license of the companies only issued by the Indonesian National Police, and since the role has been expanded, Bank Indonesia concerned about the standard and quality of the services. This requires the role of Bank Indonesia to ensure the certain standards and practices of CMC, which include proper infrastructure and equipment, competent human resources, implementation of risk management and good governance.

Therefore, Bank Indonesia issued Bank Indonesia’s Regulation No.18/15/PBI/2016 and Bank Indonesia Circular Letter No.18/25/DPU on CMC, which cover the regulations on (i) the distribution of cash; (ii) the handling and processing of cash; (iii) the management of cash in vaults; and (iv) the management of cash withdrawal and deposit machines, such as automated teller machines (ATM), cash deposit machines (CDM) and cash recycling machines (CRM). The regulations are expected to facilitate transport security services to expand the business in CMC and create a fair and healthy competition.

The CMC has to obtain the licence issued by Bank Indonesia, including the permission to open the branch offices. Thus to maintain the good performance, CMS is required to implement good governance principles, which include: having service level agreements; proper infrastructure and equipment, including cash sortation machines; and recruiting competent employee in managing and mastering the authenticity of rupiah.

Enhancing Public Communication of the Characteristics of Authentic Rupiah Currency

As part of its consumer protection, Bank Indonesia organized public communication activities on an ongoing basis through disseminating information to the public. The messages contained security features, the reporting mechanism of counterfeit money, and the process to change unfit to fit money. The activities were carried out through face to face activities such as speeches and discussions with either targeted audiences (tellers, retailers, students, academicians, law enforcement officers) and or public, and also through exhibitions and cultural events.

These massive communication activities were expected to maintain the public’s trust and the credibility of Rupiah as a legal tender.

Align with the growing of social media and other technology (national television/radio), Bank Indonesia was actively used these media to disseminate the campaign of Rupiah, such as 3D: “Dilihat, Diraba, Diterawang” (Look-Touch-Examine). Bank Indonesia also set up a rupiah mini site on the Bank Indonesia’s web site with the information contains of the characteristics of Rupiah, preventing and combating the Rupiah counterfeiting, and interactive games. The materials can be downloaded in the form of leaflet, booklets, and video.

Preventing and Combating the Circulation of Counterfeit Rupiah

Bank Indonesia pursued three strategies to prevent and combat the counterfeit money. The first strategy is preemptive, through campaigns and raising public awareness of the characteristics of the authentic rupiah currency, and the way to maintain good quality of Rupiah. In 2016, Bank Indonesia held 819 of such public awareness campaigns.

The second strategy involves preventive measures, by evaluating and improving the rupiah’s security features so as to counterfeiting became more difficult. For this strategy, Bank Indonesia had cooperated with several international agencies as the Central Bank Counterfeit Deterrence Group and the Interpol. The third and final strategy is through law
### Table 13.2. Managing Banks and Bank Office Members of Cash Custodians

<table>
<thead>
<tr>
<th>No.</th>
<th>Managing Bank</th>
<th>Number of Cash Custodians</th>
<th>Location and Number of Banks Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bank Mandiri</td>
<td>10</td>
<td>87 Bank Offices: Rantau Prapat (13), Toli-Toli (3), Tahunia (3), Gorontalo (15), Sorong (12), Tira (8), Biak (4), Tanjung Pinang (12), Tanjung Pandan (9), Singaraja (8)</td>
</tr>
<tr>
<td>2</td>
<td>Bank Negara Indonesia</td>
<td>13</td>
<td>83 Bank Offices: Gunung Sitoli (4), Luwuk (7), Muaro Bungo (17), Bau-Bau (7), Padang Sidempuan (11), Tobelo (2), Sungai Penuh (5), Balige (3), Tanjung Balai Karimun (8), Tebing Tinggi (8), Bukit Tinggi (4), Pamekasan (2), Rengat (5)</td>
</tr>
<tr>
<td>3</td>
<td>Bank Rakyat Indonesia</td>
<td>8</td>
<td>52 Bank Offices: Lubuk Linggau (11), Sampit (6), Waingapu (2), Dumai (14), Blangpidie (7), Tual (3), Kotabumi (3), Kolaka (6)</td>
</tr>
<tr>
<td>4</td>
<td>BPD Kalimantan Barat</td>
<td>3</td>
<td>32 Bank Offices: Sintang (13), Keta (11), Singkawang (9)</td>
</tr>
<tr>
<td>5</td>
<td>BPD Kalimantan Tengah</td>
<td>14</td>
<td>14 Bank Offices: Muara Teweh (5), Pangkalan Bun (9)</td>
</tr>
<tr>
<td>6</td>
<td>BPD Kalimantan Timur</td>
<td>24</td>
<td>24 Bank Offices: Sangatta (2), Tanjung Selor (4), Tanjung Redab (9), Melak (4), Tana Paser (5)</td>
</tr>
<tr>
<td>7</td>
<td>BPD Nusa Tenggara Timur</td>
<td>18</td>
<td>18 Bank Offices: Maumere (3), Atambua (3), Ruteng (4), Ende (6), Lembata (2)</td>
</tr>
<tr>
<td>8</td>
<td>BPD Sulawesi Selatan &amp; Sulawesi Barat</td>
<td>26</td>
<td>26 Bank Offices: Palopo (12), Pare-Pare (6), Bulukumba (8)</td>
</tr>
<tr>
<td>9</td>
<td>BPD Sulawesi Utara</td>
<td>1</td>
<td>Kotabibu (5)</td>
</tr>
<tr>
<td>10</td>
<td>BPD Sumsel Babel</td>
<td>1</td>
<td>Prabumulih (21)</td>
</tr>
<tr>
<td>11</td>
<td>BPD Nusa Tenggara Barat</td>
<td>1</td>
<td>Bima (5)</td>
</tr>
<tr>
<td>12</td>
<td>BPD Papua &amp; Papua Barat</td>
<td>18</td>
<td>18 Bank Offices: Merauke (7), Fak-fak (4), Bintuni (4), Wamena (3)</td>
</tr>
<tr>
<td>13</td>
<td>BPD Jabar &amp; Banten</td>
<td>32</td>
<td>32 Bank Offices: Serang (8), Sukabumi (24)</td>
</tr>
<tr>
<td>14</td>
<td>BPD Jatim</td>
<td>15</td>
<td>15 Bank Offices: Probolinggo (9), Banyuwangi (6)</td>
</tr>
<tr>
<td>15</td>
<td>BPD Kalimantan Selatan</td>
<td>15</td>
<td>15 Bank Offices: Batulicin (13), Tanjung (2)</td>
</tr>
</tbody>
</table>

62 510 Bank Office Members

Source: Bank Indonesia

---

**Figure 13.1. Map of Cash Custodian Distribution**

![Map of Cash Custodian Distribution](image-url)
enforcement, as carried out by the Coordinating Agency for the Eradication of Counterfeit Money (Botasupal), whose members include Bank Indonesia, the State Intelligence Agency, the Indonesian National Police, the Attorney General’s Office, and the Ministry of Finance. Bank Indonesia also proposed for maximum terms against criminal offences of counterfeit money.

In particular, Bank Indonesia worked closely with the Indonesian National Police to address the problem of counterfeit money, providing an analysis laboratory and information system support through the Bank Indonesia Counterfeit Analysis Center (BI-CAC). This laboratory examines the suspect counterfeit money that had been revealed through police investigations or had been reported by banks. Meanwhile, the information system, BI-CAC serves as a database for any information of counterfeit money, that would be used to support the police investigations and as sources to evaluate and improve the Rupiah’s security features.

As a mandate in Currency Act, Bank Indonesia has the authority to certify the authenticity of Rupiah. In line with this mandate, Bank Indonesia frequently provides competent human resources that act as an expert witness in court cases of Rupiah counterfeiting.
Box 13.1. Financial Technology and Regulatory Sandbox

The Financial Technology Boom

The last decade has witnessed various innovations in technology and business models leading to the emergence and rapid adoption of the so-called financial technologies (fintech). Data from McKinsey (2016) shows the number of fintech industry players increasing from 800 to 2,000 within one year. Meanwhile, the total transactions by the global fintech industry is estimated to reach USD2,355 billion in 2016.

