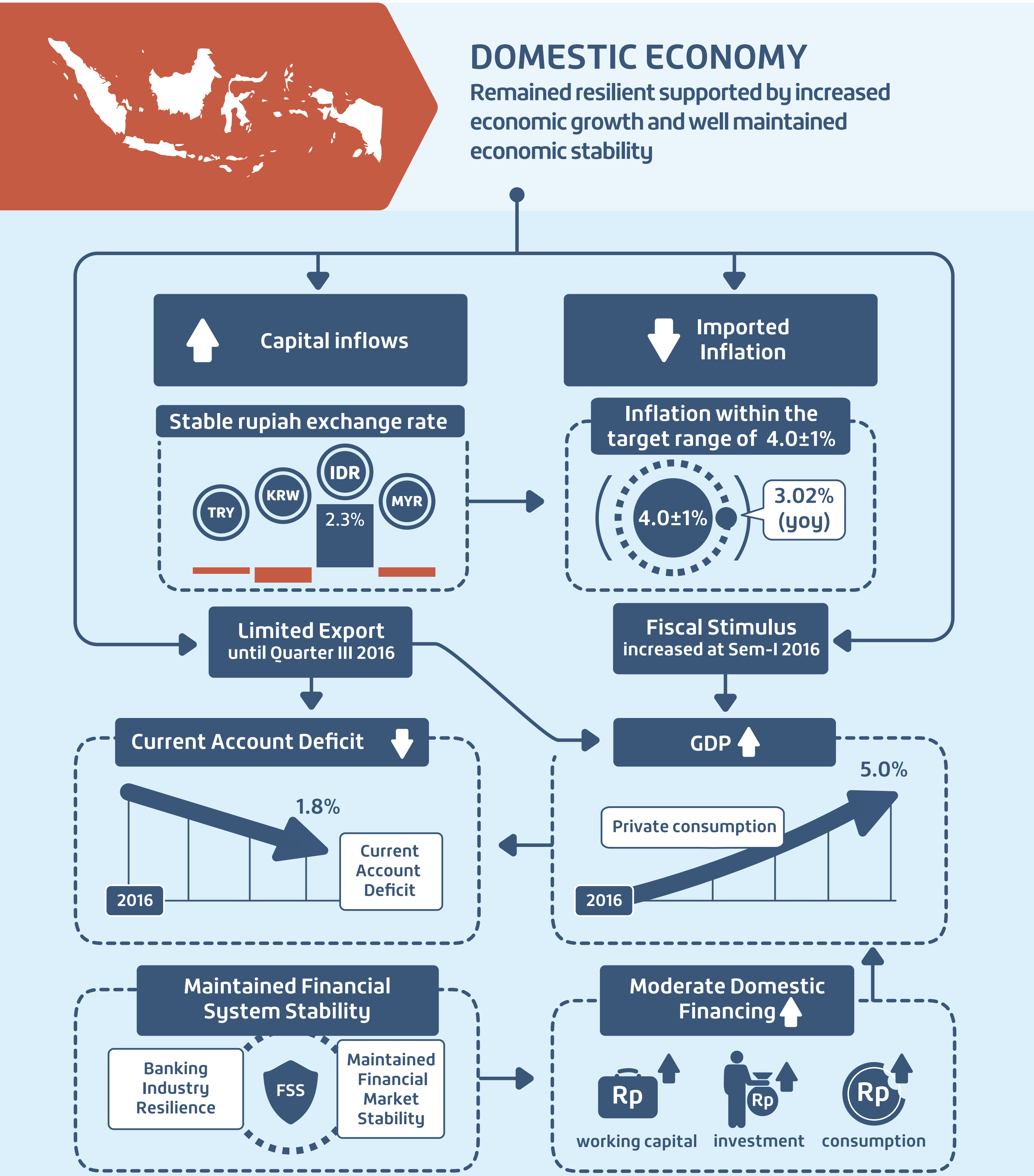
PART II

DOMESTIC ECONOMY

Image caption:
Manufacturing sector activity can reflect the performance of an economy. Productions levels may rise or fall according to the dynamics and developments of the economy.

DOMESTIC ECONOMY



PART II

Domestic Economy

In 2016, the global economy that continued to perform below expectations also posed challenges for the domestic economy. Restrained global economic growth and low commodity prices that persisted until the third quarter of 2016 underscored the risk of decline in exports and economic growth. This downturn in economic growth should be concerned, as it would not only push down on corporate performance, but also give rise to challenges in improving bank performance, effectiveness of monetary policy transmission, and management of fiscal policy. Adding to the complexity of these challenges was the possible disruption to macroeconomic and financial system stability that could result. The heightened uncertainty hanging over global financial markets during this time also increased the risk of pressure bearing down on economic stability in 2016.

During the course of the year, smooth adjustments in the domestic economy bolstered by a solid policy synergy mitigated the risks from these adverse global conditions. Indonesia's economic growth strengthened from 4.9% in 2015 to 5.0% in 2016, buoyed by domestic demand. Exports, however, remained limited. Added impetus for this achievement came from a fiscal stimulus, mainly during the first half of 2016, and the positive impact of monetary and macroprudential easing policies. The macroeconomic policy response shored up consumer confidence and helped sustain buoyant household consumption. In 2016, the improving economy benefited from the onset of rising exports during the fourth quarter, consistent with the positive effect of increasing global commodity prices. This development then generated multiplier effects in private investment, which also began to climb. In analysis by geographical area, improvement in the economy was mainly observed in Sumatra, Java, and Kalimantan. Improvement in Eastern Indonesia, however, slowed to a minor extent due to flagging mining sector performance.

The improvement in the economy during 2016 was reinforced by a fiscal stimulus while still maintaining fiscal resilience and sustainability. The available fiscal space for a stimulus was considerable, particularly during the first half of 2016, due to the positive impact of budget reforms with energy subsidies reallocated to spending on infrastructure. While working to deliver this fiscal stimulus, the Government also pursued a series of measures to improve the composition of tax revenue. In 2016, the Government has implemented a tax amnesty that was assessed as highly successful in comparison to results achieved in many other countries. In the second half of 2016, the Government performed policy measures for fiscal consolidation, aimed at securing the credibility of the fiscal sustainability outlook. These various policy initiatives succeeded in curbing the deficit in the Revised 2016 State Budget to a prudent 2.5% of GDP, down from the 2015 level of 2.6% of GDP. Alongside this, the public debt-to-GDP ratio was kept low in 2016 at 27.8%.

The higher economic growth of 2016 was supported by subdued inflation. That year, inflation was recorded at a low 3.02%, on par with the inflation in 2015 that came within the target range of 4±1%. The low inflation represents the combined effect of well managed aggregate demand, an appreciating rupiah exchange rate, and decline in inflation expectations. These factors contributed to a significantly low rate of core inflation at 3.07% in 2016. The mild inflation also represents the effect of low administered prices inflation, due to falling prices for a number of strategic energy commodities including fuels, electricity tariff for customers using upwards of 2,200 VA, and 12 kg LPG cylinder. Alongside this, volatile foods inflation remained well under control despite a modest increase over 2015 due to supply shocks from the effects of La Nina. All in all, the policy coordination between Bank Indonesia and the Government in controlling inflation, including the coordination via the Inflation Monitoring and Controlling Team at national level (TPI) and sub-national level (TPID), yielded a positive contribution to the low inflation of 2016.

Macroeconomic stability was also supported by the rupiah appreciation. In contrast to other regional currencies that suffered depreciation, the rupiah charted an average exchange rate of Rp13,305 per USD, a gain of 0.7% over 2015. Point-to-point, the rupiah closed 2016 at Rp13,473 per USD, having appreciated 2.3% over the level at the end of 2015. The appreciating trend in the rupiah was especially visible in the first three quarters of 2016 before coming under downward pressure towards the end of the year. The rupiah appreciation were closely tied to the influence of domestic economic resilience, including that of the reduced current account deficit, and the positive impact of the Government's tax amnesty program that boosted investment confidence in Indonesia. These positive perceptions led to further inflows of foreign capital and ultimately spurred an appreciating trend in the rupiah during 2016.

The upward trend in the rupiah was supported by improved performance in the Indonesia balance of payments and external sector resilience. Developments in the global economy posed challenges for improving the 2016 balance of payments. Nevertheless, the domestic adjustment process, including corporate internal consolidation, exchange rate movement in line with its fundamental, and positive investor perceptions of the Indonesian economic outlook, including the impact of the tax amnesty, contributed to improvement in the current account and the capital and financial account, the most important components of the balance of payments. The current account eased to 1.8% of GDP in response to improvement in the trade balances of oil & gas and non-oil & gas. Similarly, the capital and financial account recorded an enlarged surplus due to an increase in capital inflows driven by positive perceptions of domestic economic resilience, including the effect of the tax amnesty. Taken together, the balance of payments recorded a USD12.1 billion surplus in 2016, which in turn raised the level of international reserves to USD116.4 billion. Total foreign debt also remained at a healthy level at 34% of GDP, down from 36% of GDP in 2015.

Higher economic growth in 2016 was also underpinned by financial system stability with low systemic risk. The banking system showed a solid performance and the domestic financial market remained adequately stable, as reflected in the low level of the financial system stability index. In the banking industry, various indicators pointed to the resilience in the banking system. Banking liquidity indicators also improved in 2016, partly on expansion of government budget and the impact from relaxation of the Bank Indonesia statutory reserve requirement. The bank capital adequacy ratio (CAR) also mounted to 22.8%. Alongside this, credit risk reflected in the non-performing loans (NPLs) indicator remained at a subdued level below the safe threshold of 5%, despite having climbed from 2.5% to 2.9% in 2016. However, indications suggest that the rise in NPLs and slack private investment led to tepid growth in bank lending during 2016 at 7.9%. Sluggish bank lending encouraged use of alternative financing source from non-bank, such as by issuing shares, bonds, NCDs, and MTNs. Gross non-bank financing growth increased significantly from 17.2% in 2015 to 76.4% in 2016.

The well-maintained financial system stability in 2016 was closely linked to the sound condition of the national payment system. Various payment system indicators showed an upward trend, bolstered by the consistently smooth operation of the payment system by Bank Indonesia and the industry, in which no significant disruptions occurred. The positive trend was observed in payment system with growth in the value of non-cash retail transactions reaching 15.5% in 2016. The ratio of the retail transactions value captured by payment system to consumption also widened in 2016, indicating a shift in public preference towards the use of non-cash payment instruments in their consumption spending. Regarding the cash payment system, management of rupiah currency, was continuously able to meet public needs for cash in terms of quantities, denominations, timeliness, and quality for circulation. The positive developments in the national payment system during 2016 was supported by the Bank Indonesia commitment concerning the payment system, namely to maintain the smooth operation of transaction processes for all economic players and thus support the economy as a whole.

CHAPTER 3
Economic Growth

Indonesia economic growth rebounded in 2016. Smooth domestic economic adjustment combined with a solid macroeconomic policy response successfully mitigated external risks and nurtured national economic growth, which accelerated to 5.0%. In the fourth quarter of 2016, several developments have indicated a surge of nonbuilding investment activity and exports, thus supporting economic expansion, which are expected to persist into 2017. Stronger economic growth in Indonesia lowered unemployment, reduced poverty and narrowed income inequality in 2016.

Image caption:
Activities in a coal mining. Resource-based commodities play a vital role in the Indonesian economy due to their significant share in the export structure. For this reason, commodity price movements on global markets always impact activity in the domestic economy.

Weaker-than-expected global economic growth posted a number of challenges in terms of stimulating domestic economic growth in 2016. The challenges were triggered by the flagging global economy, prolonged low global commodity prices and highly uncertain global financial markets. The various external risks became a concern in terms of efforts to spur domestic economic growth in Indonesia because global economic growth remained sluggish and Indonesia's terms of trade (ToT) was weak due to low global commodity prices, which threatened to undermine export performance. Furthermore, investment in Indonesia was also at risk of decline if global financial market uncertainty remained high. The various risks demanded vigilance and an appropriate policy response because of the potential to unwind existing efforts to foster domestic economic growth.

Smooth domestic economic adjustment coupled with a solid macroeconomic policy response successfully mitigated external risks and nurtured positive domestic economic growth. Economic growth in Indonesia was recorded at 5.0% in 2016, up from 4.9% in the year earlier, due to the dominant role of domestic demand, particularly through solid household consumption. Large fiscal stimuli during the first half of the year, underpinned by monetary and macroprudential policy easing by Bank Indonesia, also supported strong domestic demand in 2016. Meanwhile, the role of private investment, especially nonbuilding investment, increased significantly through to the third quarter of 2016 on the back of internal corporate consolidation in the private sector. Real exports of goods and services remained weak until the third quarter of 2016 due to weak global demand and low commodity prices. The role of private nonbuilding investment and exports began to pick up in the fourth quarter of 2016 on rising global commodity prices, which offset the risk of economic moderation due to fading fiscal stimuli.

Stronger economic growth in 2016 was also accompanied by better quality growth in terms of employment, poverty and income inequality. The level of open unemployment fell from 6.2% in 2015 to 5.6% in 2016, supported by an increase in GDP absorption to employment. Poverty was also reduced, falling from 11.2% in 2015 to 10.7% in 2016 of the total population, with the gains particularly evident in urban areas in line with stronger manufacturing industry performance along with wholesale and retail as well as services. In addition, the income gap narrowed, reflected by a lower Gini ratio, improving from 0.402 in 2015 to 0.397 in 2016.

3.1. GDP – BY EXPENDITURE

Indonesian economic growth in Indonesia rebounded in 2016 after two years of decline. Economic growth was observed to accelerate from 4.9% in 2015 to 5.0% in 2016 (Table 3.1). In general, domestic economic growth accelerated despite inauspicious conditions reported in various other countries, which strived to stimulate growth during a period of sluggish global economic expansion.

Stronger domestic economic growth in 2016, against a backdrop of global economic moderation, was inextricably linked to smooth domestic economic adjustment and a solid macroeconomic policy response. An economic structure dominated by household consumption successfully dampened the risk of an economic downturn due to weaker external sector performance. Resilient household consumption was supported by low inflation and improving consumer confidence. Simultaneously, an expansive fiscal policy response during the first half of the year, together with monetary policy easing, also supported stronger economic growth in 2016. In general, revamping domestic

Table 3.1. GDP Growth by Expenditure

Percent, yoy

GDP Components	2013	2014	2015*	2016**				
				I	II	III	IV	Total
Household Consumption	5.43	5.15	4.96	4.97	5.07	5.01	4.99	5.01
Non - Profit Institution Serving Household (NPISH) Consumption	8.18	12.19	-0.62	6.40	6.71	6.64	6.72	6.62
Government Expenditure	6.75	1.16	5.32	3.43	6.23	-2.95	-4.05	-0.15
Gross Fixed Capital Formation	5.01	4.45	5.01	4.67	4.18	4.24	4.80	4.48
Building	6.74	5.52	6.11	6.78	5.07	4.96	4.07	5.18
Nonbuilding	0.63	1.58	1.95	-1.20	1.70	2.16	7.07	2.45
Export	4.17	1.07	-2.12	-3.29	-2.18	-5.65	4.24	-1.74
Import	1.86	2.12	-6.41	-5.14	-3.20	-3.67	2.82	-2.27
Gross Domestic Product	5.56	5.01	4.88	4.92	5.18	5.01	4.94	5.02

*preliminary figures **very preliminary figures
Source: BPS - Statistics Indonesia

economy has boosted economic resilience in 2016, stronger than the previous year.

Domestic demand was also an important pillar of domestic economic growth in 2016. Domestic demand was primarily supported by solid household consumption, growing at around 5% each quarter, which contributed around 55% of GDP. In addition, government consumption also bolstered economic growth, particularly during the first semester. Nonetheless, the role of government consumption faded in the second half of the year in line with fiscal consolidation. The role of investment, specifically nonbuilding investment, was solid through to the third quarter on large-scale government infrastructure spending. Meanwhile, listless exports and nonbuilding investment were relatively weak through to the third quarter, before gaining momentum towards yearend.

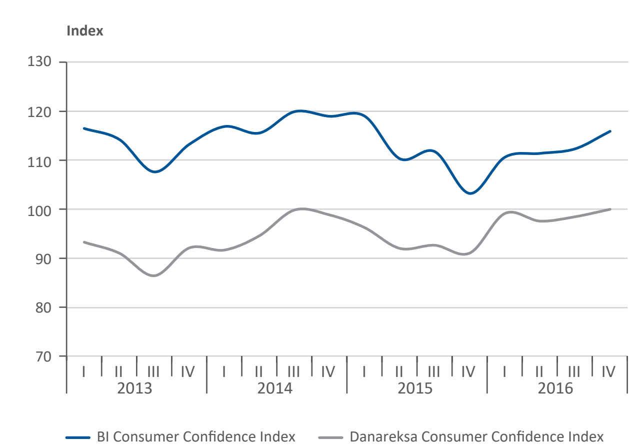
Several factors supported solid household consumption growth at 5.0% in 2016. Consumers were upbeat as reflected by a Consumer Confidence Index (CCI) that returned to optimistic territory at the beginning of 2016, which helped maintain solid consumption (Chart 3.1). More confident consumers stemmed from macroeconomic stability in the form of low inflation and relatively stable exchange rates. Furthermore, low inflation, and maintained consumer purchasing power supported household consumption. The government's fiscal stimuli, coupled with monetary and macroprudential policy easing by Bank Indonesia, also helped to maintain consumer purchasing power. In addition, consumption by non-profit institutions serving households (NPISH) increased due to the various preparations undertaken for the local elections to be held in 2017.

Household consumption gains primarily manifested in the consumption of non-foods & beverages, while consumption of foods & beverages declined. Consumption of non-foods & beverages recorded 4.9% growth in 2016, up from 4.7% in the year earlier (Chart 3.2), affecting secondary goods and tertiary goods. In terms of secondary goods, spending on transportation and communication accelerated from 4.6% in 2015 to 5.7%. Concerning tertiary goods, spending on restaurant and hotel services showed an increase. In general, non-food consumption gains were not only indicative of improvements in the structure of household consumption but were also early indications of future economic growth momentum.

Fiscal stimuli also played an important role in terms of supporting domestic demand and economic growth in 2016, especially during the first half of the year. Positive government consumption growth was recorded in the first two quarters of 2016, even soaring to 6.2% (yoy) in the second quarter due to increased government spending on goods and services. Personnel expenditure also increased significantly due to disbursements of 14th-month salary for civil servants in June 2016. In addition to central government spending, stronger government consumption was also supported locally by regional administrations, which drove government consumption in the first semester.

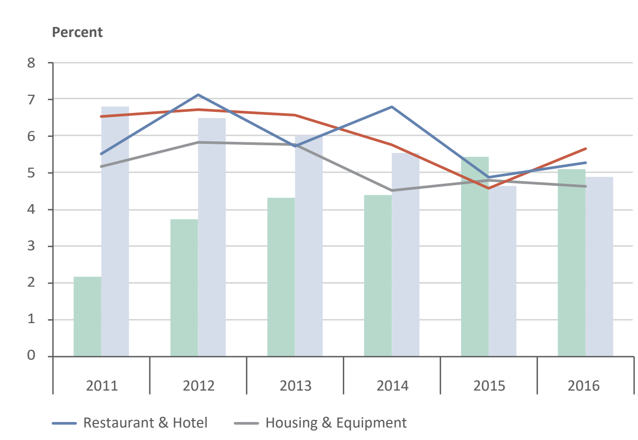
The role of government consumption in terms of boosting domestic demand dwindled in the second half of the year in line with fiscal consolidation. In the third and fourth quarters of 2016, government consumption experienced respective contractions of nearly 3.0% (yoy) and 4.1% (yoy). Such developments were explained by the government's response to adjust spending by around 12.5% compared to the state budget allocation in 2016. The spending cuts affected ministries/agencies and, more significantly, non-ministries/agencies, reaching 12.6% due to non-energy subsidies. Congruent with lower government

Chart 3.1. Consumer Confidence Index



Source: Danareksa and Bank Indonesia, calculated

Chart 3.2. Growth of Household Consumption



Source: BPS - Statistics Indonesia, calculated

spending in the second half of the year, government consumption was also observed to contract in 2016 by 0.2%, reversing conditions in 2015 when positive growth of 5.3% was recorded.

Investment, particularly building investment, also showed a similar trend to government consumption. Building investment recorded robust growth during the first semester in line with government's avowed commitment to expand infrastructure spending and, therefore, strengthen the structure of the economy moving forward. Infrastructure spending by the Government in 2016 accounted for 15.2% of the total budget, up slightly from 14.2% in 2015. The strong support from government infrastructure spending, in turn, edged up building investment growth in the first and second quarters to 6.8% (yoy) and 5.1% (yoy) respectively.

Nonetheless, building investment slowed in the second semester of 2016, falling to 5.0% (yoy) and 4.1% (yoy) in the third and fourth quarters respectively on government measures to adjust infrastructure spending, including extending the horizon on infrastructure development projects. Private construction investment also slowed due to weak aggregate demand and the abundant supply of commercial property. Less public infrastructure spending in the second semester, which undermined nonbuilding investment performance at the same time, fed through to slower nonbuilding investment growth in 2016, decreasing from 6.1% in 2015 to 5.2%.

In contrast to building investment, nonbuilding investment remained muted through to the third quarter of 2016. Nonbuilding investment even contracted by 1.2% (yoy) in the first quarter, before improving to 1.7% (yoy) and 2.1% (yoy) in the second and third quarters respectively. Such developments were explained by internal consolidation in the corporate sector in response to inauspicious global and domestic economy. Through consolidation, corporates were more inclined to pursue efficiency gains and financial consolidation rather than business expansion, which supressed investment (refer to Box 3.1).

Nonbuilding investment took off in the fourth quarter of 2016, achieving 7.1% (yoy), its highest level since 2013, due to expected economic gains on the back of rising commodity prices since the end of the third quarter. Internal consolidation in the corporate sector also began to subside, which stimulated investment linked to natural resources, such as heavy equipment. The surge of nonbuilding investment in the fourth quarter drove total nonbuilding investment for the year to 2.5%, up from 2.0% in 2015.

Nevertheless, total investment in 2016 was recorded at 4.5%, down from 5.0% in 2015.

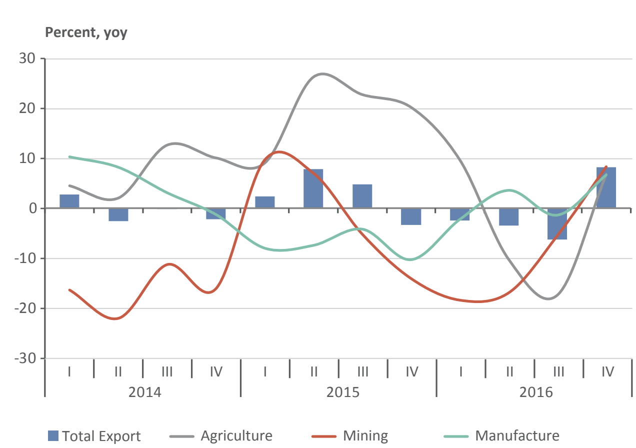
Congruent with investment performance, exports of goods and services posted sluggish growth through to the third quarter of 2016. During that period, annual export growth experienced a deep contraction, recorded at 5.7% (yoy), due to listless global economic growth and persistently low global commodity prices, affecting oil and gas as well as non-oil and gas exports alike.

Export performance rebounded in the fourth quarter of 2016, posting growth of 4.2% (yoy), which was a significant improvement from the previous three years. Export growth was driven by rising non-oil and gas commodity prices, including main export commodity from Indonesia such as coal, crude palm oil (CPO), rubber and copper. Higher commodity prices also catalysed exports of natural resources, which boosted mining export growth. Real mining exports grew by 8.3% in the fourth quarter but contracted 10.8% for the year, which still represents an improvement on the 14.1% contraction recorded in 2015 (Chart 3.3).

Manufacturing exports, posting real growth of 6.7% in the fourth quarter, also contributed to overall export performance. Manufacturing exports rebounded on stronger demand from the US and Europe, as well as higher demand from Asia, which accounts for the largest share of Indonesian exports at 65% of the total. Demand for manufacturing exports to China and Japan also improved, especially for basic chemicals and pulp. Exports to ASEAN, particularly to Thailand and the Philippines, also increased on growing demand for Low Cost Green Cars (LCGC).

Increasing domestic demand drove import in 2016. The quarterly import contraction decreased, as domestic

Chart 3.3. Growth of Non-Oil & Gas Export



Source: Bank Indonesia

demand increased. Imports of goods and services had already returned to positive territory in the fourth quarter of 2016, posting 2.82% (yoy), but still recorded a 2.3% contraction for the year. In terms of non-oil and gas imports, the contraction of capital goods continued to subside and raw materials achieved solid growth, reaching 16.0% in the fourth quarter (Chart 3.4). Meanwhile, imports of consumer goods maintained positive growth throughout the year.

3.2. GDP – BY INDUSTRIAL ORIGIN

GDP by industrial origin corroborated the dominant role of domestic demand, including fiscal policy, in terms of supporting economic growth in 2016. Several sectors linked to domestic demand, in particular the electricity sector, trade, transportation and accommodation sectors posted gains in 2016, while the construction and real estate improved in the first half of the year. In contrast, the agricultural sector continued to decline due to persistently low global commodity prices up to the third quarter. The mining sector rebounded in 2016, but underperformed on low mining commodity prices up to the third quarter.

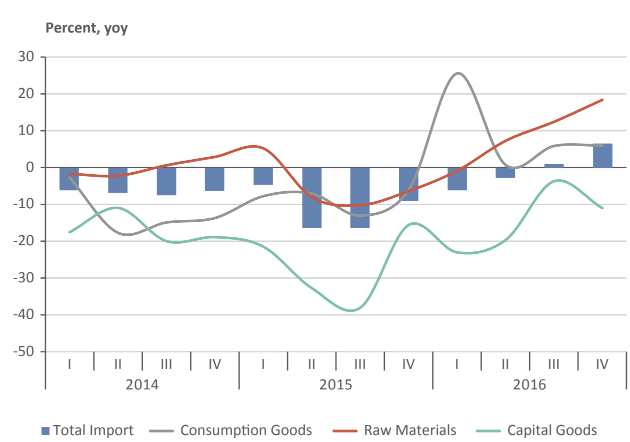
The wholesale and retail sector recorded 3.9% growth in 2016, up considerably on the 2.9% posted in the year earlier (Table 3.2). The gains stemmed from domestic demand, specifically household consumption, which boosted economic growth in 2016. In the first half of the year, wholesale and retail sector growth accelerated, amongst others, due to an adjustment to the Eid-ul-Fitr cycle and the earlier disbursement of 13th and 14th-month salaries. In addition, maintained consumer purchasing power in line with low inflation also supported growth in the wholesale and retail sector.

Mirroring the trade sector, growth of the accommodation, foods and beverages sector also accelerated, climbing from 4.3% in 2015 to 4.9% as international travellers visiting Indonesia soared 15.0% on the previous year to 12 million, the highest level in the past six years (Chart 3.5). Tourism has been boosted by investment to increase the number of hotel rooms available as well as the development of new tourist destinations, including 10 strategic national tourist regions.

The impact of fiscal stimuli on domestic demand translated into solid growth in several economic sectors. The electricity sector recorded 5.4% growth in 2016, up from 0.9% in the year earlier. Furthermore, growth in the construction sector was also strong during the first half of the year, driven by large-scale government-led infrastructure projects. Nonetheless, construction sector performance tailed off sharply in the latter half of the year in line with fiscal consolidation in the government sector. Indicatively, cement sales contracted during that period (Chart 3.6). Such developments, in turn, slowed construction sector growth for the year to 5.2% from 6.3% in 2015.

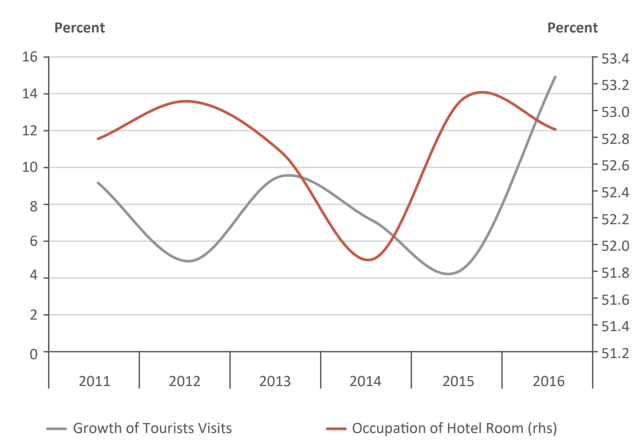
Mining sector performance rebounded in 2016. Mining industry growth was recorded at 1.1% in 2016, reversing the previous 3.4% contraction reported in 2015. Mining sector performance has been strongly influenced by government policy through enactment of the Mineral and Coal Mining (Minerba) Act in 2015, which restricted exports. The policy compelled a number of firms to build metal ore smelters, some of which began operating in 2016. Mining industry performance was also boosted by rising prices of natural resources, particularly coal, starting in the fourth quarter of 2016. Elevated global commodity prices were a boon for the mining sector, where persistently low prices had squeezed performance through to the fourth quarter.

Chart 3.4. Growth of Non-Oil & Gas Import



Source: Bank Indonesia

Chart 3.5. Growth of Tourism Industry



Source: BPS - Statistics Indonesia, calculated

Table 3.2. **GDP Growth by Industrial Origin**

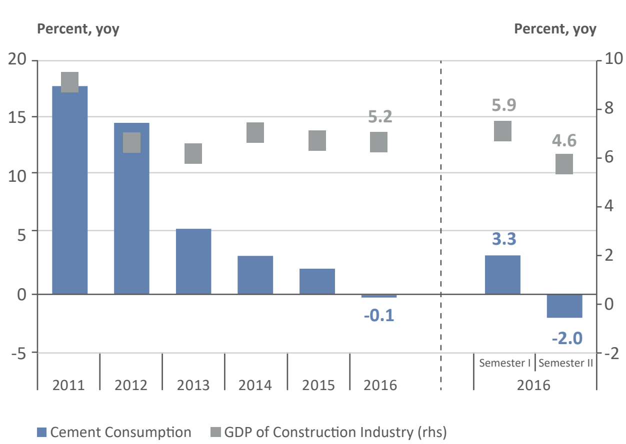
Percent, yoy

Industrial Origin	2013	2014	2015*	2016**				
				I	II	III	IV	Total
Agriculture, Forestry, and Fishing	4.20	4.24	3.77	1.47	3.44	3.03	5.31	3.25
Mining and Quarrying	2.53	0.43	-3.42	1.20	1.15	0.29	1.60	1.06
Manufacturing	4.37	4.64	4.33	4.68	4.63	4.52	3.36	4.29
Electricity	5.23	5.90	0.90	7.50	6.24	4.88	3.14	5.39
Water Supply, Garbage, Waste Management and Remediation Activities	3.32	5.24	7.07	5.39	4.12	2.36	2.66	3.60
Construction	6.11	6.97	6.36	6.76	5.12	4.95	4.21	5.22
Wholesale and Retail Trade, Repair of Car and Motorcycle	4.81	5.18	2.59	4.15	4.10	3.59	3.90	3.93
Transportation and Storage	6.97	7.36	6.68	7.90	6.91	8.26	7.85	7.74
Accommodation, Food, and Water Supply	6.80	5.77	4.31	5.68	4.96	4.68	4.47	4.94
Information and Communication	10.39	10.12	9.69	7.58	9.33	8.95	9.57	8.87
Financial Services	8.76	4.68	8.59	9.32	13.59	9.04	4.18	8.90
Real Estate Activities	6.54	5.00	4.11	4.87	4.76	3.97	3.65	4.30
Business Activities	7.91	9.81	7.69	8.14	7.57	6.95	6.83	7.36
Government Administration	2.56	2.38	4.63	4.64	4.43	3.80	0.27	3.19
Education Services	7.44	5.47	7.33	5.35	5.14	1.95	3.12	3.84
Health Services	7.96	7.96	6.68	6.49	5.05	4.49	4.10	5.00
Other Services	6.40	8.93	8.08	7.91	7.88	7.71	7.69	7.80
Taxes Less Subsidies on Products	21.80	5.08	32.24	11.84	13.35	22.44	26.74	19.31
Gross Domestic Product	**5.56**	**5.01**	**4.88**	**4.92**	**5.18**	**5.01**	**4.94**	**5.02**

*preliminary figures **very preliminary figures
Source: BPS - Statistics Indonesia

Contrasting conditions in the mining industry and economic sectors reliant on domestic demand, the agricultural, forestry and fisheries sector has experienced a slow. In 2016, growth decelerated from 3.8% to just 3.3%. Such developments were explained by prolonged low global commodity prices in 2016, especially crude palm oil (CPO). On the other hand, La Nina curbed production of food crops as well as plantations. Performance of agricultural sector only improved in the fourth quarter, reaching 5.3% (yoy), on rising international prices of plantation commodities, including crude palm oil (CPO).

Chart 3.6. **Domestic Cement Consumption**



Source: Indonesia Cement Association, calculated

The lack of a full external sector recovery, accompanied by fiscal consolidation in the latter half of 2016, contributed to subdued manufacturing industry performance. Accordingly, stable manufacturing sector growth was recorded at 4.3%, which affected several subindustries, including the furniture and textile industries, through to the third quarter. Hence, performance rebounded in the fourth quarter, as a direct impact of rising global commodity prices. A close correlation between fiscal stimuli and the manufacturing industry was observed in 2016. The large fiscal stimuli introduced during the first half of 2016 pushed manufacturing performance to 4.7% (yoy) and 4.6% (yoy) in the first and second quarters respectively, before fading in the latter half of the year after the Government introduced its strategy of fiscal consolidation.

3.3. EMPLOYMENT AND WELFARE

The uptick of economic growth in 2016 improved employment conditions. Open unemployment fell from 6.2% in 2015 to 5.6% in 2016, as full-time employment increased from 65.8% to 68.7% over the same period. Furthermore, the Labor Participation Rate also increased, rising from 65.8% in August 2015 to 66.3% in August 2016

Table 3.3. Labor Force and Unemployment

in million people, unless otherwise stated

Main Activities	2014		2015		2016	
	Feb	Aug	Feb	Aug	Feb	Aug
Productive Age (above 15 years)	181.2	183.0	184.6	186.1	187.6	189.1
Labor Force Participation (%)	69.2	66.6	69.5	65.8	68.1	66.3
Labor Force	125.3	121.9	128.3	122.4	127.7	125.4
Full Time Worker (%)	64.8	64.7	66.4	65.8	66.0	68.7
Part Time Worker (%)	21.1	21.4	20.0	20.1	20.3	18.5
Partial Unemployment (%)	8.4	7.9	7.8	8.0	8.2	7.2
Open Unemployment (%)	5.7	5.9	5.8	6.2	5.5	5.6

Source: BPS - Statistics Indonesia

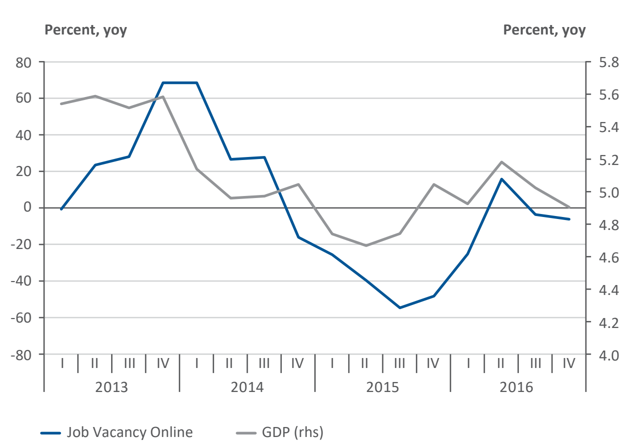
(Table 3.3). In general, the positive correlation between economic growth and labor absorption could be observed in job vacancies online data, which has tracked an upward trend since the beginning of 2016 in line with stronger economic growth (Chart 3.7).

Labor absorption also demonstrated some favorable developments in 2016. The data pointed to the domestic economy absorbing an additional 3.5 million workers in 2016, mainly in the services, financial, transportation and trade sectors (Chart 3.8). One factor that has boosted labor absorption in the transportation sector as well as the wholesale and retail sector is the rapid proliferation of online businesses engaged in e-commerce or application-based transportation services. In addition, unemployment has also fallen in terms of nearly all education levels, especially for secondary and tertiary education.

Stronger economic growth also helped to reduce poverty. Around 780 thousand people were lifted out of poverty in 2016, lowering the total to 27.8 million. This also helped to reduce the percentage of the poor to the total population from 11.2% in 2015 to 10.7%. Less poverty was primarily found in urban areas, while rural gains were more limited. The share of the poor in urban areas accounted for 7.7% of the total, down from 8.2% in 2015 (Chart 3.9).

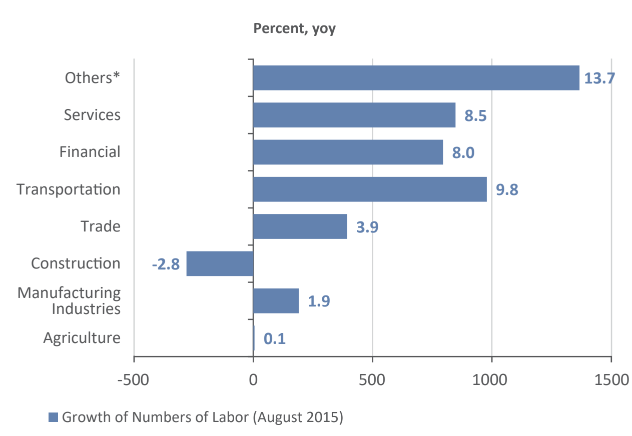
Income inequality was also shown to narrow in 2016 as the economy gained momentum, while unemployment and poverty levels also fell. Such desirable developments were reflected in the Gini ratio, improving from 0.402 in 2015 to 0.397 in 2016. Less income inequality was observed in urban as well as rural areas, through improvements to the Gini ratio (Chart 3.10). Gains in rural areas were attributed to the propitious impact of the Village Funds Program and Social Assistance Funds implemented by the Government.

Chart 3.7. Growth of Job Vacancy Online and GDP



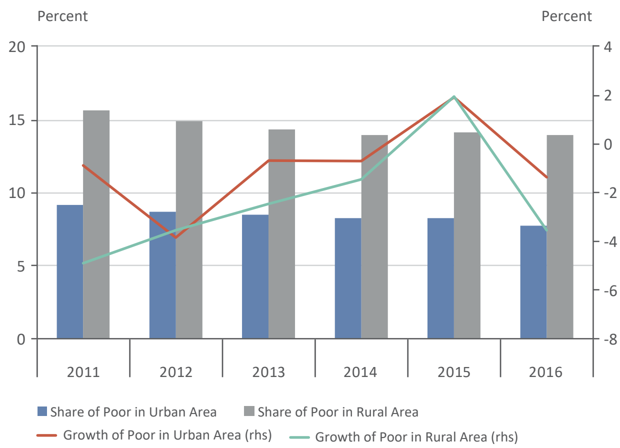
Source: Bank Indonesia and BPS - Statistics Indonesia, calculated

Chart 3.8. Changes in Numbers of Labor by Economic Sector



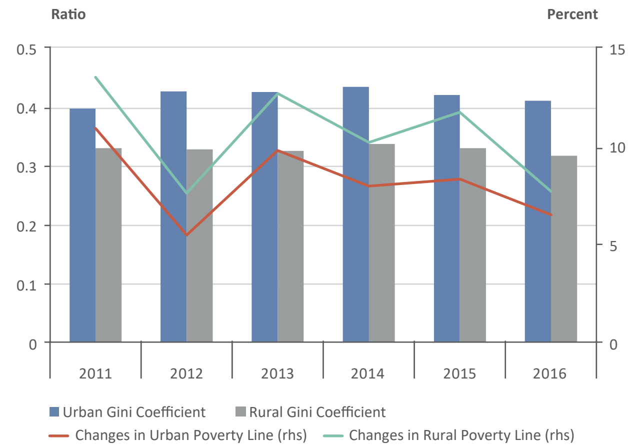
Source: BPS - Statistics Indonesia, calculated

Chart 3.9. **Share and Growth of Numbers of Poor in Urban and Rural Area**



Source: BPS - Statistics Indonesia, calculated

Chart 3.10. **Gini Coefficient and Poverty Line in Rural and Urban Area**

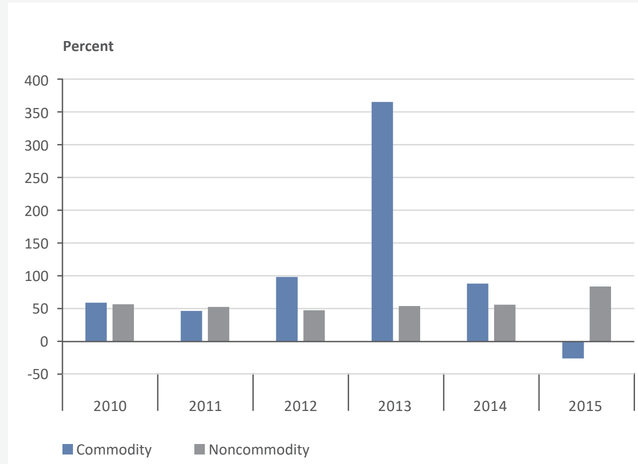


Source: BPS - Statistics Indonesia, calculated

Box 3.1. Corporate Consolidation and Investment Performance

Economic moderation spilled over to undermine corporate financial performance. The slump of corporate financial performance in 2015 forced corporations to restructure their balance sheets. Weak sales and rising operational costs, eroded corporate net profits. Such conditions stemmed from the economic downswing that has endured since 2012, after the end of price boom for natural resources, that reached its lowest point in the middle of 2015 (Chart 1). Nevertheless, despite such inauspicious conditions, some corporations opted to compensate their investors through larger dividend payments than the nominal profits they generated.[1] Against a backdrop of negative profits, firms oriented towards natural resources also had to pay out dividends (Chart 2). Corporate propensity to pay out dividends undermined their ability to invest through internal financing in 2016.

Chart 2. Dividend to Profit Ratio in Final Report 2015

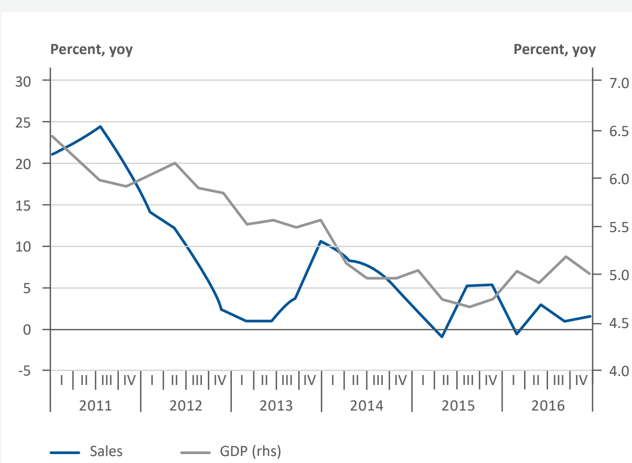


Source: Bloomberg, calculated

Some of the corporate sector, therefore, initiated financial consolidation through efficiency gains, including by postponing business expansion plans. In terms of capital spending, efficiency was reflected in a significantly lower debt-to-equity ratio (DER) in 2016 (Chart 3). Corporate balance sheets also pointed to fewer withdrawals of debt. Consolidation through adjustments in capital expenditure was possible after paying due consideration to the low urgency of need for additional investment, due to an adequate capacity utilization amidst moderate economic recovery. In addition to reducing capital expenditure, consolidation also manifested through working capital efficiencies, namely by delaying third-party debt repayments in order to maintain cash flow. Working capital savings also led to a lower interest payments. Consequently, internal financial consolidation in the corporate sector also undermined demand for new loans in 2016.

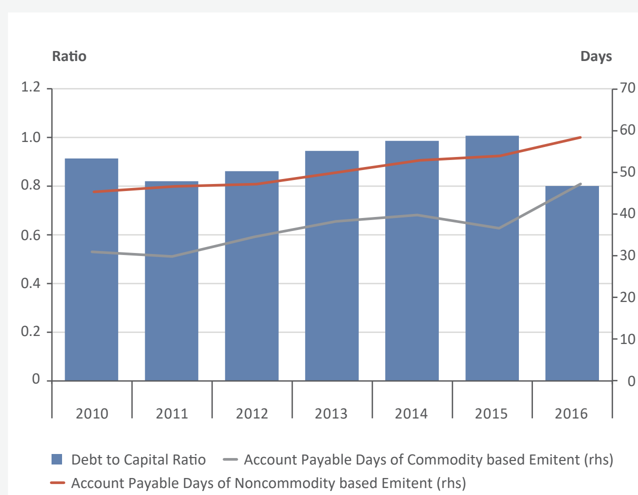
Balance sheet of firms oriented towards the natural resources, particularly the mining sector, improved in the second half of the year as global commodity prices began to rebound, which sparked investment. Although sales volume growth remained in negative territory, price factors improved financial conditions in the corporate sector beyond initial expectations at the beginning of

Chart 1. Emitent Sales Performance and GDP



Source: Bloomberg, BPS - Statistics Indonesia, calculated

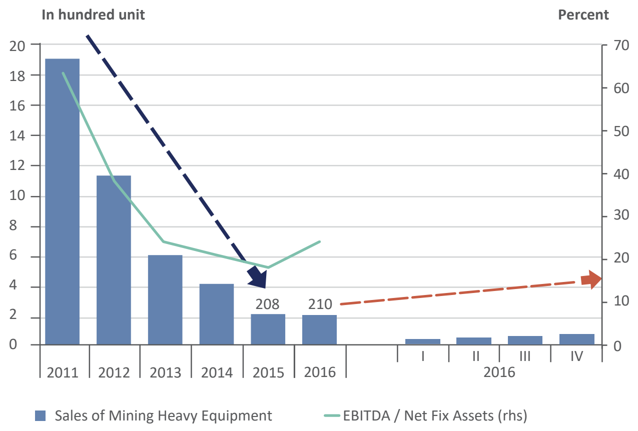
Chart 3. Debt to Capital and Account Payable Days Ratio



Source: Bloomberg, calculated

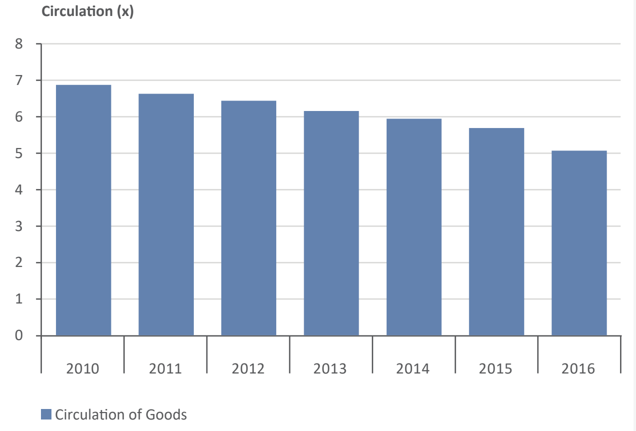
1 Reflected by the dividend payout ratio planned at the end of 2015.

Chart 4. **EBITDA Ratio and Sales of Mining Heavy Equipment**



Source: Bloomberg, United Tractors, calculated

Chart 5. **Turnover Ratio of Non-Commodity Inventory Goods**



Source: Bloomberg, calculated

the year. Sounder financial conditions, in turn, spurred investment, as reflected in the Earnings Before Interest, Tax, Depreciation and Amortization (EBITDA) ratio to the net value of fixed assets. This drove nonbuilding investment, in heavy equipment, at several commodity-based firms, especially in the mining sector (Chart 4). The replacement of fixed assets by commodity-based firms was also due to the average age of the heavy equipment replaced. Modernizing heavy equipment is to maintain productivity, in addition to consideration over the ongoing depreciation of the book value. Moving forward, rising prices of natural resource-based commodities could potentially drive more investment in the commodity sector.

Financial consolidation by non-commodity-based firms was expected to fade towards the end of 2016, thus creating the opportunity for an increased investment in 2017. Such conditions were confirmed by the EBITDA ratio to the net value of fixed assets, which has begun to pick up. The increase, however, was also indicative of the financial capacity and demand to increase fixed assets. Although the inventory turnover ratio of non-commodity-based firms remained low, this is expected to accelerate and, hence, drive investment (Chart 5). Such optimism is supported by the impact of rising global commodity prices that could raise purchasing power.

Investment is predicted to increase in 2017 after financial consolidation in the corporate sector is complete. Such optimism was strengthened by indications of an increase in the value of mergers and acquisitions in 2016 (Table 1). The rapid proliferation of mergers and acquisitions corroborated business confidence in expansion in 2017, which, in general, occurs after internal consolidations have been made at the acquired firm. Moreover, the transmission of monetary policy easing should continue, which will provide an incentive for the corporate sector to expand.