Investments into the fintech sector have continued to grow significantly as well. Data from Accenture estimates the total net investment into the fintech sector over the past two years at USD35 billion.¹ A total USD60 billion in venture capital and other funds is estimated to have been invested into the fintech sector between 2010 and 2016 (Chart 1). Meanwhile, Price Waterhouse Cooper (PWC) estimates investments into the fintech sector to exceed USD150 billion over the next three to five years.²

Fintech is basically an innovative approach in using technology for financial purposes. Fintech industry players are usually start-up companies providing creative and innovative alternatives to a variety of financial services, ranging from payments, funds transfer, loans and financing, e-commerce to investments. These start-up fintech players act as platform or mediators to facilitate various financial transactions, including investment decisions and allocation of assets, in relatively simple means and procedures. The platforms themselves utilize the application and/or internet based robotic algorithm which is technologically advanced and tends to borderless.

Fintech followed different paths in more advanced countries than that in less developed ones. While fintech in more advanced countries have stressed more on innovation and adding value to the economy, fintech in emerging countries reserve as alternative solutions to problems with the economy itself, such as limited financial access, inequality, and employment opportunity. One of the most interesting aspects of fintech is to reach and facilitate those lacking access to formal financial services. The reasons of lack of access to formal financial services are the limited reach of financial institutions and the difficulties meeting the requirements. Fintech does away with the complexities of requirement, and should thus help to improve financial access and financial literacy.

Fintech has a significant potential to drive Indonesia’s economy, the study of Bank Indonesia shows the access of financing and increase in household consumption from the fintech industries able to support further economic growth and help to provide more employment. The Indonesia’s current conditions can trigger Fintech’s development. Firstly, those who already have access to banking services only 36% of Indonesia’s total population. Second, the ratio of bank branch offices to the total population is still low. Third, the financing capacity especially from the banks is still limited. The World Bank shows that Indonesia has the potential of up to Rp1,600 trillion in demand for financing, however Rp600 trillion can be provided by the Bank. The fourth factor that favorable to fintech in Indonesia, is the high adoption rate of mobile phones in the country. There are currently 326 million of mobile phones user, and 88.1 million active internet users. These should be the most effective point for start up to foster the innovation of fintech in Indonesia.

Fintech has indeed begun to be adopted in the country, particularly its innovations in providing payment services. Bank Indonesia realizes how fintech has the potential to

---
¹ From an Accenture report titled “Fintech and The Evolving Landscape: Landing Points for The Industry” (2016).
help uplift the economy, by improving financial inclusion and fostering micro-small-medium businesses, therefore Bank Indonesia fully supports the innovation of Fintech. However, as a payment system authority, Bank Indonesia must ensure that the fintech industry also adheres to the payment system’s aspects of security, efficiency, reliability. For this, Bank Indonesia had issued Bank Indonesia Regulation No. 18/40/PBI/2016 on the Processing of Payment Transactions, which regulates payment service providers, including those using fintech. The regulation also aimed to serve the national interest as well as managing prudentiality and consumer protection.

**Bank Indonesia’s Fintech Office and the Role of Regulatory Sandbox**

Bank Indonesia had in November 2016 also set up a Fintech Office, which is a special unit to foster fintech innovations in the country and manage aspects of prudentiality and consumer protection. For this, Bank Indonesia’s Fintech Office also play the role to run the regulatory sandbox, wherein fintech products, services, business models and technological innovations can be tried and tested within fair and proportional regulatory frameworks and maintaining the industry’s level of playing field. This model has already become an international best practice adopted in the UK, Australia, Canada, Singapore, the United Arab Emirates, and Hong Kong.

Fintech start-up companies that have qualified certain requirements, can run their products and services within the regulatory sandbox, under the monitoring and in coordination with Bank Indonesia’s Fintech Office. The regulatory sandbox is set up to resemble the fintech industry’s market environment as closely as possible, with parameters testing compliance. The testing environment considers the consumer protection and the existing regulations of financial system. This regulatory sandbox plays important role to support the fintech industry in fair and healthy environment. Bank Indonesia’s Fintech Office also acts as a collaboration forum for industry players to create a synergy and harmony with the regulators.
CHAPTER 14
Policy Coordination

The increasing complexity of global dynamics and magnitude of the challenges faced by Indonesia’s economy require the support of solid policy coordination and synergy among the relevant authorities. Policy coordination and synergy should not only be oriented towards mitigating short-term risks, but also towards strengthening the structure of the economy in the medium to long term. In 2016, Bank Indonesia and governments, both at the national and regional levels, along with other related authorities, continued to strengthen policy coordination focused on maintaining macroeconomic stability and financial system stability, while also promoting the momentum of economic growth and accelerating structural reforms. This strengthening of policy coordination made a positive contribution to the effectiveness of the management of macroeconomic conditions, as reflected in low inflation, stable financial system, and sustained momentum of economic recovery.

[Image caption: Bank Indonesia, the Government, and relevant authorities worked tirelessly to strengthen policy coordination for mitigation of short-term and long-term risks. One form of this coordination was the forum provided by the Inflation Control Team (TPI) and Regional Inflation Control Teams (TPID) for maintaining price stability.]
The maintaining of macroeconomic stability and financial system stability in 2016 must be seen in light of a more solid policy response synergy between Bank Indonesia, governments, and other related authorities. In an effort to maintain macroeconomic stability, Bank Indonesia conducted intensive coordination with governments, both at the national and regional levels, to control inflation. Bank Indonesia also strengthened coordination with the authorities in the financial sector, within the framework of the Financial System Stability Committee (KSSK), to mitigate numerous potential risks that had the potential to threaten the stability of the financial system. Furthermore, Bank Indonesia also worked closely with the Financial Services Authority (OJK) and the Deposit Insurance Corporation (LPS) to reinforce the macroprudential and microprudential elements which contributed to maintaining the stability of the financial system in 2016.

In order to support the momentum of economic recovery, the coordination conducted by Bank Indonesia was focused on accelerating the implementation of structural reforms, improving the capacity of domestic financing sources through the deepening of financial markets, and managing a positive perception of the Indonesian economy to maintain the sustainability of investment. Efforts to accelerate structural reforms were aimed at strengthening the economic fundamentals of Indonesia through increased competitiveness and diversification of sustainable economic growth sources. Coordination to encourage financial market deepening focused on efforts to expand domestic sources of financing support in order to sustain development and improve financial inclusion. Meanwhile, a positive perception of the domestic economy was managed through intensive coordination between Bank Indonesia and the Government aimed at attracting inflows of foreign direct investment. In addition, Bank Indonesia, through Bank Indonesia Regional Offices (KPwDN), actively established coordination with local stakeholders in order to encourage regional economic development. Bank Indonesia also teamed up with stakeholders to improve the transaction efficiency in the economy by enhancing the reliability of payment systems and the effectiveness of currency management.

**14.1. POLICY COORDINATION IN MAINTAINING MACROECONOMIC AND FINANCIAL SYSTEM STABILITY**

**Coordination on Inflation Control**

The accomplishment of inflation control in 2016, which saw the figure moved back into the inflation target range of 4±1%, was largely attributable to the support of strong inflation control coordination, both at the national and regional levels. Coordination measures were necessary to strengthen the policy mix adopted by Bank Indonesia in controlling inflation so as to keep it in line with the fundamentals of the national economy. Inflation control coordination was undertaken through the Inflation Monitoring and Controlling Team (TPI) at the national level, as well as Regional Inflation Monitoring and Controlling Team (TPiD) in various regions. In 2016, inflation control coordination focused on efforts to mitigate the upward pressure on volatile food inflation and anticipate administered prices inflation, in line with the ongoing reform on the energy subsidy policy. In mitigating upward pressure on volatile food inflation, inflation control coordination aimed at increasing production, improving market structures, improving distribution, reinforcing regulations, as well as managing expectations and raising public awareness of inflation. Meanwhile, with regard to manage the administered prices inflation, the Government and Bank Indonesia coordinated intensively to formulate the pricing level of fuel and other energy commodities, as well as the desirable timing for implementation, in support of the policy of targeted subsidies.