Table 1. **Investment Value of Merger and Acquisition**

Indonesia Deal Summary	2013		2014			2015			2016		
	Vol	Value (USD million)	Vol	Value (USD million)	%(yoy)	Vol	Value (USD million)	%(yoy)	Vol	Value (USD million)	%(yoy)
Total Cross-Border	59	6,911	57	3,192	-54	81	1,375	-57	23	893	-35
inbound	48	2,797	49	2,886	0.03	68	1,037	-64	43	853	-18
outbound	11	4,114	8	306	-0.93	13	338	10	5	40	-88
Domestic	30	3,405	18	1,874	-0.45	23	196	-90	71	1,083	453
Total Merger and Acquisition	89	10,316	75	5,066	-51	105	1,571	-69	94	1,976	26

[1] Data of 2014 is only available from June. Average period is June to December 2014.
Source: Puff & Phelps, 2016

CHAPTER 4
Balance of Payments

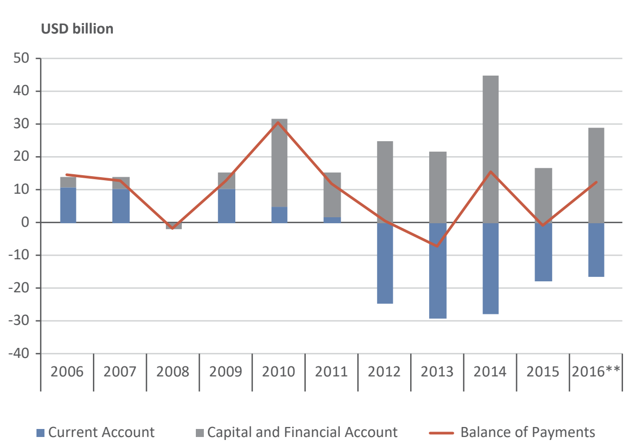
Indonesia's balance of payments (BOP) recorded a significant surplus in 2016, despite unfavorable global economic condition. The BOP surplus was supported by a narrow current account deficit and large capital and financial account surplus. Furthermore, the solid BOP position was indicative of a smooth domestic economic adjustment in response to global dynamics and the favorable domestic economic outlook perceived by international investors. Robust BOP performance in 2016 also strengthened external sector resilience, as reflected by an increase in the position of reserve assets to USD116.4 billion.

Image caption:
Loading and unloading in ports offers as an indicator of activity in exports and imports, which in turn influences the balance of payments. In 2016, the Indonesia balance of payments recorded heartening improvement amid adverse global economic conditions.

The balance of payments (BOP) improved significantly in 2016, despite unfavorable global economy due to global economic moderation and prolonged low international commodity prices through to the third quarter of 2016. After 2015, when a USD1.1 billion deficit was recorded, the BOP position reversed to record a USD12.1 billion surplus in 2016 (Chart 4.1) on the back of a narrower current account deficit and larger capital and financial account surplus. The current account deficit was maintained at the healthy level of 1.8% of GDP, down from 2.0% of GDP in the year earlier. Meanwhile, the capital and financial account surplus increased significantly from USD16.9 billion to USD29.2 billion in 2016.

The positive BOP performance in 2016 was indicative of the domestic economic resilience. On one hand, the narrower current account deficit evinced that the domestic economy performed well despite undesirable global economic dynamics. The domestic private sector lowered demand for imports in response to weak domestic demand and export performance through to the third quarter of 2016. In addition, the private sector remained sufficiently flexible in terms of exploiting the momentum of rising international commodity prices in the fourth quarter, which prompt an increase in export performance. On the other hand, the significant capital and financial account surplus also evinced the favorable domestic outlook perceived by global investors despite ongoing high global economic uncertainty. Well maintained economic stability, supported by solid policy coordination among authorities, affected the positive perception of foreign investors. Such development, in turn, triggered foreign capital inflows to Indonesia, thus supporting the significant capital and financial account surplus in 2016.

Chart 4.1. Current Account, Capital and Financial Account, and Balance of Payments



**very preliminary figures
Source: Bank Indonesia

In general, solid BOP performance in 2016 strengthened external sector resilience. The BOP surplus contributed to an increase in the position of reserve assets from USD105.9 billion in 2015 to USD116.4 billion (Table 4.1), equivalent to 8.4 months of imports and servicing government external debt. Other external sustainability indicators of the external debt also improved. The external debt to GDP ratio was observed to slip from 36.0% in 2015 to 34.0%, which is considered healthy and in line with conditions in peer countries. The structure of external debt was also deemed sound, with long-term external debt dominant, accounting for nearly 87%. Similarly, Indonesia's International Investment Position (IIP) recorded a narrower net liability in 2016 compared to the previous year (Table 4.2).

4.1. CURRENT ACCOUNT

In 2016, the current account deficit narrowed to a solid level. The current account deficit was observed to narrow to USD16.3 billion (1.8% of GDP), from USD17.5 billion (2.0% of GDP) in 2015 in 2016 (Chart 4.2). On a quarterly basis, the current account deficit primarily narrowed in the fourth quarter of 2016, as non-oil and gas exports soared to USD36.3 billion on rising international commodity prices. The positive contribution of non-oil and gas exports subsequently fed through to a sharp decline in the current account deficit, namely 0.8% of GDP in the fourth quarter, the lowest level since 2012.

The decreasing current account deficit in 2016 was also supported by a larger non-oil and gas trade surplus, coupled with a narrower oil and gas trade deficit and services account deficit. The non-oil and gas trade surplus was boosted by non-oil and gas exports, which rebounded significantly in the fourth quarter as international commodity prices began to rise. Well controlled non-oil and gas imports growth also further supported the larger non-oil and gas trade surplus. Meanwhile, the narrower oil and gas trade deficit was attributable to a decline of oil and gas imports due to the low global oil price and positive impact of the Government's energy reform policy. A decrease of freight payments due to less import activity contributed to the improvement in the services account, along with an increase in the number of international travellers visiting the Indonesian archipelago.

Non-Oil and Gas Trade Balance

The non-oil and gas trade balance recorded a larger surplus in 2016, supported by non-oil and gas export gains that exceeded the corresponding increase of non-oil

Table 4.1. **Indonesia's Balance of Payments**

USD Million

List	2015				Total	2016				Total **
	I	II	III	IV		I*	II*	III*	IV**	
I. Current Account	**-4,314**	**-4,279**	**-4,224**	**-4,703**	**-17,519**	**-4,651**	**-5,203**	**-4,680**	**-1,812**	**-16,347**
A. Goods (Net)	**3,198**	**4,371**	**4,248**	**2,232**	**14,049**	**2,648**	**3,749**	**3,923**	**5,070**	**15,390**
- Exports	37,962	39,931	36,192	35,038	149,124	33,039	36,282	34,891	40,229	144,441
- Imports	-34,764	-35,561	-31,945	-32,806	-135,076	-30,391	-32,533	-30,967	-35,160	-129,051
1. General	2,826	4,056	4,154	2,283	13,319	2,340	3,517	3,706	5,240	14,803
- Exports	37,586	39,612	35,835	34,692	147,725	32,687	35,977	34,554	39,843	143,061
- Imports	-34,760	-35,557	-31,680	-32,409	-134,406	-30,347	-32,460	-30,848	-34,604	-128,258
a. Non-Oil and Gas	3,947	5,932	6,158	2,986	19,023	3,244	4,959	5,042	6,381	19,625
- Exports	33,068	34,722	32,038	30,713	130,541	29,836	32,752	31,292	36,293	130,173
- Imports	-29,122	-28,790	-25,880	-27,727	-111,518	-26,592	-27,793	-26,250	-29,912	-110,548
b. Oil and Gas	-3,184	-3,658	-3,521	-2,743	-13,106	-2,030	-2,463	-2,621	-2,588	-9,702
- Exports	1,927	2,611	1,786	1,510	7,833	1,221	1,816	1,631	1,600	6,267
- Imports	-5,111	-6,268	-5,307	-4,253	-20,938	-3,250	-4,279	-4,252	-4,188	-15,969
c.Gas	2,063	1,781	1,517	2,041	7,402	1,126	1,021	1,286	1,447	4,880
- Exports	2,591	2,280	2,011	2,469	9,351	1,631	1,409	1,631	1,950	6,620
- Imports	-528	-498	-494	-429	-1,949	-505	-388	-345	-503	-1,741
2. Other Goods	372	315	94	-51	730	308	232	217	-170	587
- Exports	376	319	358	346	1,400	352	305	337	386	1,380
- Imports	-4	-4	-264	-398	-670	-44	-73	-120	-556	-793
B. Services (Net)	**-1,823**	**-2,829**	**-2,293**	**-1,752**	**-8,697**	**-1,041**	**-2,273**	**-1,614**	**-1,558**	**-6,486**
C. Primary Income (Net)	**-7,116**	**-7,246**	**-7,452**	**-6,565**	**-28,379**	**-7,493**	**-7,903**	**-8,013**	**-6,272**	**-29,681**
D. Secondary Income (Net)	**1,428**	**1,426**	**1,273**	**1,382**	**5,508**	**1,235**	**1,223**	**1,024**	**949**	**4,430**
II. Capital and Financial	**5,612**	**1,999**	**62**	**9,188**	**16,860**	**4,379**	**7,506**	**10,556**	**6,757**	**29,198**
A. Capital Account	**1**	**0**	**2**	**14**	**17**	**0**	**4**	**5**	**0**	**9**
B. Financial Account	**5,611**	**1,998**	**60**	**9,174**	**16,843**	**4,378**	**7,502**	**10,551**	**6,757**	**29,188**
- Assets	-8,294	-9,155	-3,708	-332	-21,489	-1,316	-3,849	3,925	20,418	19,178
- Liabilities	13,905	11,154	3,768	9,506	38,332	5,694	11,351	6,626	-13,661	10,010
1. Direct Investment	2,319	3,982	1,608	2,795	10,704	3,082	3,272	6,533	2,234	15,121
a. Assets	-3,392	-3,276	-1,266	-1,141	-9,075	-852	-1,185	471	12,925	11,359
b. Liabilities	5,712	7,258	2,873	3,936	19,779	3,934	4,457	6,062	-10,690	3,762
2. Portfolio Investment	8,509	5,528	-2,188	4,333	16,183	4,439	8,277	6,541	-385	18,872
a. Assets	24	-737	-683	127	-1,268	-168	402	1,938	14	2,186
b. Liabilities	8,484	6,266	-1,505	4,206	17,451	4,607	7,875	4,604	-399	16,686
3. Financial Derivatives	93	-3	231	-301	20	-22	-25	-28	66	-9
a. Assets	205	229	196	37	667	276	171	160	1	609
b. Liabilities	-112	-232	35	-338	-647	-298	-195	-188	64	-618
4. Other Investment	-5,310	-7,510	409	2,346	-10,064	-3,121	-4,022	-2,495	4,842	-4,796
a. Assets	-5,131	-5,371	-1,955	645	-11,812	-573	-3,236	1,356	7,477	5,024
b. Liabilities	-179	-2,138	2,364	1,702	1,748	-2,548	-786	-3,851	-2,635	-9,820
III. Total (I + II)	**1,298**	**-2,280**	**-4,162**	**4,485**	**-659**	**-272**	**2,303**	**5,876**	**4,944**	**12,851**
IV. Net Error and Omissions	**5**	**-645**	**-404**	**605**	**-439**	**-15**	**-141**	**-167**	**-439**	**-762**
V. Overall Balance (III+IV)	**1,303**	**-2,925**	**-4,565**	**5,089**	**-1,098**	**-287**	**2,162**	**5,708**	**4,505**	**12,089**
VI. Reserves and Related Items	**-1,303**	**2,925**	**4,565**	**-5,089**	**1,098**	**287**	**-2,162**	**-5,708**	**-4,505**	**-12,089**
Memorandum:										
- Reserves Assets Position	111,554	108,030	101,720	105,931	105,931	107,543	109,789	115,671	116,362	116,362
- In Month of Imports and Official Debt Repayment	6.6	6.8	6.8	7.4	7.4	7.7	8.0	8.5	8.4	8.4
- Current Account/GDP (%)	-2.0	-2.0	-2.0	-2.2	-2.0	-2.1	-2.3	-1.9	-0.8	-1.8

*preliminary figures **very preliminary figures
Source: Bank Indonesia

Table 4.2. **Indonesia International Investment Position**

USD Million

List	2015 I	2015 II	2015 III	2015 IV	Total	2016 I*	2016 II*	2016 III*	2016 IV**	Total
Indonesia's International Investment	**-406,983**	**-383,845**	**-355,247**	**-376,834**	**-376,834**	**-400,520**	**-413,865**	**-344,731**	**-320,958**	**-320,958**
Direct Investment, Net	-211,147	-201,698	-195,204	-193,059	-193,059	-204,609	-210,749	-185,705	-176,071	-176,071
Portfolio Investment, Net	-201,811	-192,237	-162,627	-187,914	-187,914	-202,180	-213,951	-227,332	-213,618	-213,618
Financial Derivatives, Net	1	61	-13	91	91	73	51	13	-20	-20
Other Investment, Net	-105,580	-98,000	-99,123	-101,883	-101,883	-101,348	-99,006	-47,378	-47,611	-47,611
Reserves	111,554	108,030	101,720	105,931	105,931	107,543	109,789	115,671	116,362	116,362

*preliminary figures **very preliminary figures
Source: Bank Indonesia

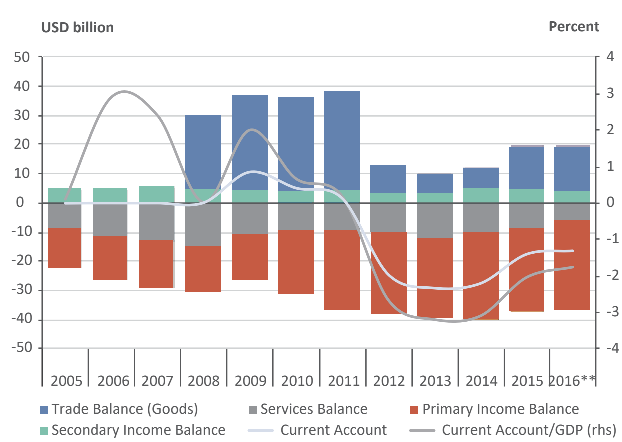
and gas imports. The increase in non-oil and gas exports performance was also supported by rising commodity prices in the fourth quarter of 2016 (Chart 4.3). After narrowing significantly in 2012, when commodity prices collapsed along with dwindling global demand in 2016, the non-oil and gas trade surplus rose from USD19.7 billion to USD20.2 billion.

Manufacturing products were the main contributors to non-oil and gas export performance. The value of manufacturing exports grew at 2.4% in 2016, improved significantly from the previous year of -6.9%. The increase in manufacturing exports, which accounted for 51.2% of total exports, was also supported by a higher volume and price of manufacturing exports. The volume of manufacturing exports expanded by 1.6% in 2016, accompanied by a 0.8% jump in prices.

The main drivers of manufacturing exports in 2016 included processed foods, motor vehicles and component parts, as well as machinery and mechanical appliances. Exports of processed foods recorded an increase of 4.4%, primarily due to increase in demand from China, which accounted for 15.7%. The unexpected implementation of economic rebalancing policy in China has helped to drive imports of consumer goods, including food. Meanwhile, exports of motor vehicles and components as well as machinery and mechanical appliances also grew positively, posting 8.5% and 5.1% respectively on stronger demand, particularly from ASEAN member countries. Several major exports from Indonesia, such as textiles, electrical equipment, articles of base metals and processed rubber improved, despite remaining in negative territory.

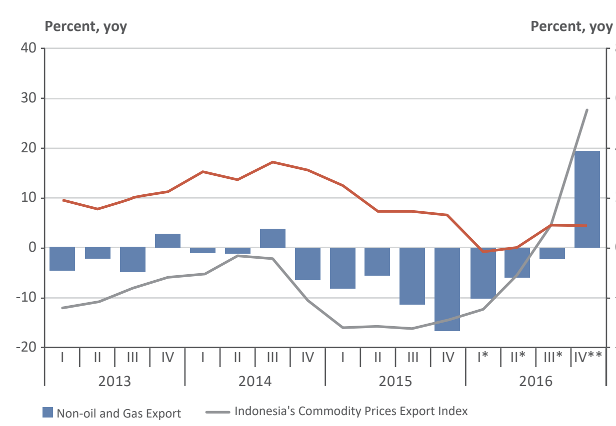
Non-oil and gas exports were also supported by shipments of primary goods, especially in the second half of the year. Exports of vegetable oil and coal, which accounted for 24.4% of total non-oil and gas exports, remained the leading exports from Indonesia. During the second half of 2016, exports of primary goods improved on a 5.8% increase in prices, while volume experienced an 8.4% decline (Table 4.3). The decrease in vegetable oil exports, dominated by crude palm oil (CPO), was attributed to less production after the devastating La Nina, fulfilling domestic demand and

Chart 4.2. **Current Account**



**very preliminary figures
Source: Bank Indonesia

Chart 4.3. **Commodity Price and Indonesia's Non-oil and Gas Export**



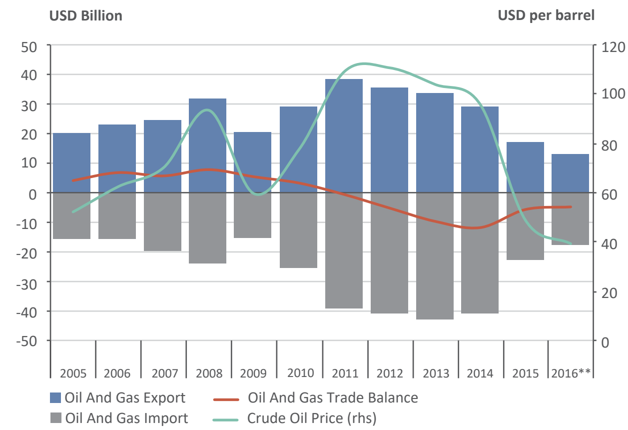
*preliminary figures ** very preliminary figures
Source: Bank Indonesia

competition from China and India as global CPO suppliers. Meanwhile, coal export volume decreased due to the clean energy policy of China. Overall, rising CPO and coal prices contributed to increase in the export value of primary goods.

Based on destination, non-oil and gas exports from Indonesia to the 10 major trading partners increased, with the exceptions of India and Malaysia. Exports to the Philippines, China, United States, Japan and Thailand retuned to positive territory in 2016, while exports to Singapore, Malaysia, South Korea and Australia remained negative, but had demonstrated gains on performance in 2015. Quarterly data pointed to positive export growth to nearly all major export destinations in the fourth quarter of 2016, except Australia and Oceania (Table 4.4).

Stronger non-oil and gas exports contributed to a corresponding but limited increase in non-oil and gas imports. The limited increase in non-oil and gas imports was linked to internal consolidation in the corporate sector in response to unfavorable global economic dynamics. In 2016, the non-oil and gas import contraction eased to 1.0% from the deep 12.4% contraction posted in 2015 (Table 4.5). By commodity group, non-oil and gas imports improved on consumer goods and raw materials. The ongoing domestic economic recovery, supported by resilient private consumption and rupiah appreciation, drove import growth of consumer goods significantly to 15.6% and alleviated the import contraction of raw materials to -0.5%. Meanwhile, the import contraction of capital goods remained

Chart 4.4. **Oil and Gas Trade Balance and Oil Price Development**



**very preliminary figures
Source: Bank Indonesia

significant at 10.2%, albeit slightly improved from 15.6% contraction recorded in 2015. Prevailing dynamics evinced an improvement in imports of capital goods in the fourth quarter of 2016, driven by non-building investment.

Oil and Gas Trade Balance

While the oil and gas trade balance continued to record a deficit in 2016, it has improved significantly compared to the previous year. The oil and gas trade deficit stood at USD4.8 billion in 2016, down from USD5.7 billion in the year

Table 4.3. **Non-oil and Gas Export (based on SITC)**

List	Share (%)		Growth (percent,yoy)									
			2015					2016				
	2015	2016**	I	II	III	IV	Total	I*	II*	III*	IV**	Total**
A. Primary Product												
Nominal	48.7	47.3	-10.2	-5.7	-16.2	-18.3	-12.6	-17.6	-15.9	-3.4	27.2	-3.1
Real	51.4	48.4	14.3	25.7	18.7	12.6	17.6	-0.4	-13.5	-15.1	-7.2	-8.4
Price Index	-	-	-21.4	-25.0	-29.5	-27.4	-25.7	-17.3	-2.7	13.8	37.0	5.8
B. Manufacturing Product												
Nominal	49.9	51.2	-4.9	-4.5	-4.9	-13.3	-6.9	-2.0	4.2	-1.3	9.2	2.4
Real	47.9	50.5	-8.0	-7.4	-4.2	-10.3	-7.4	-2.2	3.6	-1.4	6.7	1.6
Price Index	-	-	3.3	3.2	-0.7	-3.4	0.5	0.2	0.6	0.1	2.4	0.8
C. Others												
Nominal	1.5	1.5	-26.1	-17.8	-14.0	-6.9	-17.1	-10.8	0.1	-6.3	16.4	-0.5
Real	0.7	0.7	-22.2	-11.6	-2.1	1.5	-9.8	6.0	-2.7	-18.6	7.4	-5.3
Price Index	-	-	-4.9	-4.9	-12.2	-8.4	-8.1	-5.1	2.9	15.1	8.4	5.1
Total												
Nominal	100.0	100.0	-8.0	-5.3	-10.9	-15.7	-10.0	-9.7	-5.7	-2.4	18.1	-0.3
Real	100.0	100.0	2.3	7.8	4.7	-3.4	2.8	-1.7	-3.3	-6.1	5.6	-1.5
Price Index	-	-	-10.0	-12.1	-14.9	-12.8	-12.4	-8.2	-2.4	4.0	11.9	1.2

*preliminary figures **very preliminary figures
Source: Bank Indonesia

Table 4.4. Non-oil and Gas Export Based on Country of Destination

Countries	Share (%)		Growth (percent,yoy)										
			2014	2015					2016				
	2015	2016**	Total	I	II	III	IV	Total	I*	II*	III*	IV**	Total **
1. United States	11.6	11.9	5.6	-1.1	-0.4	-4.8	-7.6	-3.5	-4.0	4.4	-1.8	10.7	2.3
2. China	10.0	11.5	-22.2	-36.5	-13.1	-9.6	-13.8	-19.5	-9.4	-6.9	11.7	61.9	14.4
3. Japan	9.8	10.0	-8.7	-5.4	-8.4	-12.9	-17.8	-11.2	-6.0	-2.2	-2.0	15.7	1.2
4. India	8.8	7.6	-5.6	7.3	18.1	-27.0	-13.7	-5.0	-28.5	-32.4	3.4	7.8	-14.3
5. Singapore	6.5	6.6	11.6	1.7	-19.4	-9.2	-16.8	-11.4	-3.3	5.4	-4.6	1.6	-0.3
6. Malaysia	4.7	4.5	-10.6	3.5	0.2	-7.3	-9.7	-3.3	-12.9	-15.4	-4.5	17.2	-4.6
7. South Korea	4.1	4.0	-4.6	0.1	0.4	-6.3	-16.0	-5.5	-12.5	-7.5	-4.5	14.8	-3.1
8. Philippines	3.0	4.0	3.4	-2.0	4.2	7.2	-7.1	0.8	7.6	34.6	30.8	63.8	33.9
9. Thailand	3.5	3.5	-4.2	-6.4	-4.0	-11.6	-10.2	-8.0	-12.3	0.1	-0.7	16.5	0.4
10. Australia and Oceania	2.8	2.5	15.2	-36.4	-17.0	7.4	-21.7	-17.5	5.6	-18.6	-14.8	-8.0	-10.2
Total 10 Countries	**64.9**	**66.0**	**-5.5**	**-9.6**	**-4.4**	**-10.0**	**-13.5**	**-9.3**	**-9.3**	**-5.9**	**1.3**	**21.1**	**1.5**

*preliminary figures **very preliminary figures
Source: Bank Indonesia

earlier (Table 4.4), which contributed to a narrower current account deficit.

The oil and gas trade balance gains were supported by a narrower oil trade deficit, primarily due to fewer imports. Meanwhile, oil exports contracted from USD7.8 billion in 2015 to USD6.3 billion in 2016. Oil imports decreased on lower prices. Furthermore, the low global oil price precipitated a 25.1% drop in the import prices of oil products and depressed oil imports from USD20.9 billion in 2015 to USD16.0 billion in 2016.

In addition to price factors, the volume of oil imports also declined, falling from 206.3 million barrels in 2015 to 189.7 million barrels in 2016 due to the Government's ongoing energy reforms, which include expanding oil lifting. To that end, the Government optimised Residual Fluid Catalytic Cracking (RFCC) at Cilacap and the Trans-Pacific Petrochemical Indotama (TPPPI) in Tuban, scrapped subsidies on oil with a Research Octane Number (RON) of 88, expanded nonsubsidized oil varieties, namely Pertalite, and enhanced oil importing efficiency.[1] In addition, an increase in oil lifting was offset by the domestic demand, thus

Table 4.5. Non-oil and Gas Import (based on SITC)

Lists	Shares (%)		Growth (percent,yoy)									
			2015					2016				
	2015	2016**	I	II	III	IV	Total	I*	II*	III*	IV**	Total**
Consumption goods												
Nominal	8.7	10.2	-8.8	-9.3	-14.9	-6.3	-9.9	27.3	6.5	13.0	16.7	15.6
Real	7.4	7.6	-7.7	-7.1	-13.0	-6.0	-8.1	25.4	0.8	5.9	6.3	9.1
Price Index	-	-	-1.2	-2.4	-2.2	-0.3	-1.9	1.5	5.7	6.8	9.8	6.0
Raw Material												
Nominal	69.5	69.8	-1.7	-15.2	-17.7	-13.8	-12.3	-9.5	-2.6	1.7	9.3	-0.5
Real	81.2	83.5	5.2	-8.0	-10.3	-6.4	-4.4	-0.8	7.2	12.5	18.5	9.1
Price Index	-	-	-6.6	-7.9	-8.3	-8.0	-8.3	-8.8	-9.2	-9.6	-7.8	-8.8
Capital Goods												
Nominal	21.0	19.1	-8.7	-21.7	-20.6	-10.8	-15.6	19.0	-12.2	-7.7	-1.5	-10.2
Real	11.5	8.9	-21.5	-32.8	-29.2	-15.6	-26.3	-23.2	-19.7	-16.0	-11.1	-17.5
Price Index	-	-	16.3	16.5	12.2	5.7	14.5	5.5	9.4	9.9	10.8	8.9
Total												
Nominal	100.0	100.0	-3.9	-16.3	-17.4	-11.4	-12.4	-8.6	-3.4	0.3	8.2	-1.0
Real	100.0	100.0	-4.7	-16.4	-16.4	-9.1	-11.9	-6.2	-2.8	1.0	6.5	-0.4
Price Index	-	-	0.8	0.2	0.2	-1.1	-0.5	-2.5	-0.6	-0.6	1.6	-0.6

*preliminary figures **very preliminary figures
Source: Bank Indonesia

1 Both refineries began operating towards the end of 2015, but only achieved optimal production in the middle of 2016.

generated insignificant contribution to oil export volume. In general, the increase in domestic oil consumption was met through domestic production, which subsequently helped to improve the oil trade deficit.

Albeit narrower than in the previous year, gas trade surplus also contributed to improvements in the oil and gas balance. The gas trade balance performed well, attributed to increase in exports of liquefied natural gas (LNG) despite a persistently low export price. In 2016, the gas trade balance recorded a USD4.9 billion surplus, down from USD7.4 billion the year earlier due to a 29.2% contraction of gas exports on lower export prices and volume of natural gas (NG). The gas export contraction was offset, however, by an increase in the export volume of liquefied natural gas (LNG). Meanwhile, gas imports decreased 10.7% in 2016 as domestic gas consumption declined.

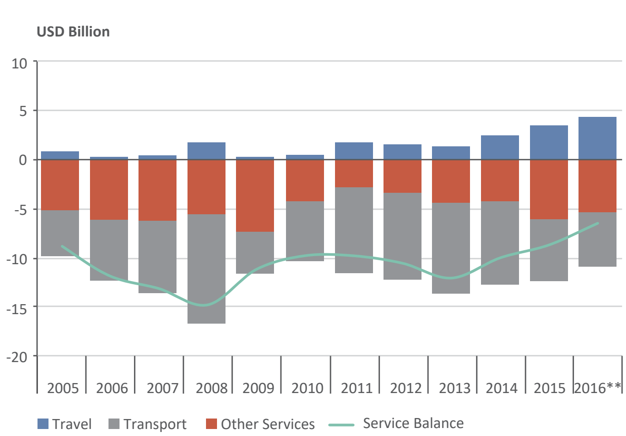
Services Account, Primary Income Account and Secondary Income Account

The services account improved on the back of a narrower transportation services trade deficit and an increase of travel services receipts. The services trade deficit reduced by 25.4% compared to the previous year due to a narrower transportation services trade deficit, specifically freight, in line with the decline of imports of goods (Chart 4.5). The services account was also buoyed in the reporting period by an increase of travel services receipts as the number of international travellers visiting Indonesia increased.

Despite recorded a narrower deficit, the transportation services balance still demands attention. This is primarily attributable to the freight services which continuously posted a trade deficit. Such condition is increasingly important due to the freight services trade deficit constitutes the largest share of the total services account deficit, namely 67.7% in 2016 (Chart 4.6). The large and persistent freight deficit is indicative of constraints in the domestic transportation industry in terms of supporting international trade. Furthermore, the value of freight services payments to international carriers is larger compared to the value of imports. The transportation services account deficit is reflected in the comparatively large percentage of freight costs paid to foreign companies to convey imported goods (freight import to import ratio) by sea, at around 5%. Meanwhile, the corresponding percentage of freight receipts from non-residents to convey exported goods (freight export to export ratio) was recorded at only around 1% (Chart 4.7). Such conditions demonstrate the need to strengthen domestic freight services and, therefore, support a resilient services account (Refer to Box 4.1).

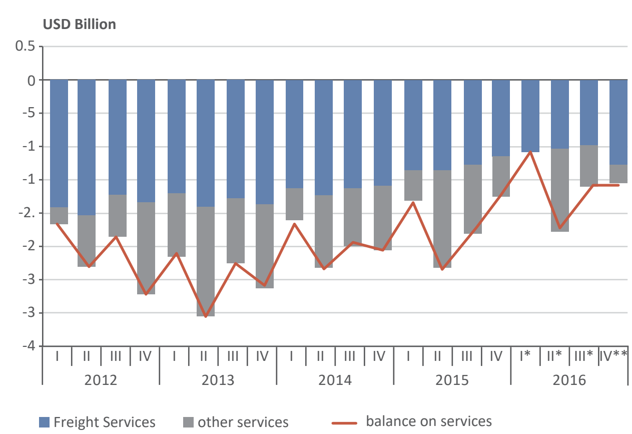
The travel services trade surplus stemmed from an increase in the number of international travellers visiting Indonesia. In 2016, international travellers visiting Indonesia increased from 9.8 million to 10.9 million people.[2] The surge of international travellers was precipitated by policy to develop 10 national priority tourist destinations, including National Strategic Tourism Regions and Special Tourism Zones.[3] The increase in the number of international travellers visiting Indonesia was accompanied by an increase in the amount spent while visiting Indonesia. Based on country of origin, travellers from Singapore, Malaysia, Australia, Japan and China were dominant, with Bali, Jakarta and Batam cited as

Chart 4.5. **Services Account**



**very preliminary figures
Source: Bank Indonesia

Chart 4.6. **Balance on Freight Services and Balance on Other Services**

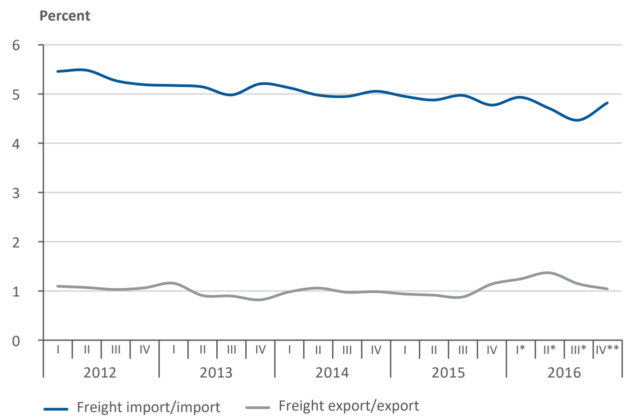


*preliminary figures **very preliminary figures
Source: Bank Indonesia

2 Excludes travellers entering through border crossings and special travellers (the elderly, clergy, trainees, researchers, etc.).

3 Development of Priority Tourism Destinations 2016-2019, Ministry of Tourism, 2016.

Chart 4.7. Freight Ratio on Transportation Services



*preliminary figures **very preliminary figures
Source: Bank Indonesia

the most popular tourist destinations. Consistent with the increases in visitors and spending, travel services receipts from international travellers increased from USD10.8 billion in 2015 to USD12.2 billion in 2016.

The primary income account recorded a larger deficit in 2016 in line with the increase in Foreign Financial Liabilities (FFL). In 2016, the primary income account deficit stood at USD29.7 billion, expanding from USD28.4 billion the year earlier (Chart 4.8). An increase in the position of Foreign Financial Liabilities (FFL) due to a surge in non-resident investments to Indonesia contributed to the larger primary income account deficit. Furthermore, the deficit grew due to an increase of interest payments on government securities as the Government increased its liability position on portfolio investment. The potential for a larger primary income account deficit in 2016 was offset by a decline of direct investment income payments as residents' assets were repatriated as part of the successful Tax Amnesty program.

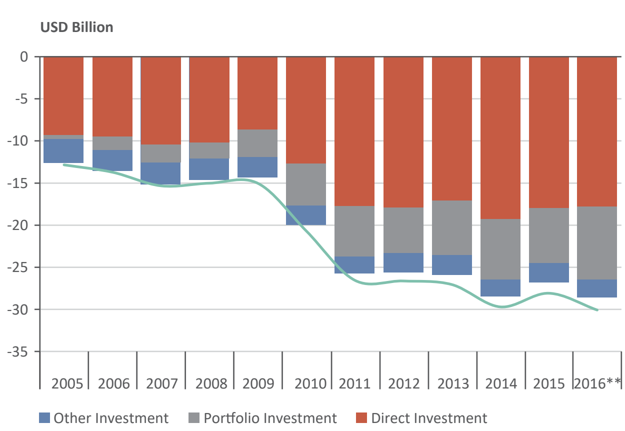
The secondary income account recorded a narrower surplus in 2016 after remittances from Indonesian migrant workers (TKI) to Indonesia decreased and remittances from foreign workers (TKA) to their home countries increased. The secondary income account surplus narrowed from USD5.5 billion in 2015 to USD4.4 billion in 2016, primarily due to the ongoing moratorium on placements of Indonesian migrant workers (TKI) in the Middle East, which prompted a decline in the number of TKI from 3.7 million to 3.5 million over the reporting period (Chart 4.9). Consequently, TKI remittances fell in 2016 from USD9.4 billion to USD8.9 billion.

4.2. CAPITAL AND FINANCIAL ACCOUNT

The capital and financial account balance recorded a surplus in 2016 totalling USD29.2 billion, increasing significantly from USD16.9 billion in 2015. Direct investment and portfolio investment surpluses were the main contributors to the increase, while the other investment deficit narrowed.

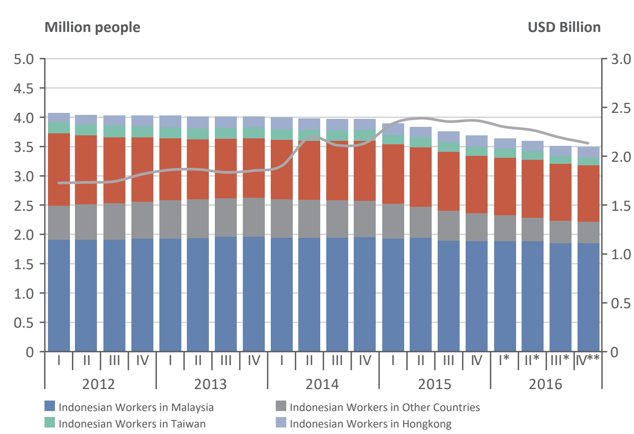
In general, the promising domestic economic outlook perceived by global investors drove the larger capital and financial account surplus, despite widespread global uncertainty. The positive perception held by global investors was supported by the promising economic outlook, maintained economic stability and attractive yields. Furthermore, the Tax Amnesty policy strengthened expectations of rupiah appreciation and future economic resilience, including fiscal sustainability. The positive sentiment, in turn, dampened global risks linked to uncertainty surrounding the proposed FFR hikes, as well as geopolitical risks in Europe and the US in the latter half

Chart 4.8. Primary Income Balance



**very preliminary figures
Source: Bank Indonesia

Chart 4.9. Number of Indonesian Workers & Remittances



*preliminary figures **very preliminary figures
Source: Bank Indonesia

of the year. In general, well maintained positive sentiment spurred capital inflows to Indonesia, thus contributing to the significantly larger capital and financial account surplus in 2016.

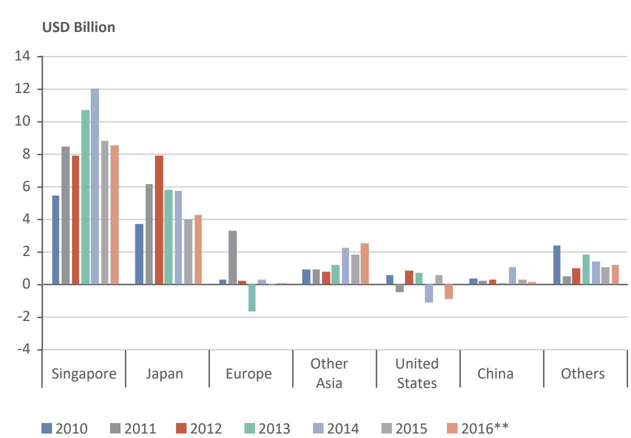
Direct Investment

Net direct investment stood at USD15.1 billion in 2016, increasing by 41.3% compared to that in 2015 in line with optimism regarding domestic economic outlook, including the impact of an increase in the ease of doing business index. The Indonesia's ranking on the ease of doing business index (EODB) jumped from 106 to 91.

Based on country of origin, Singapore and Japan continued to dominate foreign direct investment (FDI) (Chart 4.10). The combined value of FDI from both countries totalled USD12.9 billion. Furthermore, other Asian countries also remained major investors in Indonesia. Direct investment from China was recorded at USD163 million in 2016, half of the USD324 million invested in 2015. Meanwhile, direct investment from the United States recorded a net outflow totalling USD0.9 billion, contrasting the trend in 2015.

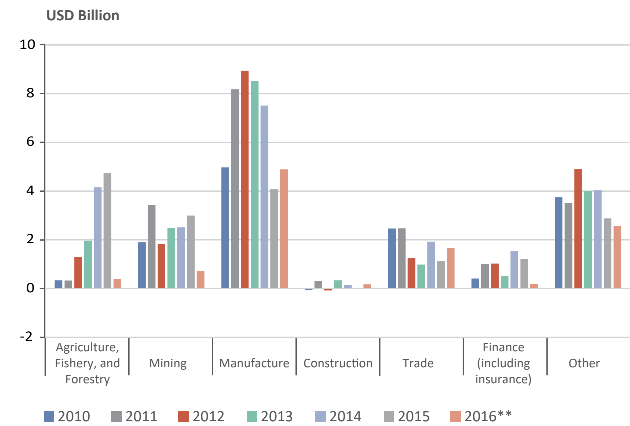
In terms of economic sector, FDI realization in 2016 concentrated in the manufacturing industry and trade sector (Chart 4.11). The value of investment in the manufacturing industry reached USD7.5 billion, with Singapore and Japan as the major investors. Meanwhile, recently increasing investment in the trade sector overtook investment in the agricultural, fisheries and forestry sector. Accordingly, investment in the trade sector totalled USD2.0 billion in 2016, primarily originating from Singapore as the major investor.

Chart 4.10. Foreign Direct Investment by Major Investor Countries



**very preliminary figures
Source: Bank Indonesia

Chart 4.11. Foreign Direct Investment by Economic Sector



**very preliminary figures
Source: Bank Indonesia

The increase of direct investment was also reflected in the positive realization of foreign direct investment (FDI) recorded by the Indonesia Investment Coordinating Board (BKPM). FDI realization data published by BKPM showed an 8.4% increase in 2016, rising from USD365.9 trillion to USD396.6 trillion, equivalent to USD29.0 billion.[4] By sector, BKPM recorded a concentration of FDI realization in the base metals, articles of metal, machinery and electronics industry as well as the basic chemicals, articles of chemicals and pharmacy industry, accounting respectively for 13.4% and 10% of total FDI. In addition, significant FDI also flowed into the paper, articles of paper and printing industry (9.6% share), the mining sector (9.5% share), as well as the conveyance and other transportation industry (8.2% share).

Consequently, the net liability of Indonesia's International Investment Position (IIP) declined, which was also inextricably linked to the successful Tax Amnesty program. During the first phase of implementation, taxpayers were required to declare unreported assets. The declaration of unreported assets, especially assets held offshore, influenced Indonesia's International Investment Position (IIP). Taxpayers began to declare their unreported assets in the third quarter of 2016, which prompted an increase in the position of direct investment on the asset side that outstripped the increase on the liability side. Such developments led to a decline in the net liability position of direct investment in Indonesia's International Investment Position (IIP) from USD193.1 billion in 2015 to USD176.1 billion in 2016.

4 Assuming exchange rates per the 2016 state budget.

Portfolio Investment

Portfolio investment also recorded a large surplus in 2016 due to the promising domestic economic outlook and attractive yields. Despite a highly uncertainty in global financial markets, portfolio investment recorded a net surplus of USD18.9 billion in 2016, even exceeding the USD16.2 billion registered in 2015.

The influx of portfolio investment primarily occurred during the first three quarters of 2016, which recorded a net inflow totalling USD19.3 billion, surpassing that recorded in the same period one year earlier. The public sector was the main driver of portfolio investment inflows, as reflected by the large number of non-resident holdings of public sector securities, through issuances of global bonds and global sukuk. During the same period, the private sector also recorded a net inflow, but not as significant as that posted by the public sector.

Entering the fourth quarter of 2016, pressures on global financial markets intensified, triggered by global risks in the form of US political dynamics and uncertainty surrounding the planned FFR hike. Such developments sparked a capital reversal from developing countries, including Indonesia. Consequently, portfolio investment, which had previously increased, experienced a reversal in both the public and private sectors. In the fourth quarter of 2016, therefore, portfolio investment recorded a net outflow of USD0.4 billion, primarily as non-residents released holdings of securities in the private sector.

By investment instruments, all portfolio investment instruments recorded a surplus in 2016, dominated by rupiah-denominated instruments as the main contributor to portfolio investment inflows. Non-resident flow of funds to rupiah government debt securities (SUN) recorded a net inflow of USD8.4 billion, increased from the USD7.7 billion registered in 2015. Accordingly, the position of non-resident rupiah SUN holdings increased from 42.9% at the end of 2015 to 43.8% at the end of 2016. Foreign capital in Bank Indonesia Certificates (SBI) recorded a net inflow of USD0.1 billion, reversing the USD0.1 billion outflow in 2015 and leading to an increase in the position of non-resident holdings of SBI from 0% to 1.5% at the end of 2016. On the stock market, investors booked a net buy totalling USD2.6 billion through to the third quarter of 2016. Nevertheless, the Federal Funds Rate (FFR) hike and unexpected results of the US presidential election drove investors to sell in the fourth quarter of 2016. Consequently, non-resident transactions in 2016 booked a net buy totalling USD1.3 billion.

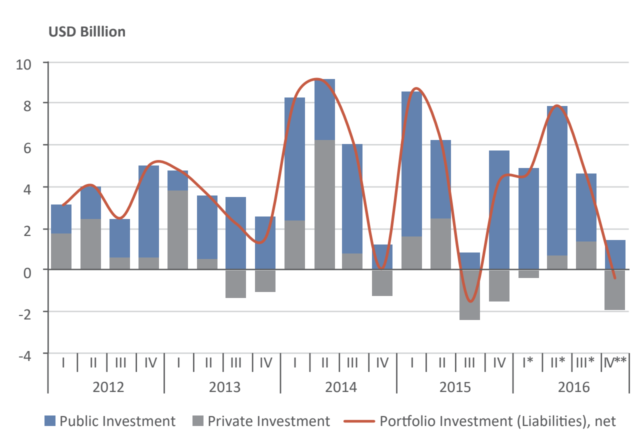
Portfolio investment in the form of long-term government debt securities, including from issuances of global bonds and global sukuk, also increased. In 2016, the Government issued global bonds purchased by non-resident investors worth USD8.7 billion. The issuances consisted of global bonds to the tune of USD5.4 billion, including prefunding for the 2017 state budget at the end of 2016, euro bonds valued at 3.2 billion euros and samurai bonds totalling USD1.0 billion. In addition, the Government also issued global sukuk, with non-residents purchasing a total of USD2.3 billion. Consequently, the net liability position of portfolio investment in Indonesia's International Investment Position (IIP) stood at USD213.6 billion in 2016, up from USD187.9 billion in 2015.

The various portfolio investment dynamics outlined above led to portfolio investment, on the liability side, to record a USD16.7 billion surplus in 2016, down slightly from USD17.5 billion in 2015 (Chart 4.12). Meanwhile, portfolio investment on the asset side recorded a USD2.2 billion surplus, reversing the usual trend of deficit. The portfolio investment surplus was largely attributable to the disbursement of assets in relation to the Government's Tax Amnesty program.

Other Investments

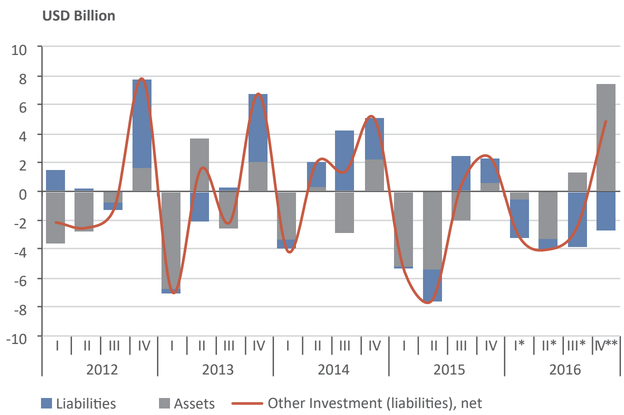
The other investment deficit significantly narrowed in 2016 due to the Tax Amnesty policy, particularly due to the repatriated funds. The net inflow of funds was primarily recorded in the second half of the year, with other investments therefore recording a surplus for the year on the asset side. Meanwhile, non-resident other investments on the liability side experienced a deficit caused by a net payment of foreign loans by the public and private sectors (Chart 4.13). Other investments on the liability side experienced a deficit as the private sector exercised prudent management of international sources of financing. This is reflected by a net payment on the liability side, which

Chart 4.12. Nonresident Portfolio Investment in Indonesia



*preliminary figures **very preliminary figures
Source: Bank Indonesia

Chart 4.13. Other Investments



*preliminary figures **very preliminary figures
Source: Bank Indonesia

stemmed from significantly smaller withdrawals of loans than the scheduled repayments. Such developments are in line with ongoing consolidation in the corporate sector, hence corporations have been more inclined to improve internal financial conditions rather than expand.

Other investments on the asset side, in the form of resident assets held offshore, experienced a net withdrawal totalling USD5.0 billion. In the second semester, the net withdrawal amounted to USD8.8 billion, after posting a net payment of USD3.8 billion in the first half of 2016. The asset decline, particularly the private sector deposits held at offshore banks, thought to be due to the Tax Amnesty policy.

Other investments in the public sector recorded a larger deficit than that posted in the previous year, increasing from USD0.2 billion to USD3.5 billion. The growing deficit primarily attributable to an increase in the government servicing external debt, which exceeded relatively stable government withdrawals of external debt in 2016.

Consequently, Other Investments recorded a deficit totalling USD4.8 billion in 2016, down significantly from the USD10.1 billion registered in 2015. The narrower other investment deficit prompted a decline in the net liability of Indonesia's International Investment Position (IIP) from USD101.9 billion in 2015 to USD47.6 billion in 2016.

4.3. EXTERNAL SECTOR RESILIENCE

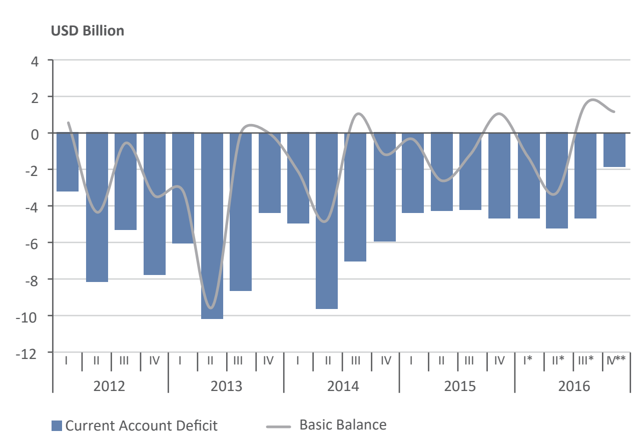
BOP gains in 2016 strengthened external sector resilience in Indonesia. Various external resilience indicators in 2016 demonstrated sound conditions, improving on the previous year. Furthermore, the ability of long-term financing sources to support the current account deficit also improved in line with the significant capital and financial account surplus. Such developments can be explained by the performance of the basic balance. Despite deteriorating somewhat in the second quarter of 2016, the basic balance rebounded in the second semester (Chart 4.14).

External resilience solvency indicators also improved in 2016, pointing to a decline in the ratio of IIP net liability to GDP due primarily to an increase of offshore assets declared through the Tax Amnesty. Milder pressures on the external sector were also reflected by an increase of non-resident capital in the form of non-debt creating inflows as a safer source of financing. Other solvency indicators also showed signs of improvement as the national economy recovered in 2016 (Table 4.6).

Resilience indicators, from the perspective of liquidity, also pointed to improvements due to an increase in the position of official reserve assets. At the end of 2016, the position of foreign exchange reserves stood at USD116.4 billion, increasing from USD105.9 billion at the end of 2014 (Chart 4.15), equivalent to 8.7 months of imports or 8.4 months of imports and servicing government external debt. This level of foreign exchange reserves is well above the international standard of three months. In addition, the capacity of foreign exchange reserves to meet monetary system obligations in the private sector also improved, as illustrated by the increase in the ratio of foreign exchange reserves to money supply (Table 4.7).

External resilience, in terms of the economy's ability to service its obligations, also improved. The Tier 1 Debt Service Ratio (DSR) was observed to decline and was categorised as

Chart 4.14. Basic Balance



*preliminary figures **very preliminary figures
Source: Bank Indonesia, calculated

Table 4.6. Indicator of External Sector Solvency

Percent

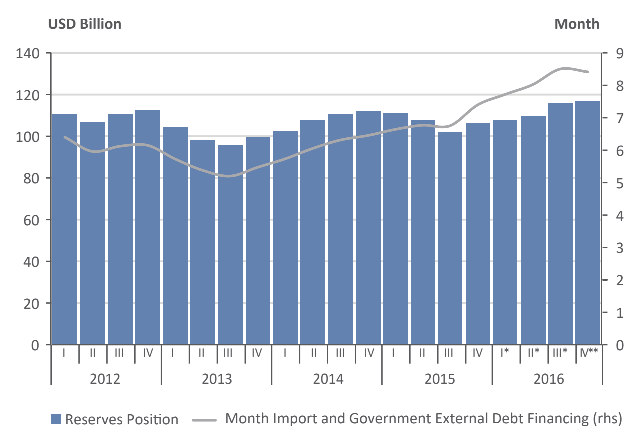
Indicator	Explanation	2011	2012	2013	2014	2015	2016**
1. Indonesia's net IIP / GDP	The ratio used to measure the portion of IIP from whole domestic economy.	35.4	34.3	35.3	43.1	44.7	36.4
2.External Debt / GDP	Role ratio of external debt to domestic financing of the economy	25.0	27.4	29.1	32.9	36.1	34.0
3. External debt / Goods and services Export 1)	A ratio that measures ability to pay external debt from goods and services export revenue	105.8	119.6	129.8	147.5	181.3	188.0
4. Net External Debt2) / Current Account Receipts	The ratio used to measure ability to pay external debt netto from current account revenue	31.2	36.8	49.6	56.9	70.1	71.4
5. Net direct investment liabilities / GDP	The ratio used to measure role of direct investment to domestic economy	22.1	19.4	21.3	25.8	28.1	25.9
6. Non-debt creating inflows (Direct Investment Liabilities + Equity) / GDP	The ratio measures role of non-debt capital inflows to financing on domestic economy	32.0	30.4	29.8	37.3	37.9	35.0

1) Total income from goods & services export and primary and secondary income
2) Gap between debts components of External Financial Debts and External Financial Assets in Indonesia International Investment Position

**very preliminary figures
Source: Bank Indonesia, BPS, calculated

normal in 2016, falling from 20.7% to 20.5%.[5] The decrease was driven by a decline in external debt repayments that surpassed the decline of current account receipts. Through the application of prudential principles, Bank Indonesia also calculates the Tier 2 DSR using a more conservative method, by including trade credit to non-residents.[6] In terms of risk, the trade credit to non-residents, which has a relatively higher share in the calculation of Tier 2 DSR, has a lower risk profile. Using this calculation, the Tier 2 DSR stood at 61.4% in 2016, down slightly compared to the previous year due to a lower private sector DSR amid an increase in the DSR of the public sector (Chart 4.16).

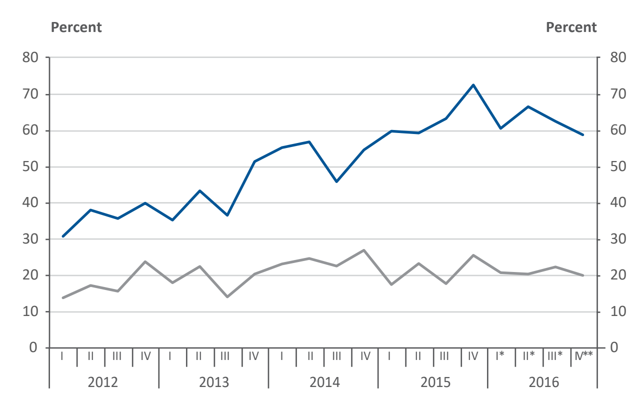
Chart 4.15. Indonesia Reserves



*preliminary figures **very preliminary figures
Source: Bank Indonesia, BPS, calculated

Bank Indonesia undertook various efforts to strengthen external sector resilience. To that end, Bank Indonesia focused on efforts to contain the external risks linked to international sources of financing used by the corporate sector. Therefore, Bank Indonesia continued to monitor implementation of Bank Indonesia Regulation (PBI) No. 16/21/PBI/2014 concerning the Application of Prudential Principles to Manage the External Debt of Nonbank Corporations. Indebted corporations are thus required

Chart 4.16. Debt Services Ratio (Indonesia)



*preliminary figures **very preliminary figures
Source: Bank Indonesia

5 Tier 1 DSR is a methodology from the World Bank. Tier 1 DSR is the ratio of total external debt payments (principal and interest) to current account receipts, where total external debt payments (Tier 1) constitute the principal payment of the long-term external debt and interest payment of long- and short-term external debt.

6 Tier 2 DSR represents a modification of the World Bank methodology by broadening the scope to include short-term loans and trade credit, thus aiming to achieve more prudent external debt management. Tier 2 DSR is therefore defined as the ratio of total external debt payments (principal and interest) to current account receipts, where the total external debt payments per Tier 2 include the principal and interest of the external debt for direct investment other than from offshore subsidiaries, such as loans and trade credit to non-affiliates.

Table 4.7. Indicator of External Sector Liquidity

Percent

Indicator	Explanation	2011	2012	2013	2014	2015	2016**
1. Reserves / Import of Goods and services	The indicator that used to measure the reserves adequacy in fulfill needs of goods and services import	58.1	53.0	47.0	55.4	63.8	72.9
2. Reserves / Broad Money (M2)	Indicators that used to measure the potential impact from decreasing confidence in domestic currency.	33.3	31.9	27.8	31.8	31.2	30.9
3. Reserves / Short Term External Debt (remaining maturity)	Indicators that used to measure reserves adequacy in paying short-term external debt based on the remaining maturity.	235.5	206.4	176.6	188.8	190.9	212.9

**very preliminary figures
Source: Bank Indonesia

to apply prudential principles in the form of a minimum hedging ratio, liquidity ratio and debt rating, as determined by Bank Indonesia. Ultimately, this policy is expected to enhance prudential principles at nonbank corporations in terms of mitigating the risks associated with external debt, while paying due consideration to more general business management practices.

External Debt

Improved external resilience was also evidenced by the performance and profile of external debt in Indonesia. External debt grew slower in 2016, accompanied by a lower ratio of external debt to GDP. The position of external debt at the end of 2016 stood at USD317.0 billion, with growth rate decelerating from 5.9% in 2015 to 2.0% in 2016. Consistent with slower external debt growth, the ratio of external debt to GDP in 2015 also decreased from 36.0% to 34.0% (Chart 4.17). Furthermore, such ratio is also considered safe and is within the range of peer countries (Chart 4.18).

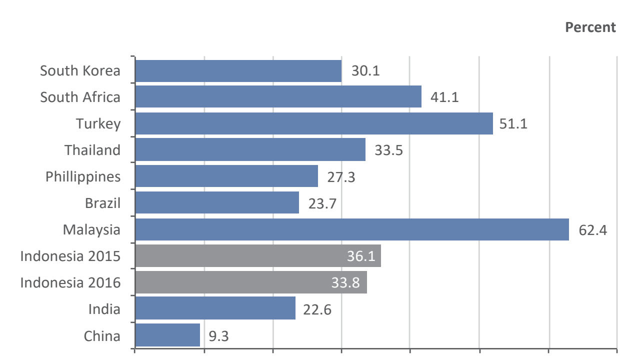
The position of private external debt declined in 2016, contracting by 5.6% and reducing the share of private external debt from 54.1% to 50.1% of total external debt in Indonesia. Long-term external debt, accounting for 74.0% of total private external debt, contributed to the lower position of private external debt, while trade credit edged up short-term external debt. Consequently, the position of private external debt at the end of 2016 reached USD158.7 billion, down from the USD168.2 billion posted in 2015. The decline of private external debt stemmed primarily from loan agreements and debt securities. Such developments are in line with a more prudent behaviour of corporate sector in terms of managing sources of financing, including foreign loans, due to ongoing internal consolidation.

The position of public external debt increased as the government issued more global bonds and global sukuk, thus expanding non-resident holdings of government securities. The position of public sector external debt, which accounts for 49.9% of total external debt, was observed to grow at 11.0% in 2016, accelerating from 9.9% the year earlier. The additional growth originated from long-term

Chart 4.17. External Debt to GDP (Indonesia)

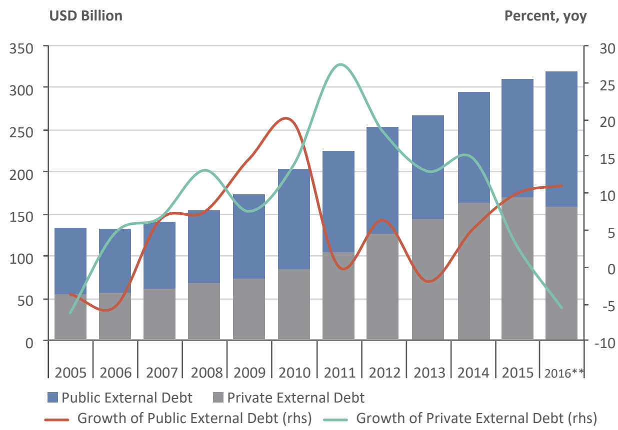
*preliminary figures **very preliminary figures
Source: Bank Indonesia, calculated

Chart 4.18. External Debt Ratio to GDP in Several Countries



Source: World Bank, calculated

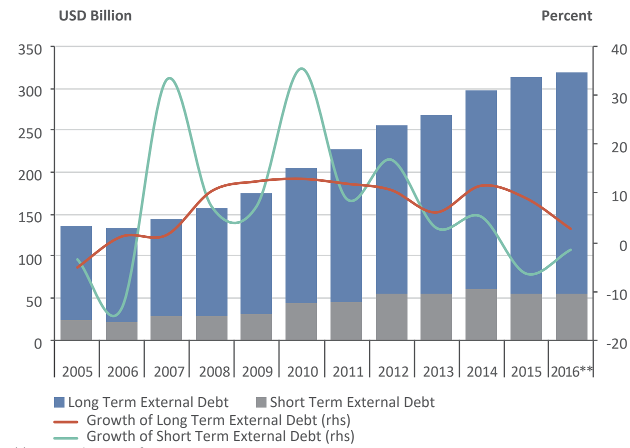
Chart 4.19. Indonesia External Debt According to Borrowers Group



**very preliminary figures

Source: Bank Indonesia

Chart 4.20. External Debt According to Remaining Maturity



**very preliminary figures

Source: Bank Indonesia, BPS, calculated

external debt, which accounted for 99.5% of total public external debt. The acceleration of public external debt was in line with the growing requirement for financing by the Government. Meanwhile, public sector short-term external debt declined. Consequently, the position of public external debt had increased from USD142.6 billion to USD158.3 billion by the end of 2016 (Chart 4.19).

The largest position of public external debt, in the form of tradable government bond (SBN), increased by 21.1% compared to the position in 2015 to fund the state budget deficit. Meanwhile, government policy to reduce foreign loans continued in 2016. Consequently, the position of government external debt in the form of loan agreements has fallen gradually from USD68.1 billion in 2010 to USD54.2 billion in 2016.

Based on remaining maturity, the structure of external debt in Indonesia was categorized as sound, reflecting the dominant long-term external debt at USD262.3 billion or 86.7% of the total (Chart 4.20). The dominance of long-term external debt was also prevalent in the private sector.

Box 4.1. Shipping Services Industry and Services Account Deficit

The services account in the BOP persistently records a deficit, with the shipping services industry as the main contributor. The services account is an indicator of domestic transportation industry strength in terms of servicing inter-island and international trade. Transportation services are the largest contributor to the services balance deficit, accounting for 78%, particularly the conveyance of goods. The large transportation services (freight) deficit is attributable, amongst others, to a reliance on foreign ships.

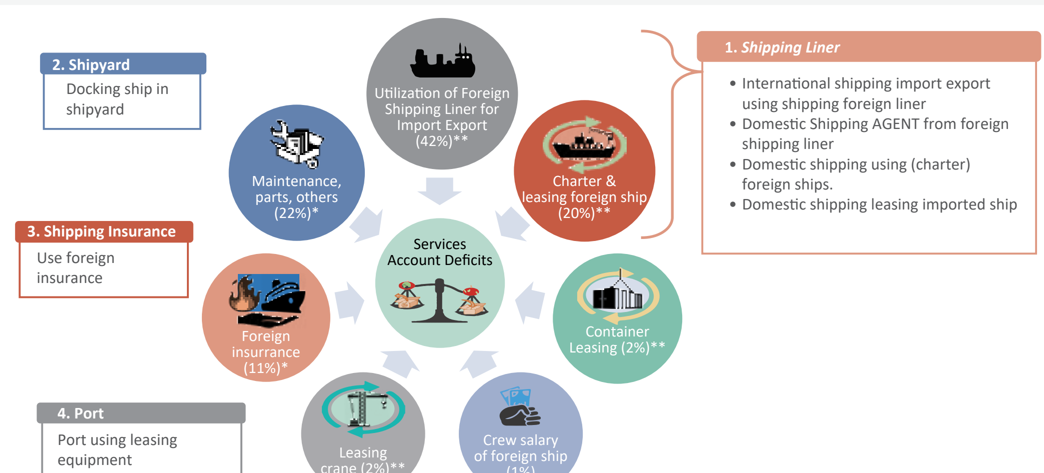
The data shows that foreign ships dominate shipping services in Indonesia. The reliance on foreign ships accounts for around 95% of international import-export activity and around 40% of domestic sea transportation. A review conducted by the Ministry of Finance found that foreign liners command 78% of total vessels, 94% of carrying capacity and 90% of import-export freight. Meanwhile, Indonesian players own ships with a comparatively small carrying capacity. Domestic shipping liners, although 100% navigated by the domestic vessel, still use foreign ships, through charter and leasing facilities, or as agents for foreign shipping services. In general, the main drivers of the services account deficit can be divided into four categories, namely the shipping services industry or shipping liners (62%), followed by shipyards (22%), Insurance Financial Services (11%) and Ports (2%).

Domestic shipping is facing several onerous challenges. The domestic shipping is unable to serve international trade due to inadequate economies of scale and competitiveness compared to more affordable foreign players due to excess supply following the global financial crisis. On the other hand, a lack of integrated and synergistic policies as well as regulations amongst relevant policymakers has undermined incentives for domestic players to invest and develop their businesses. Therefore, private domestic players maintain a low economy of scale and are not profitable enough to compete at the international level.

Profile of Domestic Shipping Industry After Cabotage Rules

The Government introduced cabotage rules through Act No. 17 of 2008 in order to overcome foreign dominance in shipping industry. The cabotage rules aims to drive national shipping industry development by providing exclusive rights to national players operating in Indonesian waters. After the implementation of Presidential Decree No. 5 of 2005 concerning National Shipping Industry Empowerment, which was subsequently reinforced by Act No. 17 of 2008 on Shipping, the shipping industry achieved a rapid growth. In 2005, the number of merchant vessels operating under an Indonesian flag totalled just 6,041 units. By 2015, the figure had grown by 174% to 16,574 units (Chart 1). In general, the shipping industry in Indonesia is controlled by five

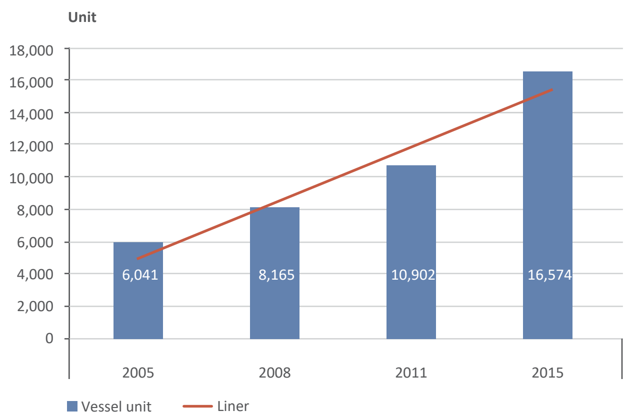
Figure 1. Main Source of the Services Account in Marine Transportation



*Services account to GDP **Estimate figure based on focused discussions

Source: Bank Indonesia

Chart 1. Number of National Shipping Vessel



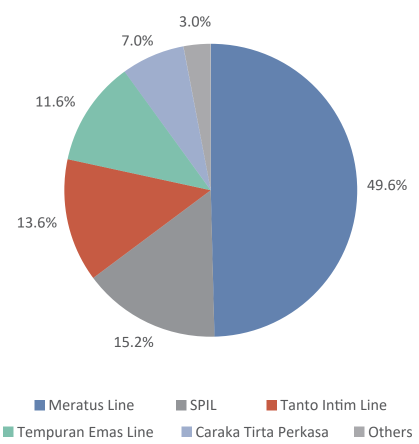
Source: INSA

companies, accounting for 50.4% of the total market share (Chart 2).[1]

The Challenge of Indonesia's Economic Spatial Structure and Improvements to Maritime Infrastructure

The geographical concentration of Industry and the regional economic imbalances in Indonesia precipitate high logistics costs, culminating in inter-regional trade volume imbalances, otherwise known as the empty backhaul problem in shipping parlance, namely trade imbalances

Chart 2. National Shipping Market Share



Source: Alphaliner, Gurning (2016), data calculated

between the destination and the origin. In other words, the ships are only fully laden in one direction. The commodities required by industry on Java generally originate from imports (raw and supporting materials), while demand from outside of Java is supplied from Java. Consequently, shipping operators charge all ship operating costs to the consignor from Java due to uncertainty whether the ship will be full on the way back. Such conditions lead to relatively higher logistics costs in Indonesia compared to other countries.

Shipping infrastructure limitations, particularly in Eastern Indonesia, also push up the cost of inter-island logistics. Most ports in Indonesia are still traditional with a relatively shallow draft (Figure 2), which means that only relatively small vessels can serve domestic ports, namely with a maximum capacity of 5,000 TEUs. In contrast, ports in other countries are accessible to vessels with a maximum capacity of up to 18,000 TEUs. Shallow domestic ports also influence the decisions of national shipping operators to favor small container ships, thus driving up the cost per TEU compared to using larger vessels.

Using larger container ships is a prerequisite to a more affordable and efficient modern logistics. In 2016, the Harper Petersen Index indicated an excess supply, which even depressed the leasing price of a ship by more than half what was recorded in 2004.[2] A sharper decline was observed for ships with a larger weight, which meant that the leasing price of a 3,500 TEU container ship (±50,000DWT) was cheaper than that of a 1,700 TEU container vessel (±25,000). Through to November 2016, therefore, the daily leasing cost per TEU of a 3,500 TEU vessel was 43.44% cheaper than that of a 1,700 TEU vessel. Consequently, using a larger vessel of 3,500 TEUs would cut logistics cost by 56.56% compared to using a 1,700 TEU vessel, which is the most dominant ship size used by operators in Indonesia. Nonetheless, the use of larger ships would necessitate a deeper draft of at least 12.5m (Figure 3).

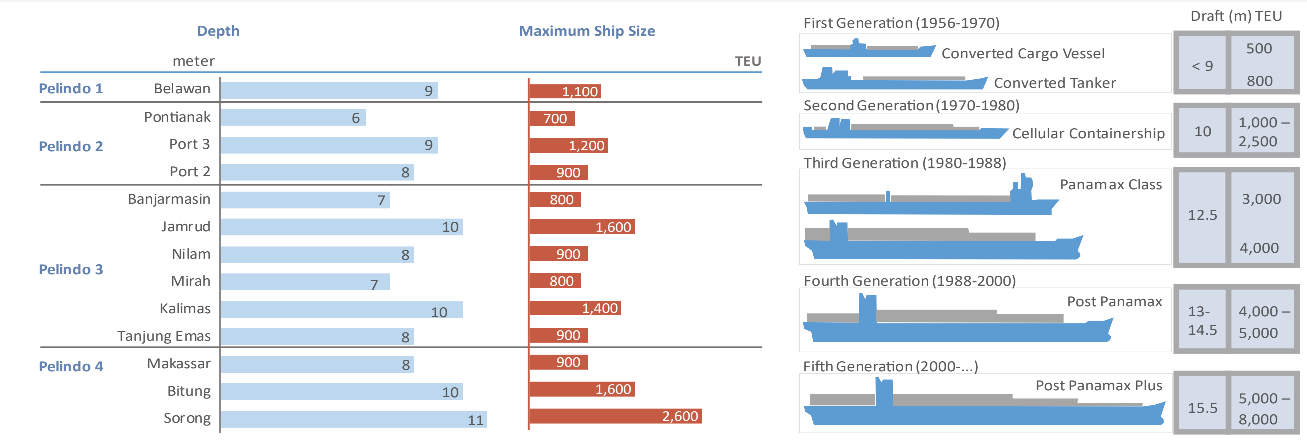
The Challenge of an Integrated Maritime Industry and the Aspirations of Indonesian Made Ships

The final determinant of a dominant foreign industry is the dependence of domestic players on imported ships due to the weak competitiveness of domestically made ships in

1 Based on early 2016 data, if the number of vessels and carrying capacity of the five largest operators were combined into one company, the number of vessels would total 180 with a carrying capacity of 118,345 TEUs. This company would rank fifth in the world in terms of vessels and 21st in terms of carrying capacity.

2 The Harper Petersen Index (HARPEX) is an international index that tabulates weighted daily charter rates of seven classes of container ship operating in international waters. The index is available at http://www.harperpetersen.com/harpex/harpexRH.csv

Figure 2. **Depht and Ship Size**



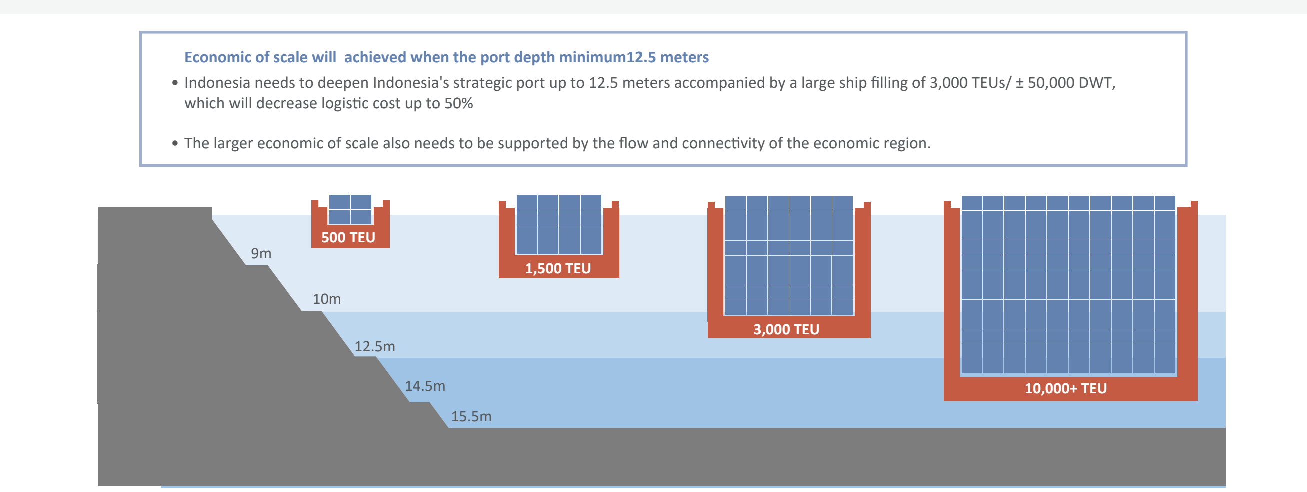
Source: McKinsey Global Institute Analysis

terms of price, quality and production speed. The protracted import process for inputs also exacerbates the lead time of domestic ship productions, while the decline of world trade has made second-hand foreign vessels more affordable due to excess supply. Repairs to ships are often made at international shipyards due to a lack of adequate domestic shipyards, long lead times and lower quality. The relatively high import content for ship procurement also feeds through to the national trade deficit.

Simulation showed that increasing the number of ships in operation are the most important variable to reduce the services balance deficit. It further showed that domestically produced ships has the largest effect in narrowing the services balance deficit, amounted to a reduction of 0.14%. In contrast, if the number of required ships were met through imports, the reduction to the deficit would only amounted to 0.05%. Input-Output analysis also demonstrated that the ship industry is crucial and have significant impact to various related sectors.

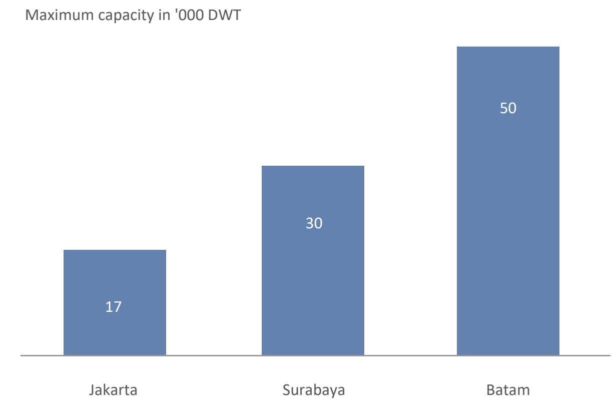
Currently, one of the problems facing the country is lack of shipyards, especially on the island of Java due to the rapid proliferation of ships. Of the 250 registered shipyards, only around 40% are actively operated and can meet just 35% of domestic demand for new ships and 85% of the demand to repair ships. Such conditions compound the problems faced by domestic shipping operators due to the long queues of 2-3 months for repairs. If urgent repairs are required, shipping operators typically turn to shipyards located in other countries, thus creating losses in the industry due to lost potential receipts. As an illustration, Jakarta is the final

Figure 3. **Port Deepening**



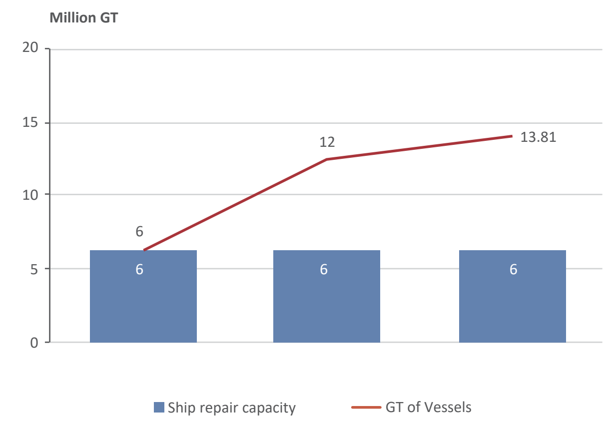
Source: Ministry of Transportation, calculated

Chart 3. Indonesia Shipyard Capacity



Source: INSA (2012 and 2014); ministry of industry (2014) quoted in Gurning (2016)

Chart 4. Shipyard Industry Capacity (Reparation)



Source: BPS INSA (2012 and 2014); ministry of industry (2014) quoted in Gurning (2016)

destination for 67% of ships in Indonesia, while the number of shipyards in Jakarta only account for 15% of the total shipyards nationwide (Chart 3 and 4).

The services balance deficit in Indonesia is also attributable to issues in the maritime industry. Weak support of the upstream sectors (shipyard industry), limited market share of intermediate industries (shipping services industry), and the reluctance to use domestic shipping services in downstream sectors (manufacturing industry) pointed to structural issues persisting in the industry. Meanwhile, without a solid domestic shipyard industry as one of the more important preconditions for the maritime development, the industry could be open to both short and long term problems, namely higher ship production cost and larger goods trade balance deficit respectively.

Considering these conditions, efforts to improve the services account could be achieved through the integration of maritime industry and local development. Domestic made ships are crucial for local economic development considering the inter-regional trade patterns in Indonesia. The Government also required to formulate innovative policies to ensure an efficient and prosperous shipyard industry.

In 2016, the Government has prioritized on the development of the maritime sector. Several strategic government measures have been introduced, including consolidation of the relevant departments and institutions, to improve the efficiency and effectiveness of the services sector. The creation of a task force aimed to reduce dwell time is also one of the measures implemented as part of this consolidation process. To support the domestic shipyard industry, several relevant departments, including the Ministry of Maritime Affairs and Fisheries (KKP), are also closely working with domestic shipyards to meet the industry demand.

CHAPTER 5
Exchange Rate

The rupiah exchange rate maintained a streghthening trend along with reduced volatility for most of 2016. Fundamentally, rupiah appreciation was driven by improved performance of the Indonesia balance of payments, including higher capital inflows as a result of positive perception towards the economic outlook. Moreover, the implementation of the Bank Indonesia regulation on exchange rate, prudential principles in managing external debt of the nonbank corporation as well as the mandatory use of the rupiah currency also play an important role in supporting the positive development of the rupiah. As such, appreciation of the rupiah in 2016 was coupled by improvement in the composition of capital flows on the forex market and by a stronger structure of the domestic forex market.

Image caption:
Rupiah and US dollar banknotes. Exchange rate stability is one focus of the Bank Indonesia policy mix. In 2016, the value of the rupiah held steady and maintained an appreciating trend amid heightened uncertainty on global financial markets.

For most of 2016, the rupiah exchange rate maintained an appreciating trend in tandem with reduced volatility. The average value of the rupiah appreciated from Rp13,392 per USD in 2015 to Rp13,305 per USD, a gain of 0.7%. Point-to-point, the rupiah also strengthened 2.3% (yoy) to close 2016 at Rp13,473 to the USD (Chart 5.1). Furthermore, volatility in the currency eased from 11.1% in 2015 to 8.4%. The stable upward movement in the rupiah took place amid downward movement in the currencies of many emerging market nations in 2016.

Fundamentally, rupiah appreciation was driven by improvements in the Indonesia balance of payments. In 2016, the balance of payments posted a surplus due to reduction of the current account deficit and a more robust surplus in the capital and financial account, as a result of rising foreign capital inflows throughout the year. Foreign capital inflows were driven by attractive yields and positive investor perceptions on economic outlook, including the effects of the tax amnesty policy. Appreciation of the rupiah was also influenced by consistency of policy synergy, including Bank Indonesia policy for the exchange rate, implementation of prudential principles (KPPK) in managing external debt of the nonbank corporation, and mandatory use of the rupiah within the territory of the Republic of Indonesia.

Exchange rate appreciation in 2016 was followed by an improved composition of capital flows on the forex market and improvement in of the domestic forex market structure. The more-robust composition of capital flows on the forex market can be observed by increased supply of foreign currency from both nonresident and resident participants. Moreover, enhancement in the domestic forex structure was visible in the greater transaction volume on the spot, forward, and swap markets.

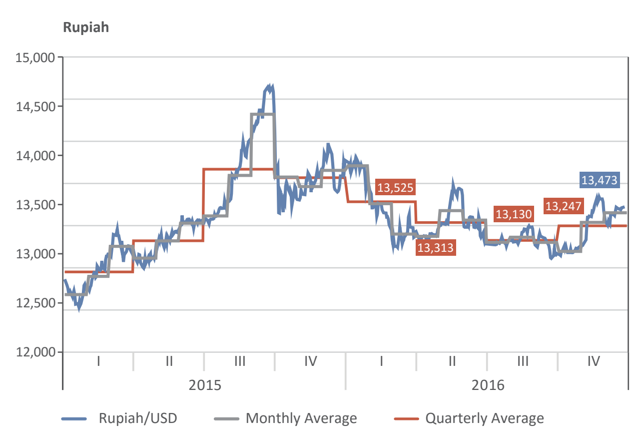
5.1. DYNAMICS OF RUPIAH EXCHANGE RATE

Rupiah appreciation during 2016 was mainly observed during the first three quarters of the year, after which the currency weakened in the final quarter. At the end of 2016, the rupiah closed at Rp13,473 per USD, representing a point-to-point gain of 2.3% (yoy) over the closing level of 2015. The average value of the rupiah appreciated from Rp13,392 per USD in 2015 to Rp13,305 per USD, a gain of 0.7% on a year-on-year basis. In addition, volatility in the currency eased from 11.1% in 2015 to 8.4%. The gains in the rupiah stood in contrast to currency movements for other emerging market countries, which were generally marked by decline in 2016 as evidenced in South Africa (-13.1%), Turkey (-9.9%), India (-4.5%), Brazil (-4.2%), the Philippines (-4.1%), and Korea (-2.5%). Furthermore, currency volatility also mounted to higher levels compared to the rupiah in several other countries (Chart 5.2).

In the first quarter of 2016, the rupiah strengthened in value while maintaining lower volatility. During this period, the exchange rate averaged Rp13,525 per USD, a gain of 1.8% (qtq) over the fourth quarter of 2015. Volatility in the rupiah also fell sharply from 16.7% in the fourth quarter of 2015 to 10.3%. The appreciation in the first quarter of 2016 can be seen as a positive development, given a mere limited ease of various external risks at the time.

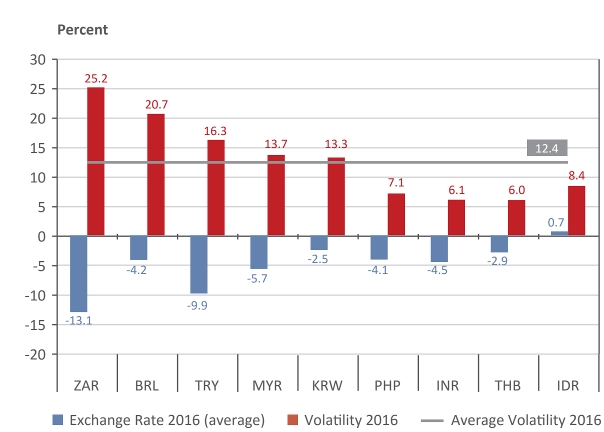
Positive investor perceptions of the Indonesian economic outlook and the decline of domestic risks has helped to minimize various external risks. External risks mounted temporarily in January 2016, triggered by pressures on the money market and stock market in China. This began since the launching of the 'circuit breaker' on China's stock

Chart 5.1. Rupiah Exchange Rate



Source: Bank Indonesia

Chart 5.2. Rupiah Exchange Rate and Peers



Source: Reuters, Bloomberg, calculated

exchanges to curb excessive net selling, but nevertheless had the opposite effect by fuelling panic on financial markets. External pressures in January 2016 were also affected by a fall in world oil prices to below USD30 per barrel due to oversupply. Concerns mounted that the decline of oil prices would affect economic outlook of commodity-producing nations. In February 2016, external pressures were toned down as positive responses of stabilization policies launched by Chinese authorities and the more dovish policy stance adopted by the Federal Reserve, the central bank of United States, in March 2016.

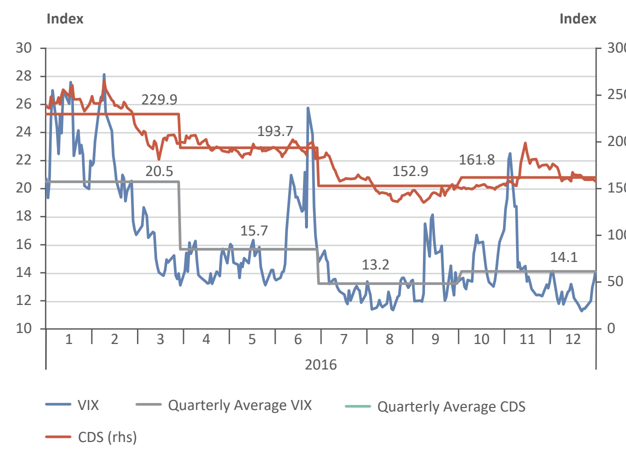
The rupiah exchange rate maintained its appreciation in the second quarter of 2016, although on a more limited scale. In average, the rupiah gained 1.6% (qtq) to Rp13,313 per USD. During this period, the streghthening trend of the rupiah was spurred by positive investor perceptions and the subdued level of risks to the economy. The appreciating trend exchange rate continued throughout the second quarter of 2016, supported by positive domestic sentiment over the adoption of the tax amnesty act and strengthened investment optimism in Indonesia.

Rupiah gains were restrained slightly in the second quarter, mainly affected by statements from the Federal Reserve officials and release of the statement of the Federal Open Market Committee (FOMC) meeting in April 2016 signaling an imminent increase in the Fed Funds Rate (FFR). The release stated that an FFR increase might be possible at the FOMC meeting in June 2016 if the US economic data remained in line with economic growth improvement, further improvement in the labor market, and a rise in inflation towards the 2% target. Over time, uncertainty on global markets eased after a statement by one of the Chairman of the US Federal Reserve at the end of June 2016, emphasizing that the increase in the FFR would proceed gradually and with greater caution.

The more limited gains in the rupiah exchange rate during the second quarter were also influenced by concerns over the outcome of the UK referendum. Anxiety were kindled when polling about referendum on 13 June 2016 revealed a possible outcome in favor of Brexit. Concerns mounted further after the leave vote emerged as victor of the referendum. This outcome was not what markets had expected and triggered a surge in global risks as reflected in an increase in the VIX (Chart 5.3).

Further exchange rate appreciation took place in the third quarter of 2016. In average, the rupiah reach Rp13,130 per USD, strengthened by 1.4% on quarterly basis. These gains were driven predominantly by positive sentiment over the first period of tax amnesty program (to end in September 2016), which stimulated higher inflows of funds into

Chart 5.3. **VIX and CDS**



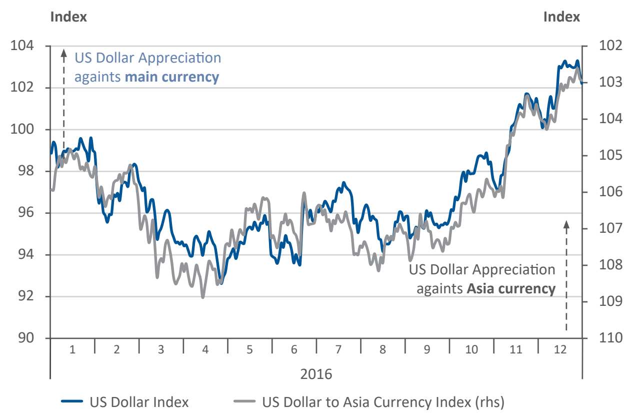
Source: Bloomberg

Indonesia. Capital inflows remarkably mounted by USD4.8 billion, invested into the Bank Indonesia Certificates (SBIs), government securities, and stocks. The positive sentiment in response to the tax amnesty has been adequate to minimize the rising external risks due to the planned hike in the FFR and the run-up to the US presidential election. Increase in external risks were reflected in the higher average of VIX during the third quarter of 2016 that reached 14.1 from 13.2 in the previous quarter.

In the last quarter of 2016, the rupiah came under pressure from external factors. Consequently, the average value of the rupiah reached Rp13,247 per USD and were depreciated by 0.9% (qtq). External factors weighing down currencies worldwide, including rupiah, were mainly spurred by positive developments in the US economy and the outcome of the US presidential election that defied market expectations. The global strengthening of the dollar were reflected in the rise of the index of the US dollar against major world and Asian currencies that carried forward into December 2016 (Chart 5.4). The increase of the FFR in mid-December 2016 helped boost the value of the dollar while exacerbate pressures on currencies of emerging markets.

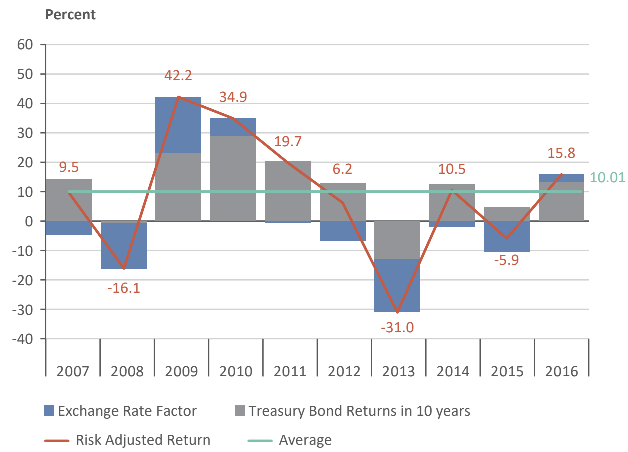
External pressures on rupiah during the fourth quarter of 2016 were also heightened by unexpected policy responses from other countries. Among these was a policy adopted by the Bank Negara Malaysia (BNM) in response to ringgit depreciation in the wake of the US presidential election. BNM prohibited banks from selling foreign currency to offshore and only permitted foreign currency to be sold onshore at rates lower than or equal to the closing trading spread of the previous day. This restriction was perceived by markets as a form of unofficial capital control and thus

Chart 5.4. **US Dollar Index**



Source: Bloomberg

Chart 5.5. **Indonesia Government Bond Yield**



Source: Bloomberg, calculated

exacerbated downward pressure on emerging market currencies, including the rupiah.

Overall, the exchange rate dynamics in 2016 reflected a strengthening in the rupiah, influenced by sustained positive investor perceptions on Indonesian economic outlook. The prospects of improved economic growth, prudently managed economic stability and financial system stability, discipline macroeconomic policies within sound corridors, and the increasingly robust policy synergy were factors supporting positive investor perceptions about the Indonesian economic outlook. Consecutively, those positive developments shall became a drawcard for foreign capital inflows into Indonesia and supports appreciation of the rupiah.

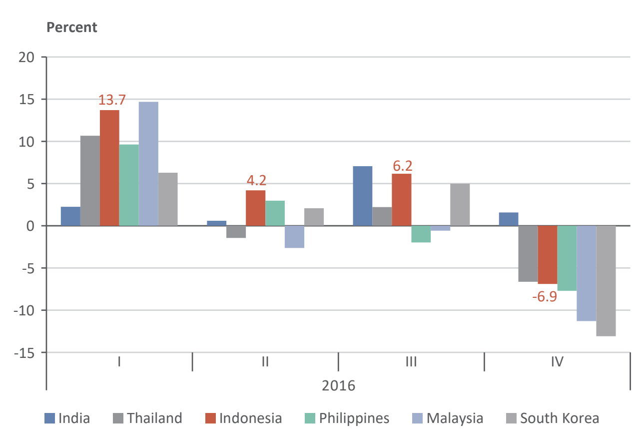
The tax amnesty program was another factor that bolstered positive investor perceptions of the economic outlook. On the one hand, the gains in the rupiah were spurred by the direct impact of funds repatriated under the tax amnesty. On the other hand, rupiah appreciation was also influenced by perceptions of medium-term fiscal resilience. This was due to promising success of the tax amnesty program, which would increase tax revenues in the short term and would strengthen fiscal resilience in the medium and long term.

Rupiah exchange rate gains in 2016 were also sustained by the continued attractive yields of Indonesian bonds. In 2016, yields on Indonesian government bonds reached 15.8%, significantly improved from the preceding year when yield was recorded at a negative 5.9% (Chart 5.5). Yields in 2016 surpassed even the average annual yield over the past ten years. Thus, Indonesian bond yields were also higher in comparison to yields offered by peer countries (Chart 5.6).

The gains in the rupiah exchange rate were closely linked to the positive impact of several policies implemented by Bank Indonesia. Implementation of various Bank Indonesia policies has contributed to more measured and subdued behaviour of the demand of the US dollar. In turn, this positive development has helped to maintain exchange rate stability during 2016.

The first policy was related to the mandatory use of the rupiah within the territory of the Republic of Indonesia, an obligation stipulated in Bank Indonesia Regulation (PBI) No. 17/3/PBI/2015 concerning Mandatory Use of the Rupiah within the Territory of the Republic of Indonesia. The regulation prescribes that every transaction, both cash and noncash, conducted by residents and nonresidents within the Indonesian territory must use the rupiah currency. Thus, violation of the regulations may lead to administrative sanctions. Despite its issuance in 2015, implementation

Chart 5.6. **Comparison of Government Bond Yield**



Source: Bloomberg, calculated

of the regulation began to show greater effect in 2016, as indicated by the downward trend in domestic forex transactions among residents from July 2015 (Chart 5.7).

The second policy was related to the regulations for curbing external debt risks through the gradual implementation of prudential principles (KPPK) in managing external debt of the nonbank corporation. The regulation has three main provisions. First, the requirement for a minimum 25% hedging ratio. Second, provision of a minimum liquidity ratio of 70% for corporates owing external debt must have, and third, requirement to provide information on compliance with the minimum BB- debt rating for corporates intending to issue or draw down new external debt after 1 January 2016.

Implementation of the KPPK brought a number of positive developments, as shown in increased reporting rate for the KPPK relative to previous reporting year. In the third quarter of 2016, a total of 2,679 corporate entities were required to report their KPPK, representing a 1.8% increase (qtq) relative to the previous quarter. The number of reporting entities was higher by 7.2% over the position of the fourth quarter of 2015. Of the reporting entities in the third quarter of 2016, 2,532 entities (94.5%) had completed their KPPK reporting with processable data. Thus, reported nominal value has represented 84.9% of total outstanding external debt from all private sector corporate entities reporting external debt.

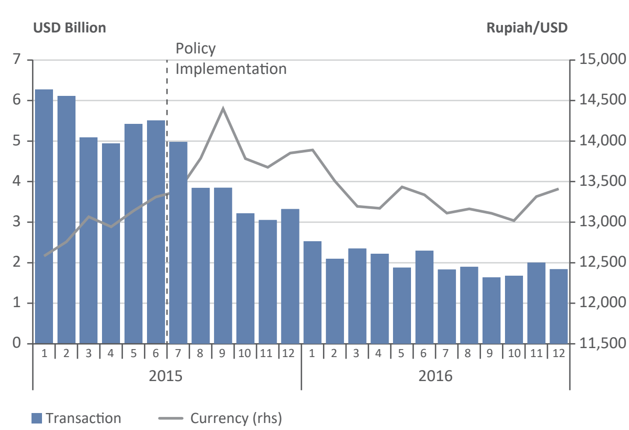
The level of compliance of KPPK reporting entities also improved in comparison to the previous year. In the third quarter of 2016, 88.6% of reporting entities had complied with the hedging ratio for 0-3 months, increased from the 83.5% compliance ratio in the third quarter of 2015. At the same time, 93.6% of KPPK reporting entities had complied with the 3-6 month hedging ratio and 86.5% with the liquidity ratio. These ratios were also higher than those reported for the same period in 2015 (Chart 5.8). Regarding compliance with the minimum debt rating, 32.8% of corporates required to make reports submitted debt rating information during December 2016. This represented a higher percentage compared to January 2016, when the reporting rate was 7.9%, of the corporates that reported their credit rating in December 2016, all had complied with the minimum debt rating.

In turn, these positive perceptions of the economic outlook have successively contributed to a reduction in risks facing the economy. Data shows that the Indonesia Credit Default Swaps (CDS), as a proxy indicator of risk, maintained a downward course in 2016. This can be observed from a lower average of Indonesian CDS by the fourth quarter of 2016 to an average of 161 compared to 229 in the first quarter of 2016. The volatility of Indonesia CDS was also significantly low, supporting indications of sustained positive investor perceptions despite fairly high volatility in the dollar during the same period, as reflected in the fluctuating VIX indicator.

5.2. CAPITAL FLOWS ON DOMESTIC FOREX MARKET

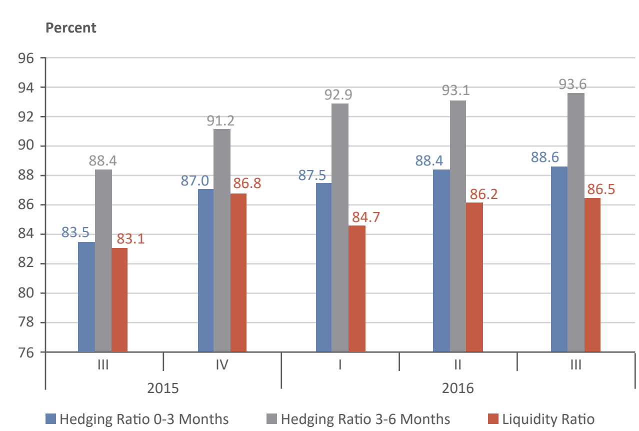
The gains in the rupiah exchange rate were also reflected in greater foreign currency supply on the forex market from both nonresident and resident market participants. Nonresident participants generated a net sale of foreign currencies of USD12.8 billion in 2016, significantly higher from USD6 billion in 2015. Furthermore, foreign currency inflows from nonresidents reached a peak in the third quarter of 2016 at USD5.8 billion (Chart 5.9). In the fourth quarter of 2016, however, mounting uncertainty in the external environment prompted investors to buy up foreign

Chart 5.7. Domestic Foreign Exchange Transaction and Rupiah Exchange Rate



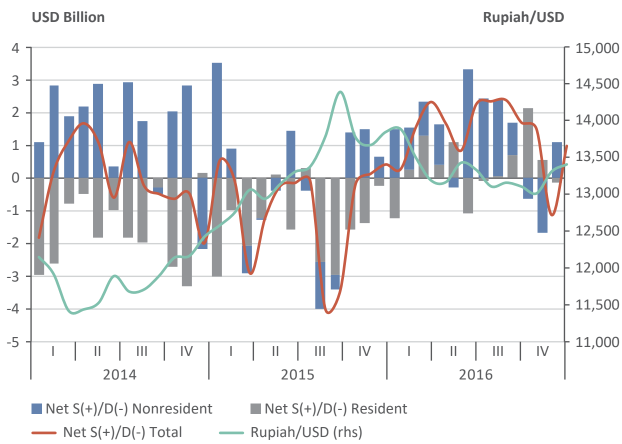
Source: Bank Indonesia, Reuters

Chart 5.8. Compliance Ratio based on Numbers of Corporate



Source: Bank Indonesia

Chart 5.9. **Foreign Exchange Net Supply-Demand in Spot Market**

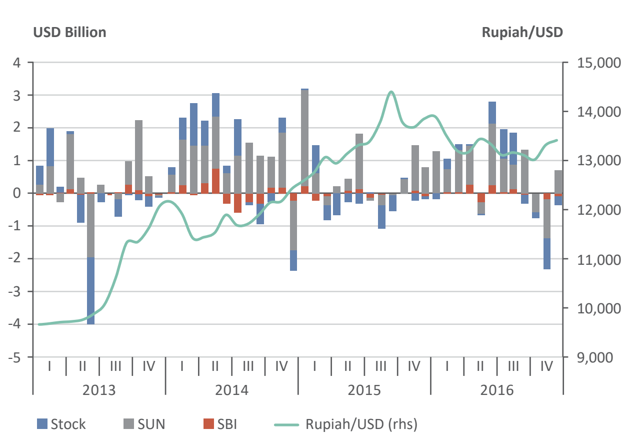


Source: Bank Indonesia, calculated

currency, resulting in a USD1.2 billion net purchase of foreign currencies by nonresidents.