A number of inflation control coordination measures were also directed at expediting the implementation of various Government policies that support the price stability. With respect to this, the Government’s commitment to set the food, infrastructure, and energy as priority sectors require supports from all parties, both at national and regional levels, for it to be successfully implemented. The Government’s commitment of strengthening connectivity through the construction of new roads, bridges, railways, and airports as well as developing sea ports will, in turn, facilitate efficient distribution of goods and minimize price disparities between regions. The Government also made efforts to improve agricultural production through the construction of irrigation channels and the rehabilitation of tertiary-level irrigation systems, the provision of fertilizer subsidies, and the expansion of agricultural areas. In the energy sector, the Government encouraged the use of natural gas and followed through with the construction of power plants to increase the availability of energy for society. In addition, the Government also followed up on a series of policy breakthroughs intended to improve the distribution of goods, such as Tol Laut program, Gerai Maritim, and the expansion of Toko Tani networks.

The role and support of regional governments in controlling inflation intensified in 2016. This was reflected in the increasing number of TPiD, which by the end of 2016 had been formed in 507 areas, a significant increase from the 442 areas at the end of 2015 (Figure 14.1). In 2016,
inflation control programs focused on efforts to maintain price affordability and the availability of basic needs, the smooth distribution of goods, and the management of public expectations through effective communication. TPID activities, which intended to sustain the supply of basic food through developments of food production, also integrating the cluster development programs initiated by Bank Indonesia. By the end of 2016, Bank Indonesia and local government had been successfully developed, 169 clusters.

The increasingly intensive role of TPID in maintaining price stability in the regions was also reflected by the inflation rate that remained at a low level during National Religious Holidays (HBKN) in 2016. During such periods, efforts to contain inflationary pressures were intensified through market operation. Unlike in the previous years, the market operation in 2016 included commodities which contribute to regional inflation, such as eggs in Padang and chili peppers in Banten. Some areas also continued to strengthen cooperation on the inter-regional provision of food supplies, such as Jambi and Lampung, which cooperated with Central Java and East Java to supply shallots. Communication in various areas were also carried out intensively to dampen public expectations of inflation, both through the mass media and first-hand inspections of markets and food supply warehouses. Overall, efforts to control inflation undertaken at the national and regional levels had a positive impact on controlling inflationary pressures in 2016.

As the number of TPID increased, Bank Indonesia continued to strengthen policy coordination through TPID National Working Group (Pokjanas TPID). Effective policy coordination, has resulted a positive impact on price stability. The seventh TPID National Coordination Meeting (Rakornas) in 2016 reaffirmed a shared commitment to bringing about low and stable inflation through coordination aimed at accelerating infrastructure development and improving the food trading system. Such aims required support from regional governments to accelerate the regional budgets spending, devise price stabilization policy breakthroughs and innovations complemented by sufficient budget allocations, and expedite the infrastructure of food distribution development. The role of regional governments was indispensable, not only for achieving economic growth but also for controlling inflation. As in previous years, the seventh TPID National Coordination Meeting (Rakornas) also presented awards to the best performance and most innovative regions in controlling inflation.

Bank Indonesia, through the Inflation Monitoring and Controlling Team (TPI) platform, formulated a basis for strengthening institutional coordination aimed at controlling inflation at the national and regional levels. It is necessary to reinforce a legal basis, considering the growing importance of sectoral policy coordination between the center and the regions, for the preparation of work programs and budgets, the formulation of policy recommendations, as well as for the implementation stage. As it stands, however, the legal basis of TPI and

---

2 The seventh TPID National Coordination Meeting (Rakornas), held in Jakarta on August 4, 2016, was chaired by the President of the Republic of Indonesia in person. This meeting is a joint initiative between Bank Indonesia, the Coordinating Ministry for Economic Affairs, and the Ministry of Home Affairs as part of the TPID National Working Group (Pokjanas TPID) platform.

3 Awards were presented to TPID in three categories, namely (i) “Best TPID” for a Province and Regency/City used as a basis for calculating inflation, (ii) “Best Performing TPID” for a Province and Regency/City not used as a basis for calculating inflation, and (iii) “Most Innovative TPID” for those areas with the best innovations for maintaining price stability.
TPID Pokjanas merely consists of a Memorandum of Understanding. Meanwhile, the effectiveness of inflation control coordination required involvement of various relevant ministries, institutions, and local governments. Taking all of these matters into account, the role of coordination at the national and regional level need to be optimized through the strengthening of a legal basis, organizational structures, working mechanisms, and the role of the inflation control secretariat.

Following the seventh TPID National Coordination Meeting (Rakornas) in 2016, the TPID National Working Group (Pokjanas TPID) conducted a series of discussions with Regional Inflation Control Teams (TPID) focusing on efforts to overcome challenges faced by the regions in controlling inflation. These discussion largely emphasized the importance of legal basis and and highlighted the role of local governments in controlling inflation, the roadmap on controlling inflation incorporated into the Government Work Plan (RKP), and the optimization of village subsidy to improve agricultural production infrastructure in rural areas. TPID also agreed to improve regional bureaucratic efficiency, in particular related to license and budget management, in accordance with the principles of good governance and regional spatial plan and to strengthen food-related database and information as a basis for the regional policies.

The expansion of public access to information about food is one of the ongoing programs which becomes Pokjanas TPID priority. The food-related data and information not only overcame the asymmetric information regarding food prices but also supported the policy on food price stability. This program is being carried out through the development of a Strategic Food Price Information System (PIHPS), which has been underway since 2013. The development of National PIHPS is also consistent with the Program Sinergi Aksi untuk Ekonomi Rakyat initiated by the Government in April 2016.

In 2016, the development of the National PIHPS focused on enhancing the database of food commodity prices by improving the performance of daily price surveys. Currently, the National PIHPS already includes price data for 10 strategic food commodities with different variants adapted to the consumption characteristics of each respective region. Since mid-2016, the data in the National PIHPS has been strengthened through price surveys conducted by Bank Indonesia on a daily basis in 164 major markets throughout 82 regencies/cities. The development of the National PIHPS in 2016 also focused on the improvement of public access through the internet address www.hargapangan.id and via mobile application (both android based and iOS based). In addition, the National PIHPS has been equipped with an early warning system (EWS) to support the formulation of price control policy responses as well as virtual meeting facilities that enable coordination among stakeholders. At a later stage, the data in the National PIHPS will be extended to include price data in modern markets, wholesalers, and producers.

Bank Indonesia, also conducted coordination to accelerate the improvement of food logistics to support food security and price stability.7 The susceptibility of the regions to price fluctuations was partly due to the inadequate and uneven quality of logistics infrastructure, high loading and unloading costs, and imbalances in the scales of economies among different regions. To overcome this, government measures aimed at prioritizing the acceleration of infrastructure development, especially ones which relate to connectivity, should be supported by strong policy commitments and synergies from various stakeholders at the central and regional levels. The availability of an infrastructure that supports inter-regional connectivity will, in turn, have a positive impact on efficient distribution and logistics between regions. At the same time, efforts to ensure the availability and affordability of food for communities also need to be undertaken by strengthening production capacities and agricultural intensification, improving market structures and supply chains of food commodities, as well as expanding public access to food information.

Bank Indonesia and the Government agreed on five strategic measures to mitigate inflationary pressure in 2017. First, to curb volatile food (VF) inflation to a range between 4–5%, by strengthening regional food logistics infrastructure, as well as using fiscal instruments and incentives to encourage the role of Local Governments in prices stability.

---

4 The President of the Republic of Indonesia, at the inauguration of the Program Sinergi Aksi untuk Ekonomi Rakyat, stressed the importance of food price data and information center for policy making.

5 The strategic commodities in the PIHPS include rice, red onions, garlic, chili pepper, bird’s eye chili, beef, chicken, eggs, and white sugar.

6 The selection of cities in the early stages of the surveys referred to those cities that serve as a basis for calculating National CPI inflation by Statistics Indonesia (BPS).

7 Bank Indonesia initiated a coordination meeting with the Central and Local Governments on February 12, 2016 in East Nusa Tenggara (NTT), which espoused the theme of ‘Accelerating the Improvement of a Logistics System to Strengthen Food Security’.