Foreign currency inflows from nonresidents were placed, among others, into various rupiah-denominated financial instruments. Over the course of 2016, total inflows from nonresidents in the major rupiah financial instruments, i.e. government securities, stocks, and Bank Indonesia Certificates (SBIs), reached USD9.3 billion, up from USD5.1 billion in 2015. The major portion of the increase in inflows, USD8.0 billion, was placed in government securities, followed by increase in foreign holdings in stocks by USD1.2 billion and in SBIs by USD0.1 billion. Thus, inflows of nonresident funds into rupiah financial instruments peaked in the third quarter of 2016 at USD4.8 billion. In the subsequent quarter, however, inflows of nonresident funds placed in the related rupiah financial instruments recorded a net purchase of USD2.8 billion (Chart 5.10).

Chart 5.10. **Inflow of SBI, SUN, and Stock**



Source: Bank Indonesia, Indonesia Stock Exchange (IDX), Bloomberg

Afterwards, the higher inflows of nonresident funds contributed to increases in stock and bond prices. The average of Composite Stock Index (IDX Index) climbed by 2.5% to 5,027, a significant improvement when compared to the 0.15% decline in 2015. Along this line, the IDX Index was reached the highest level of 5,472 in early October 2016. Subsequently, the IDX Index underwent significant correction and dropped to 5,028 at year-end due to mounting global risks. Consistent with the uplift on the stock market, inflow of nonresident funds into government bonds also helped to ease yield on 10-year government bonds from an average of 8.2% in 2015 to 7.6% in 2016.

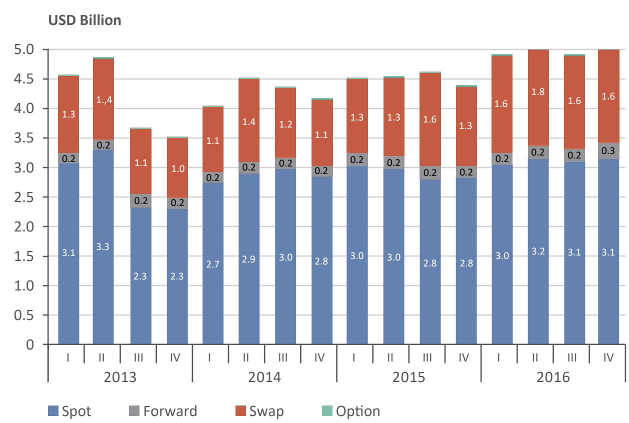
Another positive development was also observed from resident activities on the domestic forex market. Domestic participants booked USD4 billion in net selling of foreign currencies after having recorded a USD17.2 billion net purchase in 2015. Consecutively, foreign currency selling by residents added to the supply of foreign currency, thus contributing to rupiah gains in 2016. Residents activity in selling foreign currencies in 2016 were mainly driven by factors such as provision of funds for repatriation under the tax amnesty, gearing for the expected appreciation in the rupiah following the tax amnesty, as well as improvement in export earnings. Accordingly, foreign currency supply from residents mounted significantly in the fourth quarter of 2016, spurred by the deadline for repatriation of funds under the first phase of tax amnesty in December 2016. In addition, expectations of rupiah appreciation fuelled by the tax amnesty prompted domestic players to sell off foreign currency holdings. Meanwhile, the increased supply of foreign currencies was boosted by higher non-oil and gas export proceeds recorded mainly in the last quarter of 2016 as a result of export performance improvement.

5.3. STRUCTURE OF DOMESTIC FOREX MARKET

Rupiah appreciation during 2016 was also accompanied by positive developments on the domestic forex market. Forex transaction volume mounted by 10% on yearly basis, from an average of USD4.5 billion per day in 2015 to USD5 billion per day in 2016 (Chart 5.11). This represented a significantly positive development given a slack performance in Indonesia's exports. Data shows that the rise in domestic forex transactions widened the proportion of forex transactions against international trade flows from an average of 1.6% in 2015 to 1.8% of international trade flows in 2016.

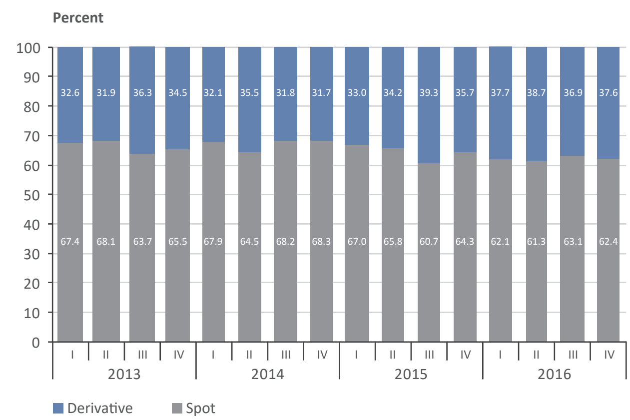
Another positive development was the increase in forex transaction volume in all market segments, i.e. the spot, forward, and swap markets. On the spot market, average

Chart 5.11. Foreign Exchange Transaction in Money Market



Source: Bank Indonesia, calculated

Chart 5.12. Composition of Derivative and Spot Transaction



Source: Bank Indonesia, calculated

daily transaction volume climbed 15% from USD2.9 billion per day in 2015 to USD3.1 billion per day in 2016 (Chart 5.11). Forward transaction volume also widened from an average USD0.21 billion per day in 2015 to USD0.23 billion in 2016. On the swap market, average daily volume of swap transactions mounted 17% from USD1.4 billion per day in 2015 to USD1.7 billion in 2016.

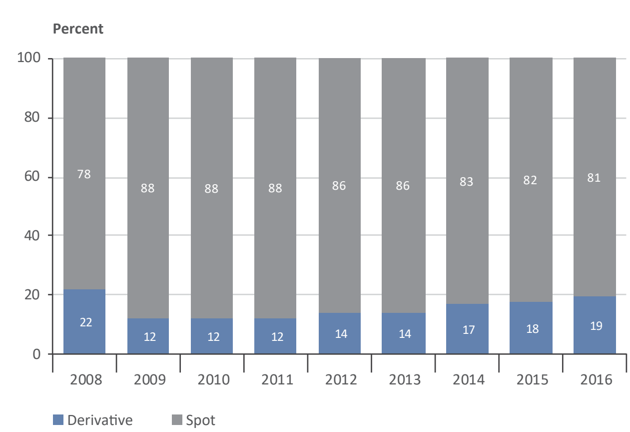
On the spot market, transaction volume increased for both domestic and foreign participants. Domestic participants recorded a 6.7% increase in transaction volume (buying and selling), up from USD568 billion to USD606 billion. Accordingly, a significant rise in volume came from individual transactions, which soared 400% from USD23 billion in 2015 to USD115 billion in 2016. This can be explained partly by the effect of the tax amnesty program. Thus, foreign actors also recorded a 6.9% increase in spot transaction volume to USD130 billion, mainly in foreign currency supply as a result of higher capital inflows for investment in Indonesia.

On the derivatives market, growth in transaction volume was driven by both domestic and foreign market participants. The volume of transactions by domestic participants mounted from USD314 billion in 2015 to USD340 billion. The highest increase was recorded in swap transactions at 55%, followed by increases of 12% in forward and 3% in spot transactions. Similarly, derivative transactions conducted by foreign participants climbed from USD151 billion to USD197 billion. This rise is explained by demand for hedging in the fourth quarter of 2016, in line with increased downward pressure on the rupiah. As a result, the derivatives market widened from 36% of total transactions on the domestic forex market in 2015 to 38% in 2016 (Chart 5.12).

Improvements on the derivative market owe much to the positive influence of Bank Indonesia policy in providing flexibility for market practitioners in conducting hedging transactions. On the forward market, the policy introduced by Bank Indonesia expanded flexibility for executing forward transactions with net settlement carried out in the forms of unwind, early termination, and rollover. Furthermore, activities on the derivatives market was also driven by the introduction of prudential external debt management principles, including an obligation for nonbank corporate entities holding foreign debt to take out hedging. As a result of these new regulations, the proportion of corporate forex buying in derivative instruments widened to 19% in 2016 from 18% in 2015 (Chart 5.13).

Within the reporting period, Bank Indonesia also launched a new structured product instrument in order to support forex market deepening, aimed at providing market players

Chart 5.13. Proportion of Derivative Transaction Volume by Corporate



Source: Bank Indonesia, calculated

with an additional derivative option beyond the existing forwards, swaps, and options. The expansion in the range of available derivative instruments is intended primarily to encourage market participants to hedge against their foreign currency exposures. This forex structured product is known as call spread options. Hedging with call spread options incurs less cost in comparison to forward transactions, despite the more limited exchange rate band that is hedged. The additional option for derivative instruments is also expected to incentivize market participants to build capabilities in managing currency mismatch risk, and thus serve as an efficient instrument that strengthens market deepening while building forex market resilience.

CHAPTER 6
Inflation

Inflation experienced a decreasing trend throughout 2016 and was within the inflation target range of 4±1%. This favorable outcome was influenced by controlled core inflation, in line with manageable aggregate demand, minimum external pressures, and subdued inflation expectations. Administered prices inflation had also subsided, as domestic fuel prices followed the trend of lower global oil prices. In addition, volatile food inflation was also under control, although it saw an uptick due to weather effects from the La Nina phenomenon. Other factors contributing to the low inflation rate were Bank Indonesia's consistent monetary policy, and the solid coordination between Bank Indonesia and the Government under the Inflation Monitoring and Controlling Team (TPI) and their regional counterparts (TPID).

Image caption:
Market activity is where price formation takes place. The year 2016 recorded low, subdued inflation within the targeting range. The low inflation owes much to the consistency of monetary policy and robust coordination between Bank Indonesia and the Government in controlling inflation

The Consumer Price Index (CPI) inflation ended at 3.02% in 2016, so it was within the inflation target range of 4.0±1% (Chart 6.1), and lower than that of 3.35% in 2015. This relatively tame inflation was also reflected in the dynamics of monthly inflation throughout 2016, which revealed lower level than the historical pattern. The monthly inflationary difference was only seen in April 2016 which recorded deflation due to fuel price cuts and lower post-harvest prices of strategic food commodities. Overall, CPI inflation in 2016 was the lowest in the last 7 years.

The curbing of CPI inflation was contributed by the decrease of inflation in almost all components. Core inflation was under control, supported by manageable aggregate demand, minimum external pressures, and subdued inflation expectations. Administered prices inflation also subsided due to lower world oil prices. Meanwhile, volatile food inflation was under control in the midst of *La Nina* symptoms risking to push up the prices of certain food commodities.

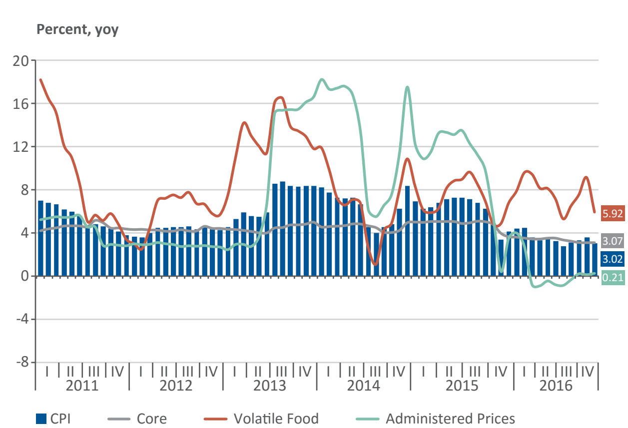
In general, low inflation in various component was the positive impact of Bank Indonesia's consistent monetary policy in controlling inflation within its target range. Moreover, solid coordination between Bank Indonesia and the Government through the Inflation Monitoring and Controlling Team (TPI) and their regional counterparts (TPID) also played a role in achieving low inflation in 2016.

6.1. CORE INFLATION

Core inflation ended at 3.07% in 2016, down from the previous year's core inflation of 3.95%. Throughout 2016, the downward pressure on core inflation was evident from monthly inflation dynamics, except in June during the celebration of the National Religious Days (HBKN) coincided with the annual school holidays (Chart 6.2). Compared to 2016's monthly core inflation data 2011-2015 was lower, particularly in the period after July 2016. This was the result of all determinants of the core inflation –aggregate demand, external pressures, and inflation expectations– having subsided within the year.

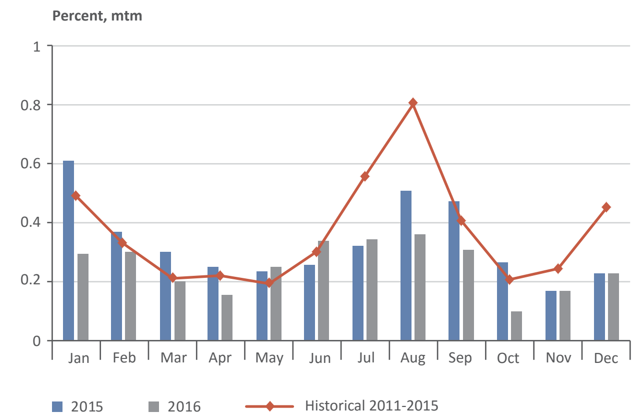
Aggregate demand remained moderate in 2016, as supply managed to keep up with demand throughout the year. The moderate level of aggregate demand was reflected in both retail sales growth and the consumer confidence index which relatively unchanged (Chart 6.3). Growth in consumer credit and other monetary indicators also remained modest. Meanwhile, an adequate supply response was evident from the industrial sector's capacity utilization level which was still under 80%.

Chart 6.1. Consumer Price Index Inflation and Its Components



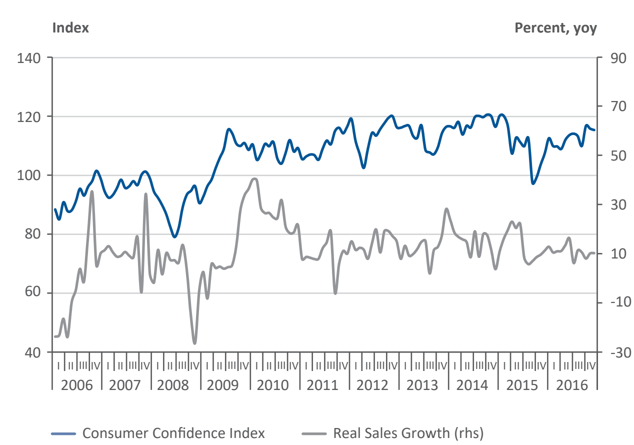
Source: BPS - Statistics Indonesia, calculated

Chart 6.2. Historical Pattern of Core Inflation



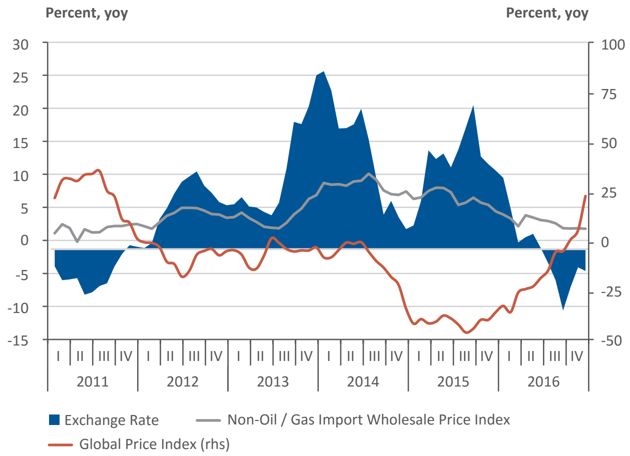
Source: BPS - Statistics Indonesia, calculated

Chart 6.3. Real Sales Growth and Consumer Confidence Index



Source: Bank Indonesia

Chart 6.4. Development of Exchange Rate, Global Commodity Prices, and Non-Oil/Gas Import Wholesale Price Index



Source: IMF, Bloomberg, BPS - Statistics Indonesia, calculated

External pressures, which throughout 2016 had been at a minimum, also contributed to controlled core inflation. The modest external pressures were prompted by low global commodity prices and appreciated exchange rate. Although global commodity prices began to pick up by last quarter in 2016, its effect had yet to be transmitted to the core inflation. Overall, the dynamics of external factors tempered imported inflation as seen from the inflation of the non-oil/gas commodity price index in 2016, which decreased considerably from 5.52% in 2015 to 2.98% in 2016 (Chart 6.4). As prices at the level of wholesalers were constrained, so were prices at the consumer level. The inflation of products with imported components, such as automobiles, also contributed less to the overall inflation compared to previous year condition (Table 6.1). In the foodstuffs category, imported food commodity derivative products such as wheat and corn had a limited contribution to the overall inflation (Table 6.2).

More manageable inflation expectations in 2016 also played a crucial role to the moderate core inflation. The inflation expectation index of both consumers and wholesalers exhibited a decreasing trend, while the inflation forecasts of economists moved down to the inflation target (Chart 6.5). This positive development was largely due to Bank Indonesia's consistent policies to maintain macroeconomic stability throughout 2016. Bank Indonesia's efforts to maintain rupiah's stability, and solid coordination between Bank Indonesia and the Government in controlling inflation, further eased inflation expectations.

In overall, the low core inflation in 2016 was due to minimum pressures from both global and domestic factors. This was reflected in the declining trends for both the traded and nontraded components of core inflation throughout 2016, as compared to the previous year (Chart 6.6). Traded core inflation decreased to 2.79% in 2016, from 3.60% the previous year. Likewise, nontraded core inflation decreased to 3.29%, from 4.24%. Further analysis of the nontraded core inflation showed decreasing inflation for services sectors, such as those for housing rental rates, nonforeman worker salary, and education costs (Table 6.1).

6.2. VOLATILE FOOD INFLATION

Volatile food inflation remained manageable in 2016, although it experienced a slight increase from a year earlier. Volatile food inflation ended 2016 at 5.92%, an increase compared to 2015 at 4.84%. Major commodities that contributed significantly to volatile food inflation in 2016 were red chili peppers, shallot, and garlic (Table 6.3).

The uptick in volatile food inflation was triggered by supply problems on certain food commodities, as their

Table 6.1. Contribution of Core Non-Food Inflation to CPI Inflation

Percent

No.	Commodity	2015	2016
Inflation			
1	Contract House Tariff	0.10	0.10
2	Cellphone Tariff	0.00	0.10
3	House Rental Rates	0.13	0.09
4	Gold Jewelry	0.04	0.07
5	Car	0.10	0.06
6	Non Foreman Worker	0.08	0.05
7	Academy / College	0.06	0.04
8	Senior High School	0.04	0.04
9	Elementary School	0.05	0.04
10	House Keeper Salary	0.06	0.04

Source: BPS - Statistics Indonesia, calculated

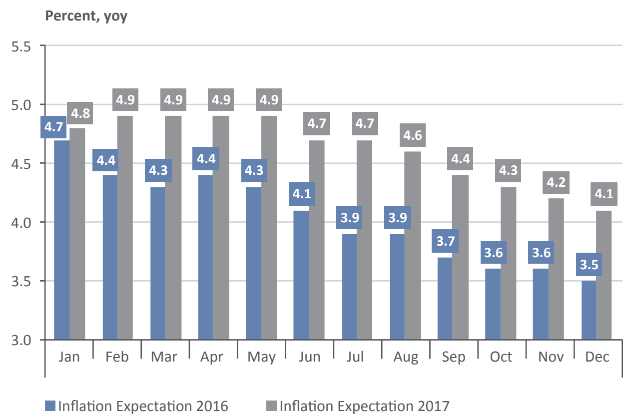
Table 6.2. Contribution of Core Food Inflation to CPI Inflation

Percent

No.	Commodity	2015	2016
Inflation			
1	Rice and Side Dish	0.14	0.08
2	Sugar	0.05	0.06
3	Noodle	0.07	0.04
4	Mineral Water	0.04	0.03
5	Fried Chicken	0.03	0.03
6	Ice	0.02	0.02
7	Oily Pastries	0.03	0.02
8	Rice Cake with Curry	0.02	0.02
9	Fruit Juice	0.01	0.02
10	Porridge	0.03	0.02

Source: BPS - Statistics Indonesia, calculated

Chart 6.5. Consensus Forecast Expectation



Source: Consensus Economics

crops failed due to high rainfalls, pests and diseases. As instruments for prices stabilization were limited, inflation shot up, particularly those of red chili peppers, shallot and garlic. As the year concluded, however, the volatile food inflation eventually subsided as the prices of other food commodities, mainly rice, purebred chicken meat, purebred chicken eggs, and beef, stabilized. This positive development was attributed to adequate supply as well as intensive market operations conducted by the Government.

Quarterly inflation dynamics of volatile food in 2016 showed the inflation generally at a higher level compared to the previous year's growth. The volatile food inflation in the first semester of 2016 was at 3.47% (ytd), higher than the same period the previous year of 0.33% (ytd). This was largely due to supply problems with the shallots commodity, such that its price shot up by 30.86% (mtm) in March 2016.

Table 6.3. Inflation/Deflation Contribution of Strategic Food Commodities to CPI Inflation

Percent

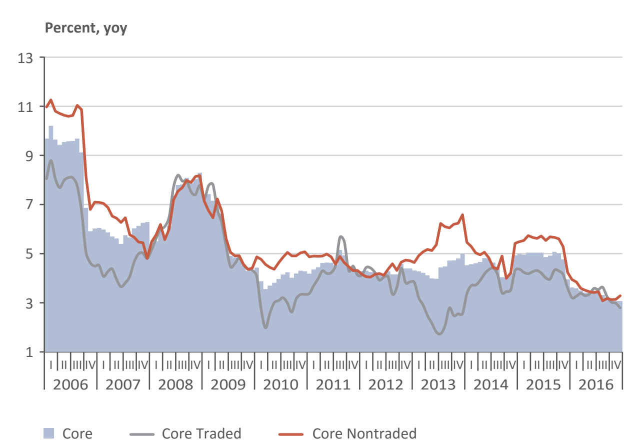
Commodity	2015	2016
Chili	-0.39	0.35
Shallot	0.15	0.17
Garlic	0.07	0.11
Bird's eye chili	-0.13	0.07
Cooking Oil	-0.04	0.06
Beef	0.05	0.04
Purebred Chicken Meat	0.15	0.01
Rice	0.31	-0.01
Purebred Chicken Egg	0.09	-0.02

Source: BPS - Statistics Indonesia, calculated

The increase in commodity prices during this period was triggered by production disruptions as heavy rainfall caused many crops to fail.

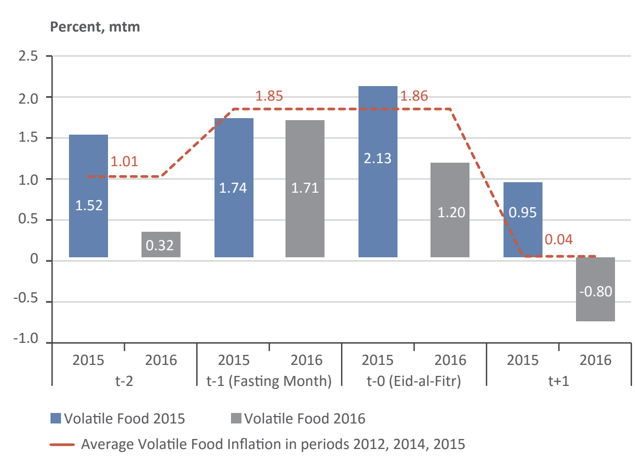
Volatile food inflation was moderately under control in the third quarter of 2016 as coordinated efforts at national as well as regional level to manage food inflation intensified. Food inflation prior to the festive season (the Eid-al-Fitr) in 2016 was recorded lower than that of the same period in the previous year (Chart 6.7). Average monthly volatile food inflation between June and September 2016 (the month when the the Eid-al-Fitr occurs) recorded at 0.51% (mtm), down from 0.89% (mtm) in the same period the previous year. This was primarily attributed to each region focusing market operations for strategic food commodities that largely affect inflation in their own regions, such as red chili peppers in Padang, and beef in Jakarta and Palembang. Several regions has also established inter-provincial trade cooperation in strengthening the supply of certain commodities in their regions, such as Jakarta, West Java and Banten with regard to rice and beef.

Chart 6.6. Development of Core Traded and Nontraded Inflation



Source: BPS - Statistics Indonesia, calculated

Chart 6.7. Inflation During Periods of National Religious Holidays



Source: BPS - Statistics Indonesia, calculated

Pressure on volatile food inflation rose again in the last quarter of 2016, as supply problems again affected horticultural products, particularly red chili peppers. Volatile food inflation between October and December 2016 averaged at 7.53%, higher than the 5.54% in the same period in 2015. The price of red chili peppers contributed much to the inflation, as it shot up by 20.86% (mtm) in November 2016, making up the 0.16 percentage points to the month's 0.47% (mtm) overall CPI inflation. The significant price increase of red chili peppers that month was due to significant production drops, as many crops of the commodity across Sumatra succumbed to disease, while policy instruments to stabilize supply and price of horticultural products remained limited.

Overall, despite slightly increasing, volatile food inflation in 2016 was under control in the midst of La Nina phenomenon affected food production. This came mostly in response to the Government having anticipated the situation to maintain prices of foodstuff, particularly rice and beef. The price of rice remained stable throughout 2016, as domestic production increased, and its supply was further secured with imports from the previous year. The increase in domestic rice production was confirmed by the 10% increase in rice procured by the National Logistics Agency (BULOG) for 2016, while rice stocks from the previous year's import was noted to have been 676,695 tons. The increase in rice supply boosted the Government Rice Reserve (CBP) which increased by 25%, thus supporting the 26% increase in rice market operations in 2016. The sufficient supply of rice was also reflected in BULOG's rice stock, which by the end of 2016 was up by 30% from the previous year.

The mild volatile food inflation was also contributed by the Government's special measures to stabilize the food prices, including policies related to the increase in beef supply. The supply of beef throughout 2016 was adequate, supported by domestic production as well as imports by BULOG. In this context, the Government has assigned BULOG to maintain certain strategic food stocks and stabilize their prices at the consumer and producer level.[1] BULOG has been specifically assigned for price stabilization of rice, corn and soybeans. Meanwhile, for sugar, cooking oil, flour, shallots, chili peppers, beef and purebred chicken meat, either BULOG or other state-owned enterprises can be assigned the task of their price stabilization.

Other government policies contributing indirectly to the volatile food inflation were infrastructure development and the disbursement of subsidies. The Government had throughout 2016 carried out several infrastructure projects, which included constructing new dams for cropland irrigation, flood prevention, power generation, and clean water supply. Subsidies were also disbursed to support domestic food production, which included subsidies in fertilizer and seeds amounted Rp30.1 trillion and Rp1.0 trillion respectively in 2016.

The manageable volatile food inflation was partly influenced by policies concerning food distribution and accessibility. The Ministry of Trade (Kemendag) and BULOG jointly set up Maritime Kiosks and Our Food Centers (RPK) to improve food distribution and accessibility. The Ministry of Trade also outlined reference prices for BULOG or other state-owned enterprises assigned to procure certain food commodities from farmers and later sell them to consumers.[2] Strengthened coordination between Bank Indonesia and the Government through the TPI and TPID also contributed to moderate volatile food inflation, as the TPI and TPID continued to focus on maintaining the affordability of price and availability of society basic needs, smooth distribution, and management of public expectation through effective communication.

Several challenges remained prominent, especially in terms of controlling food inflation, despite the volatile food inflation being relatively well-managed throughout 2016. Recurring distribution problems and the shifting of food commodities which contribute most to the inflation, indicates the existence of structural problems in the economy. In 2016, supply problems occurred due to heavy rainfalls and disease affecting crops of shallots and red chili peppers, which eventually affected the soaring prices of the commodities. Managing these food prices has been considerably challenging as policy instruments regarding supply and price stabilization instruments were limited. Such policies relating to control volatile food inflation are therefore necessary to be strengthened, including policies to mitigate the impact of rising energy prices on production costs.

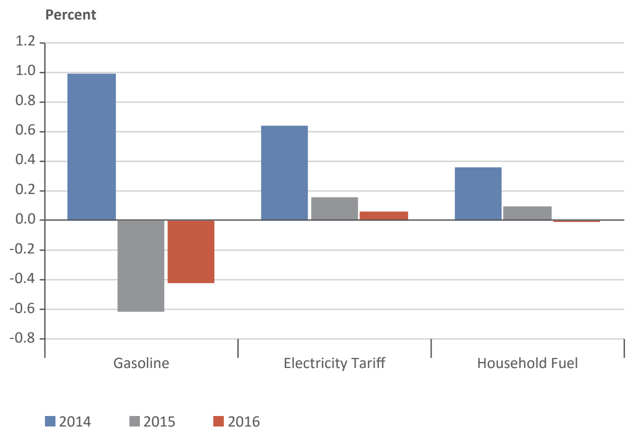
6.3. ADMINISTERED PRICES INFLATION

Administered prices inflation in 2016 was recorded at a relatively low level. Administered prices inflation ended at 0.21% in 2016, lower than in 2015 which reached 0.39%. Historically, administered prices inflation in 2016 was the lowest in the past seven years.

1 Presidential Regulation No. 48 / 2016, issued on May 25, 2016, on the Assignment to BULOG Concerning Matters of National Food Security.

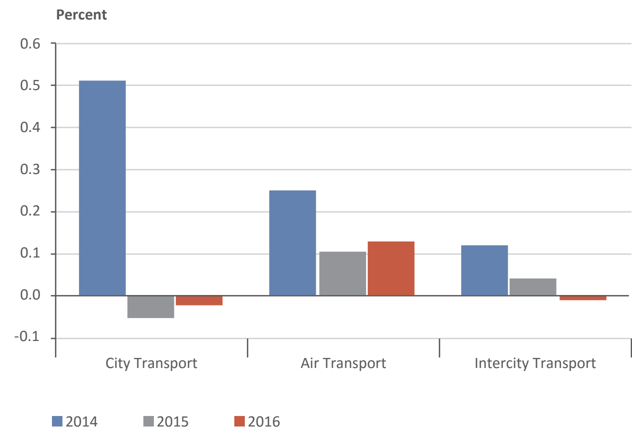
2 Minister of Trade Regulation No. 63 / 2016, issued on September 9, 2016, on Reference Prices for Procuring from Farmers and Selling to Consumers.

Chart 6.8. Contribution of Energy Commodities Inflation to CPI Inflation



Source: BPS - Statistics Indonesia, calculated

Chart 6.9. Contribution of Transport Prices Inflation to CPI Inflation



Source: BPS - Statistics Indonesia, calculated

The low rate of administered prices inflation in 2016 was largely owed to the Government's policy of fuel price cuts throughout the year, in response to lower global oil prices and a stronger rupiah exchange rate. In the first semester of 2016, these favorable conditions prompted Government to cut fuel prices twice (Table 6.4). On January 5, 2016, the price of RON88 gasoline fell by Rp350 per liter and the price of diesel fuel decreased by Rp1,050 per liter.[3] Subsequently, on April 1, 2016, the price of both fuels were further cut by Rp500 per liter.[4]

The Indonesian government also lowered the price of the 12 kg cylinder LPG (Liquefied Petroleum Gas) by Rp5,600/ cylinder–or Rp467/kg– in the Greater Jakarta area, and Rp5,800/cylinder nationwide. Electricity tariff, meanwhile, saw four monthly downward adjustments in the period from February to May 2016, and eight upward adjustments in the year's remaining period in response to current economic circumstances. All these policies regarding fuel prices resulted in energy-related inflation contributing less to the overall inflation in 2016 (Chart 6.8).

In the second semester of 2016, fuel prices remained unchanged, despite global oil prices starting to pick up. On June 27 and September 23, 2016, the Government decided that the prices for RON88 gasoline and diesel fuel remain unchanged for the periods of July-September 2016 and October-December 2016, respectively.[5] The Government also decided to subsidize diesel fuel prices at a fixed amount of Rp500 per liter since July 1, 2016. Inflationary pressure on administered prices were further eased as the Government decided to postpone subsidy cuts for the 900VA electricity tariff, and cancel hikes on the 3 kg tank LPG fuel price.

In line with the lower global oil prices and a stronger rupiah exchange rate, the Government also cut transportation tariff. In February 2016, the ceiling price and floor price for air transportation were lowered by 5%.[6] In the period from April to July 2016, public transportation rates for ships, ferries, trains, buses and taxies, were all cut by 3% in average.[7] These transportation tariff reductions eventually translated to transportation-related inflation, particularly from inner-city and intercity transportation costs, contributing less to overall inflation in 2016 (Chart 6.9).

3 Minister of Energy and Mineral Resources Decree No. 2 K/12/MEM/2016, issued on January 4, 2016.

4 Minister of Energy and Mineral Resources Decree No. 4738 K/12/MEM/2016, issued on March 30, 2016.

5 The decision was made in consideration of several aspects: (1) the state coffers' financial ability and current economic circumstances, (2) the public's purchasing power, and (3) the public's real economic and social condition. The decision was made through Minister of Energy and Mineral Resources Decree No. 5976 K/12/MEM/2016, issued on June 27 for the period July-September, and Minister of Energy and Mineral Resources Decree No. 7147K/12/MEM/2016, issued on September 23 for the period October-December.

6 Minister of Transportation Regulation No. PM 14/2016, issued on January 21, 2016.

7 Sea transportation rate cuts were made through Minister of Transportation Regulation No. PM 38/2016, while train rate cuts were made through Minister of Transportation Regulation No. PM 35/2016, both of which were issued on April 1, 2016. Minister of Transportation Circular No. SE 15/2016 was also issued on April 1, 2016 as a reference for regional administrations to adjust rates on inter-city buses, inter-regional buses, and ferries.

Table 6.4. Administered Prices Policies in 2016

Month	AP Policy
January	- Price reduction for RON 88 by Rp350/l to Rp6,950/l (non Jamali) and solar by Rp1,050/l to Rp5,650/l. - Price reduction for RON 92 gasoline by Rp200/l, RON 95 gasoline by Rp500/l, and Pertamina Dex by Rp650/l.* - Electricity tariff reduction from 1,509/kWh to 1,409/kWh.** - Price reduction for 12 kg LPG by Rp5,600/tube or Rp467/kg (Jakarta). - Price reduction for Intercity and Interprovince Transport by 5%. - Cigarette prices each increased by 0.71%, 0.99%, and 0.74% (mtm).***
February	- Price reduction for RON 95 and RON 92 gasolines by Rp200/l and Pertamina Dex by Rp300/l.* - Electricity tariff reduction from 1,409/kWh to 1,392/kWh.* - Reduction of air transport upper bound and lower bound tariffs by 5%. - Cigarette prices each increased by 0.83%, 1.45%, and 1.31% (mtm).***
March	- RON 92, RON 95, and Pertamina Dex gasolines prices were corrected three times, each by Rp200/l. RON 90 gasoline price was corrected by Rp200/l.* - Electricity tariff reduction from 1,392/kWh to 1,355/kWh. ** - Cigarette prices each increased by 0.76%, 0.64%, and 1.32% (mtm).***
April	- Price reduction for RON 88 gasoline and solar by Rp500/l to Rp6,450/l (non Jamali) and RP5,150/l, respectively. - Electricity tariff reduction from 1,355/kWh to 1,343/kWh.** - Price reduction for Intercity Interprovince Transport, Cross-Province Sea Freight Service, City Transport, and Taxi each by 3.5%, 3.38%, 0.76%, and 2.74% (mtm). - Passenger Service Charge (PSC) in 7 airports increased on average by 34%. - Cigarette prices each increased by 0.62%, 0.61%, and 0.47% (mtm).***
May	- Price reduction for RON 92, RON 95, and RON 90 gasolines prices by Rp200/l, and Pertamina Dex by Rp300/l.* - Electricity tariff increased from 1,343/kWh to 1,354/kWh.** - Price reduction for Sea Passenger Transport by 0.27% (mtm). - Cigarette prices each increased by 1.18%, 0.82%, 0.79% (mtm).***
June	- Electricity tariff increased from 1,354/kWh to 1,365/kWh.** - Cigarette prices each increased by 0.50%, 0.41%, and 0.26% (mtm).***
July	- Solar subsidy lowered by Rp500/l. - Electricity tariff increased from 1,365/kWh to 1,413/kWh.** - Cigarette prices each increased by 0.36%, 0.32%, and 0.41% (mtm).***
August	- Electricity tariff reduction from 1,413/kWh to 1,410/kWh. - Cigarette prices each increased by 0.36%, 0.32%, and 0.41% (mtm).***
September	- Dexlite gasoline price increased by Rp200/l.* - Electricity tariff increased from 1,410/kWh to 1,458/kWh.** - Cigarette prices each increased by 0.91%, 1.01%, and 1.17% (mtm).***
October	- Dexlite gasoline price increased by Rp200/l.* - Electricity tariff increased form 1,458/kWh to 1,460/kWh.** - Toll tariff for Prof. Dr. Ir. Sedyatmo Road increased on average by Rp1,000 for each vehicle category. - Cigarette prices each increased by 0.52%, 0.63%, and 1.04% (mtm).***
November	- RON 92 and RON 95 gasoline prices increased by Rp250/l and Rp150/l, respectively.* - Electricity tariff increased from 1,460/kWh to 1,462/kWh.** - Cigarette prices each increased by 0.56%, 0.63%, and 0.63% (mtm).***
December	- RON 95 and RON 98 gasoline prices increased by Rp50/l. RON 92, RON 90, and Dexlite gasoline prices increased by Rp150/l.* - Electricity tariff increased from 1,462/kWh and 1,472/kWh.** - Cigarette prices each increased by 0.98%, 0.84%, and 0.96% (mtm).***

* Gasoline prices for Jakarta
** Electricity tariff for non-subsidized household with power above 1,300 VA
*** Clove cigarettes, clove flavor cigarettes, and white clove flavor cigarettes

Source: Ministry of Energy and Mineral Resources, Pertamina, State Electricity Company (PLN), and Statistics Indonesia (BPS)

CHAPTER 7
Fiscal Policy

The fiscal policy of 2016 was aimed at strengthening the stimulus for Indonesia's economy to mitigate the risks of limited global economic growth, while still maintaining the prospect of fiscal sustainability. The 2016 State Budget (APBN) focused on strengthening the quality of expenditure into more productive sectors and accompanied by strengthening the structure of tax revenue. Various government efforts, including by revising tax revenue to be more realistic and consolidating spending in the second half of 2016, were crucial in maintaining fiscal credibility. The 2016 APBN deficit remained manageable at 2.5% of the Gross Domestic Product (GDP) and the government debt was at a healthy level of 27.8% of GDP.

Image Caption:
To promote economic recovery, the Government delivered a fiscal stimulus through expenditures on infrastructure development. It is envisaged that the improvements to infrastructure will provide a solid foundation for greater competitiveness and sustainable economic growth.

The direction of 2016 fiscal policy was aimed at strengthening the stimulus for the domestic economy, while still maintaining the credibility of the prospect of fiscal sustainability. Policies were also aimed at responding to prevailing risks in the global economy, which included limited growth and lower commodity prices. These policies were outlined in the 2016 State Budget, optimizing the strategy of tax collection as well as improving the quality of spending into productive sectors and priorities, including by increasing infrastructure spending. The strategy was sustained by efforts to maintain sustainability of fiscal financing needs so as to manage any fiscal risks in the medium and long term.

The first semester of 2016, however, had already posed serious challenges to the fiscal policies. The domestic tax revenue up to the first semester of 2016 had not been as expected due to low commodity prices and moderate domestic economy growth. Meanwhile, state expenditure had already reached 44.3% of the target, in turn pushing the budget deficit to 1.9% of GDP in the first semester of 2016.

In the second semester of 2016, the Government took consolidation measures, both from revenue and expenditure side, in order to maintain credibility of fiscal sustainability. From the revenue side, tax revenue was revised downwards to a more realistic target, while still optimizing any potential revenue sources from taxation. This included revenue from the tax amnesty program, which by the end of the 2016 had already collected Rp107 trillion in clearance levy. In terms of expenditure, allocations were scrutinized for spending into priority and more productive sectors, such as infrastructure, food security, education and health.

All these efforts had in the end helped secure credibility of fiscal sustainability, with the 2016 Revised State Budget's deficit ending at 2.5% of GDP, lower than the previous year of 2.6% of GDP. This achievement helped keep Indonesia's total public debts by the end of 2016 at a healthy level of 27.8% of GDP.

7.1. FISCAL DYNAMICS

The 2016 fiscal policy was directed at strengthening the stimulus to Indonesia's economy, while maintaining the prospect of fiscal sustainability. Policies were aimed at anticipating cycles of high uncertainties in the global economy, while strengthening the domestic economy's structure to improve its capacity and competitiveness. In its implementation, the fiscal stimulus was not only in the form of an increased amount of spending, but also the quality of spending by allocating more state spending to productive sectors and priorities, such as infrastructure spending.

In the initial stage, fiscal policies were outlined in the assumptions and targets of the 2016 State Budget, which was approved in November 2015. Among the budget's assumptions was global oil prices standing at USD50 per barrel, an economic growth at 5.3% and inflation at 4.7% (Table 7.1). State revenue was then estimated to reach Rp1,820.5 trillion, an increase of 21.8% compared to 2015 realization. State expenditure, meanwhile, were allocated at Rp2,095.7 trillion, an increase of 16% compared to the realization of 2015 (Table 7.2). Overall, these estimates make the 2016 APBN deficit estimated at 2.15% of GDP.

In its development, global and domestic conditions were not in line with expectations, thus posing challenges to 2016's fiscal management. The global economic growth remained limited and weighed down on commodity prices, including that of crude oil. This in turn affected the prospects for domestic economy, putting the expectations for both economic growth and inflation off their marks.

Table 7.1. Macroeconomic Assumptions

Macroeconomic Assumption	2015			2016		
	State Budget	Revised Budget	Realization	State Budget	Revised Budget	Realization
Economic growth (percent, yoy)	5.8	5.7	4.8	5.3	5.2	5.0
Inflation (percent, yoy)	4.4	5.0	3.4	4.7	4.0	3.1
Exchange rate (Rp to USD)	11,900	12,500	13,395	13,900	13,500	13,307
Average of 3-month Government Treasury Bill (SPN) interest rate (percent annual)	6.0	6.2	6.0	5.5	5.5	5.7
Indonesia Crude Oil Price-ICP (USD/ barrel)	105	60	49.2	50	40	40
Indonesia oil lifting (thousand barrels per day)	900	825	778	830	820	829
Indonesia gas lifting (thousand barrels oil equivalence per day)	1,248	1,221	1,195	1,155	1,150	1,184

Source: Ministry of Finance

Table 7.2. State Budget Realization 2015-2016

Items	Revised Budget 2015	Realization 2015				State Budget 2016	Revised Budget 2016	Realization 2016			
	Rp Trillion	Rp Trillion	% GDP	%yoy	% Revised Budget	Rp Trillion	Rp Trillion	Rp Trillion	% GDP	%yoy	% Revised Budget
A. Domestic Revenue	**1,761.6**	**1,504.5**	**13.0**	**-3.0**	**85.4**	**1,822.5**	**1,786.2**	**1,555.1**	**12.5**	**3.4**	**87.1**
I. Domestic Revenue	1,758.3	1,494.1	12.9	-3.3	85.0	1,820.5	1,784.2	1,546.9	12.5	3.5	86.7
1. Tax Revenue	1,489.3	1,240.4	10.7	8.2	83.3	1,546.7	1,539.2	1,285.0	10.4	3.6	83.5
- Domestic Taxes	1,440.0	1,205.5	10.4	9.3	83.7	1,506.6	1,503.3	1,249.5	10.1	3.6	83.1
- International Trade Taxes	49.3	34.9	0.3	-20.0	70.9	40.1	35.9	35.5	0.3	1.7	98.9
2. Nontax Revenue	269.1	253.7	2.2	-36.3	94.3	273.8	245.1	261.9	2.1	3.2	106.9
II. Grants	3.3	10.4	0.1	106.6	314.9	2.0	2.0	8.2	0.1	-21.2	417.0
B. Total Expenditure	**1,984.1**	**1,796.6**	**15.6**	**1.1**	**90.5**	**2,095.7**	**2,082.9**	**1,860.3**	**15.0**	**3.5**	**89.3**
I. Central Government Expenditure	1,319.5	1,173.6	10.2	-2.5	88.9	1,325.6	1,306.7	1,150.1	9.3	-2.0	88.0
1. Employee Expenditure	299.3	281.1	2.4	15.3	93.9	347.5	342.4	305.1	2.5	8.5	89.1
2. Goods Expenditure	259.7	232.4	2.0	31.6	89.5	325.0	304.2	259.4	2.1	11.6	85.3
3. Capital Expenditure	252.8	209.0	1.8	41.9	82.7	201.6	206.6	166.4	1.3	-20.4	80.6
4. Debt Interest Payments	155.7	156.0	1.4	16.9	100.2	184.9	191.2	182.8	1.5	17.2	95.6
5. Subsidies	212.1	186.0	1.6	-52.5	87.7	182.6	177.8	174.2	1.4	-6.3	98.0
6. Grant Expenditure	4.6	3.1	0.0	244.4	66.6	4.0	8.5	6.5	0.1	109.7	76.3
7. Social Assistance	103.6	97.0	0.8	-0.9	93.7	55.3	53.4	49.6	0.4	-48.9	92.9
8. Other Expenditures	31.7	8.9	0.1	-23.9	28.2	24.7	22.5	6.0	0.0	-32.6	26.8
II. Transfer to Regions and Village Fund	664.6	623.0	5.4	8.6	93.7	770.2	776.3	710.3	5.7	14.0	91.5
1. Transfer to Regions	643.8	602.2	5.2	5.0	93.5	723.3	729.3	663.6	5.3	10.2	91.0
2. Village Fund	20.8	20.8	0.2		100.0	47.0	47.0	46.7	0.4	124.9	99.4
C. Primary Balance	**-66.8**	**-136.1**	**-1.2**	**52.8**	**203.8**	**88.3**	**-105.5**	**-122.5**	**-1.0**	**-10.0**	**116.1**
D. Surplus/Deficit	**-222.5**	**-292.1**	**-2.5**	**31.7**	**131.3**	**-273.3**	**-296.7**	**-305.2**	**-2.5**	**4.5**	**102.9**
E. Financing	**222.5**	**318.1**	**2.8**	**27.8**	**143.0**	**273.3**	**296.7**	**331.0**	**2.7**	**4.1**	**111.6**

Source: Ministry of Finance

Revenue targets were also at risk of not being reached so that it could interfere with fiscal resilience.

The Government promptly responded to those challenges by revising some of the assumptions and targets of the 2016 APBN to be more realistic. In the Revised State Budget (APBN-P) 2016 set in mid-2016, the assumption of 2016 oil prices was reduced to USD40 per barrel in line with the limited global economic growth. As a result, the assumption of economic growth and inflation fell to 5.2% and 4.0% respectively. The budget's posture was revised as well, with state revenue down to Rp1,784.2 trillion, largely due to non-tax state revenue expected to be only Rp245.1 trillion, from previously Rp273.8 trillion. State expenditure was consequently revised as well, cut to Rp2,082.9 trillion. This balanced out to the budget's deficit being revised slightly up at 2.37% of the GDP.

Despite the budget revision, 2016 fiscal management challenges remained apparent. The limited global economic growth and lower commodity prices, including oil price, had already affected state revenue from meeting its target for the first semester. In the meantime, the realization of government spending has been recorded quite large, particularly infrastructure spending. Realized state expenditure grew 15% in the first half of 2016 compared to the achievement in the same period of the previous year, and had already reached 44.3% of its target for 2016. These conditions were in turn to cause deficit APBN-P 2016 in the first half of 2016 has reached 1.9% of GDP.

The government responded to these challenges by taking fiscal consolidation measures, both in terms of revenue and expenditure side. The consolidation measures were contained in Presidential Instruction No. 8 Year 2016 dated August 26, 2016 which comprises preparation of Ministry/ Institution's austerity for the Implementation of APBN-P

Year 2016. Spending were reallocated to priorities and more productive sectors, including for infrastructure, food security, education, and health. On the revenue side, the tax revenue target was revised downwards to a more realistic amount, while optimizing other potential sources for tax revenue, including through the tax amnesty program, which by the end of 2016 had already collected Rp107 trillion in clearance levy.

7.2. STATE REVENUE

Efforts to increase state revenue as a basis to sustain fiscal stimuli still faced some challenges in 2016. Limited growth still plagued the global economy, affecting Indonesia's domestic economy as well, and in turn affecting tax revenue. Meanwhile, low commodity prices, including that of crude oil, affected non-tax state revenue. Overall, less favorable global conditions had impact on the state revenue, both tax revenue and Non-Tax State Revenue (PNBP).

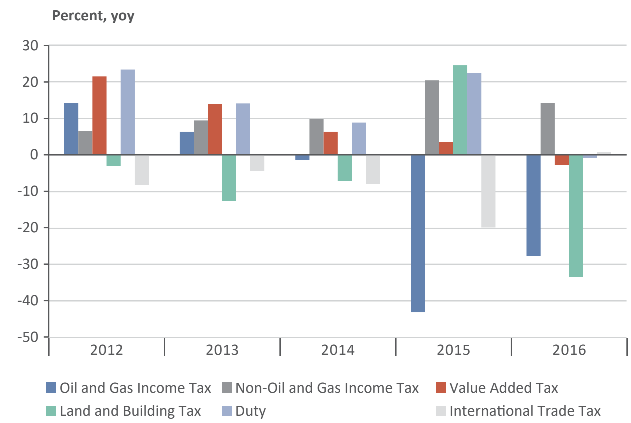
State revenue by the end of 2016 amounted to Rp1,546.9 trillion, or only 86.7% of its target in the 2016 Revised State Budget. This was due to tax revenue being short by Rp254 trillion, thus only reaching 83.1% of its target. The shortfall in tax revenue in 2016 was even higher than the Rp249 trillion shortfall the previous year. Non-Tax State Revenue, however, increased in 2016, amounting to Rp261.9 trillion, or up 3.2% from the previous year. This was due to improving performance and efficiency within the state ministries and other governmental agencies.

Tax revenue only grew by 3.6% in 2016, lower than 8.2% in the previous year. Revenue from oil-and-gas income taxes, value-added taxes, and property taxes had even decreased (Chart 7.1). Revenue from non-oil-and-gas income taxes continued to increase, although this was slower than the previous year. Tax revenue in 2016 were particularly affected by the Government's policy to again increase the amount of Non-Taxable Income (PTKP).

Tax revenue managed to increase, partly due to the tax amnesty program, which by the end of 2016 had contributed Rp107 trillion in clearance levy (see Box 7.1). The program had particularly contributed to the increase in revenue from non-oil-and-gas income taxes, which by the end of 2016 reached Rp630.1 trillion.

Revenue from tobacco excise were down to Rp143.5 trillion in 2016, from Rp144.6 trillion the previous year. This was due to the latest changes to the Government's incentive of postponing the excise payments for cigarette manufacturers and cigarette importers.[1] The incentive had previously increased tobacco excise revenue from Rp116 trillion in 2014.

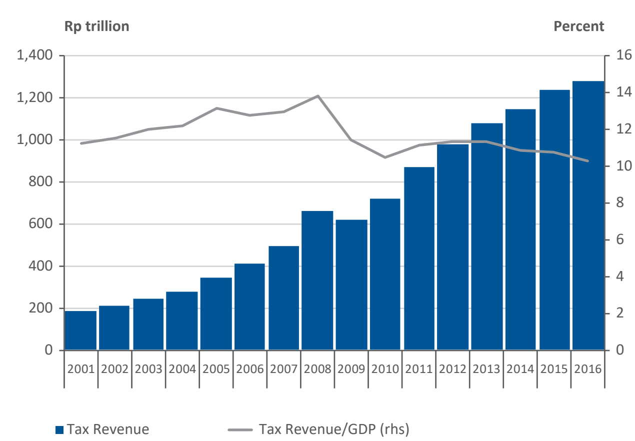
Chart 7.1. Growth of Tax Revenue Components



Source: Ministry of Finance, calculated

Tax shortfall in 2016 has placed the importance of continuing tax reforms to improve tax revenue ahead. Tax revenue has yet strengthened its position as the economy's source of financing, with Indonesia's tax ratio in 2016 at only 10.3% of GDP, down from the previous year's 10.7% of GDP (Chart 7.2). Improving the tax ratio has become even more important lately, as lower global commodity prices have also pulled down the ratio of oil-and-gas revenue in 2016 to only 0.29% of GDP, from the previous year's 0.43% of GDP.

Chart 7.2. Tax Revenue and Tax Revenue Ratio to GDP



Source: Ministry of Finance

1 Minister of Finance Regulation No. 69/PMK.04/2009 provided an incentive of postponing excise payments for cigarette manufacturers and cigarette importers that comply with affixing excise seals to their products. Minister of Finance Regulation No. 20/PMK.04/2015, the third revision to the incentive, shortened the excise payment deadline to December 31 of the ongoing fiscal year.

7.3. STATE EXPENDITURE

The overall state expenditure in 2016 increased from 2015, but the share of central government spending was lower than the target. Total state expenditure for 2016 amounted to Rp1,860.3 trillion, an increase of 3.5% compared to 2015 realization (Chart 7.3). The increased spending largely went into regional transfer funds and village funds, both of which in 2016 were up 14% from the previous year. Actual central government spending for 2016, meanwhile, only amounted to 88% of the Rp1,306.7 trillion allocated in the 2016 Revised State Budget, or only totalling Rp1,150.1 trillion, down from Rp1,183.3 trillion in the previous year.

The decreasing spending of central government was influenced by fiscal consolidation process. In the process of consolidation, austerity is more directed to the components of routine operational expenditure, while cuts on capital expenditure components are minimized. In this strategy, the Government instructs budget savings to be made on unranked events, events not held until the end of year, as well as for events that were not urgent and could be carried over to the next fiscal year.

Despite the spending cuts, fiscal stimulus through infrastructure spending was maintained. The ratio of infrastructure spending to the total state expenditure was up to 14.4% for 2016, compared to 14.2% in the previous year. The infrastructure spending included government financing through the public-private partnership (PPP) financing schemes and State Equity Participation (PMN) to SOEs. A total of 12 PPP projects worth Rp93.8 trillion were realized in 2016, with other major projects, such as the Batang power plant, the Palapa Ring telecommunications project, and the Umbulan tap-water plant, finally entered their financial closing after having been delayed. The granting of PMN to PT Sarana Multi Infrastruktur (PT SMI) and PT Penjaminan Infrastruktur, and other SOEs were also implemented.

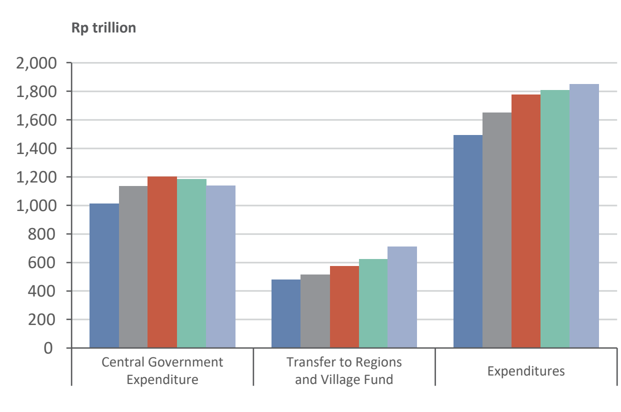
A positive change in the central government spending was the reallocation of energy subsidies to non-energy subsidies. Subsidies for diesel fuel were cut from Rp1,000 per liter to Rp500 per liter on July 1, 2016, leading to a lower amount of energy subsidies for the fiscal year (Chart 7.4). The energy subsidy was then allocated to some non-energy subsidies include subsidized interest of People's Business Credit (KUR), subsidized mortgage interest, down payment home assistance that are realized using budget for program's credit subsidy. In overall, subsidies totalled Rp174.2 trillion in 2016, lower than the 2015's achievement Rp186.0 trillion.

In contrast to central government spending, transfers to the regions and village funds increased in the 2016 fiscal year, despite their allocations in the revised budget not being fully spent. The transfers increased, mainly due to an increase in the Special Allocation Funds to the regions, and the central government's latest policy of converting any unspent transfer funds into government bonds. The banking industry had indeed reported lower savings and deposit funds from regional governments, indicating that the policy had encouraged regional governments to actually spend their transfer funds.

7.4. BUDGET FINANCING

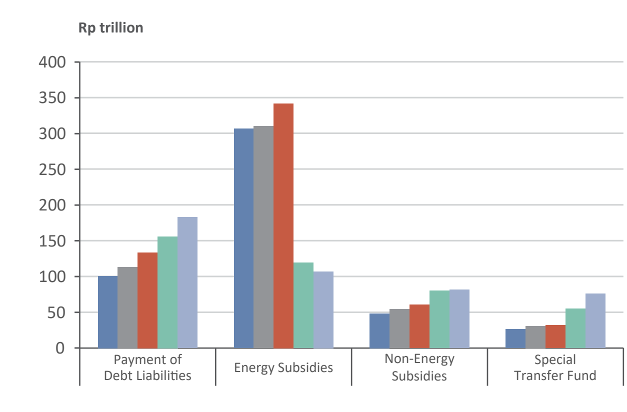
The overall state revenue and state expenditure standings throughout 2016 resulted in a deficit of Rp305.2 trillion, or 2.5% of GDP. This was higher than a deficit of 2.37% of GDP expected in the 2016 Revised State Budget, but remained at a safe and healthy level in maintaining fiscal sustainability,

Chart 7.3. State Expenditure Components



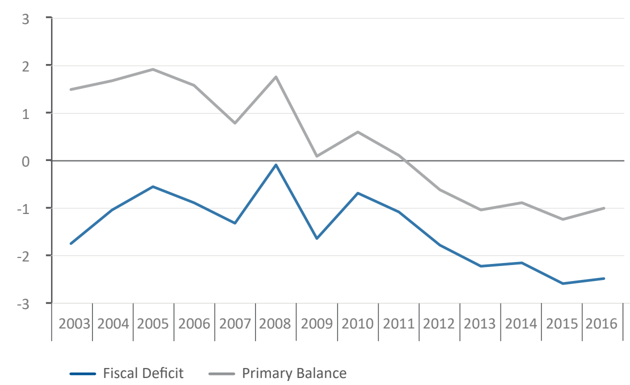
Source: Ministry of Finance

Chart 7.4. State Expenditure Sub-Components



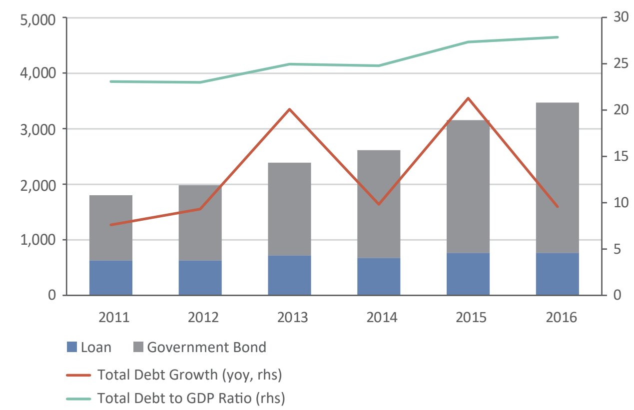
Source: Ministry of Finance

Chart 7.5. **Fiscal Deficit and Primary Balance**



Source: Ministry of Finance, calculated

Chart 7.6. **Government Debt to GDP Ratio**



Source: Ministry of Finance, calculated

and still lower than the actual deficit of 2.6% of GDP for the 2015 budget. In line with these conditions, the realization of the deficit in the primary balance of APBN-P 2016 was at 1.0% of GDP, down compared to the realization in 2015 of 1.2% of GDP (Chart 7.5).

The 2016 budget deficit was largely financed through locally-issued government bonds, amounting to Rp651.9 trillion (gross) throughout the year. This had added to the total outstanding of government bonds to Rp2,734 trillion, and had placed government bonds as the primary component to Government debt (Chart 7.6). The Indonesian government also took up Rp58.3 trillion in foreign loans for 2016, down from Rp77.5 trillion the previous year.

The Government had taken careful consideration regarding the liquidity and stability of the domestic money markets, when it issued the government bonds and took up other source of budget financing. Government bonds were no longer issued by the year's end, as that time usually coincides with increased demand for liquidity. The Indonesian government's dollar-denominated global bonds, which amounted to USD3.5 billion or Rp46 trillion for 2016, were issued at the year's beginning, to minimize effects on the liquidity of rupiah. An early redemption feature, meanwhile, was added to the Savings Bond Retail (SBR) issuance, to spread out their liquidity effects.

In relation to the budget financing, Indonesia's total government debt standing was still at a healthy and safe level. Total government debts amounted to Rp3,467trillion by the end of December 2016, up from 2015 position of Rp3,165 trillion. However, government debt growth in 2016 was recorded to slow from 21.3% (yoy) in 2015 to 9.5% (yoy). The portion of rupiah-denominated debt also increased from 55% to 58% thus reducing the currency risk in debt management. In addition, the ratio of government debt way still low and within the safe corridor of 27.8% of GDP, not much different from the 2015 level of 27.3% of GDP.

Box 7.1. Tax Amnesty Policy

As the largest source of state revenue, the realization of Indonesia's tax revenue was still below its potential. Based on data from the Ministry of Finance and BPS - Statistics Indonesia, the average ratio of tax to GDP during the year 2000 to 2015 amounted to 11.5%. This ratio was still lower than the potential ratio of tax to GDP which reached 21.5%.[1]

The low tax ratio was affected by low tax compliance in Indonesia. Based on data from BPS, the number of working citizens was recorded at more than 120 million people and the number of companies operating in Indonesia was documented at more than 3.5 million. However, the Taxpayer (WP) data registered in the Ministry of Finance was only 30 million taxpayers, consisting of Individual Employees Taxpayers, Individual Non-employee Taxpayers, and Corporate Taxpayers which recorded at approximately 22.3 million, 5.2 million and 2.5 million respectively. Out of those registered taxpayers, only 60% had complied in submitting their Annual Tax Reports (SPT) in 2015 indicating the low tax compliance.

Other data indicates the presence of illicit overseas funds of Indonesian citizens that have yet been subject to taxes. The Global Financial Integrity (GFI) classifies funds as illicit if the funds are acquired, transferred, or used illegally. A study by Kar and Spanjers (2015) shows Indonesia ranking ninth in the list of countries with the highest amount of illicit overseas funds.[2] Illicit financial outflows from Indonesia in the period between 2004 and 2013 had amounted to USD181 billion (Table 1). This averages to USD18 billion each year, with tax evasion being the main motive for the illicit financial outflows.

As the increasing need to finance its spending each year, the Government has acted in tapping these potential sources for tax revenue. Among the latest efforts is the Tax Amnesty (TA) policy, which ran from 1 July 2016 to 31 March 2017. In the Act No.11/2016 concerning the Tax Amendment adopted on 28 June 2016, the TA object is the tax obligations not yet or fully settled by the taxpayers, which is represented in any assets that have yet been declared in a taxpayer's latest annual tax report, and have yet been subject to taxes, as subject to the tax amnesty program. Excluded, are assets that have increased in value due to revaluation. Taxpayers must then report the assets, their due taxes, and pay a clearance levy which is lower than the normal tax. The clearance levy rate for any overseas assets declared but not repatriated was 4% during the period between July 1 and September 30, 2016, 6% during the period between October 1 and December 31, 2016, and 10% during the period between January 1 and March 31, 2017. The clearance levy rates for any domestic assets declared, or any overseas assets declared and repatriated, were half of the rates for any overseas assets declared but not repatriated –or 2%, 3%, and 5%, respectively, for each period.

Table 1. Illicit Financial Outflows

USD Million

Year	Indonesia	Developing Countries Total
2004	18,466	465,269
2005	13,290	524,588
2006	15,995	543,524
2007	18,354	699,145
2008	27,237	827,959
2009	20,547	747,026
2010	14,646	906,631
2011	18,292	1,007,744
2012	19,248	1,035,904
2013	14,633	1,090,130
Cumulative	**180,710**	**7,847,921**

Source: Kar dan Spanjers, 2015.

The tax amnesty program was welcomed positively, with many taxpayers reporting their previously undeclared assets and paying the clearance levy, which by December 31, 2016 had reached Rp107 trillion, and helped increase state revenue from non-oil-and gas income taxes. The total value of previously undeclared assets was Rp4,294 trillion, in which Rp141 trillion was repatriated (Table 2). These total amounts of the clearance levy and declared assets during the tax amnesty program's first two periods were both the highest in the history of similar tax amnesty programs in the world (Chart 1 and Chart 2). Tax revenue collected from the tax amnesty program's first two periods was also higher than that from the Indonesian government's similar sunset policy program back in 2008, which only added Rp7.5 trillion to the tax revenue.

The tax amnesty program had temporarily affected the banking industry's liquidity, as funds from the clearance levy flowed into the state coffers. The pressure on the bank's liquidity was affected by the timing of clearance levy settlement. During the tax amnesty program's first period,

1 IMF (2011). *Indonesia: Selected Issue*. IMF Country Report No.11/310.

2 Kar and Spanjers (2015). *Illicit Financial Flows from Developing Countries 2004-2013*. Global Financial Integrity.

Table 2. **Tax Amnesty Realization**

Rp Billion

Items	Jul	Aug	Sep	Period I	Oct	Nov	Des	Period II	Period I and II
Amnesty ransom and tax arrears deposit	1,118	6,019	90,020	97,156	779	1,100	7,790	9,669	106,825
Termination of initial evidence investigation	1	66	288	354	45	84	256	385	739
Tax arrears payment	987	1,137	941	3,065	-	-	-	-	3,065
Repatriation declaration	41	2,247	127,341	129,628	473	2,020	8,879	11,372	141,000
Overseas declaration	87	15,750	908,284	924,121	6,751	10,073	72,055	88,879	1,013,000
Domestic declaration	1,071	71,827	2,529,513	2,602,411	82,061	94,202	361,327	537,589	3,140,000
Total wealth	1,199	89,824	3,565,137	3,656,160	89,285	106,295	442,261	637,840	4,294,000

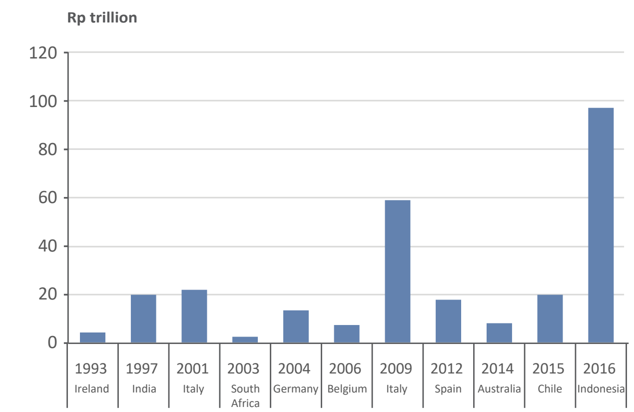
Source: Tax Amnesty Statistics Dashboard, Ministry of Finance, calculated

as much as Rp90 trillion in clearance levy were paid in the month of September 2016 alone (Table 2), to total Rp97 trillion by the end of period. This lead to the highest pressure on the bank's liquidity on September. The sheer amount of clearance levy in the tax amnesty program's first period was due to taxpayers taking opportunity of the period's lower clearance levy rate. During the tax amnesty program's second period, the amount of clearance levy had decreased significantly, adding only Rp10 trillion to total Rp107 trillion by December 31, 2016.

Apart from increasing the liquidity in domestic markets, the inflow of overseas funds due to the tax amnesty program also affected other economic variables, such as improving Indonesia's international investment position, and strengthening the Indonesian rupiah's exchange rate. This was reflected in the transfer of Overseas Current Account (OCA) deposits in banks to Nostro, the sale of securities and foreign asset divestitures throughout 2016 (Chart 3). The transfer of OCA deposits to Nostro reached the highest position in the period between September and December 2016. The same period also saw significant inflows that increased the liquidity in Indonesia's local markets, improved Indonesia's international investment position during 2016's second semester, and strengthened the Indonesian rupiah's exchange rate.[3 4]

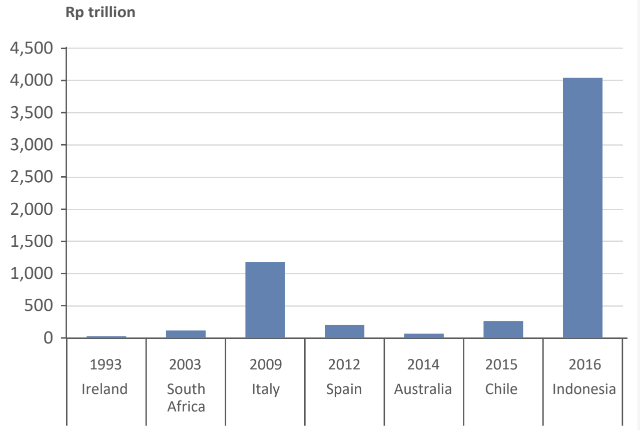
The utilization of repatriation funds requires the availability of adequate investment instruments. Rupiah-denominated instruments that are available in the market consist of investment in Government Securities (SBN), stock market, banking sector such as time deposit and Negotiable Certificates of Deposit (NCD), corporate bonds, mutual funds, sukuk and other instruments. While, foreign-currency instruments include the Indonesian government's global bonds, and corporate investment options, such as direct investments, foreign debt refinancing, debt-to-equity

Chart 1. **Comparison of Ransom in Tax Amnesty Programmes from Countries around the World**



Source: Tax Amnesty Statistics Dashboard - Directorate General of Tax and Center for Indonesia Taxation Analysis, calculated

Chart 2. **Comparison of Wealth Declaration in Tax Amnesty Programmes from Countries around the World**

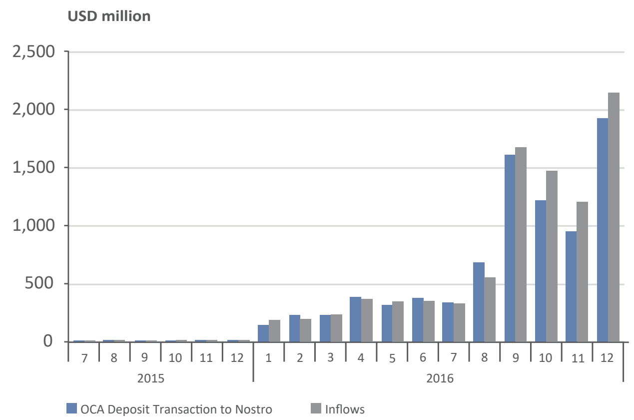


Source: Tax Amnesty Statistics Dashboard - Directorate General of Tax and Center for Indonesia Taxation Analysis, calculated

3 See Chapter 4. Balance of Payments

4 See Chapter 5. Exchange Rate

Chart 3. Transaction of Overseas Current Account (OCA) Deposit to Nostro and Inflows



Source: Bank Indonesia

swaps, and back-to-back loans. Long-term investment instruments are also available, such as infrastructure bonds. In order to facilitate the hedging of repatriation funds in the domestic banks, Bank Indonesia has provided additional facilities in plain-vanilla transactions such as forward through a net settlement system for unwinding purpose, early termination and roll-over options, as well as of structured products through call spread options.

Going forward, further tax reforms must be carried out to increase the tax base that the tax amnesty program had added to, and unlock the potential of more tax revenue. The clearance levy and declared assets during the tax amnesty program had shown the fiscal potential of untapped tax revenue from both existing and unregistered taxpayers. These tax revenue, however, would be more sustainable for Indonesia's fiscal capacity if the tax base can be continuously increased. For that matter, such efforts as the tax amnesty program must be continued through other tax reforms, which include improving the tax regulation and tax administration, widening the tax base through the effective use of information technology, and capacity building for tax compliance officers.

CHAPTER 8
Financial System Stability

The stability of the financial system in 2016 was well maintained amid an increase in banking credit risk. The increase in credit risk led the banks to intensify their prudential principle in regard to channelling loans whilst also encouraging banks to undertake internal consolidation. However, this consolidation strategy reduced the effectiveness of the transmission of monetary and macroprudential policy easing in bringing about loan growth recovery. In that regard, the performance of banking intermediation in 2016 was relatively low. Nonetheless, a slowdown in bank lending significantly boosted nonbank financing in 2016, especially through the issuance of corporate bonds, medium term notes, negotiable certificates of deposit, and promissory notes. In turn, this condition improved the performance of nonbank financial markets. This was followed by a decline in risk as positive sentiment was created toward developments in the recovery of the domestic economy and the success of the government's tax amnesty program.

Image caption:
Amid the heightened uncertainty on global financial markets, financial system stability in Indonesia remained sound and steady. During 2016, bank lending began to climb while capital market gained in line with the expanding volume of financing through offerings of shares, bonds, MTNs, and NCDs.

Conditions in the financial system remained stable in 2016, supported by high level of liquidity and capital in the banking system, along with improved performance of the bond and equity markets. Nonetheless, Financial System Stability (FSS) still faced several challenges in 2016, especially from increased credit risk. Slowing corporate sector performance owing to a decline in demand and prices of global commodities, along with moderate domestic economic growth encouraged corporations to undertake internal consolidation and delay business expansion. This condition led to an increase in credit risk and reduced the performance of banking intermediation in 2016.

The increase in credit risk encouraged banks to be more prudent in extending new loans whilst also prioritized internal consolidation over credit expansion. Internal bank consolidation is believed to have hindered the transmission of easing-bias monetary policy, either through interest rate channel or credit channel. Besides that, the impact of macroprudential policy easing - which was intended to support economic growth momentum through an increase in bank lending – also saw a decline. In 2016, banking loan growth, except loan for Micro, Small, and Medium Enterprises (MSMEs), slowed in comparison to the previous year. The higher growth of MSMEs loans was mainly driven by an increase in lending of the People's Business Credit (KUR). Various efforts were made by the government to accelerate KUR lending in 2016. Policies to promote KUR lending that were achieved by lowering interest rates, broadening the institutions which channel KUR and its recipients, as well as the provision of KUR for export oriented business (KURBE) facilities were factors which supported the increase in KUR lending in 2016.

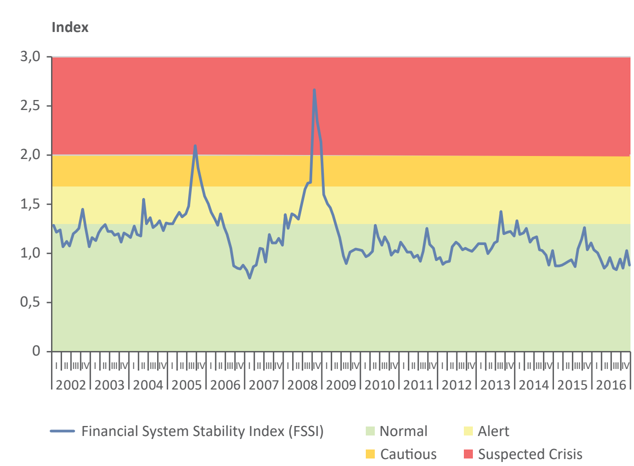
Amid the slowdown in banking intermediation, the performance of the Nonbank Financial Industry (IKNB) generally improved in 2016. This was reflected in the financing performance of financing companies (multifinance) and the increase in the assets, investments, the premiums ratio and the penetration rate of insurance companies. In terms of risk, both financing companies and insurance companies faced higher risks. This was reflected in the increase in the ratio of Non Performing Financing (NPF) and the ratio of gross claims over gross premiums.

The slowdown in lending encouraged corporations to utilize alternative sources of financing through the bond market and stock market. This was indicated by the issuance of corporate bonds and Medium Term Notes (MTN) which rose significantly in 2016. In the financial markets, the performance of the bond and stock markets improved, followed by a decline in risk driven by capital inflows in line with the positive sentiment on domestic economic developments and the success of the tax amnesty program.

8.1. GENERAL RISK ASSESSMENT OF FINANCIAL SYSTEM

Financial System Stability (FSS) was well maintained in 2016, supported by adequate liquidity and high capital adequacy ratio of the banking system, and relatively restrained volatility in the financial markets. This condition was reflected in the Financial System Stability Index (FSSI) which was kept within the normal zone (Chart 8.1).[1] Financial System Stability was supported by an improvement in banking resilience. Several banking resilience indicators, such as the ratio of liquidity to deposits and the Capital Adequacy Ratio (CAR) were recorded at high levels and increased from 19.4% in 2015 to 20.9% and from 21.2% to 22.7%, respectively, at the end of 2016. Besides that, high foreign capital inflows especially into government bonds (SBN) - which reached Rp107.3 trillion - had a positive impact on the performance of Indonesia's financial markets. In the situation when Financial System Stability is stable, several risks showed an increase suh as slower growth of banking intermediation which was accompanied by increased credit risk (Non Performing Loans/NPLs) due to sluggish activities of corporations. Pressure in regard to the collection of funds also continued from 2015, although it has improved in quarter IV 2016, supported by tax amnesty repatriation funds.

Chart 8.1. Financial System Stability Index



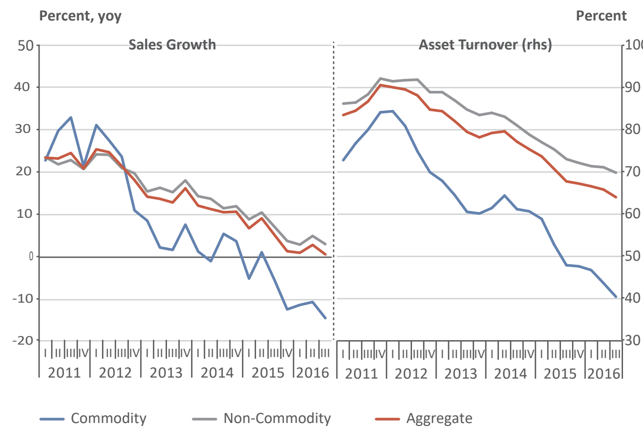
Source: Bank Indonesia

1 The components forming the FSSI are the Financial Institutions Stability index (which was founded from the banking pressure, intermediation and efficiency components) and the Financial Markets Stability Index.

8.2. PERFORMANCE AND RISK OF THE CORPORATE SECTOR

The performance of nonfinancial corporations was relatively sluggish in line with corporate efforts that prioritized internal consolidation over business expansion.[2] The modest corporate performance was reflected in a number of indicators, such as sales growth and assets turnover (Chart 8.2), along with inventory turnover which declined (Table 8.1). By sector, the performance of corporations in the commodity sector presented a steeper decline due to weaker demand and lower commodity prices in the global markets. The slowdown in the performance of corporations in the commodity sector had a subsequent impact on corporate performance in supporting sectors, especially the transportation and trade sector, such that the corporate sector on aggregate recorded weaker performance in 2016.

Chart 8.2. Sales Growth and Asset Turnover



Source: Bloomberg, calculated

Amid the slowdown, corporate profitability still showed an improving trend from the beginning of 2016 in line with the consolidation and efficiency efforts undertaken and the sustained profit margins. Improvements in performance were seen through the increase of Return on Assets (ROA) and Return on Equity (ROE) indicators, which ensued, among others, in infrastructure, consumption goods, and agriculture sectors. Meanwhile, corporate profitability in the mining sector was still negative (Table 8.1 and Chart 8.3). As anticipated, corporations undertook consolidation and efficiency efforts as a way to trim operating costs to reduce the Cost of Goods Sold (COGS). Furthermore, in order to maintain profit margins, corporations maintained product selling prices in order to restrain the impact of the sales decline on profits. The behavior of corporations in the commodity sector was reflected in the higher gross profit margin (Chart 8.3).

In response to the downturn in business performance, corporations indicatively undertook internal consolidation by reducing their debt (leverage). The corporate debt, either in aggregate or among corporations in the commodity sector, experienced a decline as reflected in the lessening Debt to Equity Ratio (DER) (Chart 8.4). In line with the decreasing sales, corporations reduced their debt - particularly their short-term debt (which are generally

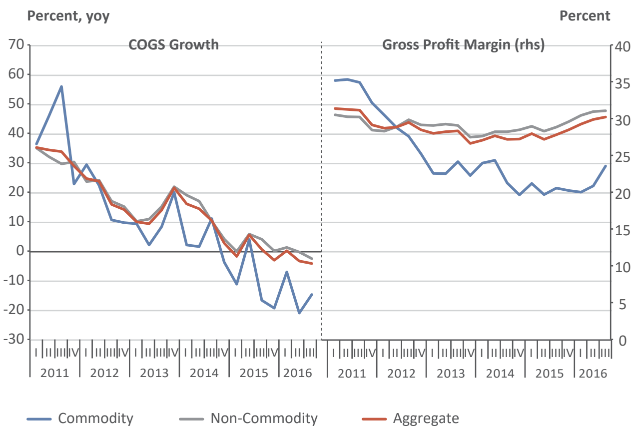
Table 8.1. Corporate Performance by Sector

No.	Sector	ROA		ROE		DER		Current Ratio		TA/TL		ATO		ITO	
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
1.	Agriculture	0.22%	2.38%	0.48%	5.26%	1.32	1.11	0.82	0.90	1.76	1.90	0.64	0.49	8.06	6.74
2.	Basic & Chemical Industry	2.18%	4.21%	4.52%	8.52%	1.08	0.98	1.36	1.42	1.93	2.02	0.71	0.67	4.85	4.96
3.	Consumer Goods Industry	10.88%	12.24%	22.29%	23.03%	1.09	0.73	1.64	1.98	1.92	2.38	1.31	1.31	4.67	4.90
4.	Infrastructure, Utilities, and Transportation	1.72%	4.18%	4.87%	11.14%	1.85	1.50	0.97	0.93	1.54	1.67	0.51	0.51	64.93	62.67
5.	Basic Industry	4.29%	4.37%	9.76%	9.72%	1.28	1.17	1.20	1.25	1.78	1.85	0.79	0.74	7.28	7.46
6.	Mining	-2.44%	-3.89%	-6.29%	-10.42%	1.57	1.82	0.78	0.89	1.64	1.55	0.41	0.36	9.39	9.46
7.	Property & Real Estate	5.44%	4.52%	11.42%	9.32%	1.07	1.05	1.81	1.73	1.93	1.95	0.37	0.33	1.94	1.75
8.	Trade, Services & Investment	3.48%	3.02%	6.78%	5.80%	0.95	0.89	1.46	1.52	2.06	2.12	0.89	0.86	7.40	7.47
Aggregate		**2.96%**	**3.66%**	**6.67%**	**8.03%**	**1.27**	**1.13**	**1.26**	**1.34**	**1.79**	**1.88**	**0.68**	**0.64**	**6.08**	**7.47**

Note: TA/TL: Total Assets/ Total Liabilities; ATO: Assets Turnover; ITO: Inventory Turnover
Source: Bloomberg, calculated

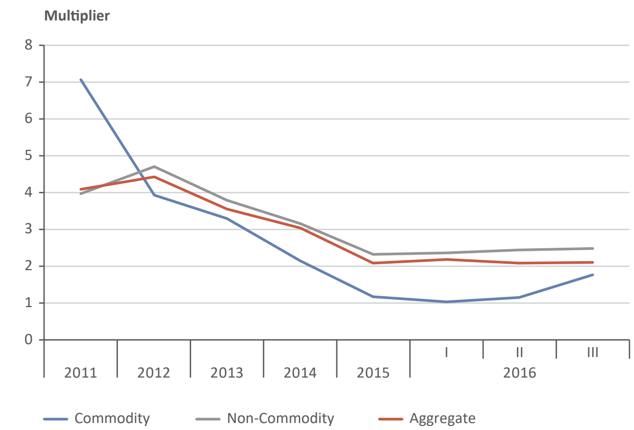
2 Data based on the performance of 448 companies which went public on Indonesia's Stock Exchange (IDX).

Chart 8.3. COGS Growth and Gross Profit Margin



Source: Bloomberg, calculated

Chart 8.5. Interest Coverage Ratio



Source: Bloomberg, calculated

used for working capital). The consolidation undertaken by companies led to a decline in loan interest rates and bond yields since monetary policy easing had not yet been able to boost up the corporate debt and business expansion. The decline in loan interest rates led only to a reduction in corporate interest expenses. As such, consolidation efforts were able to sustain the ability of corporations to repay their debt as reflected in the Interest Coverage Ratio (ICR) which tended to be stable (Chart 8.5).

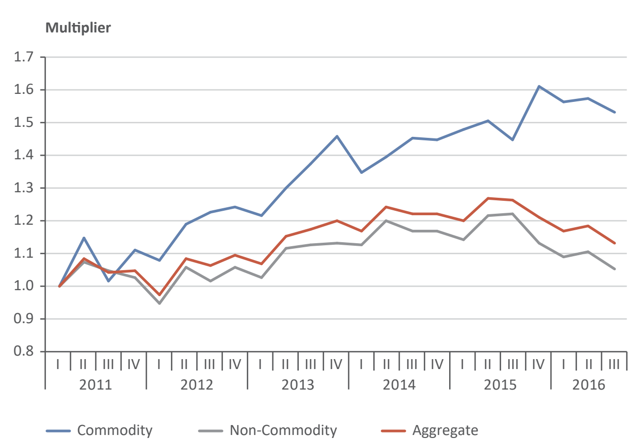
The decline in corporate leverage was also indicated in declining private foreign debt position (Chart 8.6). The private foreign debt position decreased from USD168 billion at the end of 2015 to USD159 billion at the end of 2016. The decline in foreign debt is an indication of lower foreign exchange risk exposure for private corporations. Efforts to reduce the foreign debt are believed to have been made by corporations in the commodity sector. Since corporations in the commodity sector are export-oriented, they tend to have foreign debt.

8.3. PERFORMANCE AND RISK OF BANKING INDUSTRY

Performance and Risk of Banking Industry

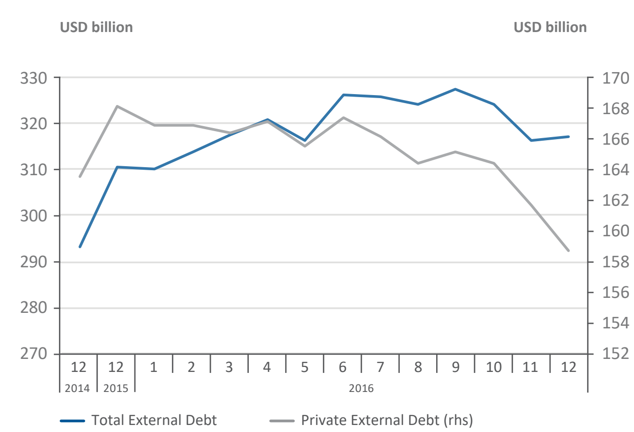
In line with the consolidation process of corporations, banking loan growth slowed from 10.5% in 2015 to 7.9% in 2016 (the lowest growth since 2002). By economic sector, the biggest slowdown in loan growth occurred in the mining sector and its supporting sectors (value chain) such as the transportation sector due to weak demand and low commodity prices (Chart 8.7). Moreover, loan growth

Chart 8.4. Debt to Equity Ratio



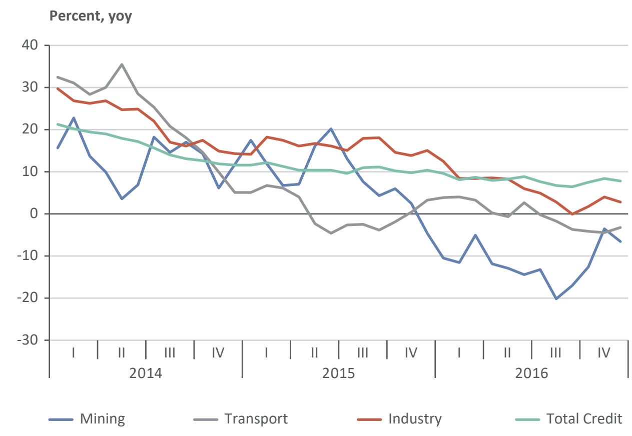
Source: Bloomberg, calculated

Chart 8.6. Corporate Debt



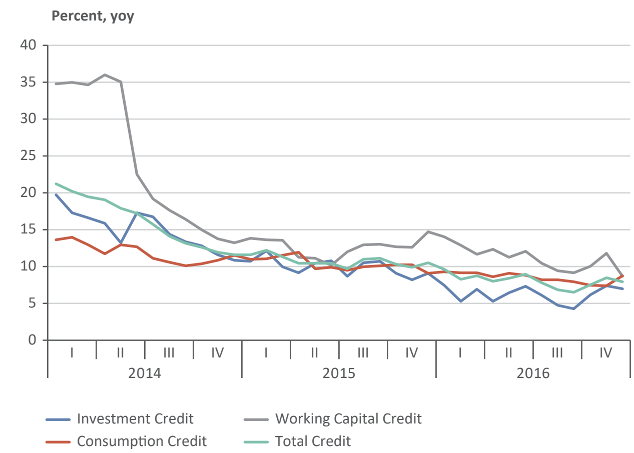
Source: Bank Indonesia

Chart 8.7. Sector with Low Credit Growth



Source: Bank Indonesia

Chart 8.9. Credit Growth by Type of Use

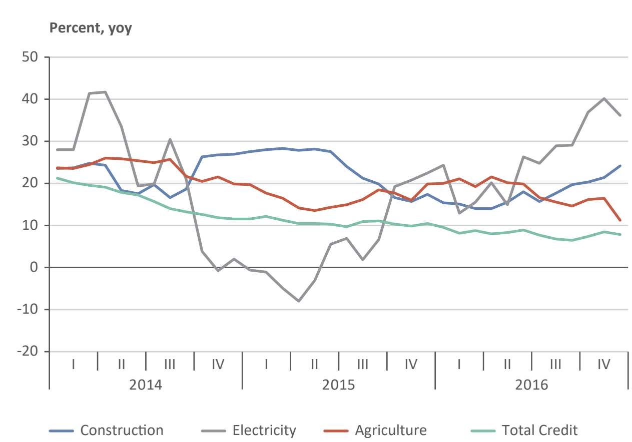


Source: Bank Indonesia

in the manufacturing sector decreased in line with the lower demand for Indonesia's export products. Meanwhile, high level of loan growth occurred in the electricity and construction sectors, supported by the government's infrastructure projects (Chart 8.8). Based on loan purpose, the lowest loan growth ensued in working capital loans. This was in line with the still-weak corporate sales which caused corporate demand for working capital to decline - especially for purchasing of raw materials (Chart 8.9). Meanwhile, the decline in consumer credit - especially Housing Loan (KPR) - was relatively restrained due to the positive impact from Bank Indonesia's easing LTV policy.

The slowdown in bank lending was influenced by both supply and demand factors. On the demand side, weakening of bank loans was in line with the ongoing consolidation and the tendency of corporations to hold business expansion.

Chart 8.8. Sector with High Credit Growth

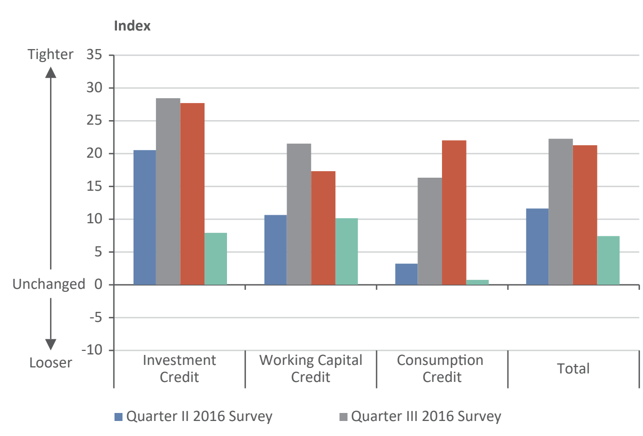


Source: Bank Indonesia

While on the supply side, there was a tendency for banks to be more prudent in extending loans due to an increase in the risk perceptions of banks as reflected in the increase in lending standards index in 2016 (Chart 8.10). Compared to peer group countries, Indonesia's loan growth was still relatively high even though several countries had experienced an increase in credit growth (Chart 8.11).[3]

In line with the slowdown in bank lending, the credit risk of banking industry (as measured by NPLs) tended to increase in 2016, despite remaining well under the threshold of 5%. The gross NPL ratio of banking industry rose to 2.9% in 2016 from 2.5% in 2015. Based on the type of use, the highest NPLs occurred in working capital loans(3.6%) or in line with corporate consolidation efforts (Chart 8.12). By economic sector, the increase in NPLs was driven by weak corporate

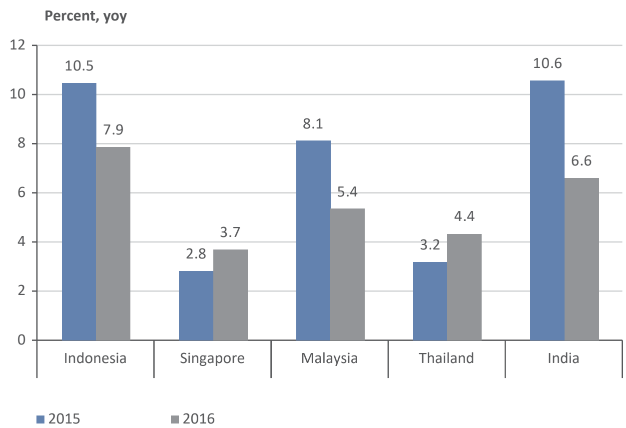
Chart 8.10. Lending Standard Index



Source: Bank Indonesia

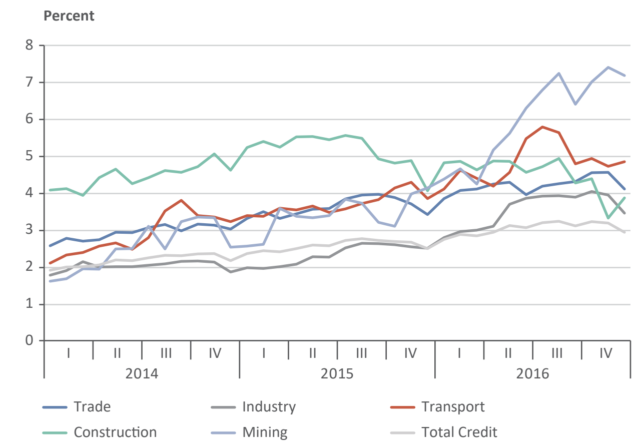
3 Source: Bank Indonesia (December 2016), Malaysia, Singapore Thailand and India: CEIC (November 2016), compiled

Chart 8.11. Credit Growth of Peer Countries



Source: Bank Indonesia, Bloomberg, calculated

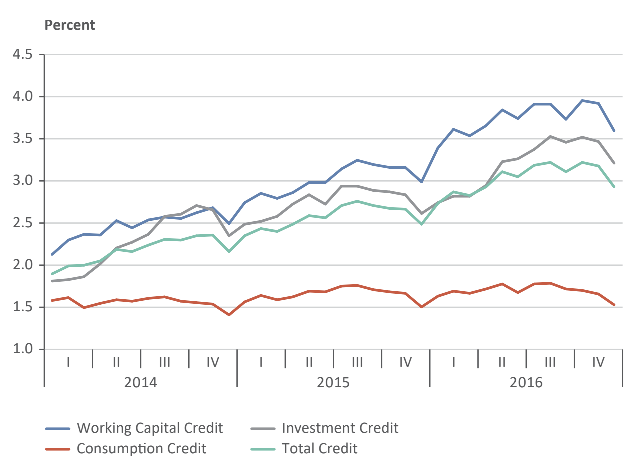
Chart 8.13. NPL by Economic Sector



Source: Bank Indonesia

incomes in trade and industry sector which adversely impacted the ability to repay loans. Besides that, the decline in commodity prices also led to weaker performance of companies in mining sector, thus causing the credit quality to decline significantly, with the NPL ratio reaching 7.2% at the end of 2016 (Chart 8.13). The decline in the performance of mining sector also led to deteriorating loans in mining's supporting sectors such as the transportation sector which had a NPL ratio of 4.8%. Compared to peer group countries, the increase in NPL of banking industry in Indonesia was relatively in line with the rising trend of NPL in the ASEAN region and peer countries that were generally affected by the global economic slowdown (Chart 8.14).[4]

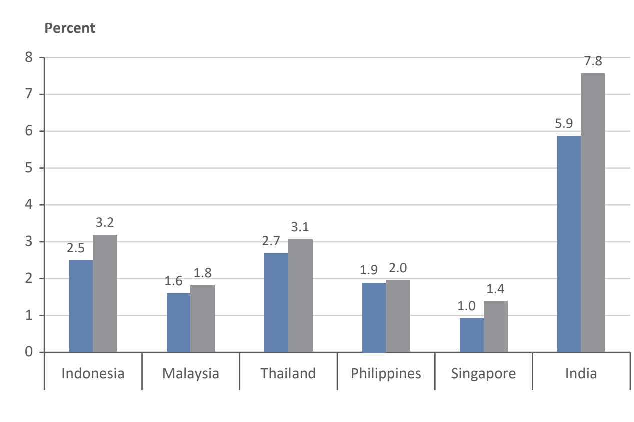
Chart 8.12. NPL by Type of Use



Source: Bank Indonesia

Responding to the increase in credit risk, banks also undertook internal consolidation by strengthening credit risk management in a preventive manner to reduce financing in high-risk sectors as well as to strengthen the loan monitoring process. Internal banking consolidation was also done through intensifying the process of non-performing loan's resolution and actively carrying out loan restructuring, especially for loans which potentially turn to be non-performing. Besides that, banks also provide the Provision for Impairment Losses (CKPN), which was relatively high to cover losses from non-performing loans. This consolidation strategy was able to rein in the pace of NPLs growth in 2016 (Chart 8.15). Optimism toward an improvement in banking NPLs was supported by the onset of rising commodity prices in quarter IV 2016 so that the performance of corporations in the mining sector and supporting sectors could improve.