8 Other efforts to control Volatile Food (VF) inflation include developing a goods traffic data system, particularly for food commodities; encouraging the diversification of public food consumption patterns, particularly for the consumption of fresh chilies and onions, including by encouraging innovations in the processed food products industry; strengthening cooperation among regions; accelerating the development of a connectivity infrastructure; and improving food cropping patterns.
to anticipate the second round effect of policy adjustments on administered prices, such as controlling public transport fares. Third, to phase the implementation of policies on administered prices, including a plan to implement the conversion of several kinds of direct subsidies into cash transfers. Fourth, to strengthen TPI and TPID institutional capacity. Fifth, to strengthen ongoing coordination between the central and regional levels. In all of this, Bank Indonesia will consistently continue to reinforce the policy mix to ensure ongoing macroeconomic stability.

**Policy Coordination on Financial System Stability**

Financial system stability faced several global and domestic challenges in 2016. Risks on the global front were mainly related to the persistent global economic slowdown which led to a decrease in the demand for and price of global commodities. This situation subsequently brought about a decline in the performance of Indonesia’s exports and corporate sector. The decline in corporate sector performance led to an increased bank credit risks in 2016. Various risks also still loomed over global financial markets, particularly with respect to expectations of rising US interest rates (Fed Funds Rate) and global political sentiment, which convey the possibility of triggering a reversal of capital flows. Meanwhile, domestic risks related to worries over tax revenue were a concern amid the ongoing consolidation of the economy.

In response to these various risks, Bank Indonesia continued to strengthen coordination with the relevant authorities to maintain the stability of the domestic financial system. This coordination mainly pertained to aspects of crisis prevention and resolution through the Financial System Stability Coordination Forum (FKSSK) which was formed in 2012. After the enactment of Act No. 9 of 2016 concerning on the Prevention and Resolution of Financial System Crisis (UU PPKSK) on 15 April 2016, the FKSSK was renamed the Financial System Stability Committee (KSSK). The KSSK, which is made up of the Ministry of Finance, Bank Indonesia, the Financial Services Authority (OJK), and the Deposit Insurance Corporation (LPS), serves to coordinate the monitoring and maintaining of the financial system stability, the resolution of financial crisis, as well as the handling of systemic bank problems, under normal condition and crisis. UU PPKSK provides a sound legal basis for the resolution of financial crisis. Moreover, as mandated by UU PPKSK, the status of crisis of financial system is to be determined by the President of the Republic of Indonesia, with due regard to the recommendations of the KSSK (See Box 14.1).

In carrying out its functions, the KSSK is supported by a Crisis Management Protocol (PMK). Such protocol is attached in its member in order to assess risks based on its respective working field. Through this forum, Bank Indonesia regularly delivered assessments on macroeconomic developments and the exchange rate at a technical level, deputy level (Deputies’ Meeting), and high level (KSSK Meetings). In this regard, Bank Indonesia also enhanced its internal arrangements related to the PMK and sharpened its analytical tools for risk monitoring. Bank Indonesia also updated its internal regulations in accordance with organizational developments and aligned these with the main points of the provisions of UU PPKSK. These provisions were further stipulated in the internal regulations on the PMK. In addition, Bank Indonesia strengthened its risk monitoring framework, including early warning indicators particularly in the monetary, macroprudential, and payment system sectors.

In order to test the readiness of the KSSK protocol based on UU PPKSK, Bank Indonesia participated in a national crisis simulation and also conducted an internal crisis simulation. The national crisis simulation is performed regularly every year by involving all levels, including the leaders of the KSSK’s member institutions (Full-dress). The simulation, which was carried out on 15 September 2016, was intended to test how effective UU PPKSK and its procedures operated. This simulation was expected to improve the coordination mechanisms among KSSK members. A crisis simulation was also conducted internally at Bank Indonesia by involving all relevant work units (Bank Indonesia Wide) in order to test the readiness of the Crisis Management Protocol (PMK) during financial crisis. In addition, Bank Indonesia participated in and coordinated with the Financial Sector Assessment Program (FSAP) by joining the FSAP’s National Working Team along with the Ministry of Finance, OJK, and LPS.⁹

**Coordination on Macroprudential and Microprudential Policies**

Close coordination between Bank Indonesia and other related institutions, in particular the OJK and LPS, was a key sucess factor in maintaining the stability of the financial system. The close links between macroprudential and microprudential supervisions, as well as the need to support the implementation of UU PPKSK, meant that effective and efficient coordination was required, especially with the OJK and LPS. To optimize cooperation and coordination with

---

⁹ The Financial Sector Assessment Program (FSAP) is a mechanism to assess the stability and soundness of the financial sector, as well as its potential contribution to economic growth and development in a comprehensive manner.
the OJK, the Macroprudential-Microprudential Coordination Forum (FKMM) was formed. The technical implementation of the FKMM was set forth in the FKMM’s Protocols which covered membership, organizing of FKMM meetings, and coordination procedures for completing the tasks at hand. Coordination between Bank Indonesia and the OJK was further amplified through the Implementation Guidelines for Cooperation and Coordination Mechanisms.

The cooperation and coordination between Bank Indonesia and the OJK was also reinforced through data exchanges, designation of systemically important banks, and information system issues. Bank Indonesia and the OJK agreed to exchange data on securities, issued by banks and derived from the Indonesian Central Securities Depository (KSEI). This agreement was outlined in the Technical Guidelines on Exchanging Securities Data as part of the calculation of the Reserve Requirement based on Loan to Funding Ratio (GWM-LFR), signed on 23 December 2016. In addition, Bank Indonesia and the OJK drew up implementation guidelines on cooperation and coordination in establishing and updating a list of systemically important banks. These guidelines were intended to standardize the process of aligning data and the scope of the data, as required in the determination of systemic banks. On the information systems side, Bank Indonesia coordinated with the OJK to develop a more reliable credit information system, during the transition of the Debtor Information System management from BI to OJK.10 In addition, Bank Indonesia coordinated intensively with the OJK to evaluate the resilience of banking capital in absorbing potential risks, by carrying out stress tests on a regular basis.

Coordination between Bank Indonesia and the LPS was strengthened in accordance to the mandate of UU PPKSK. Bank Indonesia and the LPS, on July 28, 2016, agreed on eight points of coverage for coordination and cooperation.11 First, revoking failed non-systemic banks business license. Second, funding for the handling of solvency issues involving systemic and non-systemic banks during financial crisis. Third, exchanging data and information. Fourth, developing of employee competency. Fifth, conducting joint research, studies, and surveys. Sixth, conducting joint dissemination and education programs. Seventh, conducting cross-assignment employees. Last, implementing other tasks in accordance with the prevailing legislation, such as to support the implementation of the National Non-Cash Movement (GNNT), the financial markets deepening, and the expansion of access to finance. The agreements were also adjusted to the latest developments, in line with the issuance of UU PPKSK, including those related to funding for the solvency issues involving systemic and non-systemic banks during financial crisis.

Bank Indonesia and LPS also agreed on arrangements regarding the purchase of LPS owned Indonesian Government Bonds (SBN) by Bank Indonesia for the purpose of mitigating banks problems. This related to the authority of the LPS, as stipulated in UU PPKSK, to take over and operate all the rights and authorities of shareholders, including the Annual General Meeting of Shareholders (RUPS), in order to control, manage, and sell/transfer bank assets. To obtain the funds to carry out its duties, LPS can sell its assets, such as Government Securities (SBN), to the market. However, the sale of SBN belonging to LPS in a state of crisis and in large amounts has the potential to destabilize the financial system, particularly in the government securities market. In this regard, Bank Indonesia and LPS agreed on coordination mechanisms for the sale of SBN by LPS to Bank Indonesia.12 The agreement aims to facilitate and optimize sales transactions of SBN by LPS in the handling of solvency issues involving both systemic and non-systemic banks during financial crisis.

14.2. POLICY COORDINATION IN CAPITALIZING MOMENTUM FOR ECONOMIC RECOVERY

Coordination on Promoting Structural Reforms

The steady momentum of economic recovery in 2016 needs to be reinforced through structural reforms. A more robust economy structure increase efficiency and productivity, thereby providing a strong foundation for enhancing economic competitiveness. To maintain the momentum for economic growth, Bank Indonesia coordinated with various stakeholders, in particular governments at the national and regional levels, to jointly accelerate the structural reforms necessary to support sustainable economic growth. In this regard, Bank Indonesia Regional Office (KPwDN) network throughout the country’s regions, actively established coordination with local stakeholders to promote regional economic development. Among the issues on which coordination - aimed at encouraging structural reforms

---

10 Joint Agreement between BI and the OJK No. 17/3/NK/GBI/2015 | PRJ- SOA/D.01/2015 dated December 3, 2015 on Cooperation and Coordination within the framework of the Management and Development of the Debtor Information System (SID).

11 Memorandum of Understanding between BI and the LPS No.18/12/NK/GBI/2016 | MoU-3/DK/2016, dated July 28, 2016, on Coordination and Cooperation in the Context of the Implementation of the Functions, Duties, and Authorities of Bank Indonesia and LPS.

throughout 2016 - focused on were the development of urban competitiveness and the implementation of smart cities, the development of the maritime sector as a source of economic growth, as well as the development of manufacturing industry competitiveness.

Policy synergy aimed at improving urban competitiveness was one of the coordination priorities in encouraging structural reforms. The development and management of planned, integrated, and sustainable urban areas is key to enhancing the competitiveness of these areas and fostering a variety of economic activities, including those performed by creative industries, along with innovations that create further competitive advantages. At a coordination meeting held on June 2, 2016 in Jakarta, Bank Indonesia, along with the related national and regional Governments, discussed initiatives to promote urban competitiveness and developments towards the creation of smart cities. In regard to the latter, Bank Indonesia encouraged the implementation of an electronification program in order to improve the efficiency of the relationship between People-Business-Government and good governance.

The great potential of Indonesia’s maritime sector also needs improvement in order to serve as one of the country’s sources of sustainable economic growth. The experience of other countries shows that the successful development of the maritime sector requires an integrated policy to create a strong maritime ecosystem. Therefore, coordination for the development of a maritime infrastructure which encompasses several related sectors such as shipping, fishing, tourism, and passenger ships, as well as maritime human resources and institutions is required. At a coordination meeting attended by Bank Indonesia along with related Ministries, Institutions and Regional Governments in Batam on August 12, 2016, agreement was reached on several matters to be prioritized in support of the development of the maritime sector. One of these was the implementation of the ‘one map and one ship design policy’ intended to facilitate the development of the shipping industry. In addition, an integration of logistics infrastructure development with regional development is required to support the improvement of connectivity between industrial areas, residential areas and transport nodes. Improving the quality of institutional infrastructure also needs to be prioritized through bureaucratic reforms, with a particular focus on public services and electronic-based government systems, as well as an increase in the capacity of the State Civil Apparatus (ASN) at the national and regional levels.

The transformation of the manufacturing industry is one of the keys to increase the global competitiveness of Indonesia. In response to this, Bank Indonesia held a coordination meeting in Surabaya on 25 November 2016, along with the relevant Ministries, Institutions, and Regional Governments to discuss the strategies for improving the competitiveness of the national manufacturing industry. In this meeting, it was agreed that the transformation of the manufacturing industry must be conducted through revamping various aspects, including human resources, energy supply, and other infrastructure. To this end, a policy strategy aimed at encouraging the transformation of the manufacturing industry should be adopted in an integrated, synergistic and in a consistent manner directed at strengthening the competitiveness of national industry. The transformation of national industry is to be undertaken in phases by referring to the National Industrial Development Masterplan (RIPIN) which focused on efforts to increase the added value of natural resources (Phase 1), promote competitive advantages and environmental insight (Phase 2), and turn Indonesia into a formidable industrialized nation (Phase 3).

To support the acceleration of structural reforms, the Government launched 14 Economic Policy Packages (PKE) from September 2015 to November 2016 (Table 14.1). These Economic Policy Packages encompassed the harmonization of regulations, facilitation of business licensing, and fiscal incentives. The Government launched 8 PKE in 2015 and 6 PKE in 2016. PKE IX was launched to encourage the development of an electricity infrastructure as well as a supporting infrastructure for logistics improvements (Table 14.1). Subsequently, PKE X was aimed at improving the investment climate through changes to the Negative Investment List (DNI) and increased protection for MSMEs and Cooperatives. This was followed by PKE XI which focused on Export-Oriented Smallholder Business Loans (KURBE), advanced Real Estate Investment Fund (DIRE) facilities, the application of Indonesia Single Risk Management (IRSM), as well as the development of the pharmaceutical and medical devices industry. In PKE XII, the Government highlighted efforts to improve the ease of doing business, particularly for MSMEs, including through the simplification of procedures for establishing companies and buildings. Meanwhile, PKE XIII focused more on efforts to enhance the access of Low-Income Communities (MBR) to housing. In late November 2016, the Government launched PKE XIV which pertain to the National E-Commerce Road Map. By the end of 2016, the synchronization and completion level of the deregulation of Economic Policy Packages I - XIV had reached 99%.

In order to oversee the implementation of the Economic Policy Packages (PKE) detailed above, the Government formed a PKE Implementation Task Force following
Chapter 14

Local Economic and Financial Development Coordination (KEKD) forum.

Policy Coordination on Financial Market Deepening

A robust, sustainable, and inclusive economic growth requires an adequate financial support. Therefore, a deep financial markets becomes an important factor not only for the funding development, but also for the effectiveness of monetary and fiscal policies, as well as for providing a medium to conduct a risk and liquidity management in the economy. However, Indonesia’s financial markets are still lagging behind compared to its peer countries, implies that Indonesia remains heavily reliant on the banking sector for financing. In developed countries, the financing of the economy is ever-evolving and has been dominated by financial institutions other than banks.

There are at least six important priorities in accelerating the financial markets deepening. First, increase the number of available financial market instruments. Second, strengthen domestic investor base, in terms of both institutional investors (such as pension funds and insurance) and retail investors. Third, enhance long-term investment instruments, accompanied by creation of a securities reverse-repo mechanism and the expansion of hedging instruments. In this regard, Bank Indonesia, in a gradual and measurable manner, has begun issuing provisions on derivative instruments to meet hedging needs and accommodate funds from abroad, including repatriated tax amnesty funds. Fourth, an efficient financial market intermediaries (primary dealers/brokers) to improve the liquidity and efficiency of transactions in the financial markets. Fifth, a safe and effective financial market infrastructure, to ramp up volumes and reduce transaction costs, including the Electronic Trading Platform (ETP), the centralization of clearing and underwriting (Central Counterparty/CCP), Financial Technology (Fintech), the administration of securities (custody), and the automation of integrated and efficient settlement processes. Sixth, a better cooperation among relevant authorities.


Table 14.1. Government Economic Policy Package

<table>
<thead>
<tr>
<th>Package IX</th>
<th>Package X</th>
<th>Package XI</th>
<th>Package XII</th>
<th>Package XIII</th>
<th>Package XIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Electricity Infrastructure&lt;br&gt;- Logistics</td>
<td>Investment Openness (Negative Investment List)</td>
<td>- Export-Oriented People’s Business Credit (KURBE)&lt;br&gt;- Indonesia Single Risk Management (IRSM)</td>
<td>Enhancing Ease of Doing Business</td>
<td>Affordable Housing for Low-Income Earners</td>
<td>National E-Commerce Roadmap</td>
</tr>
</tbody>
</table>

Source: Coordinating Ministry for Economic Affairs
Bank Indonesia also agreed to cooperate with the Ministry of Finance and the Financial Services Authority (OJK) in accelerating the supply of economic financing sources. This cooperation included the establishment of the Coordination Forum for Development Financing through Financial Markets Deepening (FK-PPPK) (Diagram 14.2), the expedited implementation of policies related to all elements of the financial markets, and the exchange of data and information. Over the course of 2016, FK-PPPK initiated several joint activities, including identifying challenges related to priority infrastructure project financing through financial market instruments, organizing workshops on the role of the capital market as an alternative for domestic infrastructure financing, as well as staging roundtable discussions on potential financing for electricity infrastructure. In addition, FK-PPPK is currently preparing a masterplan on the development of financial markets.