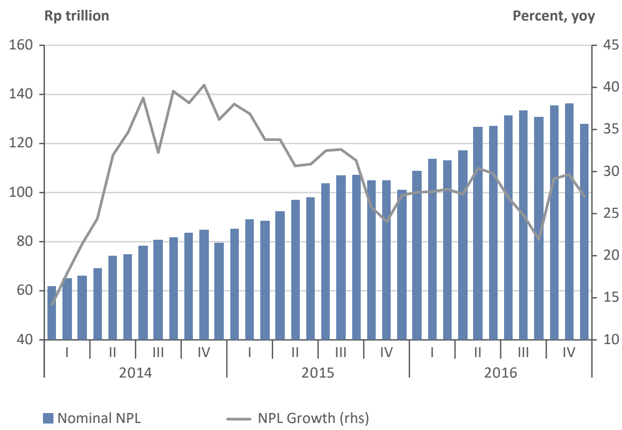
Chart 8.14. NPL of Indonesia and Peer Countries



Source: Bank Indonesia, Bloomberg, calculated

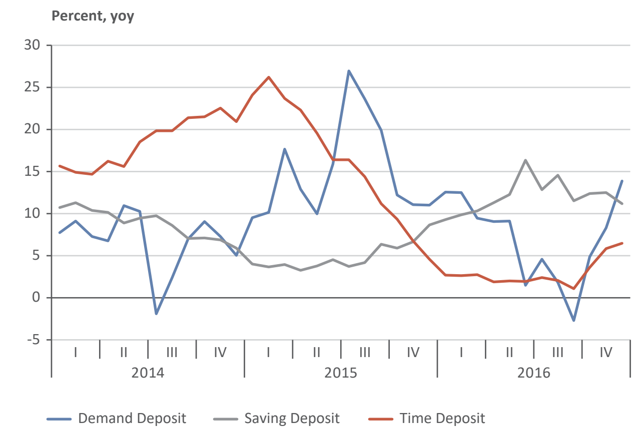
4 Source of data on Indonesia: Bank Indonesia as of December 2016, data on Malaysia, Singapore and Thailand: Bloomberg as of quarter III 2016, data on the Philippines and India: IMF as of quarter II 2016, compiled

Chart 8.15. **NPL Level and Growth**



Source: Bank Indonesia

Chart 8.17. **Growth of Bank Deposits by Type**



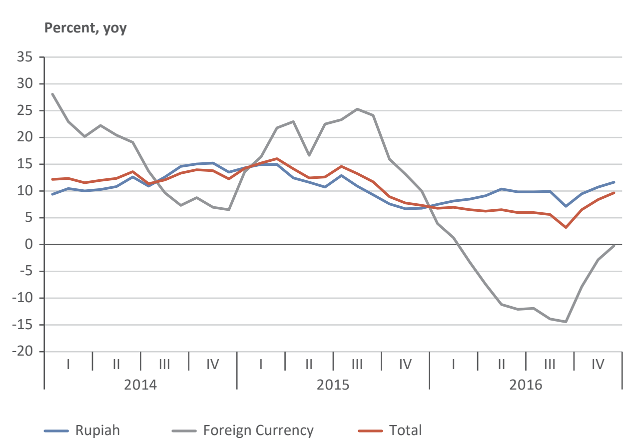
Source: Bank Indonesia

With loans growth still fairly sluggish, the growth of banks' deposits was also restrained, although they started to show an increase in quarter IV 2016 attributable to the tax amnesty program. Growth in deposits increased to 9.6% in 2016 from 7.3% in 2015 (Chart 8.16). The increase in deposits was contributed by fiscal expansion and inflows of tax amnesty repatriation funds which were reflected in the increase of both demand deposits and time deposits (Chart 8.17). Although deposits have already shown an increase, its sustainability needs close attention. This is because of seasonal pressures which can result in a funding gap and potentially create liquidity pressures in the banking system. Besides that, the increase in deposits by BUKU categories was still dominated by large banks, namely BUKU 4 and BUKU 3 banks. Meanwhile, the deposits growth of BUKU 1 and BUKU 2 banks was still below the average growth of deposits in the banking system (Chart 8.18).

Regulations and high yields on government bonds (SBN) constrained the growth in banking deposits in 2016. Implementation of regulation concerning mandatory use of rupiah for domestic transactions resulted in lower growth in foreign currency deposits due to the shift toward rupiah deposits. Meanwhile, the Financial Services Authority (OJK) regulation which requires the nonbank financial institutions to meet the percentage target for government bonds ownership also led to a shift from bank deposits - especially those owned by pension funds and insurance companies toward government bonds portfolio. Besides that, pressure on banking deposits collection was also triggered by the fact that yields on government bonds were more attractive than interest rates on deposits. This also encouraged a shift from bank deposits toward government bonds.

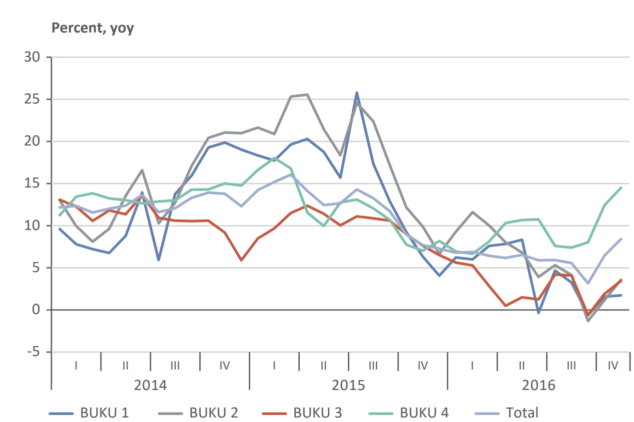
Amid a slowdown in deposits growth, banks sought to increase their funding through the issuance of bonds and

Chart 8.16. **Growth of Bank Deposits by Currency**



Source: Bank Indonesia

Chart 8.18. **Deposit Growth of Commercial Banks by Business Activities (BUKU)**

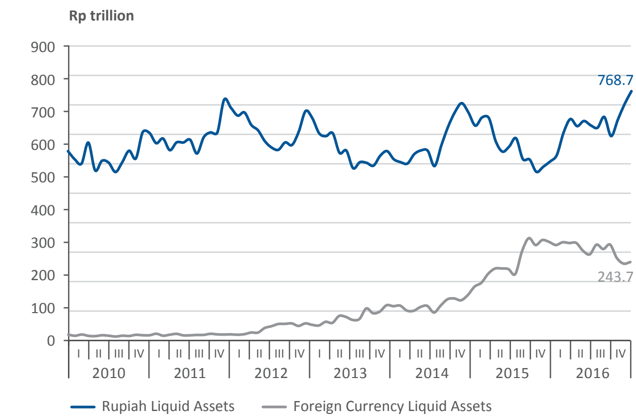


Source: Bank Indonesia

Medium Term Notes (MTN). The issuance of securities by banks was intended to anticipate the funding gap, especially in quarter II and quarter III 2016. The increase in bond issuances by banks was also in line with decrease in funding cost through the issuance of marketable securities. Besides that, by maturity, marketable securities also have longer tenors than banking deposits, thereby improving the maturity structure of bank liabilities. Nonetheless, the share of issuances of marketable securities toward total bank funding was still relatively small. Given the stiffer competition in obtaining banking deposits, the issuance of marketable securities will become alternative source of funding for banks.

Banking liquidity in 2016 tended to be high, in line with the increase in government's financial expansion since the beginning of the year, the easing policy of statutory reserve requirements stipulated by Bank Indonesia, along with the loan growth slowdown. The increase in bank liquidity was reflected in the ratio of Liquid Assets to Deposits (LA/D) which increased from 19.4% in 2015 to 20.9% at the end of 2016 (Chart 8.19). Meanwhile, the ratio of Liquid Assets to Non Core Deposits (LA/NCD) rose from 93.4% in 2015 to 99.4% in 2016. These liquidity ratios are far above the minimum liquidity thresholds for each indicator. Despite the fairly loose conditions, liquidity of the banking system reduced in three times during 2016. The first occasion was in April 2016 due to the needs of corporate tax payments. As a result, liquid assets fell by Rp21 trillion. The second time was in June 2016 due to the seasonal pattern of cash withdrawals for religious festivities (Eid al-Fitr) causing liquid assets to fall by Rp25 trillion. The third occasion was in September 2016 due to phase I redemption of tax amnesty which reached Rp45 trillion. By contrast, at the end of 2016, banking liquidity increased again by Rp97 trillion owing to tax amnesty repatriation funds (Chart 8.20).

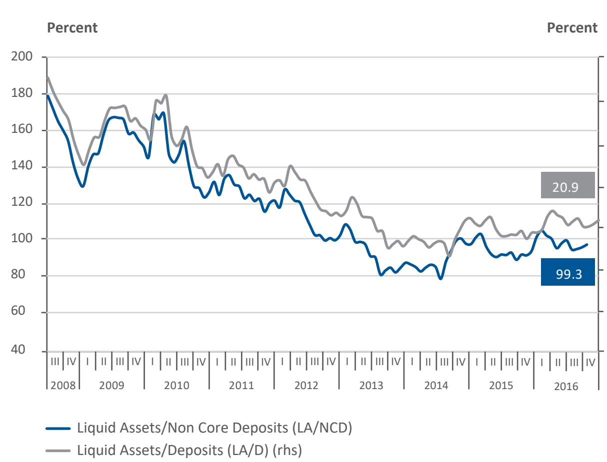
Chart 8.20. Banking Liquid Assets



Source: Bank Indonesia

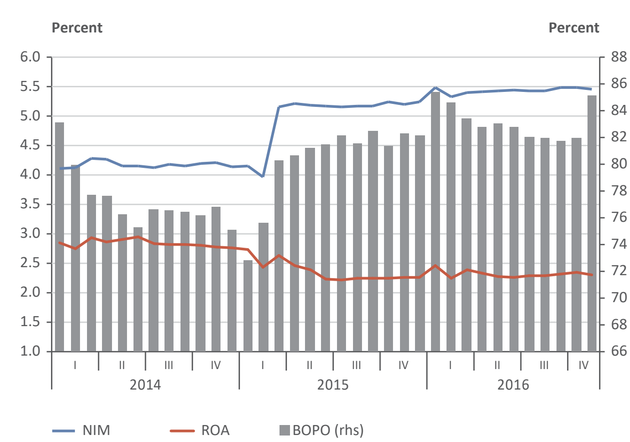
Amid the constrained intermediation performance and increased credit risk, banking profitability was still maintained because of Net Interest Margin (NIM) which was rising and always upheld at a high level (Chart 8.21). The increased NIM in 2016 owed mostly to the bigger spread between the interest rates on loans and deposits (Chart 8.22). Banks responded to monetary policy easing by lowering interest rates on deposits, especially time deposits, at a faster rate than they lowered lending rates. Nonetheless, the higher NIM was not accompanied by better efficiency. This was reflected in the ratio of Operating Expenses to Operating Income (BOPO) of banks which rose slightly from 82.2% in 2015 to 82.8% in 2016. The increase in the BOPO owed to higher Overhead Costs (OHC) due to the rising CKPN costs to write-off NPLs (Chart 8.23). To offset the increase in BOPO, banks made efforts to raise fee based income as an alternative source of income besides interest as a way to sustain profitability.

Chart 8.19. Banking Liquidity Ratio



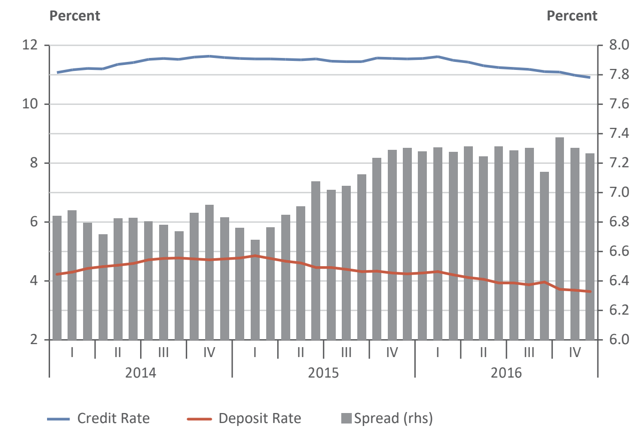
Source: Bank Indonesia

Chart 8.21. Banking Efficiency



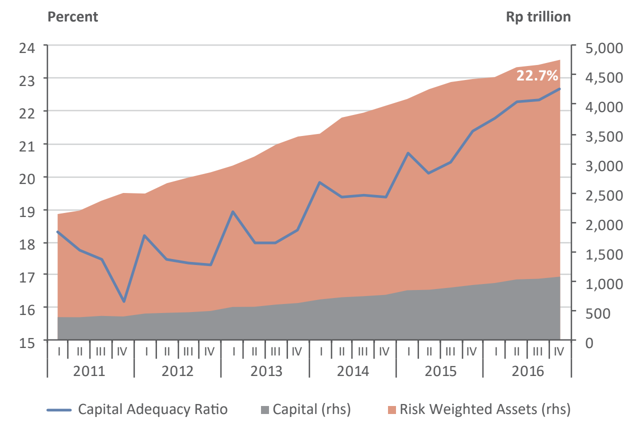
Source: Bank Indonesia

Chart 8.22. **Banking Interest Rate Spread**



Source: Bank Indonesia

Chart 8.24. **Indonesia Banking CAR**



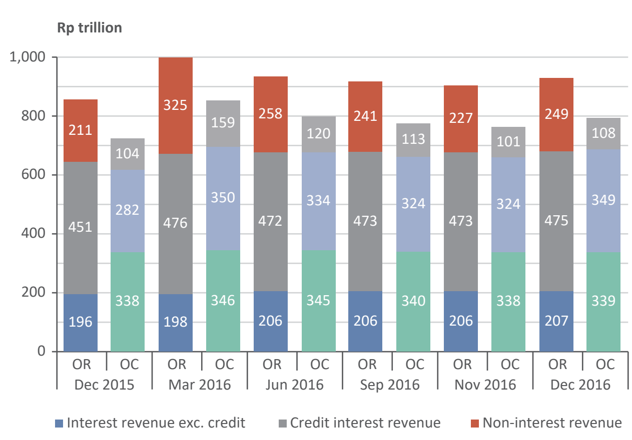
Source: Bank Indonesia

The resilience of banking capital continued to improve due to the slower loan growth and better profitability of banks. In December 2016, the CAR of banks reached 22.7% or up from 21.2% in 2015 (Chart 8.24). The CAR level in Indonesia's banking sector is far higher than the average CAR in the ASEAN region and among peer groups (Chart 8.25). The high level of CAR constitutes the response of banking industry regarding prudential principle in extending loans despite the still moderate economic growth so that the growth in Risk Weighted Assets (RWA) declined. The healthy capital of banks was also an indication of bank's preparedness in meeting several Basel III regulatory requirements concerning capital, especially the Capital Conservation Buffer, Countercyclical Capital Buffer and Capital Surcharge for systemic banks. By structure, the banking capital was also relatively healthy because it was dominated by tier-1 capital - the most stable component in a bank's capital structure.

Sharia Banking and Finance

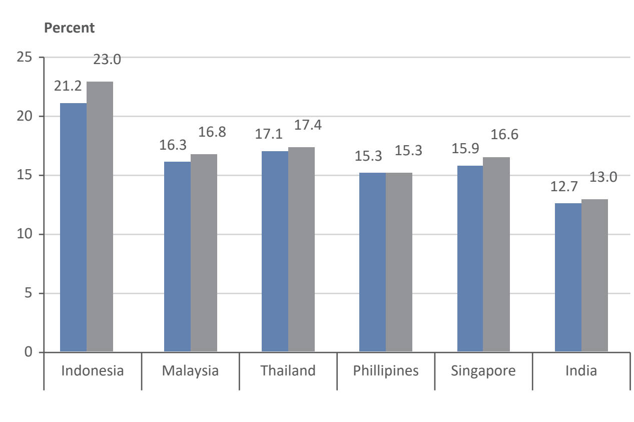
Even though economic growth has yet to recover completely, the development of sharia banking still showed an improvement in 2016 over 2015. Notably, there was an increasing number of Sharia Commercial Banks (BUS). In September 2016, Bank Aceh – a conventional commercial bank with Sharia Business Units (UUS) – was converted into a Sharia Commercial Bank so that the bank became the only Sharia Commercial Bank (BUS) with the status as a regionally-owned enterprise. As a result of this conversion, the assets and number of sharia banks increased at the end of 2016. The number of BUS increased from 12 banks to 13 banks, while the number of Sharia Business Units reduced from 22 to 21 UUS. Nonetheless, the addition of one BUS was not accompanied by a higher number of sharia bank offices, which actually declined from 1,990 offices at the end of 2015 to 1,869 offices in 2016. The decline in

Chart 8.23. **Structure of Operational Revenue and Cost**



Source: Bank Indonesia

Chart 8.25. **Banking CAR of Indonesia and Peer Countries**



Source: Bank Indonesia, CEIC, calculated the number of offices can be attributed to the internal consolidation process and adjustments to the business models of sharia banks. Meanwhile, the number of UUS offices increased from 311 to 332 offices at the end of 2016. At the global level, the position of Indonesia's sharia banking by assets was in 10th place with a 1.4% share of global sharia banking.[5] Going forward, Indonesia as one of the members of the Organization of Islamic Cooperation (OIC) -which is projected to record economic growth over the medium term that is higher than the average global growth rate- has the potential to see sharia banking in the country grow quite briskly.

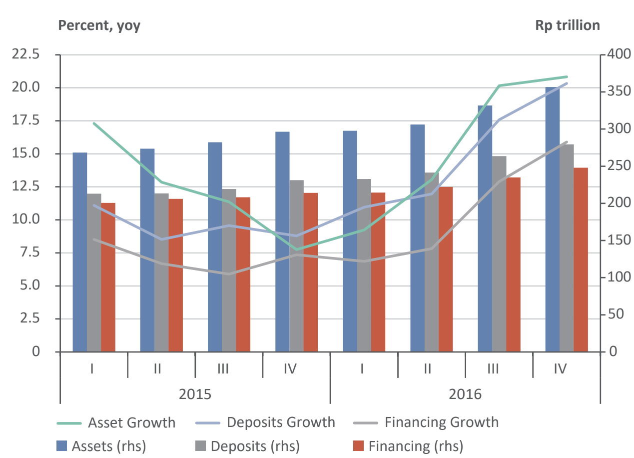
The total assets of sharia banking (BUS and UUS) at the end of 2016 reached Rp356.5 trillion, up 20.3% or higher compared with the growth in 2015 of 8.8%. Deposits also experienced higher growth in 2016 than in 2015: up from 7.8% to 20.8% or reaching Rp279.3 trillion. The financing distributed (PYD) also recorded higher growth than in the previous year: up from 7.4% in 2015 to 15.9%. As a result, the position of financing distributed at the end of 2016 stood at Rp248.0 trillion (Chart 8.26). The market share of sharia banking also rose over the year from 4.8% to 5.3% at the end of 2016. The increase in the performance of sharia banking was also attributable to the conversion of Bank Aceh to a sharia bank. The assets of BUS and UUS still dominated the sharia banking industry, reaching ±98% of the national sharia banking industry's assets, while the remainder comprised assets of Sharia Rural Bank (BPRS) which are still relatively small.

The profitability of sharia banking also saw an improvement in 2016. The ROA indicator rose from 0.5% in 2015 to 0.6% in 2016. This improvement in profitability was also accompanied by greater efficiency as reflected in the decline in the BOPO ratio from 97.0% in 2015 to 96.2%. The capital adequacy of sharia banks also improved, as shown in the increasing CAR from 15.0% in 2015 to 15.6% at the end of 2016.

The financing growth of sharia banking (BUS and UUS) in 2016 was higher than in 2015. Sharia banking financing in 2016 grew 15.9%, or higher than the previous year's growth of 7.4%. The quality of sharia banking financing as reflected in the NPF ratio also showed a relative improvement to 4.2% at the end of 2016 compared to the previous year's figure of 4.3% (Chart 8.27).

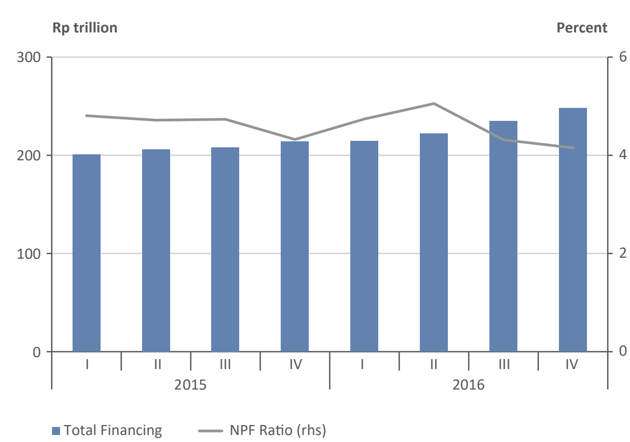
Financing the economy using sharia financial instruments was also carried out through non-bank instruments, such as the issuance of corporate sharia bond (sukuk). In 2016 there were 14 corporate sukuk series issuances with a total value reaching Rp3.8 trillion. With these issuances, the number of outstanding corporate sukuk became 53 series, with a value of Rp11.9 trillion. The number and value of corporate sukuk recorded a change in 2016. In this year, the number of corporate sukuk issuances reached 16 series with a total value of Rp3.3 trillion, so that the total number of corporate sukuk reached 47 series with outstanding value of Rp9.9 trillion. Other than commercial financing, the sharia financial system also provides of social financing through the instruments of zakat and waqf. The payment of zakat is obligatory for people who meet certain requirements. According to a study conducted by Bank Indonesia, the potential value for zakat in Indonesia has reached Rp217 trillion per year or equivalent to 3.4% of Indonesia's GDP in 2010. This potential can be divided into three main groups, namely the of personal income zakat (households)

Chart 8.26. Sharia Banking Asset, Financing, and Deposits



Source: Bank Indonesia, OJK

Chart 8.27. Sharia Banking Financing and NPF



Source: Bank Indonesia, OJK

5 Islamic Financial Services Industry (IFSI) Stability Report 2016, Islamic Financial Services Board (IFSB)

of Rp83 trillion, the companies zakat both state owned companies or private companies of Rp117 trillion, and the savings zakat of Rp17 trillion. Another study from the Public Interest Research and Advocacy Centre (PIRAC) stated that Indonesia's zakat potential is around Rp20 trillion per year, while the ADB has a far higher estimation figure of Rp100 trillion per year.

According to Act Number 23 year 2011 concerning the Management of Zakat, institutions assigned with the tasks of collecting, distributing, and utilizing zakat are National Amil Zakat Body (BAZNAS) and Amil Zakat Body (LAZ). Zakat funds cannot be held indefinitely so that within a maximum of one year it must be utilized. The utilization of zakat funds can be for either consumptive or productive purposes. Those entitled to receive zakat funds are limited to 8 groups, namely the poor (*fakir*, *miskin*), *amil*, *muallaf*, *riqob*, *gharimin*, *fiisabiilillah*, and *ibnu sabil*.

In terms of collection, the amount of zakat officially collected by BAZNAS and LAZ in all of Indonesia is still below its potential. According to BAZNAS data, the amount of zakat funds that have been collected reached Rp3.65 trillion.[6] One of the factors behind the low realization of zakat collection is that the zakat reporting system is not yet optimal. Not all the people pay zakat through BAZNAS or LAZ. Instead, some people directly channel zakat to the beneficiaries without reporting it, such that accurate data concerning the amount of zakat distributed by individuals is not available.

Other than through zakat instruments, waqf can be an alternative source of financing. Unlike zakat, waqf is voluntary and there are no restrictions on the communities which have the right to utilize the waqf assets. Based on Act Number 41 year 2004 concerning Waqf, the assets which can be donated are fixed assets and current assets, including money. Waqf assets can be earmarked for: (i) facilities and religious activities; (ii) facilities as well as educational and health activities; (iii) assistance to the poor, neglected children, orphans, and scholarship; (iv) the progress and economic improvement of the people; and/or (v) other common welfare causes which do not conflict with sharia and regulations. Given that donated assets must be fixed at the principal amount and not below it, then waqf (especially money) allows for continued accumulation and can become an alternative source of financing available over the long-term.

6 Source: BAZNAS Statistics Document 2016 in the Zakat Indonesia Outlook for 2017, PUSKAS BAZNAS

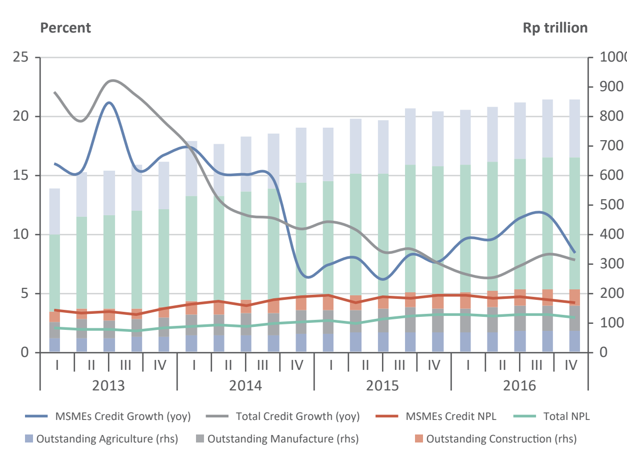
Development of MSMEs

MSMEs Loan

The channelling of loans to MSME increased in 2016. MSME loans reached Rp857 trillion or 19.4% of the total banking loans. MSME loans in 2016 grew by 8.4% or slightly higher than in 2015 when they grew by 8.0% (Chart 8.28). Based on the number of loan accounts, around 23.1% of MSME had access toward bank financing in 2016, up from 20.6% in 2015. The increase in MSME loan was seemingly driven by a decline in lending rates and an increase in lending of People's Business Credit (KUR) program. Based on the loan purpose, working capital loans grew by 9.2%, up from 7.6% at the end of 2015. Meanwhile, investment loans grew by 6.4% in 2016, or slower than the growth in 2015 of 9.2%.

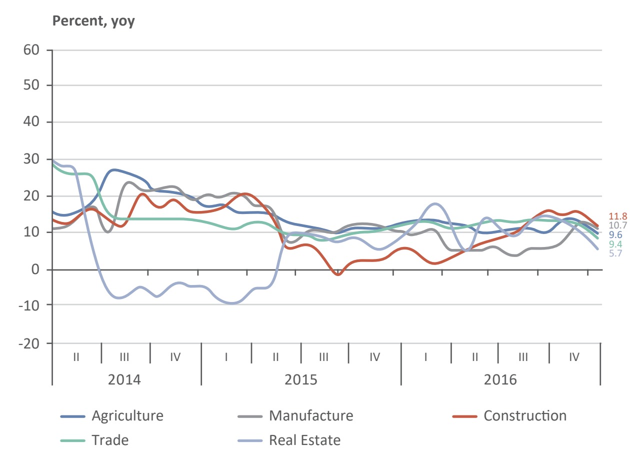
From five sectors with the largest share of MSME loans, the trade, real estate, and agriculture sectors are the sectors with the highest MSME loan growth. These three sectors recorded the highest loans growth in 2016, with average growth of 11.9%, 11.5% and 11.0%, respectively (Chart 8.29). Meanwhile, several sectors still experienced a decline in loan growth in 2016, including the mining and quarrying, social services, and financial intermediaries sectors with negative loan growth of 4.0%, 2.0%, and 4.7% respectively, albeit still showing an improvement over 2015 when negative loan growth recorded 19.2%, 6.2%, and 10.5%, respectively. By business classification, the highest growth in MSME loan during 2016 was for loans channelled to micro and small enterprises (MSE) which grew by 10.9% and 11.1%, respectively. Meanwhile, medium enterprises loan only grew by 5.7%. The brisk loan growth of micro and small enterprises was consistent with the relatively high channelling of KUR in 2016.

Chart 8.28. MSMEs Credit



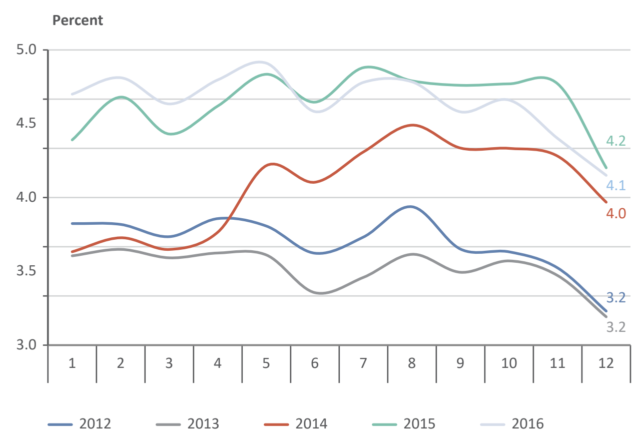
Source: Bank Indonesia

Chart 8.29. MSMEs Credit by Sector



Source: Bank Indonesia

Chart 8.30. Gross NPL of MSMEs Credit



Source: Bank Indonesia

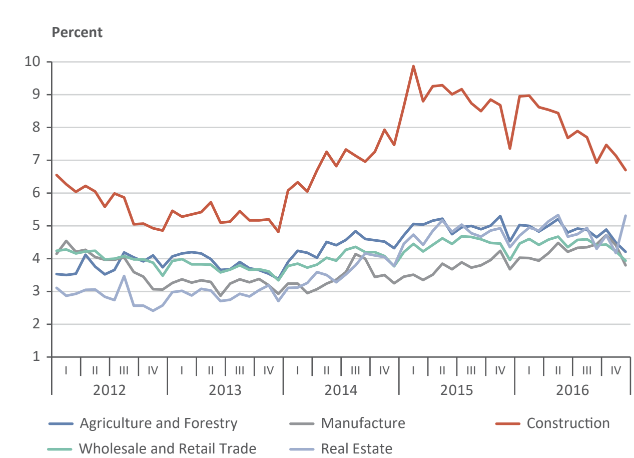
Spatially, the distribution of lending to MSME was still uneven and focused on regions where economic activity is centred. This is reflected in the realization of MSME loan in Java and Sumatra which dominated with shares of 58.0% and 19.7%, respectively. Meanwhile, the shares for the regions of Sulawesi, Kalimantan, Bali-Nusa Tenggara, and Maluku-Papua were still relatively low, that is at 7.2%, 7.0%, 5.7% and 2.3%, respectively. This condition reflected the fact that banking infrastructure is more commonly found in Java and Sumatra. By economic sectors, the majority of lending to MSME was absorbed by the wholesale and retail trade sector with a share of 52.7% and directed toward the medium enterprises group. The dominance of the trade sector reflects this sector's more measured risk profile, while the channelling of MSME loan to other sectors was still low.

The level of MSME loan risk in 2016 tended to improve compared to 2015, especially since mid-2016. The NPLs of MSME declined from 4.2% in 2015 to 4.15% at the end of 2016. The MSME credit risk level was still relatively high compared to its level over the last 3 years (Chart 8.30), which influenced by the relatively weak domestic economic growth. Nonetheless, efforts made by banking industry to improve the collectability of MSME customers was able to reduce risks as marked by the decline in the ratio of MSME gross NPLs at the end of 2016. Other efforts made by banks to reduce risks included loan to MSME in a more selective manner.

From five economic sectors with the largest shares of lending to MSME, an improvement in credit quality occurred in the trade, agriculture, and construction sectors. The NPL ratio in these three sectors improved to 3.9%, 4.2%, and 6.7%, even though the level of risk was still relatively high (Chart 8.31). By business classification, an improvement in the NPL ratio in 2016 was seen in the credit for micro and small enterprises which became 2.1% and 4.3%. Meanwhile, the NPL ratio in the credit for medium enterprises actually worsened to 5.1%. The improvement in NPLs in the credit for micro and small enterprises is believed to be due to the ratio of KUR NPLs which were relatively small at just 0.4%.

In relation to the requirement for commercial bank to make at least 10% of their lending to MSME by the end of 2016, the number of banks which have already complied with this requirement is only 56 banks.[7] Some banks still face problems fulfilling this obligation, either internally or externally. From the internal side, the bank's inability to extend loan to MSME is the main problem. Human resource

Chart 8.31. MSMEs Gross NPL by Economic Sector



Source: Bank Indonesia

7 Bank Indonesia Regulation Number 14/22/PBI/2012 as amended by Bank Indonesia Regulation No.17/12/PBI/2015 concerning Lending or Financing by Commercial Banks and Technical Assistance in the framework of Developing Micro, Small and Medium Enterprises.

limitations and the fact that many banks are accustomed to lend consumption loan also became a factor hindering productive lending to MSME. Besides that, the lack of adequate office and infrastructure network, along with the increased KUR made it more difficult for banks which are not channelling KUR to obtain potential new borrowers. Meanwhile, from the external side, a slowdown in the performance of MSME due to lethargic domestic economic conditions was the main problem.

People's Business Credit (KUR)

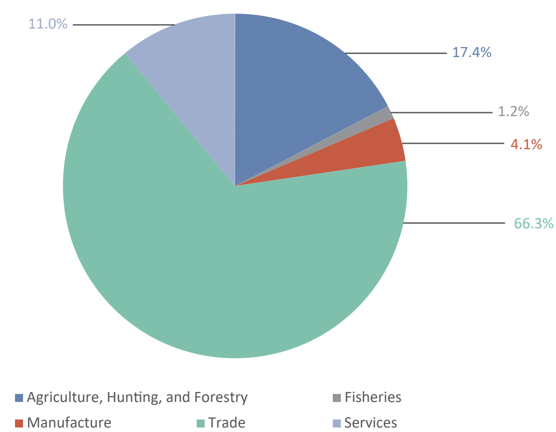
To enhance the role of MSME and stimulate economic recovery, the government continued to channel more KUR. The government made a breakthrough in 2016 by lowering the KUR interest rate to 9% from 12% previously, and raised the lending target to Rp100 trillion from only Rp30 trillion previously. Besides that, the government also widened the scope of institutions which may channel KUR to 37 institutions from 4 banks previously, and the receivers of KUR to include people and business entities compared to only productive enterprises previously.[8] The government also sought to accelerate the distribution of KUR through the Economic Policies Packet XI which provided a stimulus to MSME exporters. One of this stimulus was through providing loan to MSME with export oriented business (KURBE).

KUR lending in 2016 reached Rp94.4 trillion or 94.4% of the target. The quality of KUR lending was very good with a low NPL ratio of just 0.4%. Nonetheless, the distribution of KUR lending was still concentrated in several regions and certain economic sectors. By economic sectors, KUR lending was concentrated in the trade and agriculture sectors (Chart 8.32). Based on the spatial distribution, the provinces which absorbed most KUR were Central Java (Rp16.9 trillion), East Java (Rp14.6 trillion), and West Java (Rp11.9 trillion), while outside Java, the highest KUR lending was in South Sulawesi (Rp5.1 trillion) and North Sumatra (Rp4.3 trillion). The dominance of Central Java in the channelling of KUR is consistent with the high level of the policy and infrastructure index (1.61), which helped to support an improvement in the competitiveness of MSME, thus leading to better access to financing in the region (Figure 8.1).[9]

8 Regulation of the Coordinating Minister for the Economy Number 9 Year 2016 Second Amendment on the Regulation of the Coordinating Minister for the Economy As Chairman of the Policy Committee on Financing for Micro, Small and Medium Enterprises Number 8 Year 2015 concerning the Directive for Implementing the People's Business Credit.

9 Report on the Analysis of MSMEs Competitiveness, Bappenas, 2014.

Chart 8.32. KUR Realization by Economic Sector

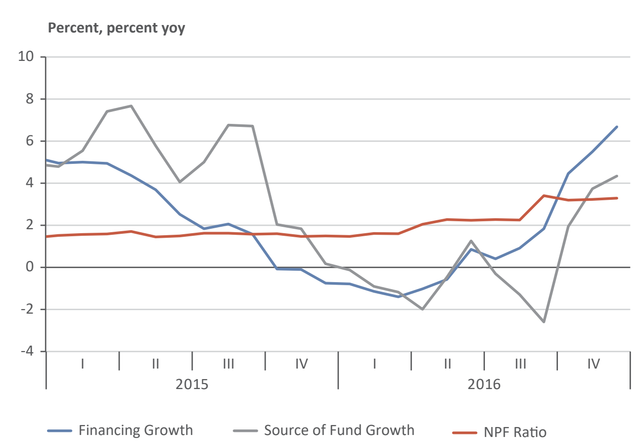


Source: Coordinating Ministry of Economic Affairs, 2016

8.4. NONBANK FINANCIAL INDUSTRY PERFORMANCE AND RISKS

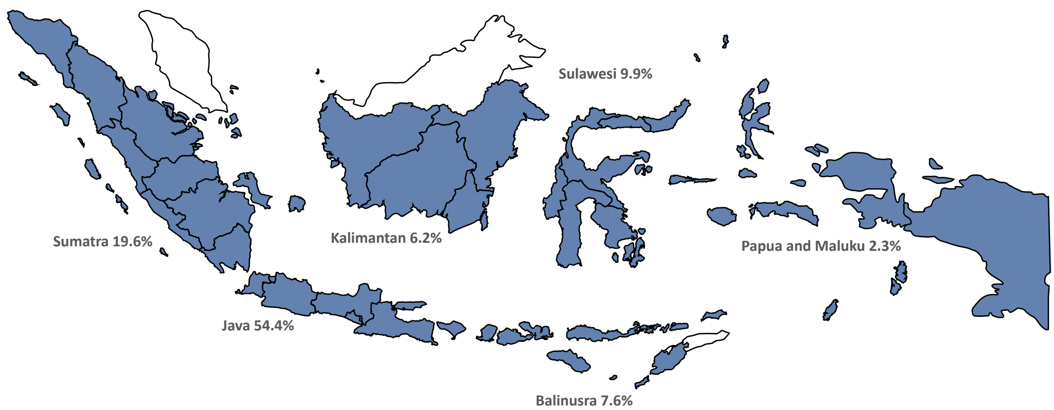
The performance of financing companies (multifinance) started to improve in accordance with the increased financing that led to better profitability. The ROA indicator rose from 3.3% to 3.9% in December 2016, while ROE rose from 11.5% to 12.0%. Nevertheless, the increase in financing was also accompanied by higher risk (Chart 8.33). The ratio of NPF of financing companies rose to 3.3% in December 2016. The total financing grew by 6.7% in December 2016, driven by rupiah financing, while, by contrast, foreign currency financing still declined (Chart 8.34). The increase in the financing was also supported by greater efficiency as reflected in the BOPO which declined from 85.4% in 2015 to 82.8% in 2016 (mainly due to a fall in swap premium costs). On the funding side, financing companies continued

Chart 8.33. Performance of Financing Company



Source: OJK

Figure 8.1. **KUR Realization by Region**

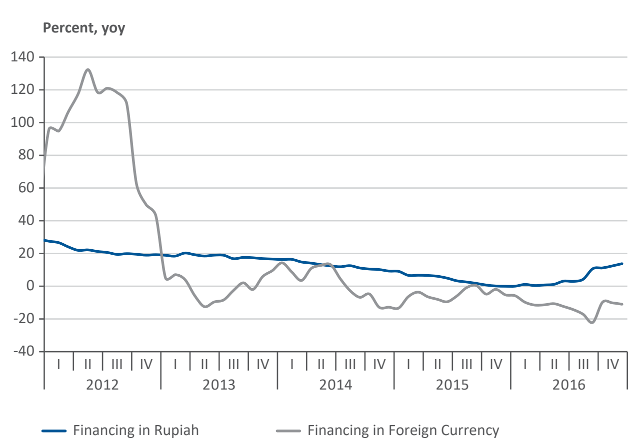


Source: Coordinating Ministry of Economic Affairs, 2016

to reduce foreign loan in accordance with the decline in the foreign currency financing. This contributed toward lowering the hedging costs of financing companies in the form of swap premiums. Meanwhile, domestic loans experienced an increase whether through bank loans, the issuance of marketable securities (especially bonds) or subordinated loans (Chart 8.35).

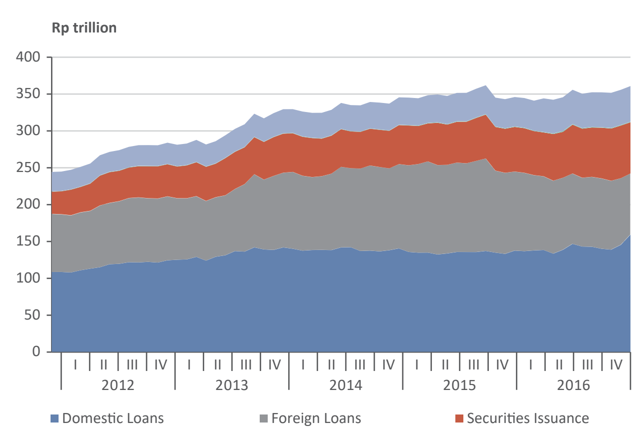
Amid limited economic growth and lethargic business activities, the performance of the insurance companies in 2016 showed an increase whether from the aspect of assets growth, investment, the premiums ratio or the penetration rate. Total assets rose 16.1% to Rp932.1 trillion with the largest assets composition accounted for by life insurance (41%), followed by social insurance (31%), general insurance and reinsurance (15%), along with compulsory insurance (13%) at the end of 2016. The increase in the life insurance portion corresponded with the higher number of insurance agents which reached an estimated 535 thousand agents at the end of 2016. The increase in the number of agents plays an important role for the growth of life insurance because of the characteristics of insurance sales via agents based on the close relationship between the agents and clients (emotional selling). Furthermore, investment insurance rose by 21.7% from Rp641 trillion in 2015 to Rp780 trillion at the end of 2016 as indicated by the increased income from premiums. The ratio of premiums toward gross claims of 158% as of December 2016 was up 9.1% from the previous year, driven by an increase in gross premiums which were greater than the increase in gross claims. Meanwhile, insurance penetration in quarter III 2016 of 2.6% was improved from 2.2% in quarter II 2015.

Chart 8.34. **Financing by Currency**



Source: OJK

Chart 8.35. **Funding of Financing Company**



Source: OJK

8.5. FINANCING, PERFORMANCE, AND RISK OF FINANCIAL MARKET

With banking loan growth yet to recover, economic financing from financial markets recorded an increase in 2016. The trend of financing from financial markets has marked an upturn since 2015. In 2016, the total financing through issuance of stocks (Initial Public Offerings/IPO and right issues), corporate bonds, medium term notes (MTN), negotiable certificates of deposit (NCD), promissory notes, and other financial instruments reached Rp230.2 trillion, or higher than 2015's Rp129.0 trillion (Table 8.2). The largest increase came from the issuance of corporate bonds. The increased financing in financial markets is an attractive option for some corporations amid rising bank lending standards whilst it also has lower costs than bank loans. From the perspective of the owner of funds, the issuance of marketable securities by corporations is an attractive alternative investment amid lower interest rates on banking deposits.

Financing from the financial markets in 2016 primarily came from the issuance of shares and corporate bonds. The gross financing of the financial market in 2016 was primarily from the issuance of corporate bonds of Rp112.0 trillion and the issuance of shares through IPO and rights issues of Rp79.2 trillion (Chart 8.36). In net terms, corporate bond issuances reached Rp64.1 trillion in 2016, after refinancing needs of Rp47.9 trillion were deducted. This amount far exceeded the amount of net issuances in 2015 of Rp20.3 trillion.

Lower interest rates also contributed toward the increase in corporate bond issuances in 2016. The weighted average of interest rate on corporate bonds during 2016 in the category of non-bank corporation issuers was recorded at 8.53% and in the non-financial corporation issuers was 9.22%

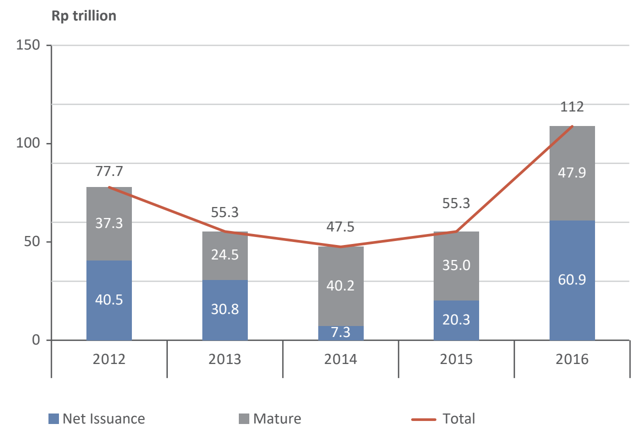
Table 8.2. Financial Sector Financing

Rp trillion

Total Financing in Financial Market	2011	2012	2013	2014	2015	2016
IPO + Rights Issue	62.8	21.0	57.5	47.6	53.6	↑ 79.2
Financial Sector Issuers	20.4	3.1	16.6	12.8	3.7	↑ 16.1
Bonds	51.3	77.7	50.5	47.5	55.3	↑ 112.0
Financial Sector Issuers	41.4	53.7	30.8	30.3	35.1	↑ 83.2
MTN + NCD	5.9	10.1	4.9	14.9	20.1	↑ 39.0
Financial Sector Issuers	1.9	2.1	3.2	9.2	14.2	↑ 25.3
Total	120.0	108.9	112.9	110.1	129.0	↑ 230.2
Total Financial Sector Issuers	63.7	58.9	50.6	52.2	52.9	↑ 124.6

Source: OJK, calculated

Chart 8.36. Bonds Issuance Net and Mature

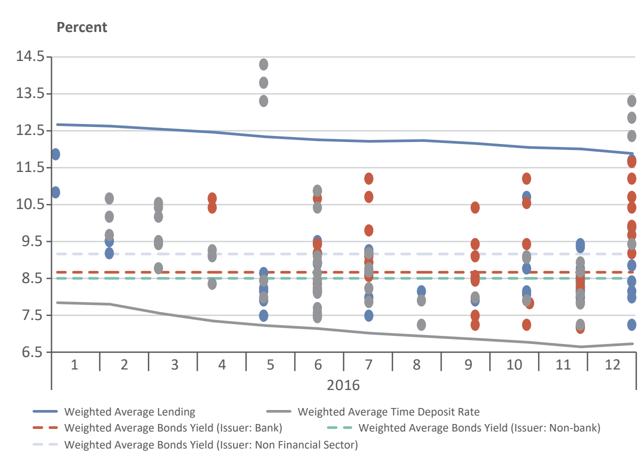


Source: OJK, Bloomberg, calculated

(Chart 8.37). This interest rate was far below the average lending rate in 2016. A lower cost compared to bank loans was the main reason for the increased utilization of funding from the financial markets, especially the issuance of corporate bonds amid rising bank lending standards. From the perspective of the owners of funds, the higher return in comparison to deposit interest rates in 2016 encouraged greater demand for financial market instruments.

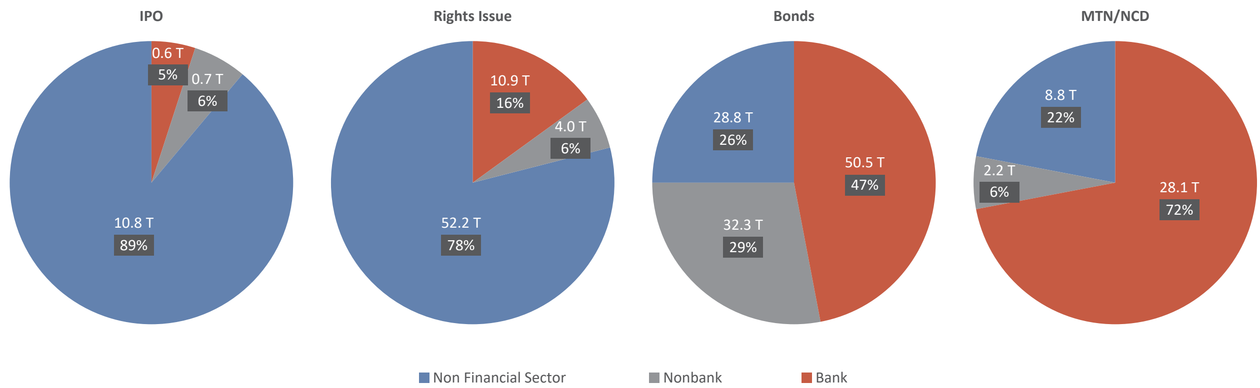
The utilization of financing through financial markets was still dominated by corporations in the financial sector. Based on the type of instrument, financing through IPOs and rights issues were dominated by corporations in the non-financial sector with portions reaching 89% and 78%, respectively. Meanwhile, bond issuances and MTN/NCD issuances were dominated by corporations in the financial sector, especially banks which reached 45% and 72%, respectively (Chart 8.38). The use of financing through the financial markets was

Chart 8.37. Interest Rate and Bonds Yield



Source: Bank Indonesia, Bloomberg, calculated

Chart 8.39. Financial Market Funding 2016



Source: Bloomberg, calculated

mostly for consolidation purposes. The process of bank consolidation was reflected in the still-sluggish bank lending although the source of funds obtained from bonds and NCD was quite large. Meanwhile, the process of consolidation in the non-financial sector was reflected in the plan of fund utilization for expansion of only 9.9%. In fact, the biggest plan of fund utilization was intended for working capital (53.6%).

Despite the significant increase, financing through the financial markets was not enough to offset a slowdown in bank lending. As such, the overall domestic financing still slowed. In net terms, the total growth in domestic financing slowed to 10.5% (yoy) compared to 10,9% growth in 2015 (Table 8.3). This slowdown owed to only 9.2% growth in rupiah lending, or lower than the growth in 2015 of 12.0%. In net terms, financing through the financial markets in 2016 grew Rp166.4 trillion or 14.5%, higher than the growth in 2015 of 7.8% (Table 8.3). With this growth, the portion of nonbank financing rose significantly from 18.0% to 31.2% of total domestic net financing (Chart 8.39).