Bank Indonesia also actively coordinated on measures to encourage the development of Islamic financing sources to further support the national economy. In this regard, Bank Indonesia joined the National Committee for Sharia Finance (KNKS), which is chaired by the President of the Republic of Indonesia.14 Bank Indonesia also worked with Islamic finance industry practitioners, who are members of the Indonesia Islamic Global Market Association (IIGMA), in drawing up an Islamic Financial Market Code of Conduct (ICOC). On October 25, 2016, the ICOC was launched as a guide for practitioners in the Islamic finance sector to perform transactions in compliance with the rules of Islamic Law, or Sharia.

To promote the social aspects of Islamic finance, Bank Indonesia cooperate with relevant institutions to initiate the compiling of Zakat Core Principles (ZCP) and Waqf Core Principles (WCP). ZCP serve as a guideline for the effective management of zakat in international forums. The drafting of ZCP was done by Bank Indonesia in conjunction with the National Amil Zakat Board (BAZNAS), the Islamic Research and Training Institute-Islamic Development Bank (IRTI-IDB) as well as with other countries which are members of the International Working Group-Zakat Core Principles (IWG-ZCP). ZCP were launched at the World Humanitarian Summit of the United Nations in Istanbul, Turkey, on May 23, 2016. Meanwhile, WCP were compiled by Bank Indonesia in cooperation with the Indonesian Waqf Board (BWI), IRTI-IDB and other member countries of the International Working Group-Waqf Core Principles (IWG-WCP). Bank Indonesia also cooperated with the BWI in the preparation of the BWI roadmap which will be used as input in the amendment of the Law on Waqf. Furthermore, Bank Indonesia also cooperated with the Ministry of SOEs, Ministry of Finance, and BWI in designing a waqf linked sukuk (Islamic bond) model to make waqf assets more productive and add to the types of available sukuk as a means of attracting investors.

To promote an understanding and public awareness of Islamic economics, Bank Indonesia, in cooperation with relevant parties, continued to organize dissemination and education programs. In 2016, Bank Indonesia held the third Indonesia Sharia Economic Festival (ISEF) in Surabaya. This event saw the declaration of a Joint Commitment to Accelerate the Development of Islamic Economics and Finance between Bank Indonesia, the Coordinating Ministry for Economic Affairs, the Ministry of National Development Planning, the Ministry of Finance, the Creative Economy Agency, LPS, the Government of East Java, Nahdlatul Ulama, Muhammadiyah, BAZNAS, BWI, and 17 Pondok Pesantren (Islamic boarding schools) based in East Java. The event also produced an agreement on a roadmap for the economic independence of the country’s Pesantren.

### Policy Coordination on Managing Positive Perceptions of the Indonesian Economy

The momentum for economic recovery needs to be sustained by maintaining positive perceptions among investors with regard to the domestic economy, since investors’ investment behavior is strongly influenced by such perception. These perceptions are generally related to the country’s investment climate and risk level, reflected by economic fundamentals indicators such as economic growth, inflation, current account deficit, foreign exchange reserves, and the country’s sovereign credit rating.

---

14 Presidential Decree No. 91 of 2016 concerning the National Committee of Sharia Finance (KNKS) set up a KNKS Steering Committee consisting of six ministers and four Chairman of relevant authorities/agencies, including the Governor of Bank Indonesia.
In the global financial markets, a sovereign credit rating is an indicator that reflects a country’s ability to pay its foreign debt obligations in accordance with the agreed terms and conditions. Assessments of sovereign credit ratings, which are performed by rating agencies, are generally based on the country’s macroeconomic conditions and outlook, the government’s financial performance, external risks, the effectiveness of institutions, as well as fiscal and monetary sector performance. Empirically, sovereign credit ratings have been shown to have an influence on the cost of borrowing when a country wishes to issue bonds. The sovereign credit rating of a country also serves as a benchmark for ratings given to private companies in the country concerned, thus indirectly also affecting the cost of investing in the private sector. In addition, a sovereign credit rating also determines the access of a country to international capital markets.

As part of coordination efforts aimed at maintaining a positive perception of the Indonesian economy, the National Investor Relations Unit (IRU) was formed. Bank Indonesia acts as the Secretariat of the National IRU which is responsible for coordinating with relevant Ministries and Institutions in the formulation of communications strategies for investors and rating agencies. Additionally, in a bid to reduce asymmetric information, the National IRU regularly collects official data and information from various Ministries, Institutions, and Authorities for the relevant rating agencies. To date, the National IRU has consistently managed to ensure that the positive perception of the three major rating agencies - Fitch Ratings, Moody’s Investors Service and Standard and Poors (S&P) - with regard to Indonesian economy has been maintained. The ratings assessments of these three agencies serve as a reference for investors in the global market when making investment decisions. In addition, there are two Japanese rating agencies which routinely conduct assessments of Indonesia which serve as a reference for Japanese investors. These are the Japan Credit Rating Agency (JCRA) and the Rating and Investment Information Corporation (R&I).

Coordination efforts through the National IRU managed to preserve a positive perception among the rating agencies. As of the end of 2016, Indonesia maintained an investment grade rating based on the assessments of Fitch and Moody’s, as well as the aforementioned Japanese rating agencies. Furthermore, on December 21, 2016, Fitch upgraded Indonesia’s credit rating outlook from Stable to Positive (Chart 14.1). Fitch stated that there were three key factors underpinning this improvement in outlook. First, robust Indonesian macroeconomic stability amid global economic challenges and uncertainty. Second, the effective monetary and exchange rate policy in reducing turbulence in the financial markets. Third, the consistent structural reforms for enhancing the investment climate and driving economic growth in the medium term.

Efforts to manage a positive perception were also undertaken in the regions, in particular as a means of ramping up Foreign Direct Investment (FDI). Bank Indonesia played an active role in enhancing the attractiveness of regional investment through the establishment of Regional Investor Relations Units (RIRU) with pilot projects in five provinces, namely North Sumatra, West Java, East Java, East Kalimantan, and North Sulawesi. Through the RIRU forum, Bank Indonesia built strategic partnerships with stakeholders in the regions, especially in facilitating promotional activities and managing positive perceptions about investment in the regions. In 2016, the RIRU Pilot Projects in the 5 provinces continued to generate and improve information about regional economic development as well as investment potential in the regions. The Regional Investor Relations Units in West Java and East Kalimantan even carried out investment promotions overseas of their respective regions.

At the global level, efforts to attract foreign capital inflows into Indonesia were undertaken through the establishment of the Global Investor Relations Unit (GIRU). The plan was for GIRU to serve as a coordination platform between Bank Indonesia Representative Offices in abroad (KPIwLN) and representatives of the Government through the relevant Ministries and Institutes, in particular with Embassies/Consulate Generals and Indonesia Investment Promotion Centers (IIPC), which are managed by the Investment Coordinating Board (BKPM). The GIRU is expected to take advantage of its geographical proximity to foreign investors and act as an extension of the National Investor Relations
Unit (IRU) in conducting investor relations activities, including by disseminating the latest developments in the Indonesian economy.

Coordination among the IRU, RIRU, and GIRU was established to boost the management of positive perceptions of the Indonesian economy. The synergies were brought to bear, among other things, in the investor summits organized by Indonesian Embassies/Consulates which sought to bring together investment demand and supply, especially in the real sector (Table 14.2). At these forums, the IRU acted as a facilitator connecting investors with potential investments in Indonesia. Meanwhile, GIRU played a role in promoting the development of the national economy, while RIRU promoted the economic development and potential of the regions.

Policy Coordination to Promote Regional Economic Development

Bank Indonesia, through its Regional Offices (KPwDN), reinforced coordination with regional stakeholders to support regional economic development. Coordination efforts towards regional economic development sought to encourage inclusive and sustainable economic growth through the development of new sources of economic growth and support for economic equality among the regions. Moreover, coordination of regional economic development were directed towards supporting the effectiveness of Bank Indonesia’s policy implementation. Characteristic heterogeneity between regions requires Bank Indonesia to pay special attention to spatial dynamics when devising a policy. The strengthening of Bank Indonesia’s role in contributing to regional economic development was reaffirmed by internal arrangements which kept Bank Indonesia firmly within the corridor of its framework of duties and authority. The commitment to strengthening Bank Indonesia’s role in the regions was partly evinced by the expansion of its KPwDN network in all provinces in Indonesia.