Table 8.3. Net Domestic Financing Composition

Period	Bonds (Net)	Stocks	MTN/ NCD (Net)	Total Non-credit	Credit	Total Domestic Financing
Net Financing (Rp trillion)						
2014	7.3	47.6	11.3	66.2	337.5	403.7
2015	20.3	53.6	8.9	82.8	365.4	448.2
2016	60.9	80.2	25.3	166.4	313.3	479.7
Net Financing Growth (Percent, yoy)						
2014	3.4	6.2	106.5	6.7	12.4	10.9
2015	9.1	6.6	40.1	7.8	12.0	10.9
2016	24.4	9.3	81.7	14.5	9.2	10.5

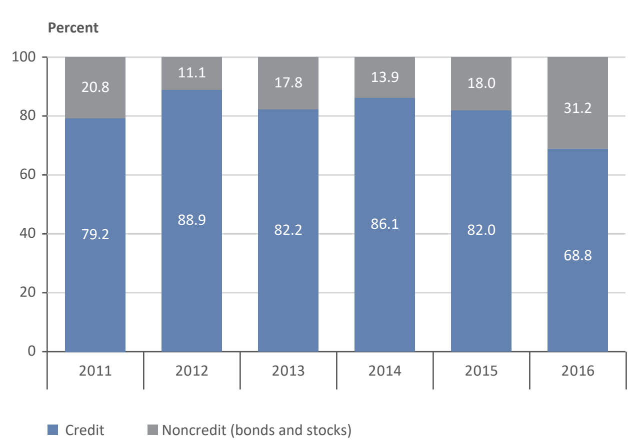
Source: Bank Indonesia, OJK, calculated

Bond Market

Bond market risk declined in 2016. This is reflected in the 77 bps decline in the yield on 10-year government bonds (SBN) from 8.75% in December 2015 to 7.97% in December 2016 (Chart 8.40). The decline in yields on government bonds also occurred among other tenors, i.e. for short, medium and long tenors (down by 85 bps, 71 bps and 71 bps, respectively, to 7.69%, 8.17% and 8.38%). Overall, the average yield on government bonds for all tenors declined by 75 bps from 8.82% to 8.07% at the end of 2016.

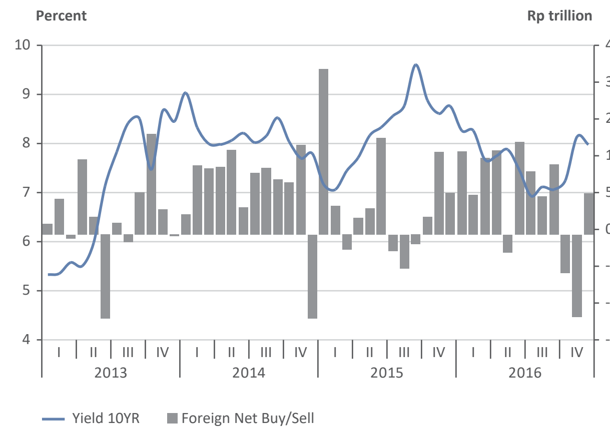
The performance of the government bonds market improved, as reflected in the greater activity of nonresident investors who purchase government bonds. During 2016, nonresident investors were net buyers to the tune of Rp107.3 trillion, up from Rp96.1 trillion at the end of 2015. In

Chart 8.38. Net Domestic Financing



Source: Bank Indonesia, OJK, calculated

Chart 8.40. Government Bond (SBN) Yield and Foreign Net Investment Buy/Sell



Source: Bank Indonesia, Bloomberg

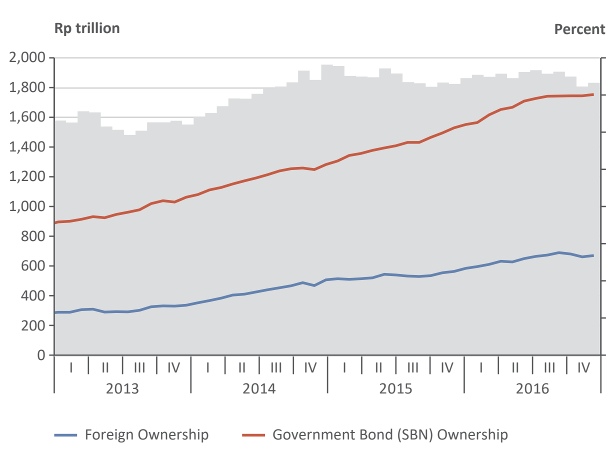
semester I 2016, the net buying of nonresident investors was significant at Rp85.4 trillion (Chart 8.41). Nonetheless, in semester II 2016, the net buying of nonresident investors declined. This was triggered by negative sentiment related to China's economic growth which was below market expectations and because of heightened concerns over FFR hikes. Overall, the role of nonresident investors in the government bonds market remains quite large. Their holdings of government bonds in 2016 was relatively stable at around 37%. On average, the government bonds holdings of nonresident investors in 2016 was recorded at 37.6%, or slightly up compared to 2015's 37.4% (Chart 8.41). The relatively large contribution of nonresident investors has implications for the strength of external factors influence in affecting the dynamics of the government bonds market.

Stock Market

The performance of the stock market in 2016 also showed a relative improvement, supported by the positive sentiment generated both globally and domestically. This better performance was reflected in the increase in the Composite Stock Price Index (JCI) to 5,296.7 or up by 704 points (15.3%) compared with its position at the end of 2015. From the global side, the increase in the JCI generally owed to the decreased expectations in regard to FFR hikes following the release of US economic data which indicated that the economic recovery was still slow. Besides that, better prices of international crude oil at the end of quarter III 2016 also created positive sentiment on the domestic market. Meanwhile, from the domestic side, movements in the JCI were affected by the positive sentiment toward Indonesia's macroeconomic conditions which were resilient in 2016, as reflected principally in economic growth that was better than market expectations, as well as the positive sentiment toward the success of the government's tax amnesty program. The domestic stock market performed better in 2016 although the performance of global stock markets was mixed. The JCI rose by 15.3%, the biggest increase either globally or regionally after Thailand (19.8%) (Chart 8.42). Meanwhile, other stock market indices in the region recorded declines, such as Malaysia (-3.0%) and the Philippines (-1.6%).

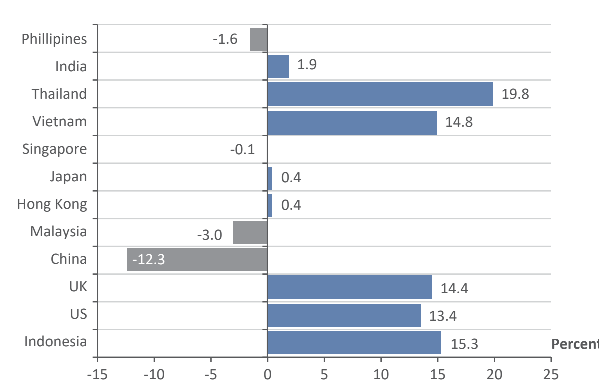
The better performance of the JCI was across all sectors. Most sectoral indices strengthened up until the end of 2016, especially the mining sector (70.7%) and the basic industry sector (32.0%). The better performance of stocks in the mining sector led by the improvement in commodity prices

Chart 8.41. Share of Foreign Investor Ownership on Government Securities



Source : Bloomberg, calculated

Chart 8.42. JCI and Global Stock Market Index

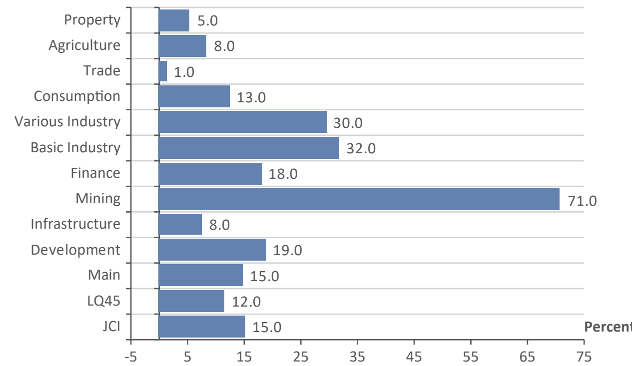


Source: Bloomberg

since the end of quarter III 2016. The strengthening of coal prices in semester II 2016 was a main factor which boosted stock prices in the mining sector (Chart 8.43).

Stock market risk also declined in 2016 as reflected in the increase in the JCI and the decline in JCI volatility. In 2016, JCI volatility was recorded at 291.1 or lower than the level in the previous year of 407.7. The lower volatility was consistent with the strengthening of the JCI due to both positive domestic sentiment toward Indonesia's macroeconomic conditions which were resilient during 2016 and the positive global sentiment related to decreasing expectations of FFR hikes and generally improving global oil prices.

Chart 8.43. Sectoral Index



Source: Indonesia Stock Exchange (IDX)

CHAPTER 9
Payment System and Currency Management

Payment system and currency management, both managed by Bank Indonesia and industry, operated securely, efficiently with a high degree of reliability throughout 2016. The national payment system operated by Bank Indonesia and the industry were able to process all financial transactions, high value as well as retail value transaction, performed by the public, businesses, and the Government. The efficiency of financial transactions also improved along with an increased use of noncash payment system instruments, including in the distribution of Government social assistance. Meanwhile, Bank Indonesia's currency management was able to satisfy the demand for cash from the public and businesses with the availability of currency in sufficient quantities, appropriate denominations, a timely manner and a quality fit for circulation. This excellent performance meant that the national payment system and currency management were able to provide optimal support for economic activities as well as sustain the stability of the financial system.

Image caption:
Bank Indonesia issued and released into circulation 11 denominations of Rupiah currency in the 2016 series under the mandate of the Currency Law. The new rupiah currency features images of national heroes, traditional dances, and natural scenery from various different regions in Indonesia.

National payment system in 2016 performed well in supporting the economic activities and the stability of the financial system. The performance of the payment systems operated by Bank Indonesia was reflected in their high reliability and availability, as well as in the implementation of effective contingency plans that enabled all financial transactions deriving from economic activities performed by the public, businesses, and the Government were cleared and settled safely and efficiently. Along with this, the payment systems operated by the industry also ran smoothly. Meanwhile, the currency management showed a good performance, as reflected in their ability to meet the demand for cash from the public with the availability of currency in sufficient quantities, appropriate denominations, a timely manner, and a quality fit for circulation for the entire territory of the Republic of Indonesia. This good performance was closely linked to Bank Indonesia's efforts to strengthen its payment system and currency management policies in 2016.

In line with economic activities that have yet to fully recover, payment system transactions, especially high value endured a slowdown in 2016. High value payment system transactions through Bank Indonesia's - Real Time Gross Settlement (BI-RTGS) system declined by 0.8% in 2016. Despite of the sluggish of the economic activities, the slow down of growth BI-RTGS transaction is also impacted by Bank Indonesia's policy due to transition period of implementation BI-RTGS 2nd Generation, where the minimum limit of BI-RTGS transaction raised from Rp100 million to Rp500 million until June 2016. In contrast, retail payment system transactions increased significantly as the impact of the policy. The value of transactions through Bank Indonesia's National Clearing System (SKNBI) rose by 30% in 2016, partly due to the impact of the increase in the minimum cap for transactions through the BI-RTGS system, which resulted in a switch to using SKNBI. Meanwhile, the value of transactions using Card-Based Payment Instruments (CBPI) increased by 14.5%, and transactions using electronic money soared by 34.3% compared to 2015. The increased use of CBPIs and electronic money was the result of the vigorous socialization of the National Non-Cash Movement (GNNT) as well as Bank Indonesia's initiative to encourage interoperability and interconnection between payment systems providers, which sought to provide more convenience, also encourage public interest in using noncash retail payment instruments.

There was also an improvement of performance in terms of rupiah currency management in 2016 that reflected in the trends of a number of indicators. Currency in circulation (UYD) increased by 4.4%, the outflow of currency from Bank Indonesia increased by 7.8%, and the inflow of currency into Bank Indonesia increased by 14.7% in 2016. The rise in the inflow of currency led to an increase in the amount of money unfit for circulation (UTLE) destroyed by Bank Indonesia, which accounted for 31.4% of the inflow. This increase in the destruction of UTLE indicates an improvement in the quality of banknotes circulating in society as unfit money is replaced by money fit for circulation (ULE).

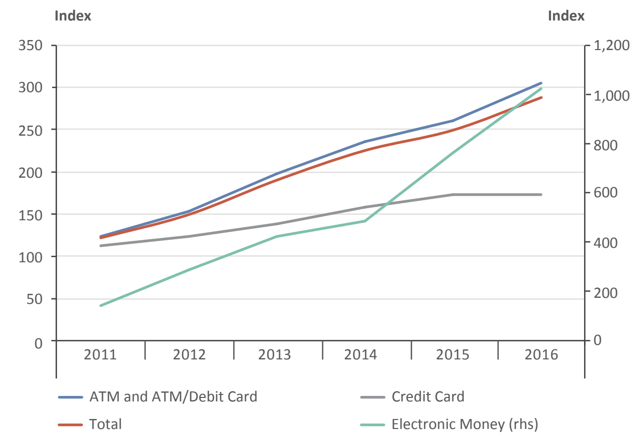
9.1. PAYMENT SYSTEM PERFORMANCE

The payment system operated by Bank Indonesia and the industry ran efficiently and smoothly in 2016. A consistent and continuous strengthening of payment system infrastructures and policies carried out by Bank Indonesia was able to mitigate credit risks, liquidity risks, and operational risks of the payment system. The national payment system was able to process all the transactions performed within the economy properly, thereby contributing to the support of economic activities and maintaining the stability of the financial system. The reliability and security of payment systems were maintained, thus also enhancing people's confidence in the use of noncash payment instruments. To encourage the use of such noncash payment system instruments, in 2016 Bank Indonesia continued to reinforce socialization and education of the National Non-Cash Movement (GNNT) which was launched in August 2014, and also encouraged the payment system industry to implement interoperability and interconnection, so as to provide more convenience to the public.

Bank Indonesia's payment system policy in promoting GNNT was also aimed at expanding the public's access to finance. On the back of this policy, the use of noncash payment instruments continued to increase, as reflected in the rise of the noncash payment system index from 249 in 2015 to 288 in 2016 (Chart 9.1). The increase in the noncash payment system index indicates the success of the GNNT program in encouraging the use of noncash payment instruments in the economy. Based on the type of instrument, the largest increase in the noncash payment system index was seen in the use of electronic money. This increase was primarily driven by the use of electronic money in the distribution of Government social assistance programs.

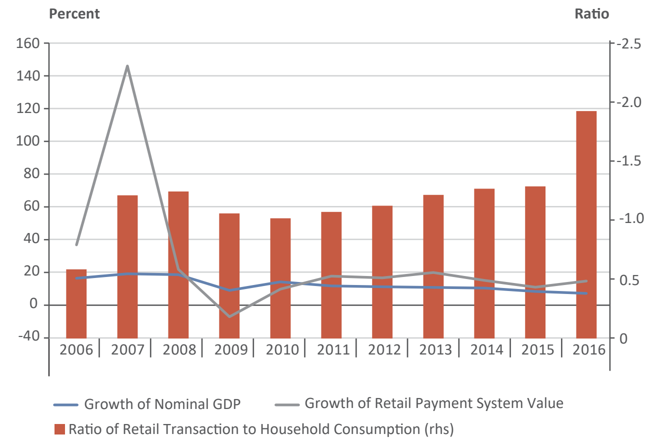
The value of transactions performed using retail payment systems, consisting of SKNBI, CBPIs, electronic money and fund transfers grew by 15.5% in 2016. The growth was consistent with the increase in the ratio of the value of retail payment system transactions to Gross Domestic Product (GDP) from 0.74 in 2015 to 0.95 in 2016 (Chart 9.2). Meanwhile,

Chart 9.1. Noncash Payment System Index



Source: Bank Indonesia

Chart 9.3. Ratio of Retail Transaction to Household Consumption



Source: Bank Indonesia

the ratio of the value of retail payment system transactions to private consumption value also saw an increase, from 1.31 in 2015 to 1.95 in 2016. These developments indicate that the public is growing increasingly accustomed to using noncash payment instruments to finance consumption spending (Chart 9.3). The increase in retail payment transactions also correlates to the upward trend of the Retail Sales Index (Chart 9.4).

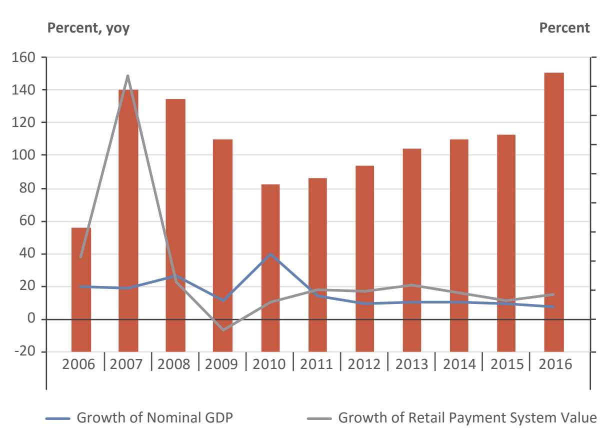
Noncash Payment System Operated by Bank Indonesia

Bank Indonesia Real Time Gross Settlement

BI-RTGS, which is a high value payment system, operated securely and smoothly in 2016. The operation of the BI-RTGS system was supported by the application of an effective Business Continuity Plan (BCP). This was reflected in the availability and capability of the BI-RTGS system in settling all high value payments in Indonesia. In terms of liquidity, participants of BI-RTGS system also retained sufficient daily funds to maintain successful transactions settlement, as reflected in the low level of unsettled transactions, the relatively small use of the Intraday Liquidity Facility (FLI), and a decline in throughput in zone III (above 2:00 PM). As of December 2016, the ratio of zone III throughput stood at 30%, below the guideline of 40%, indicating that participants remained compliant in fulfilling the requirements of transaction settlement through the BI-RTGS system.

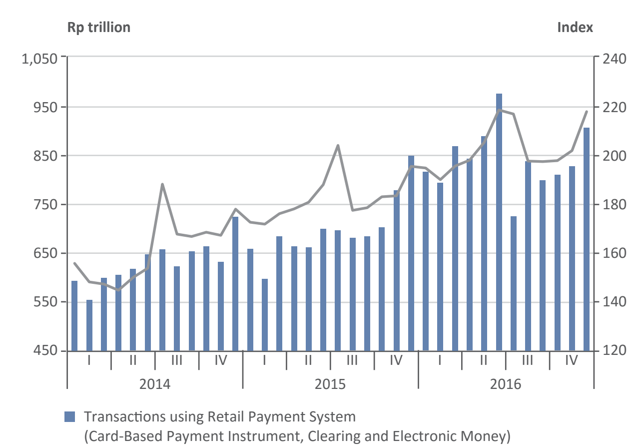
There was a slight drop in the value of BI-RTGS transactions conducted in 2016, in line with business consolidation as well as policy adjustment on the limit of BI-RTGS transaction. The BI-RTGS system successfully settled 7.6 million transactions in 2016 with a value of Rp111.8 thousand trillion. As such, there was a dip in both the volume and

Chart 9.2. Ratio of Retail Transactions to GDP



Source: Bank Indonesia

Chart 9.4. Retail Sales Index and Retail Transaction



Source: Bank Indonesia

value of these transactions, of 30.7% and 0.8% respectively, compared to 2015 when the corresponding figures were 11.0 million transactions with a value of Rp112.7 thousand trillion. Meanwhile, the average daily volume of transactions in the BI-RTGS system in 2016 amounted to 30.9 thousand transactions at a value of Rp450.9 trillion per day. This represented a decrease of 31.2% and 1.6% respectively compared to the corresponding figures in 2015 of 44.9 thousand transactions with a value Rp458.2 trillion per day (Chart 9.5). The decline in payment transactions through the BI-RTGS system in 2016 was partly an effect of the capping policy on the minimum transaction amount using BI-RTGS as part of BI-RTGS 2nd Generation implementation risk mitigation, which caused a shift to SKNBI.

Throughout 2016, the liquidity of BI-RTGS system participants remained adequate, as also reflected by the banking industry's turnover ratio indicator which was relatively stable with a slight increase from 1.0 in 2015 to 1.1 in 2016 (Chart 9.6). The rise in the value of this turnover ratio, to more than one, indicates that BI-RTGS participants, especially banks, made great use of incoming transactions in liquidity management as a means of optimizing profitability. Although the value of the turnover ratio went up, there were no settlement risks in the BI-RTGS system due to the smooth and proper settlement of all transactions through this system.

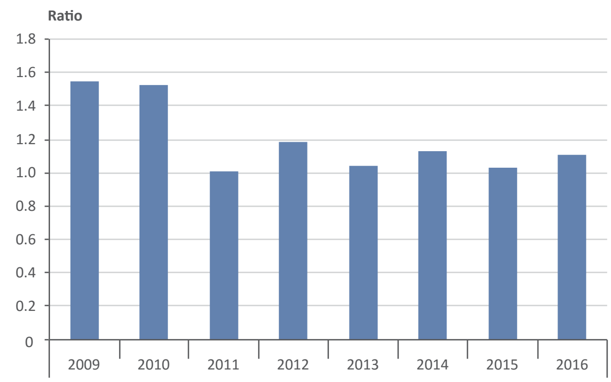
Bank Indonesia Scripless Securities Settlement System

There was a significant upswing in the administering and number of securities transactions through the BI-SSSS system in 2016. During 2016, 289.1 thousand securities transactions were traded through BI-SSSS with a value of Rp52.5 thousand trillion. The represented an increase of 57.4% and 50.4% respectively over the volume and value of BI-SSSS transactions in 2015 when there were 183.7 thousand transactions with a value of Rp34.9 thousand trillion. Meanwhile, the average daily volume of transactions in the BI-SSSS system in 2016 amounted to 1,166 thousand transactions with a value of Rp211.6 trillion per day. These daily averages represented an increase of 56.1% and 49.0% respectively compared to the corresponding figures from 2015 of 747 transactions with a value of Rp142.3 trillion per day (Chart 9.7). This fairly notable rise in the value of transactions through BI-SSSS as of the end of 2016 was thought to be related to the repatriation of tax amnesty funds which were subsequently placed in securities instruments.

The Bank Indonesia National Clearing System

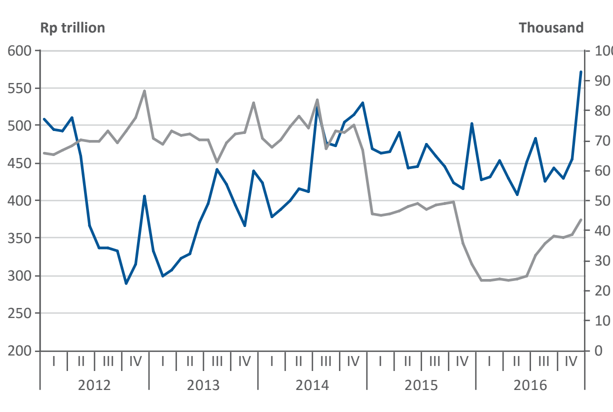
There was also an increase in transactions conducted through SKNBI, Bank Indonesia retail payment system,

Chart 9.6. BI-RTGS Turnover Ratio



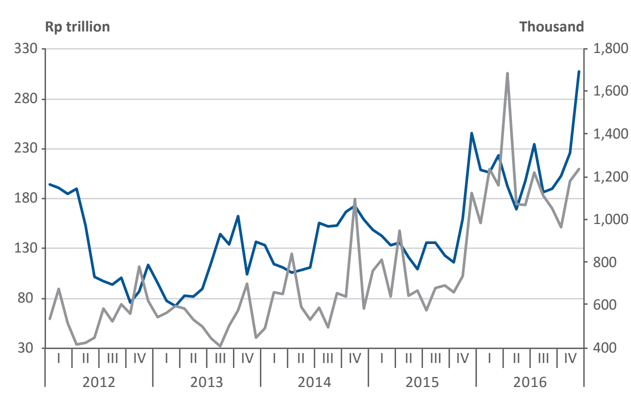
Source: Bank Indonesia

Chart 9.5. BI-RTGS Transaction



Source: Bank Indonesia

Chart 9.7. BI-SSSS Transaction



Source: Bank Indonesia

in 2016. Last year, 124.5 million SKNBI transactions were performed with a value of Rp4.16 thousand trillion. The volume and value of these transactions constituted an increase of 9.7% and 30% respectively compared with the volume and value of these transactions in 2015 which totalled 113.5 million transactions with a value of 3.2 thousand trillion. Meanwhile, the average daily volume of SKNBI transactions in 2016 amounted to 502.1 thousand transactions with a value of Rp16.8 trillion per day. These daily averages represented an increase of 8.8% and 27.3% respectively over the corresponding average daily volume and value of SKNBI transactions in 2015 which totalled 461.5 thousand transactions with a value of Rp13.2 trillion per day (Chart 9.8). The rise in the number of SKNBI transactions was partly a result of the capping policy that raised the minimum limit on the value of transactions through BI-RTGS from Rp100 million to Rp500 million on 16 November 2015, causing a shift to SKNBI. However, on July 1, 2016 the minimum limit or cap on the value of transactions through BI-RTGS was lowered back to Rp100 million, thus drawing some transactions back to using BI-RTGS.

Noncash Payment System Operated by the Payment System Industry

Card-Based Payment Instruments

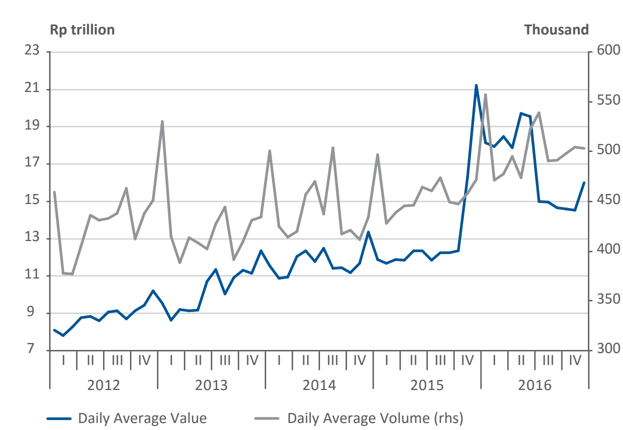
The vigorous socialization of GNNT, growing public confidence, as well as the need for practicality all boosted transactions using CBPIs in 2016. Payment transactions with CBPIs, which include Automated Teller Machine (ATM) cards, ATM/debit cards and credit cards continued to increase. In 2016 the number of CBPI instruments in circulation rose by 12% to 153.6 million from 137.1 million cards in 2015. The volume of transactions using CBPI in 2016 stood at 5.5 billion transactions with a value of Rp5.9 thousand trillion. The volume and value of these transactions increased by 13.8% and 14.5% respectively when compared to 2015, there were 4.9 billion transactions with a value of Rp5.2 thousand trillion. Meanwhile, the average daily volume of CBPI transactions in 2016 amounted to 15.1 million transactions with a value of Rp16.2 trillion per day. These daily averages represented an increase of 13.1% and 14.2% respectively over the corresponding average daily volume and value of CBPI transactions in 2015 which totalled 13.3 million transactions with a value of Rp14.2 trillion per day (Chart 9.9).

The upward trend in CBPI transactions was largely due to ATM card and ATM/debit card transactions on top of the fact that such instruments are increasingly easy and secure to use. The increase in the volume and value of CBPI transactions was also supported by an improvement in the supporting infrastructure for performing such transactions, like ATM and EDC machines. As of the end of 2016, there were approximately 100.8 thousand ATM units and 1.05 million EDC units in the country, an increase of 3.1% and 5% respectively when compared to 2015 when there were 97.8 thousand ATM units and one million EDC units. The ease and efficiency of performing transactions using CBPIs is continued to improve in line with the onset of the implementation of the National Payment Gateway (NPG) in late 2016 which seeks to encourage interconnection and interoperability between providers of noncash payment instruments.

ATM Cards and ATM/Debit Cards

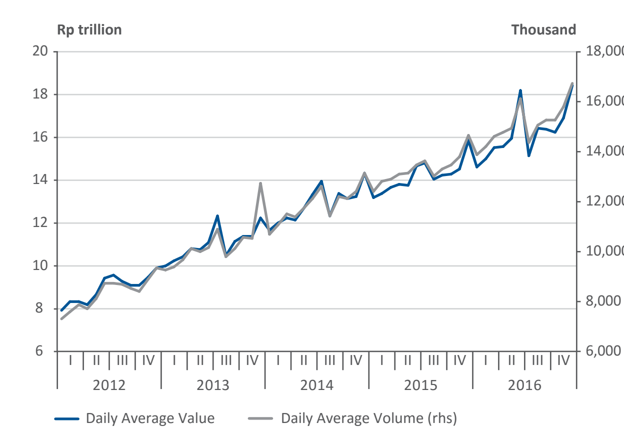
Bank Indonesia's policy of expanding the use of noncash payment instruments showed positive results. This was

Chart 9.8. **National Clearing (SKNBI) Transaction**



Source: Bank Indonesia

Chart 9.9. **Card Based Payment Instrument Transaction**



Source: Bank Indonesia

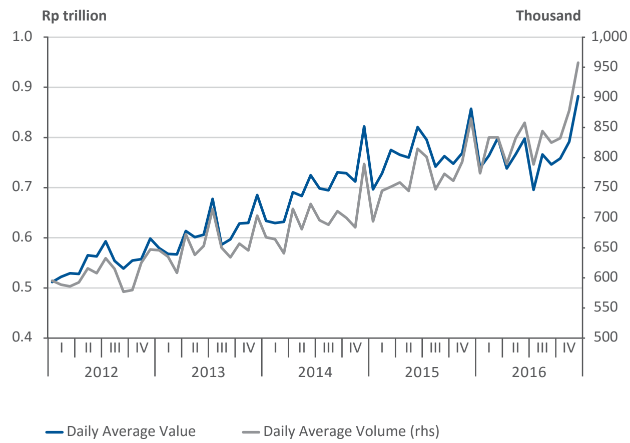
reflected by an additional number of ATM cards and ATM/debit cards in circulation as well as an increase in both transaction volume and value. The number of ATM cards and ATM/debit cards in circulation in 2016 rose by 12.5% to 136.2 million cards from the previous year's figure of 120.3 million cards. In line with the increased number of cards in circulation, the number of transactions using ATM cards and ATM/debit cards also rose. ATM card and ATM/debit card transaction volume went up by 14% to 5.2 billion transactions from the previous year's figure of 4.6 billion transactions. Furthermore, the value of these transactions also increased by 15.1% to Rp5.6 thousand trillion from the previous year's figure of Rp4.9 thousand trillion. In terms of daily averages, the volume of ATM card and ATM/debit card transactions in 2016 stood at 14.2 million transactions per day, a rise of 13.6% over the corresponding figure in 2015 of 12.5 million transactions per day. These transactions had a value of Rp15.4 trillion per day, up from the previous year's figure of Rp13.4 trillion per day (Chart 9.10).

Credit Cards

In general, the number of credit cards and volume of credit card transactions in 2016 increased even though there was a slowdown until mid-year as a result of tax reporting requirements. The number of credit cards in circulation in 2016 reached 17.3 million cards, up 3.0% when compared to the figure in 2015 of 16.9 million cards. In terms of volume of credit card transactions, 2016 saw an increase of 8.8% to 306.4 million transactions from 281.3 million transactions in 2015. Meanwhile, the value of credit card transactions last year increased by 0.5% to Rp282 trillion from Rp280.5 trillion in 2015. The average daily volume of credit card transactions in 2016 amounted to 837.1 thousand transactions per day, up 8.6% over the previous year's corresponding figure of 770.7 thousand transactions per day. In terms of value, credit card transactions rose by 0.3% to Rp770.4 billion per day from Rp768.4 billion per day in 2015 (Chart 9.11). Credit card growth endured a slowdown in the middle of the year, affected by the provision which requires the reporting of data on credit card transactions for tax purposes. However, there was a significant upturn towards the end of the year driven by cyclical factors and the postpone of obligation of transaction data reporting along with the tax amnesty implementation.

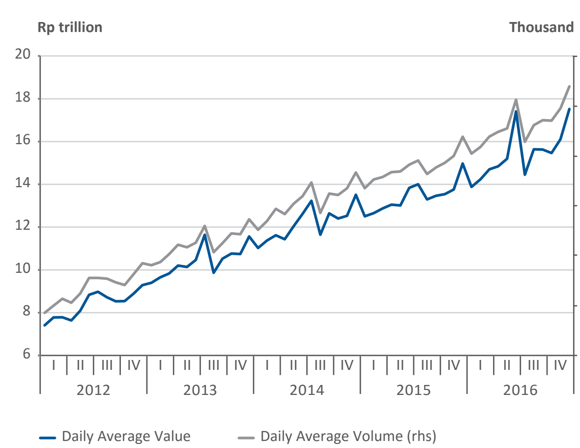
Meanwhile, non-performing loans (NPLs) from credit cards were kept under control and even saw some improvements. The credit card NPL in 2016 stood at 2.4%, better than the 2015 which accounted of 2.6% (Chart 9.12). Loans under collectability from credit cards with current criteria increased to 91% from 89% in 2015. This increase was the result of an improvement in loans under collectability in the

Chart 9.11. Credit Card Transaction



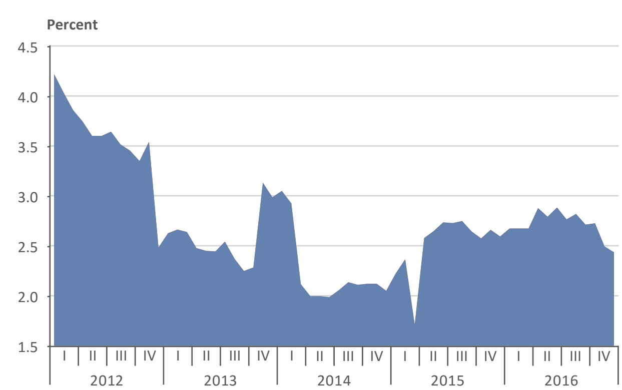
Source: Bank Indonesia

Chart 9.10. ATM and ATM/Debit Transaction



Source: Bank Indonesia

Chart 9.12. NPL Ratio of Credit Card



Source: Bank Indonesia

special mention category, which declined from 9% to 7% in 2016 (Chart 9.13).

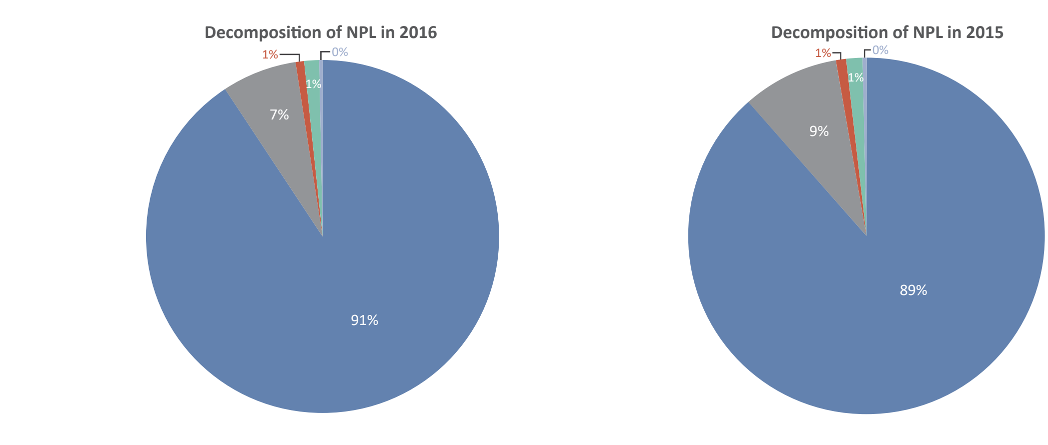
Electronic Money

Bank Indonesia, along with the Government and the banking industry, continued to encourage the use of electronic money. To expand the use of noncash retail payment system instruments to all layers of society, Bank Indonesia supported the initiative of the use of electronic money in the distribution of government social assistance. In 2016, the Government distributed phase three and four of Family Hope Program (PKH) social assistance using Digital Financial Services (DFS) to approximately 695 thousand beneficiaries in 68 regencies/municipalities in 20 provinces. The Government also broadened the pilot project for the distribution of social assistance with the Family Welfare Card/Program Keluarga Harapan (PKH) via Family Hope Program Joint Business Group e-Shops (e-Warong Kelompok Usaha Bersama Program Keluarga Harapan, or KUBE PKH) in 33 regencies/municipalities. The distribution of government social assistance using electronic money represented the continuation of an initiative first launched in 2015.

The increased use of electronic money was also supported by the vigorous socialization of GNNT program. In fact, growth in the use of electronic money in 2016 was a result of continous measurement taken after the declaration of the GNNT program in 2014, including the implementation of electronic parking transactions (e-Parking), the launch of the Bandung Smart Card, and the staging of the National Non-Cash Movement Festival. These efforts succeeded in increasing the number of electronic money instruments in circulation, as well as the volume and value of electronic money transactions. In 2016, Bank Indonesia encouraged the expansion of the use of electronic money as a mean of payment on toll roads through launching toll payments with multi-bank electronic money on the Waru - Juanda Surabaya toll road segment at the end of 2016. In addition, Bank Indonesia also built on its commitment to the Toll Road Regulatory Agency (BPJT), operators, and banks to facilitate the migration to noncash toll payments. Bank Indonesia also developed guidelines for the interoperability of server-based electronic money, which has now entered the proof of concept phase for the interconnection of electronic money.

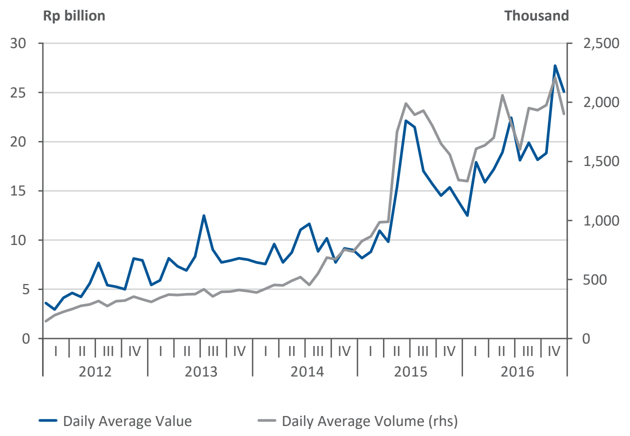
In line with the various development initiatives in 2016 as detailed above, the number of electronic money instruments increased significantly. The number of electronic money instruments in circulation in 2016 totalled 51.2 million, up 49.3% from the 2015 total of 34.3 million instruments. The volume of electronic money transactions in 2016 stood at 662.9 million transactions with a value of Rp7.1 trillion, up 23.8% and 34.3% respectively compared with the corresponding figures from 2015 of 535.6 million transactions with a value of Rp5.3 trillion. Meanwhile, the average daily volume of electronic money transactions in 2016 was 1.8 million transactions with a value of Rp19.4 billion per day. These figures represented an increase of 24% and 34.3% respectively when compared to the average daily volume and value of such transactions in 2015, when there were 1.5 million transactions with a value of Rp14.4 billion per day (Chart 9.14). The improved performance of electronic money transactions was influenced by a variety of programs, such as the distribution of Government social assistance using electronic money, toll payments with multibank electronic money, the use of electronic money for Jakarta Commuter Trains (KCJ) and Transjakarta buses, as well as the National Non-Cash Movement (GNNT) and Digital Financial Services (DFS) campaigns.

Chart 9.13. Credit Card Collectibility 2015 and 2016



Source: Bank Indonesia

Chart 9.14. Electronic Money Transaction



Source: Bank Indonesia

Nonbank Fund Transfer Operations

Fund transfers through nonbank institutions in 2016 underwent a significant increase. A total of 26.1 million fund transfers through nonbank fund transfer operators (TD BB) took place during 2016, with a value of Rp85.7 trillion. The largest share of these fund transfers was made up of domestic fund transfers, which accounted for 57% of the total volume of transactions performed through nonbank fund transfer operators. Meanwhile, in terms of value, these transactions were dominated by incoming transactions with a 54% share of the total value (Chart 9.15).

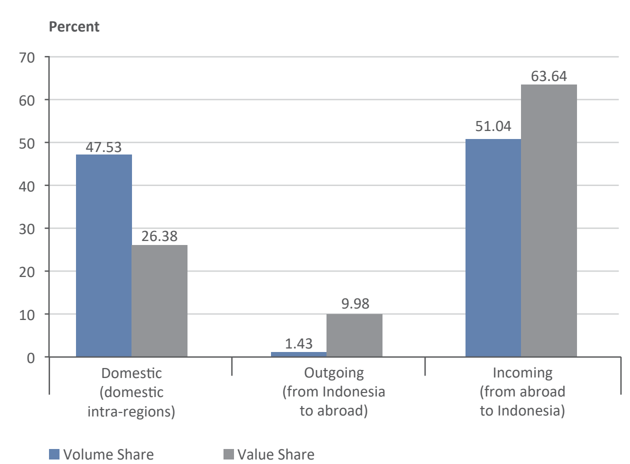
In view of the value of fund transfer transactions deriving from incoming transactions, Bank Indonesia sought to actively educate and familiarize prospective Indonesian migrant workers set to leave the country about fund transfers. In order secure the transfer of funds from Indonesian migrant workers, Bank Indonesia also encouraged Indonesian migrant workers and prospective migrant workers to use nonbank fund transfer operators (TD BB) that have been licensed in their respective countries

Nonbank Money Changer

Pressure on the exchange rate in the fourth quarter boosted exchange transactions of foreign banknotes (UKA) in 2016. Foreign banknote transactions in 2016 increased by 73.3%, or Rp13.0 trillion, compared with the 2015 figure. The total volume of sales and purchases of foreign banknotes in 2016 stood at Rp256.8 trillion, divided into Rp128.2 trillion from foreign banknote purchases and Rp128.6 trillion from foreign banknote sales. In terms of monthly averages, foreign banknote exchange transactions in 2016 amounted to Rp21.4 trillion per month, with average purchases of Rp10.7 trillion and average sales also of Rp10.7 trillion per month. The most active month in terms of foreign banknote transactions was December 2016, with a value of Rp30.8 trillion, while the least active month was July 2016, with a value of Rp16.1 trillion (Chart 9.16).

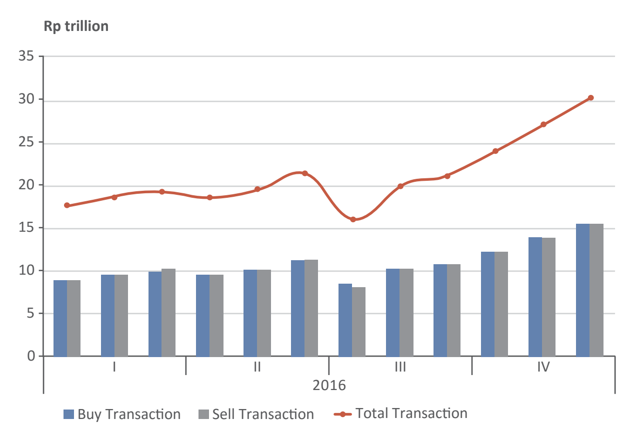
There was a rise in the number of nationwide nonbank money changer (KUPVA BB) in 2016. As of December 2016, the number of headquarters of nonbank money changer licensed in Indonesia stood at 1,064, up from 994 in 2015. There were 404 nonbank money changer across DKI Jakarta (38%) followed by Batam in the Province of Kepulauan Riau with 153 nonbank money changer (14%), and the Province of Bali with 141 nonbank money changer (13%). From this total number of headquarters, there were 883 branch offices of nonbank money changer across the Indonesia region (Chart 9.17).

Chart 9.15. Share of Fund Transfer Transaction Volume and Value



Source: Bank Indonesia

Chart 9.16. Foreign Exchange Transaction through Nonbank Money Changer (KUPVA BB)

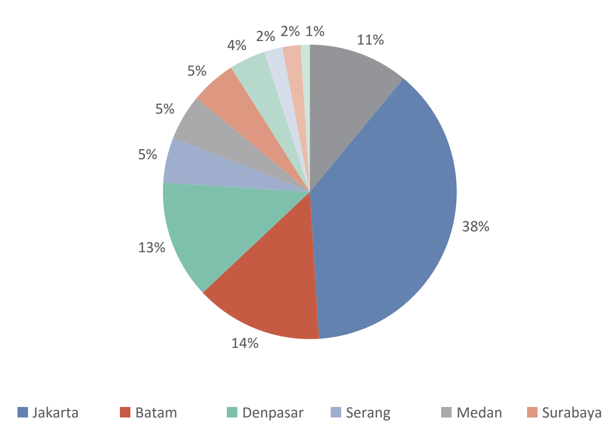


Source: Bank Indonesia

Bank Indonesia performed intensive supervision of nonbank money changer operations, both indirectly (offsite) and directly (onsite) inspections. This supervision was based on Bank Indonesia Regulation Number 18/20/PBI/2016 on Nonbank Money Changer. In addition, Bank Indonesia as the Supervisory and Regulatory Authority, based on Act No. 8 of 2010 on the Prevention and Combating of Money Laundering, also supervised the compliance of nonbank money changer with the Anti Money Laundering and Combating Terrorism Financing (APU and PPT) program. In exercising its authority, Bank Indonesia supervised aspects of APU and PPT with respect to nonbank money changer based on Bank Indonesia Regulation Number 12/3/PBI/2010 on the Implementation of an Anti Money Laundering and Combating Terrorism Financing Program with respect to Nonbank Foreign Exchange Traders. This supervision was carried out in a decentralized manner according to the location of the nonbank money changer's headquarters in line with the division of Bank Indonesia's working areas, including both its Headquarters and its Regional Representative Offices.

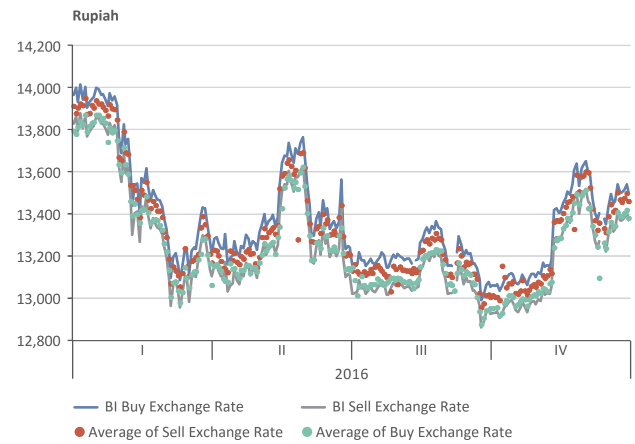
As part of efforts to maintain the stability of the rupiah, Bank Indonesia also monitored the determination of exchange rates by nonbank money changer. In carrying out the indirect supervision, Bank Indonesia monitored the setting of exchange rates by 27 selected nonbank money changer. In 2016, in general, the rupiah strengthened against the US dollar by 432 points or 3.12% in the exchange rates set by nonbank money changer. In late December 2016, the buying and selling rates for US dollars at nonbank money changer were still within a reasonable range with a spread of 76.2 and a relatively small buying and selling volume variance. This situation indicates a lack of any motive for speculation on the part of nonbank money changer (Chart 9.18).

Chart 9.17. Share of Nonbank Money Changer



Source: Bank Indonesia

Chart 9.18. Nonbank Money Changer

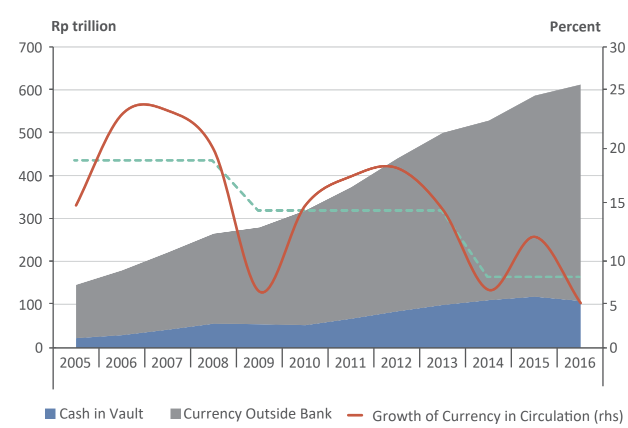


Source: Bank Indonesia

9.2. CURRENCY MANAGEMENT PERFORMANCE

In line with the noncash payment system, the growth of currency in circulation (UYD) in 2016 also experienced a slowdown, driven by economic activity which remained in a period of consolidation. The UYD position at the end of 2016 stood at Rp612.5 trillion, up 4.4% compared with the position from the end of 2015 of Rp586.8 trillion. This growth of UYD was lower than that of 2015 when a figure of 11.0% was recorded. Looking at its components, the slowdown in UYD growth was caused by a decline in the cash in vault position (CiV) from Rp117.3 trillion in 2015 to Rp107.3 trillion at the end of 2016 (Chart 9.19). The decline in CiV was affected by reduced demand for banking currency held as a precaution, due to the Christmas holiday and end of year period in 2016 were shorter than in 2015. Based on the daily UYD pattern,

Chart 9.19. Currency in Circulation



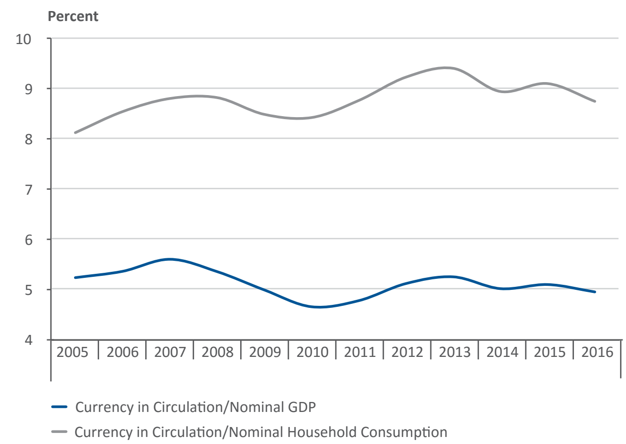
Source: Bank Indonesia

the amount of currency in circulation was influenced by seasonal factors in certain periods, especially religious holidays (the period of Ramadan and Christmas) and public holidays. In 2016, the most amount of money in circulation was recorded at the end of Ramadan, amounting to Rp662 trillion, an increase of 9.6% over the same period in 2015 when Rp604.2 trillion was in circulation (Chart 9.20).