Coordination with regional stakeholders in the context of regional economic development was embodied in various program activities primarily related to development planning. In various regions, Bank Indonesia actively contributed to the formulation of macroeconomic assumptions, an important part for the drafting of Regional Working Program Plans (RKPD) and Draft of Regional Budgets (RAPBD). In areas such as East Kalimantan, North Sulawesi and others, Bank Indonesia was also directly involved as a moderator in public discussions and Development Planning Deliberation Forum (Musrenbang) related to the drafting of the Provincial Medium-Term Development Plan (RPJMD) proposal.

Coordination with regional stakeholders was also conducted in the context of developing the potential of regional economies and MSMEs, such as an initiative undertaken by Bank Indonesia Regional Office in North Maluku to stimulate a cross-island cooperation called SE-HaTTI15. This collaboration was aimed at improving inter-regional connectivity to stimulate the region’s economy and improve public prosperity, particularly through a joint tourism promotion by creating historical and cultural tour packages in Ternate, Tidore, and Jailolo. Bank Indonesia also helped to promote cultural tourism of the three regions through Festival Kreasi dan Inovasi Anak Negeri (Children of the Nation’s Creativity and Innovation Festival), held in November 2016. Meanwhile, Bank Indonesia Regional Office in Papua Province teamed up with the City of Jayapura to boost the area’s tuna and yellow tail snapper fishing industry through entrepreneurship training and the teaching of simple bookkeeping skills to numerous groups of fishermen.

Policy Coordination on Payment Systems and Currency Management

The momentum for economic recovery also requires a sustainable payment systems with a reliable and efficient currency management. These conditions can be achieved through coordination between the relevant Ministries, Institutions, and Authorities. In terms of payment systems, several major programs included coordination related to financial inclusion and Money Changer (KUPVA). In addition, cooperation was reinforced at international forums, both

Table 14.2. IRU-RIRU-GIRU Synergy

<table>
<thead>
<tr>
<th>Event</th>
<th>Organizer</th>
<th>Focus of Investment Promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia Festival 2016 in Ottawa &amp; Montreal, Canada, 22-25 May 2016</td>
<td>Embassy of the Republic of Indonesia in Ottawa</td>
<td>Trade, Investment, and Tourism</td>
</tr>
</tbody>
</table>

15 An acronym of Segitiga Emas (Golden Triangle) and the name of the Regencies/Cities involved in the collaboration (West Halmahera, Ternate and the Tidore Islands)
with central banks as well as international institutions. Meanwhile, in terms of currency management, coordination focused on activities related to the issuance, circulation, and/or revocation and withdrawal of the rupiah, as well as currency destruction activities and the distribution of currency to the entire territory of the Republic of Indonesia.

Coordination within the framework of developing financial inclusion was aimed at encouraging the improvement of social welfare. Access to financial services reduces economic vulnerability and provides a means of building assets and economic capacity which, in turn, paves the way to getting out of poverty. The availability of access to basic financial services is important for allowing the wider participation of the whole of society in development, including low-income groups, and for enabling everyone to receive greater benefits from national development. In 2016, Bank Indonesia coordinated with the Ministry of Social Affairs to promote the distribution of Family Hope Program (PKH) social assistance in non-cash form through Digital Financial Services. In addition to being more targeted and efficient, the distribution of non-cash social assistance is effective not only in educating public on access to financing but also in improving their access to it.

In regard to the development of financial access, the Government launched its National Strategy for Financial Inclusion (SNKI) document in 2012 as part of the 1st ASEAN Conference on Financial Inclusion. This document served as an embryo for the enactment of Presidential Regulation No. 82/2016 concerning a National Strategy on Financial Inclusion, on November 18, 2016. The implementation of an integrated SNKI was aimed at encouraging the penetration of the financial sector in order to meet the 75% of target percentage in adult population with access to formal financial institutions by 2019. The pursuit of this target will be undertaken through the adoption of a number of financial inclusion policies supported by effective regulations, infrastructures, and organizations. To this end, the National Council for Financial Inclusion was established in order to strengthen coordination and synchronization in executing the SNKI, while directing measures and policies for solving problems and overcoming obstacles in the SNKI’s implementation, as well as monitoring and evaluating the implementation.16

Bank Indonesia also strengthened coordination with law enforcement agencies in carrying out tasks related to payment systems and currency management. This coordination with law enforcement agencies focused on four aspects, as outlined in a Memorandum of Understanding between Bank Indonesia and the Indonesian National Police.17 First, the handling of alleged offenses related to payment systems and Money Changer (KUPVA).18 Second, the handling of alleged violations of the obligation to use the rupiah for transactions within the territory Republic of Indonesia (NKRI) and alleged criminal acts against the rupiah.19 Third, the providing of security to Bank Indonesia and guarding of valuable state property.20 Fourth, the guidance and supervision of Security Service Companies (Badan Usaha Jasa Pengamanan) that safeguard the transport and processing of currency.21 In 2016, the activities conducted by Bank Indonesia and the Police, both at the central and regional levels, included the implementation of a coordination forum with the purpose of combating unauthorized Money Changer (KUPVA), the holding of discussion forums regarding credit card fraud, and the dissemination of information on the provisions and management of payment systems.

Bank Indonesia also cooperated extensively in the field of payment systems in international forums. Within ASEAN, Bank Indonesia served as the deputy chair of the Working Committee on Payment and Settlement Systems (WCPS) and the Working Committee on Financial Inclusion (WCFINC). In 2016, WCPS activities focused on following up on plans set out in the 2016–2025 Strategic Action Plan (SAP). To get an overview of the potential of the

---

16 The National Council for Financial Inclusion is chaired in person by the President of the Republic of Indonesia, while the Vice-President acts as Deputy Chairperson. Meanwhile, the Coordinating Minister for Economic Affairs acts as Chief Executive, together with the Governor of Bank Indonesia as Deputy Chief Executive I and the Chairman of the Board of Commissioners of the Financial Services Authority as Deputy Chief Executive II.

17 Memorandum of Understanding (MoU) on Cooperation in the framework of Supporting the Duties and Authorities of Bank Indonesia was signed by the Governor of Bank Indonesia and the Chief of Police on September 1, 2014. This was subsequently followed by the signing of Principles of Understanding (PoU) by 29 Bank Indonesia Regional Offices (KPwDN) and their respective Local Police Force.

18 Cooperation Agreement between Bank Indonesia and the Chief of the Criminal Investigation Agency of the Indonesian National Police (Kabareskrim) on 24 September 2014, concerning Procedures for the Handling of Alleged Offenses related to Payment Systems and Foreign Exchange Operations.

19 Cooperation Agreement between Bank Indonesia and the Chief of the Criminal Investigation Agency of the Indonesian National Police (Kabareskrim) on 20 November 2015, concerning Procedures for the Handling of Alleged Violations of the Obligation to Use the Rupiah in the Territory of the Unitary Republic of Indonesia as well as Alleged Criminal Acts Against the Rupiah.

20 Cooperation Agreement between Bank Indonesia and the Chief of the Indonesian National Police Mobile Brigade Corps (Kakor Brimob) on February 23, 2015, concerning Procedures for Providing Security to Bank Indonesia and the Guarding of Valuable State Property.

21 Cooperation Agreement between Bank Indonesia and the Chief of the Security Maintenance Agency of the Indonesian National Police (Kabaharkam) on February 26, 2015, concerning the Implementation of Guidance and Supervision of Security Service Companies (Badan Usaha Jasa Pengamanan) that Safeguard the Transport and Processing of Currency.
interlinkage of interstate payment system infrastructures, WCPSS performed a mapping survey on the condition of the payment system infrastructure in ASEAN. WCPSS also paid attention to the need of migrant workers in ASEAN countries to send remittances more effectively and efficiently. In 2016, WC-FINC compiled the Digital ASEAN Financial Inclusion (DFI) Framework which aims to promote DFI through the provision of financial products and services to the wider public. This framework also seeks to raise awareness of digital trade and the use of electronic payments, as well as online consumer protection.

In the framework of the prevention and combating of counterfeit currency circulation, Bank Indonesia continued to coordinate with all the relevant law enforcement agencies, especially elements of the Coordinating Agency for the Eradication of Counterfeit Money. (Botasupal). This coordination entailed the exchange of information, including improvement of security elements in rupiah banknotes, regulations related to the procurement of raw materials and money printing machines to support better and more accurate oversight, as well as the creation of a nationwide list of known counterfeiters. In addition, Bank Indonesia also played a role in the delivery of expert testimony in criminal cases involving currency counterfeiting, including through conducting laboratory tests on suspected counterfeit currency at the request of the police. Bank Indonesia’s support for these repressive law enforcement measures is expected to have a deterrent effect on potential currency counterfeiters.

Bank Indonesia coordinated with relevant Ministries and Institutions, State-Owned Enterprises (BUMN), and transport companies to support the smooth distribution of currency. In 2016, Bank Indonesia also teamed up with the Navy and Police to provide Mobile Cash services in 39 of Indonesia’s most outermost islands. Bank Indonesia also established cooperation with the Indonesian railways company, PT. Kereta Api Indonesia (KAI), and Indonesian National Shipping company, PT. Pelayaran Nasional Indonesia (Pelni), in support of scheduled railway and passenger ship transportation modes. To ensure its currency distribution activities were secure, Bank Indonesia collaborated with the Indonesian National Police in securing and guarding currency distribution.

Bank Indonesia also coordinated with the Ministry of Finance in the process of destruction of damaged or shabby money. This forms part of the mandate of the Act on Currency which was further outlined in a Memorandum of Understanding between Bank Indonesia and the Government on coordinating in matters of currency planning, printing and destruction. This coordination included the submission of information on the amount of shabby money is to be destroyed on a quarterly basis. Furthermore, Bank Indonesia also coordinated with the Ministry of Justice and Human Rights (Kemenkumham) in making public announcements about the amount of damaged or shabby money destroyed through the State Gazette of the Republic of Indonesia.

With respect to the issuance of 2016 Emission Year (EY) rupiah currency, Bank Indonesia coordinated with various relevant Ministries and Institutions. This coordination included working together on the selection of images of national heroes and/or former president as the main pictures on 11 (eleven) denominations of 2016 Emission Year (EY) rupiah currency. As mandated by the Law on Currency, the rupiah denominated currency must contain the image of a national hero and/or former president, the determination of which is to be set forth in a Presidential Decree. With relation to this, coordination took place in the tracing and visiting of the descendants of the 11 national heroes selected to be used for the 2016 Emission Year (EY) rupiah currency, as well as requesting their consent for the use of their ancestors’ images. Furthermore, the results of these coordinated efforts were set forth in Presidential Decree No. 31 of 2016 on the Determination of Images of National Heroes as the Main Pictures on the Front of Rupiah Banknotes and Rupiah Coins of Republic of Indonesia.

---

22 In accordance with Article 28 of the Act on Currency, these elements of Botasupal comprise the State Intelligence Agency, the Indonesian National Police, the Attorney General’s Office, the Ministry of Finance, and Bank Indonesia.

Financial crisis prevention and resolution efforts require strong references and legal foundations. Experiences show that crisis management requires substantial funds and resources. Fiscal Costs of Indonesian financial crisis amounted to 57% of GDP during the 1997 banking crisis, among the highest proportion compared to its peer countries (Chart 1). Meanwhile, the share of Indonesia’s debt to GDP at the time of the 2008 crisis was also high, at 68% of GDP (Chart 2).\(^1\) In addition, issues relating to legal certainty present a major challenge for policymakers when making sound decisions in times of crisis. In such circumstances, coordination among institutions plays an important role, especially in relieving sustained pressure on the financial system which may trigger a crisis. To this end, the support of a strong legal framework is required in crisis prevention and resolution.

After undergoing several lengthy discussion, the Act on Prevention and Resolution of Financial Crisis (UU PPKSK) was enacted on April 15, 2016. The ratification of UU PPKSK represented a very important achievement in efforts to maintain the stability of the financial system. UU PPKSK provides a stronger legal framework for the Financial System Stability Committee (KSSK) for preventing and mitigating financial crisis. UU PPKSK also strengthens the roles and functions of respective Ministries and Institutions, with the intention of improving governance in the prevention and mitigating of financial crisis.

In general, UU PPKSK mandates three main things. First, monitoring and maintaining stability in Financial System. Second, mitigating financial crisis. In this case, the President of the Republic of Indonesia plays an important role in determining the status of crisis condition of financial system, including any requisite mitigation measures. Third, handling systemically important bank problems, both under normal conditions and crisis. Methods of handling bank problems, as stipulated in UU PPKSK, encourage the concept of bail-in which pertains to the handling of problems using the concerned bank’s own resources, in line with international practice based on recommendations from the Financial Stability Board (FSB).

UU PPKSK also mandated the establishment of the Financial Stability Committee, or KSSK.\(^2\) The KSSK is composed of the Minister of Finance who serves as the coordinator as well as a member with voting rights, the Governor of Bank Indonesia and the Chairman of the Board of the Financial Services Authority (OJK) as members with voting rights, and the Deposit Insurance Corporation (LPS) as a member without voting rights. These four institutions are responsible for maintaining financial system stability in Indonesia as well as for handling systemic bank problems. The KSSK organizes regular meetings, or meetings at any particular time upon request from a KSSK member. These meetings, discuss the assessments of financial system stability conditions and any required steps in this regard. Decision making in the KSSK is based on consultation and...
In the event that a consensus is not reached, the proposal submitted by a KSSK member is rejected but may be submitted to another KSSK meeting. At this subsequent meeting, a decision will be made by majority vote if the meeting is still not able to reach a consensus.

The KSSK is responsible for assessing financial system stability (SSK) conditions based on input from every KSSK member. Furthermore, the KSSK gives recommendations to the President of the Republic of Indonesia relating to any decision on determining the state of financial system. The KSSK is also instrumental in handing over the handling of systemic bank solvency problems to the LPS, including steps taken by KSSK members to support the handling of systemic bank problems by the LPS. Additionally, the KSSK makes decisions on the purchase of Government Securities (SBN) belonging to LPS by Bank Indonesia for the purpose of handling bank problems.

In practice, each KSSK member has a respective role as mandated by UU PPKSK. All KSSK members exchange data and information with each other. This data and information then serve as a reference for discussing the state of the financial system at KSSK Meetings. The Ministry of Finance acts as the KSSK coordinator and monitors risks in the fiscal sector. Meanwhile, in addition to its authority in establishing systemic banks, the OJK also conducts assessments on the fulfillment of requirements pertaining to the solvency and soundness of banks, when it comes to the potential granting of Short-Term Liquidity Loans (PLJP) by Bank Indonesia. In the event that a systemic bank runs into solvency problems, the OJK will coordinate with the LPS in determining follow-up handling measures. In this respect, the LPS plays a role in handling systemic bank solvency problems using several methods. These include the transfer of some or all the assets and/or liabilities of the systemic bank concerned to a beneficiary bank, the transfer of some or all the assets and/or liabilities of the systemic bank concerned to an intermediary bank, and handling Banks in accordance with the Act on the Deposit Insurance Corporation.

In terms of the implementation of the Act on the Prevention and Resolution of Financial Crisis (UU PPKSK), Bank Indonesia has six major roles in the Financial System Stability Committee (KSSK). First, BI plays a role in decision making in the KSSK, both under normal conditions and crisis. Under UU PPKSK, the status of a financial crisis is to be determined by the President of the Republic of Indonesia in person, based on recommendations from the KSSK. Second, BI coordinates in the monitoring and maintenance of financial system stability, in particularly identifying potential escalations in systemic risks and formulating recommendations to prevent these risks from materializing. Third, BI coordinates with the OJK in designating systemically important banks. Fourth, BI is responsible for granting Short-Term Liquidity Loans/Short-Term Liquidity Financing based on Sharia principles (PLJP/S). Fifth, BI purchases government securities owned by LPS for handling the problems of banks. Sixth, BI supports bank restructuring programs. To follow up on these roles, Bank Indonesia not only has strengthened its internal provisions on Crisis Management Protocol (PMK), but has also drawn up a number of internally-derived provisions.