The role of currency in domestic economic activity remained quite high. This significant role is reflected in the ratio of currency in circulation (UYD) to GDP, which in recent years has been relatively stable at around 5.1%. The significant role played by currency in the economy can also be seen in the ratio of UYD to household consumption. In 2016, the ratio of UYD to household consumption reached 8.7%, slightly lower than 2015's figure of 9.1% due to the slowing growth of household consumption (Chart 9.21). The decline in the ratio of UYD to consumption was also considered to be affected by the increasing use of noncash payment system instruments which have started to shift public behavior in terms of performing transactions. The sustained important role of currency is also apparent from the share of UYD in the money supply, both in the narrow sense (M1) and broad sense (M2), which in recent years has been relatively stable (Chart 9.22).

In terms of denominations, the proportion of Rp100,000 banknotes in UYD has continually increased over recent years, from 35.4% of the total in 2005 to 65% in 2016 (Chart 9.23). This increase has been driven by the preference of banks and the public to have larger denominations of rupiah for the reason of practicality and efficiency. The public preference for holding particular denominations has also been influenced by the easiness of access to money in certain denominations, mainly through ATM and ATM/debit machines which is constantly on the rise.

Chart 9.21. Ratio of Currency in Circulation to GDP and Household Consumption

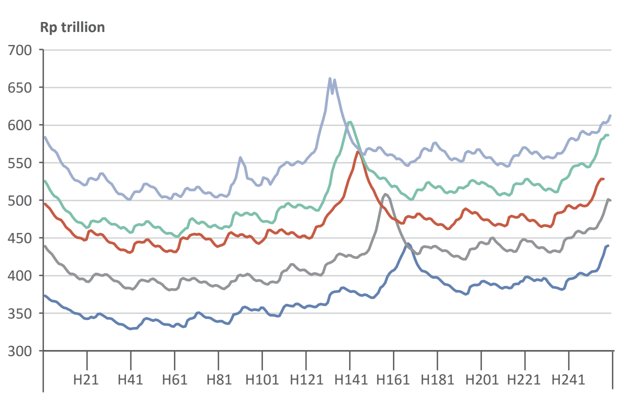


Source: Bank Indonesia

In 2016, the number of currency transactions to and from Bank Indonesia continued to increase in line with the ongoing strong demand for currency in the economy. Over 2016, the flows of currency through Bank Indonesia continued to experience net outflow, of Rp25.8 trillion, lower than that in 2015 of Rp56.2 trillion. The currency withdrawn by banks from Bank Indonesia (outflow) amounted to Rp610.4 trillion, or growth of 7.8% from the 2015 figure of Rp566.3 trillion. Meanwhile, the currency deposited by banks in Bank Indonesia (inflow) amounted to Rp584.6 trillion, up 14.7% from the 2015 figure of Rp509.8 trillion (Chart 9.24).

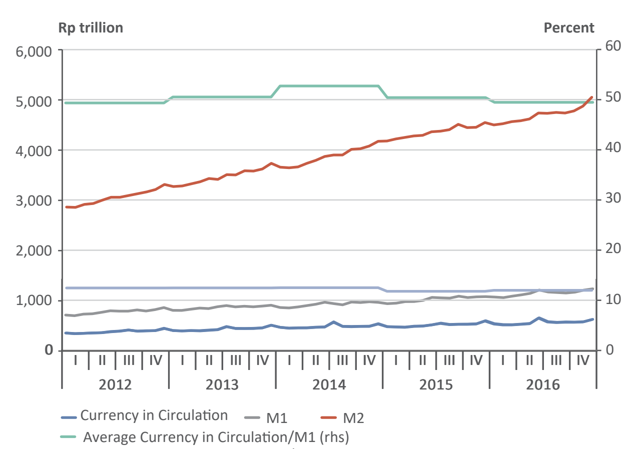
Bank Indonesia continued to maintain the availability of currency throughout 2016. To ensure efficient and smooth

Chart 9.20. Daily Movement of Currency in Circulation



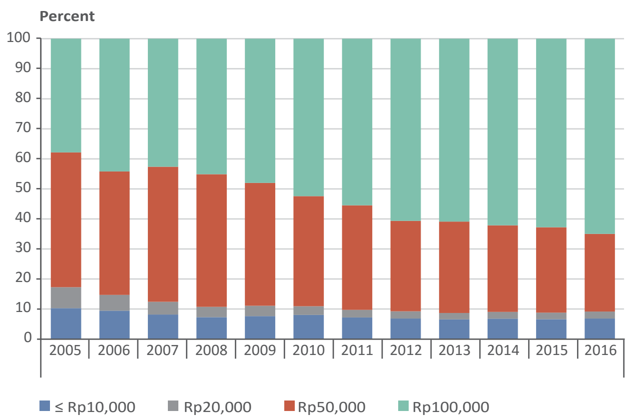
Source: Bank Indonesia

Chart 9.22. Ratio of Currency in Circulation to M1 and M2



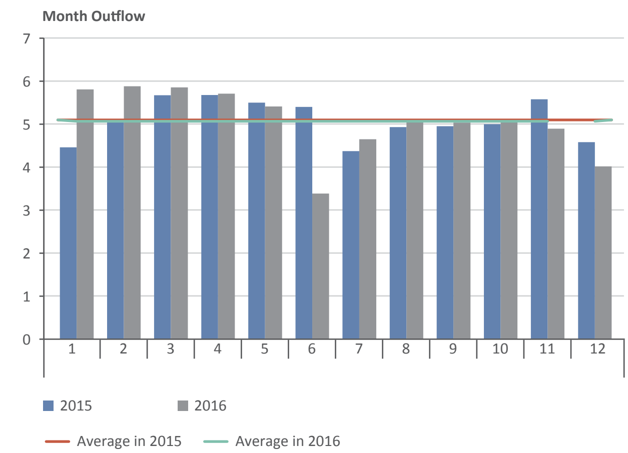
Source: Bank Indonesia

Chart 9.23. Currency in Circulation by Denomination



Source: Bank Indonesia

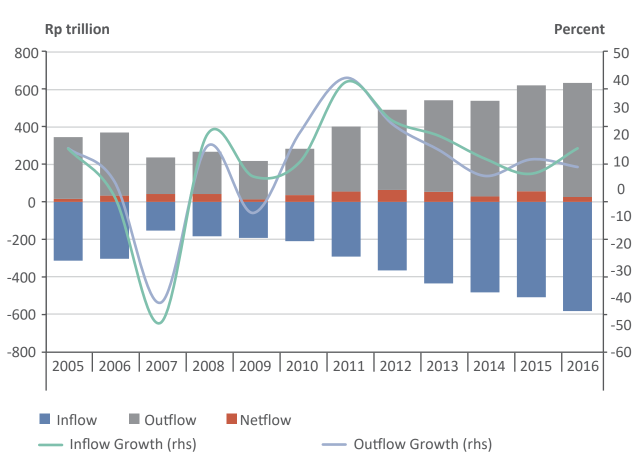
Chart 9.25. Ratio of Cash Position to Average of Monthly Outflow



Source: Bank Indonesia

cash payment transactions in every public economic activity, Bank Indonesia made certain of maintaining the availability of currency. This was reflected in Bank Indonesia's cash adequacy ratio, which on average stood at 5.1 months of outflow over the course of 2016, the same as the previous year. The highest cash adequacy ratio was recorded in February-March 2016, with 5.9 months of outflow, in line with the reverse flow of currency from banks to Bank Indonesia after the 2015 Christmas and end of year period. Meanwhile, the lowest cash position came about in June 2016 with 3.4 months of outflow as a result of the high demand for currency during the 2016 Ramadhan/Eid Al Fitr period (Chart 9.25). By area, the highest cash adequacy ratio was recorded at Bank Indonesia's Headquarters with 7.1 months of outflow. This high cash ratio was intended to maintain the National Iron Stock (ISN) that has to be provided by Bank Indonesia in anticipation of withdrawals

Chart 9.24. Outflow and Inflow through Bank Indonesia

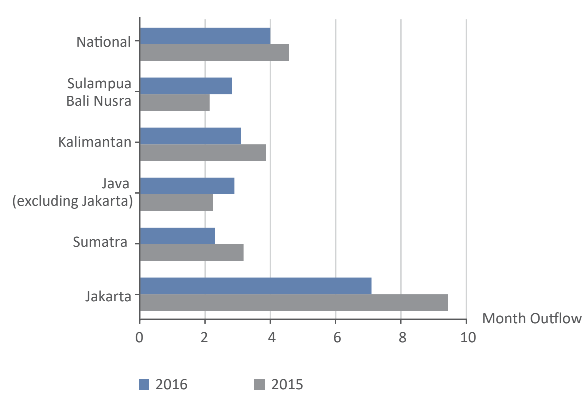


Source: Bank Indonesia

from banks, the majority of which are headquartered in the Greater Jakarta area or Jabodetabek (Chart 9.26).[1] Outflow continued to rise but lower than in the previous year. This is consistent with economic growth which remained sluggish compared to 2015. In addition, the clean money policy, which raised the soil level of currency, affected the cash ratio which dropped compared to the previous year.

To carry out its mandate derived from the Act No. 7/2011 on Currency as well as to improve the quality of currency,

Chart 9.26. Ratio of Cash Position to Average of Monthly Outflow per Region



Source: Bank Indonesia

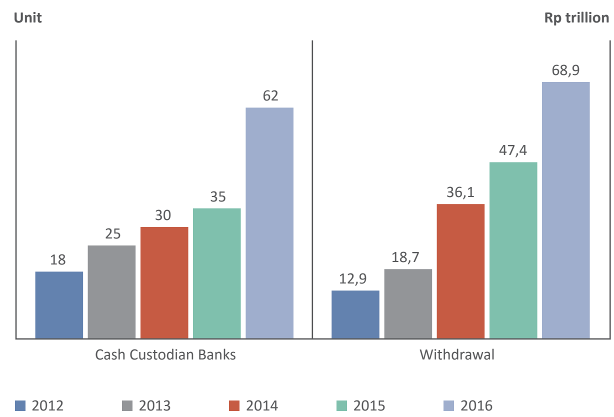
1 The National Iron Stock is a standby inventory in anticipation of an increase in demand for currency that was not predicted at the time of preparation of the Currency Demand Estimation at the beginning of the year, and which could be precipitated, for example, by a rise in the fuel or electricity prices in the current year. Setting the iron stock at 20% of projected currency in circulation (UYD) is in accordance with the best practices of other countries, for example the Central Bank of Spain and Central Bank of Korea.

Bank Indonesia issued and circulated 2016 Emission Year (EY) Rupiah currency. Bank Indonesia issued and circulated 11 denominations of 2016 EY currency, consisting of seven denominations of banknotes and four denominations of coins. The policy was enacted in order to fulfill the mandate of the Currency Law while also facilitating the identification of authentic currency characteristics and strengthening the security features on rupiah currency. The issuance and circulation of 2016 EY rupiah currency was officially launched by the President of the Republic of Indonesia on December 19, 2016, to coincide with the commemoration of State Defense Day.

2016 Emission Year rupiah currency features images of national heroes, aimed at fostering patriotic values. In more detail, 2016 EY currency features twelve images of national heroes as the main image on the front of respective currency denominations. The decision to portray images of national heroes is intended to express appreciation for the services these people rendered to Indonesia. In addition, the heroic spirit and patriotic values of these national heroes are expected to serve as a role model , especially for the youth of Indonesia. To further entrench the diversity of art, culture and natural wealth in Indonesia, the new banknotes also depict images of traditional dances and natural landscapes drawn from various regions of Indonesia. The diversity and uniqueness of Indonesia's nature and culture displayed on the currency are expected to enhance the public's affection for their homeland of Indonesia. To facilitate the identification of authentic currency characteristics and also to make it unease to counterfeit, Bank Indonesia strengthened various security features in the 2016 EY currency (see Box 9.1).

In 2016, in order to expand the coverage of its cash services to the whole of Indonesia, Bank Indonesia added to its number of Cash Custodians.[2] The increase in Cash Custodians took place in areas previously unreached by Bank Indonesia's cash services. Bank Indonesia added Cash Custodians in 27 locations, from 35 locations in 2015 to a total of 62 locations in 2016, from 368 participating banks in 2015 to 510 participating banks. This expansion meant that the coverage of Bank Indonesia's cash services rose from 66% in 2015 to 82% in 2016. In line with the addition of Cash Custodians, currency withdrawals from Cash Custodians increased significantly. A total of Rp68.9 trillion was withdrawn from Cash Custodians in 2016, an increase of 45.4% over the 2015 figure of Rp47.4 trillion (Chart 9.27). By the area, the highest number of Cash Custodian took

Chart 9.27. Number of Cash Custodian and Rupiah Withdrawal



Source: Bank Indonesia

place in the Bank Indonesia Representative Offices for the Provinces of Papua and East Nusa Tenggara, both of which has 6 Cash Custodians.

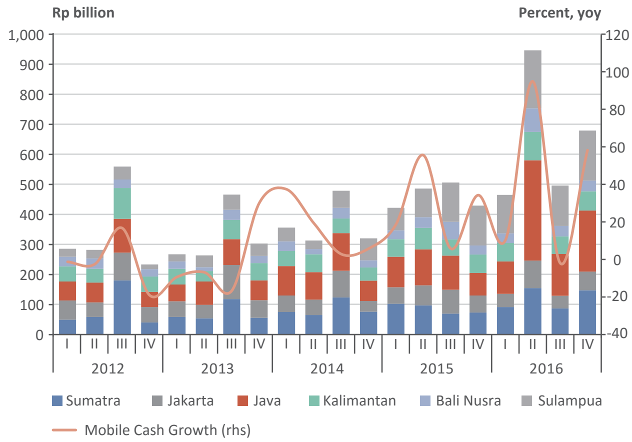
Bank Indonesia also continued to facilitate the exchange of money by means of Mobile Cash Services across Indonesia, including in the country's remote areas and outermost islands.[3] These efforts were reflected in the 40.3% growth of money exchanges from Rp1.8 trillion in 2015 to Rp2.6 trillion in 2016 (Chart 9.28). In addition, there was a rise in the frequency of Mobile Cash Services of 48.8%, from 2,598 times in 2015 to 3,867 times in 2016. The strong growth mainly occurred in the second quarter of 2016, in line with the high demand for cash in Ramadan/Eid Al Fitr period. The increase in Mobile Cash services is expected to meet the demand for currency throughout Indonesia as well as to replace the unfit with fit money, thus enhancing the quality of currency in circulation.

Bank Indonesia remains committed to fulfill the money fit for circulation (ULE). Money fit for circulation is the banknotes that meets the requirements to be circulated based on the quality standards defined by Bank Indonesia. The fulfillment of good quality of Rupiah is very important for maintaining the integrity of the Rupiah as a symbol of the sovereignty of the Republic of Indonesia. In addition, (ULE) provides convenience for public to perform transactions. Money is declared unfit (UTLE) based on Bank Indonesia's standards, if its condition has changed, because of mildew, oil, chemicals and scribbles among other things, or if its physical appearance has changed because of burns,

2 Cash Custodian is an activity whereby supplies of currency are kept in a bank designated by Bank Indonesia in order to ensure a sufficient supply of bank cash and to meet the currency needs of the public in specific areas/regions.

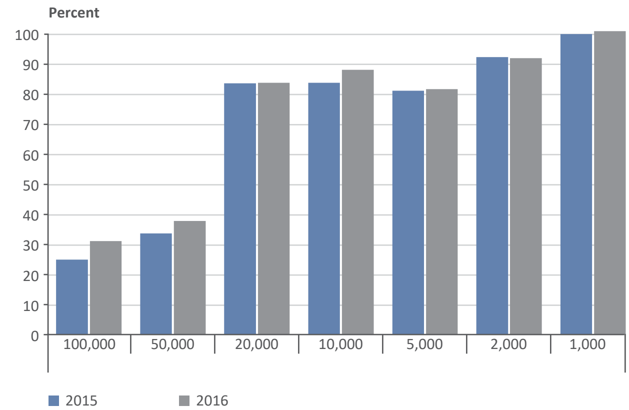
3 Mobile Cash is a currency exchange facility provided by Bank Indonesia to the public, or other parties working with Bank Indonesia, which uses modes of transport; it is done through a retail mechanism (to the public) and a wholesale mechanism (to banks).

Chart 9.28. Rupiah Withdrawal Through Mobile Cash



Source: Bank Indonesia

Chart 9.30. Ratio of Destroyed Banknotes to Inflow by Denomination

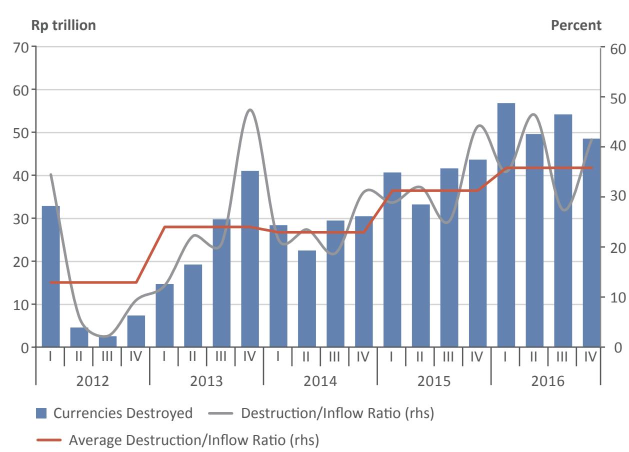


Source: Bank Indonesia

perforations or waterworks. Bank Indonesia routinely destroys money deemed unfit for circulation in support of its commitment to provide fit money to the public.

Bank Indonesia consistently sought to raise the quality standards of currency in circulation. To improve the quality of currency circulating in society, Bank Indonesia applied a clean money policy. This policy seeks to improve the quality, or soil level, of currency in circulation.[4] This was reflected in an increase of money deemed unfit for circulation which went on to be destroyed, in terms of both the number of banknotes as well as the value of these banknotes, of 16.2% and 31.4% respectively. Over 2016, there were 6.9 billion banknotes destroyed with a value of Rp210.5 trillion, while no coins were destroyed. In 2015, there were 5.9 billion banknotes destroyed as well as 49.0 coins, with a total value of Rp160.3.trillion. The increased amount of money destroyed was also influenced by a greater amount of processing (counting and sorting) of money along with an added amount of inflow into Bank Indonesia. As a result, the ratio of destroyed money unfit for circulation (UTLE) to inflow in 2016 was 36.0%, higher than the previous year's ratio of 31.4% (Chart 9.29). In terms of denomination, more Rp100,000 and Rp50,000 banknotes were destroyed than in the previous year. Meanwhile, for other denominations of banknotes, more than 80% of the inflow was destroyed by Bank Indonesia (Chart 9.30).

Chart 9.29. Destruction of Currency Unfit for Circulation

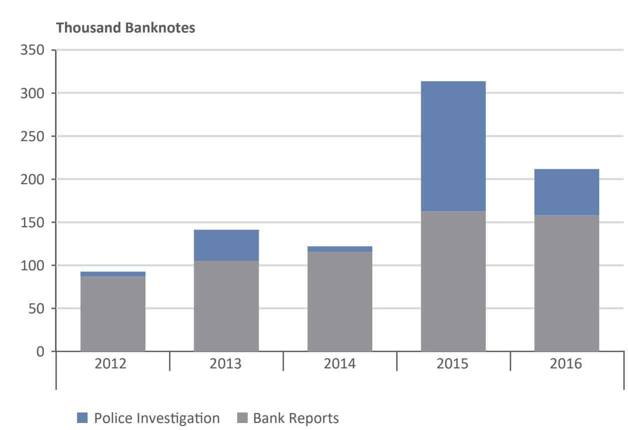


Source: Bank Indonesia

4 The soil levels used by Bank Indonesia have a range of soil level 1 to 16. Soil level 1 is completely unfit money for circulation, while soil level 16 is perfectly printed money (HCS) from Perum Peruri. For 2016, Bank Indonesia set soil level 8 as the minimum standard for money to be fit for circulation, meaning that any money with soil level 1 to 7 was considered unfit for circulation and has to be destroyed.

The clean money policy has managed to improve the quality of currency in circulation. The successful implementation of this policy during 2016 was reflected in the results of a

Chart 9.31. Finding of Counterfeit Money by Police and Bank



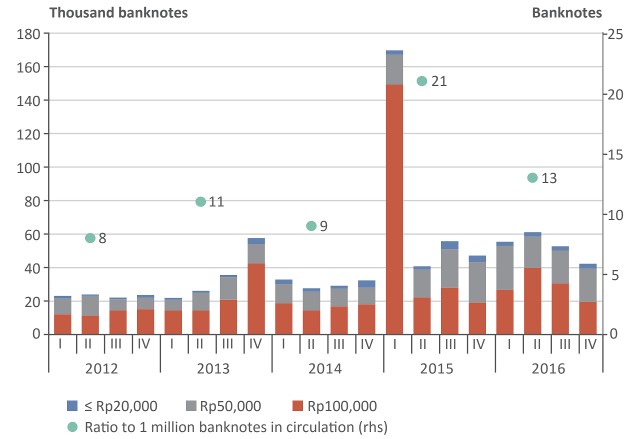
Source: Bank Indonesia

Table 9.1. Result of Survey on Quality of Currency Fit for Circulation (ULE) 2016

Denomination	Location	Soil Level	
		Semester I	Semester II
Large Denomination Money (UPB) (≥ Rp20.000)	82 CPI Cities	10	11
Small Denomination Money (UPK) (≥ Rp10.000)	82 CPI Cities	6	8

Source: Bank Indonesia

Chart 9.32. Ratio of Counterfeit Money to Currency in Circulation



Source: Bank Indonesia

survey on the quality of money fit for circulation in several cities. Based on this survey, which was conducted in 82 cities that were used to calculate the Consumer Price Index (CPI) in the first and second halves of 2016, there was an upward trend in the quality of money, as reflected in an improved soil level (Table 9.1).

In addition, Bank Indonesia sought to prevent and combat the counterfeiting. Bank Indonesia continued to strengthen coordination with the Indonesian Republic Police and other law enforcement agencies to uncover cases of money counterfeiting as well as to improve the compliance of banks in reporting the counterfeit cases. Moreover, Bank Indonesia also kept up efforts aimed at educating the public about the characteristics of currency and how to identify counterfeit money. These efforts led to a decline in the finding of counterfeit currency in 2016, from 313,538 notes to 211,661 notes. Of the fake banknotes discovered, 157,782 were reported by banks and 53,879 were the result of police investigations (Chart 9.31). In terms of denomination, most were Rp100,000 and Rp50,000 banknotes, with 116,824 notes (a 55.2% share) and 84,245 notes (a 39.8% share) respectively. These developments meant that the ratio of counterfeit currency in circulation fell from 21 notes to 13 notes per one million notes in circulation (Chart 9.32).

Box 9.1. New Currency of 2016 Emission Year

The Rupiah is a symbol of state sovereignty and should be respected and appreciated by every citizen of Indonesia. The Act No. 7 of 2011 concerning Currency (Currency Law) establishes the rupiah as the country's legal tender to be used in all regions of the Republic of Indonesia. Bank Indonesia, as the monetary, macroprudential, and payment system authority, including currency management, is mandated by the Currency Law to issue, distribute, as well as revoke and withdraw rupiah from circulation.

The issuance and circulation of 2016 Emission Year (EY) currency forms part of the mandate of the Currency Law, which among other things regulates the general and specific characteristics of the rupiah. One common characteristic found in all rupiah banknotes is the signatures of the Governor of Bank Indonesia and the Minister of Finance of the Republic of Indonesia, as well as the phrase "Negara Kesatuan Republik Indonesia". Meanwhile, one common characteristic found in all rupiah coins is the phrase "Republik Indonesia" (Republic of Indonesia). These general characteristics of the rupiah reaffirm its philosophical significance as a symbol of state sovereignty which deserves the respect and pride of all Indonesian citizens.

On December 19, 2016, coincide with State Defense Day, the President of the Republic of Indonesia, Ir. H. Joko Widodo, officially launched the issuance and circulation of 2016 EY rupiah currency in all denominations. 2016 EY rupiah currency consists of seven denominations of banknotes, namely Rp100,000, Rp50,000, Rp20,000, Rp10,000, Rp5,000, Rp2,000, Rp1,000, and four denominations of coins, namely Rp1,000, Rp500, Rp200 and Rp100. The issuance and circulation of the new 2016 EY currency represented a historical moment for Indonesia as it was the first time this had happened simultaneously for all the country's currency denominations.

National Heroes - Theme of the New Rupiah Currency

In accordance with the mandate of the Currency Law, all rupiah should use an image of a national hero as the main picture on their front part. This represents a form of honour to those heroes who have struggled to defend and strengthen the Republic of Indonesia and also familiarize the public with the national heroes, thereby fostering a spirit of heroism and the exemplary attitude that these national heroes adopted. In determining the heroes whose images would be displayed on rupiah banknotes and coins, Bank Indonesia consulted with the Central Government as well as Regional Governments, historians, academics, and public figures. There were several criteria used for selecting which images of national heroes would be represented on the currency, as follows: the images were never have been used before on rupiah (except for the proclamators: Soekarno and Hatta), there had to be equal regional representation and gender representation, and they had to be acceptable to all parties concerned. The images of the national heroes who are represented on the Rupiah banknotes and coins were obtained from the authorized agency for administering national heroes and consent for the the images was obtained from the descendants of the national heroes selected. Furthermore, the selected images of national heroes used in 2016 EY rupiah currency were set forth in a

Denomination		Front Picture	Rear Picture	
		National Heroes	National Dance	Natural Landscape
Banknotes	Rp100,000	Dr. (H.C.) Ir. Soekarno – Dr. (H.C.) Drs. Mohammad Hatta	Topeng Betawi	Raja Ampat
	Rp50,000	Ir. H. Djuanda Kartawidjaja	Legong	Pulau Komodo
	Rp20,000	Dr. G.S.S.J. Ratulangi	Gong	Derawan
	Rp10,000	Frans Kaisiepo	Pakarena	Wakatobi
	Rp5,000	Dr. K.H. Idham Chalid	Gambyong	Gunung Bromo
	Rp2,000	Mohammad Hoesni Thamrin	Piring	Ngarai Sianok
	Rp1,000	Tjut Meutia	Tifa	Banda Neira
Coins	Rp1,000	Mr. I Gusti Ketut Pudja		
	Rp500	Letnan Jenderal TNI (Purn) Tahi Bonar Simatupang		
	Rp200	Dr. Tjipto Mangoenkoesoemo		
	Rp100	Prof. Dr. Ir. Herman Johannes		

Presidential Decree (Decree No. 31 of 2016 concerning the Use of Images of National Heroes as the Main Picture on the Front of Newly-Printed Banknotes and Coins of the Republic of Indonesia on September 5, 2016).

In addition to the images of national heroes, new rupiah banknotes also feature images of traditional dances and natural landscapes from across the Indonesian archipelago as a way of portraying the diversity of art, culture and natural wealth in Indonesia. The inclusion of images of national heroes, dances and natural landscapes from across Indonesia is expected to support the national character revolution through the introduction of historical elements which may serve patriotic values and the affection for homeland, in accordance with one of the Nawa Cita programs initiated by the President of the Republic of Indonesia.

Characteristics of Authenticity of 2016 EY Rupiah Currency

In order to help the public to identify the authenticity of rupiah currency and to cause difficulties at counterfeiting, 9-12 security features were incorporated into the 2016 EY Rupiah currency. In general, these security features are divided into three levels namely overt, semi-covert and covert/forensic. Overt security features are those that can be detected without the supporting tools. Semi-covert security features are those that can be detected using simple tools such as a magnifying glass//loupe or an ultra violet light (UV). Meanwhile, covert/forensic security features are those that can only be detected using laboratory/forensic equipment.

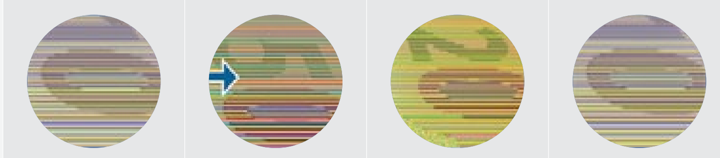
Overt security features are intended to make it easy for the public to identify whether rupiah currency is authentic using the 3D method of '*Dilihat*, *Diraba*, *Diterawang*', or 'Look, Touch, Examine'. The overt security features found on the 2016 EY rupiah currency include:

1. A woven security thread that can change color when viewed from certain angles as well as a security thread embedded in the bank notes.

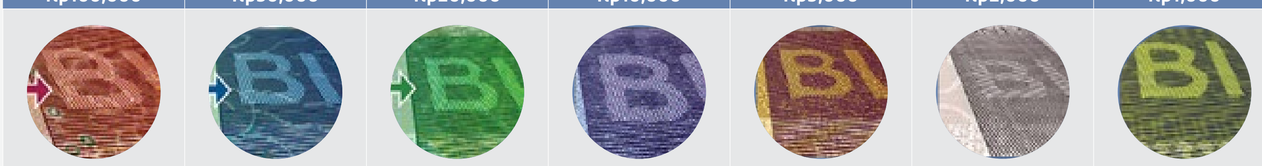
2. Watermarks in the form of images of heroes and certain ornaments.

3. The image of a shield containing the BI logo that changes color when viewed from different angles.

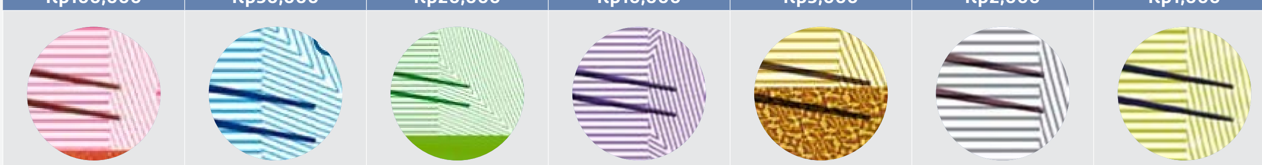
4. Hidden multicolored images which can be seen from certain angles.

Rp100,000	Rp50,000	Rp20,000	Rp10,000
			

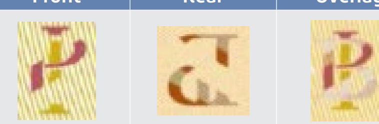
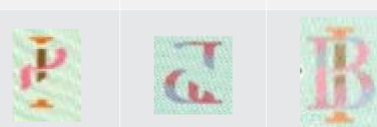
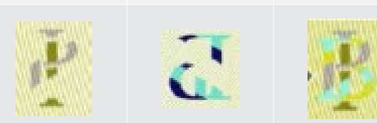
5. A hidden image in the form of the letters "BI" as well as numbers that can be viewed from certain angles.

Rp100,000	Rp50,000	Rp20,000	Rp10,000	Rp5,000	Rp2,000	Rp1,000
						

6. Embossing in the form of a pair of lines on the side of the banknote that feel rough when touched, which are used as a code for the blind.

Rp100,000	Rp50,000	Rp20,000	Rp10,000	Rp5,000	Rp2,000	Rp1,000
						

7. Self-completing (rectoverso) images of the BI logo that complete each other when held up to the light.

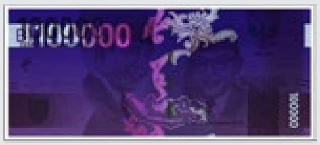
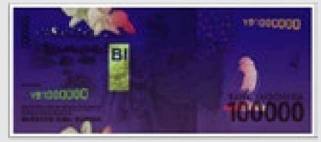
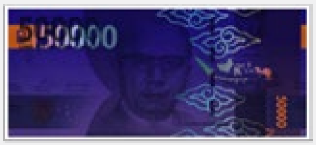
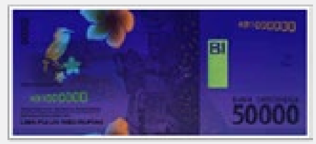
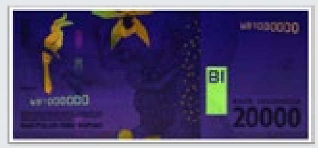
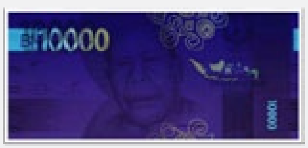
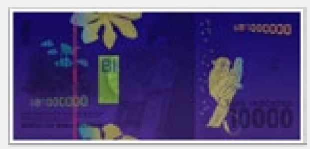
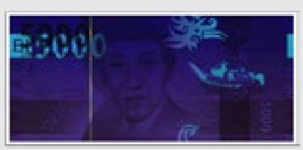
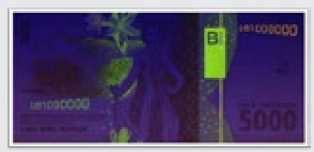
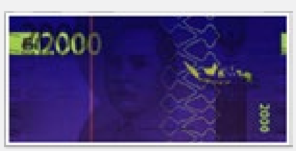
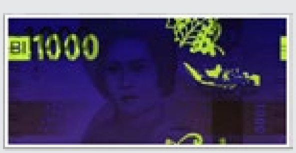
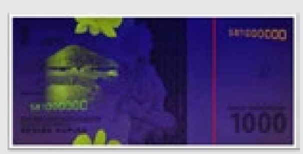
Denomination	Front	Rear	Overlay	Denomination	Front	Rear	Overlay
Rp100,000				Rp5,000			
Rp50,000				Rp2,000			
Rp20,000				Rp1,000			
Rp10,000							

Semi-covert security features are intended to make it easy for the professionals, such as tellers and cashiers, to identify whether rupiah currency is authentic using simple tools such as a magnifying glass/loupe or an ultra violet light (UV). The semi-covert security features found on the 2016 EY rupiah currency include:

1. Micro text and raster images.

Rp100,000	Rp50,000	Rp20,000	Rp10,000	Rp5,000	Rp2,000	Rp1,000
						

2. Printed with a special ink that fluoresces when under a UV lamp.

Denomination	Front	Rear
Rp100,000		
Rp50,000		
Rp20,000		
Rp10,000		
Rp5,000		
Rp2,000		
Rp1,000		

Maintaining the Quality of the Rupiah

A habit of maintaining and caring for the Rupiah needs to be internalized in the public at the early stage, since maintaining the rupiah is equivalent of maintaining a symbol of state sovereignty. Meanwhile, caring for the rupiah is an expression of gratitude for the hard work done on behalf of the country. In order to encourage the public to treat the rupiah better, Bank Indonesia is promoting the new slogan of 3D - "*Didapat-Disimpan-Disayang*", or "Earned-Kept-Loved".

The overt and semi-covert security features of the new rupiah banknotes are easy to identify if the banknotes are in a good and clean physical condition. According to that, it is essential that the public should concern for maintaining rupiah banknotes physical condition and preventing them from becoming quickly damaged, worn or dirty. The public can contribute in maintaining and caring the Rupiah, thus the currency management undertaken by BI can be done more efficient. The way to do this is to get rid of bad habits such as wetting, folding, crumpling and scribbling on rupiah banknotes, as well as stapling.

Despite the issuance of the 2016 EY rupiah currency, any existing rupiah banknotes and coins already in circulation are still treated as legal tender as long as they are not revoked or withdrawn from the circulation by Bank Indonesia.

CHAPTER 10
Regional Economy

The improvement of Indonesia's economic growth in 2016 was mainly driven by improved economic conditions in Sumatra, Java and Kalimantan. The economic recovery in these regions was underpinned by household consumption which remained strong and improved exports in the fourth quarter of 2016 as commodity prices in the global market rose. The support of regional fiscal stimulus in the first half of 2016 helped to sustain an improved economic performance in various regions, despite the imposition of austerity measures in the second half of 2016 which led to the marginalization of the regional fiscal role. The improvement in economic performance was also supported by the tendency for inflation in many areas to be kept under control and in line with inflation targets for 2016. Solid coordination in controlling inflation, especially through the Regional Inflation Control Teams, contributed to manage regional inflation in 2016. Furthermore, the positive economic performance of many regions was accompanied by a decline in unemployment and poverty.

Image caption:
At the regional level, the economy responded in different ways to the dynamics of global commodity prices. The economies of regions dominated by resource-based commodities generally profited from the upward trend in commodity prices during 2016.

The economic performance of most regions in 2016 showed an improvement, primarily supported by continuing strong private consumption and an improved export performance in the fourth quarter 2016 as commodity prices in the global market increased. The support of regional fiscal stimulus in the first half of 2016 helped to sustain an improved economic performance in various regions, despite the imposition of austerity measures in the second half of 2016 which led to the marginalization of the role of regional fiscal policy over the year as a whole. The economic performance of Sumatra, Java and Kalimantan showed particular improvements. Economic growth in the Eastern Indonesia Region (KTI) also remained at high levels, supported by sufficiently high economic growth in the region of Sulawesi-Maluku-Papua (Sulampua), even if this growth was slightly slower than that of the previous year due to the economic downturn in the region of Bali-Nusa Tenggara (Bali-Nusra).

Meanwhile, by the end of 2016 inflation trends in many areas supported the achievement of the national inflation target of 4±1%. There were several integral aspects to keep inflation under control in various areas. These included the lack of pressure from domestic demand, the managing of inflation expectations , the strengthening of the rupiah, and deflation in commodity prices which fall into the administered prices (AP) category. On the other hand, there was added inflationary pressure from rising food prices in many regions. The increase in food inflation pressure in some areas in Sumatra led to a higher level of inflation in Sumatra compared to other regions in 2016. However, solid coordination in controlling inflation between Bank Indonesia and the Government through the Inflation Control Team (TPI) and Regional Inflation Control Team (TPID), as well as several Government policy measures, at both the national and sub-national, aimed at controlling price volatility during periods of National Religious Holidays (HBKN), all made a positive contribution to withstanding any further inflationary pressure from rising food prices.

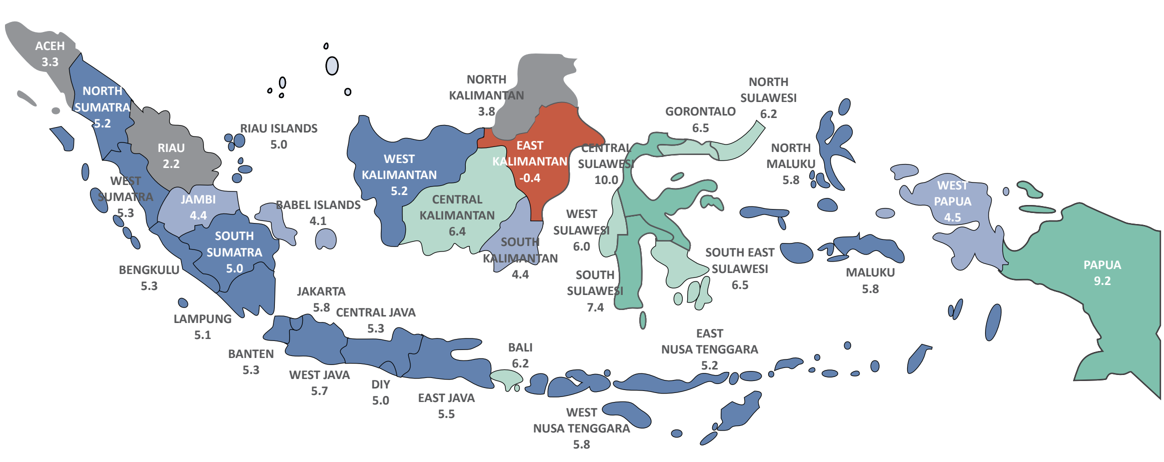
10.1. Regional Economic Growth and Welfare

Dynamics of Regional Economic Growth

The recovery of Indonesia economy in 2016 mainly derived from economic improvements in Sumatra, Java and Kalimantan. Most of the provinces in these three regions recorded an upswing in economic growth compared to the previous year. East Kalimantan stood out in that its economy continued to contract, but not as deeply as in the previous year (Figure 10.1). In general, the improved economic performance of these three regions was driven by strong domestic consumption, enhanced export performance in line with an improvement in commodity prices on the global market, as well as increased investment. Meanwhile, aggregate economic growth in KTI remained at a fairly high level, supported by sufficiently high economic growth in the Sulampua region. However, the economic growth of KTI in 2016 was still lower than that of 2015 due to slowing economic growth in the Bali-Nusra region.

Sumatra's economy grew by 4.3%, up from the previous year's figure of 3.5%. This increase in Sumatra's economic growth was supported by an improved economic performance in almost all provinces in Sumatra, except West Sumatra and the Riau Islands. Sumatra's improved economic performance was mainly driven by increased investment and an improvement in exports (Chart 10.1). This increased investment was sustained by the amount of government spending in the first half of 2016, in line

Figure 10.1. Map of Regional Economic Growth in 2016



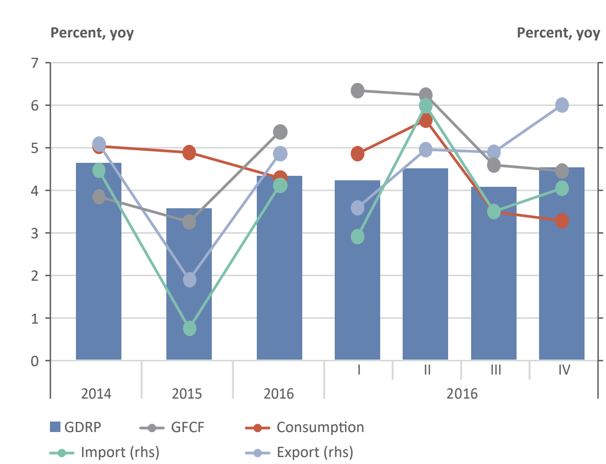
Source: BPS-Statistics Indonesia

with large-scale infrastructure projects such as the Trans-Sumatra Highway, the Light Rapid Transit (LRT) system in South Sumatra, and the construction of several airports in the Sumatra region. Aggregate government consumption in various areas of Sumatra in the second quarter of 2016 grew by 6.8% (yoy), the highest growth rate since the second quarter of 2013. However, the role of government consumption declined, recording negative growth in the second half of 2016 in line with fiscal consolidation measures taken by the Government.

The export performance of various areas in Sumatra improved, most notably in the second half of 2016, supported by inter-regional exports along with an increased demand for domestic palm oil for biodiesel needs. Exports to foreign countries also improved, driven by various natural resource-based commodities which made up a large part of Sumatra's exports, such as mineral fuel and lubricant groups, raw material groups, as well as vegetable and animal oil groups (Chart 10.2). This positive export growth, in turn, stimulated the role of private corporations through non-construction investment growth in the second half of 2016, amid a limited fiscal stimulus role. The role of household consumption, which was quite robust in different regions of Sumatra throughout 2016, was able to offset the decline in domestic consumption due to the limited role of government consumption.

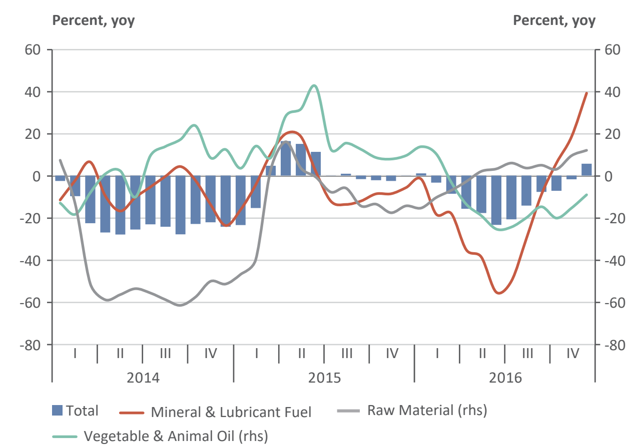
In terms of economic sectors, Sumatra's enhanced economic growth in 2016 was supported by an improved performance in the tradable sector and several nontradable sectors. The improved performance in the tradable sector, consisting of mining, agriculture and industry, was consistent with the improvement of exports in the second half of 2016. Nevertheless, the El Nino climate phenomenon, which occurred in 2015, resulted in limited farm production,

Chart 10.1. Sumatra Economic Growth by Expenditure



Source: BPS-Statistics Indonesia, calculated

Chart 10.2. Sumatra Main Commodities Real Export Growth



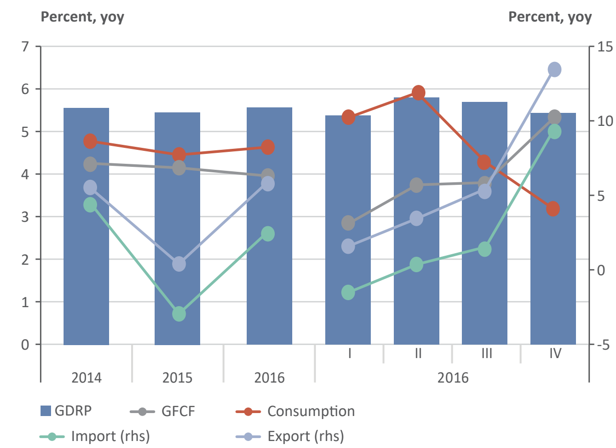
Source: Bank Indonesia

thereby holding back improvements in the production performance of the agriculture industry in 2016. In the nontradable sector, the performance of construction, commerce and financial services sectors improved. The enhanced performance in these nontradable sector was influenced by an increase in investment, particularly in construction, in the first half of 2016, along with the ongoing strong role of domestic consumption in different districts of Sumatra.

Java's economy, which boasts the biggest share in the national economy (58%) grew by 5.6% in 2016, up slightly from the previous year's corresponding figure of 5.5%. Java's improved economic growth was driven by an enhanced economic performance in East Java, West Java, and Yogyakarta. In contrast, economic growth in the other three provinces slowed. Java's improved performance in terms of economic was attributable to strengthening domestic consumption, especially household consumption. However, the increase in domestic consumption was restrained by a decline in government consumption in the second half of 2016 in line with the fiscal consolidation pursued by the Government (Chart 10.3).

Java's export performance has improved since the beginning of 2016, thereby contributing to the improvement of Java's economy. The greatest increase in export performance in Java was recorded in East Java, amounting to 13.2%. This was spurred on by rising inter-regional exports and enhanced demand for manufacturing products from major trading partners. Among Java's major export commodities which enjoyed a rising trend from the beginning of 2016 were chemicals, as well as beverages and cigarettes (Chart 10.4). The strengthening of domestic consumption, complemented by an improved export performance,

Chart 10.3. Java Economic Growth by Expenditure



Source: BPS-Statistics Indonesia, calculated

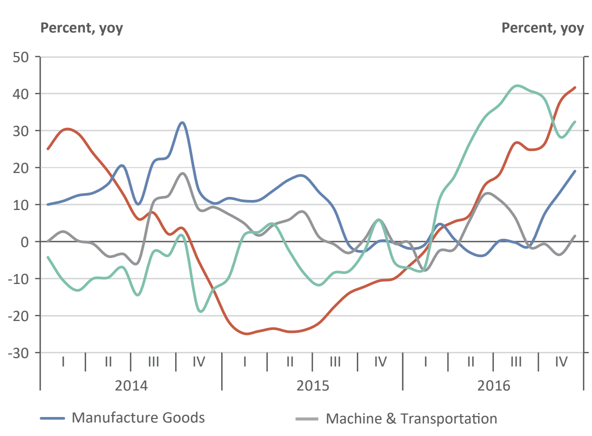
boosted non-construction investment by private corporations, especially in the second half of 2016, thus bolstering Java's overall investment performance.

The strengthening of domestic consumption in Java had a positive impact, by boosting the performance of several nontradable sectors, such as commerce, information and communications, and hospitality. These developments were in line with improvements in retail sales and the strengthening of inter-regional trade activities. In addition, the increased capacity of mobile telecommunication infrastructure in Java, particularly for broadband services, accompanied by a rise in mobile data usage, had a positive effect on the growth of the information and communications industry in Java. Meanwhile, the agriculture sector, which accounts for a large share of Java's economy, recorded stable growth of 3.3% in 2016, supported by the achievement of food production in the island's production centers. In contrast, the industrial and construction sectors endured slowing growth, affected by the relatively limited activity in property development and infrastructure in 2016. Nevertheless, the performance of the industrial sector in Java was sustained by an increase in manufacturing exports.

Kalimantan's economy grew by 2.0% in 2016, better than the previous year's growth rate of 1.4%. Almost all of Kalimantan provinces experienced a higher economic growth rate , including East Kalimantan whose economic growth contraction still represented an improvement over that of the previous year. The only province in Kalimantan to endure a slump in economic growth in 2016 was Central Kalimantan. Early in the first half of 2016, Kalimantan's economy still faced pressure due to the limited improvement in coal export commodity prices and declining gas production in East Kalimantan (Chart 10.5). Kalimantan's export performance only started to show positive growth in the second quarter of 2016, supported by improvements in coal exports inline with increasing demand from China.

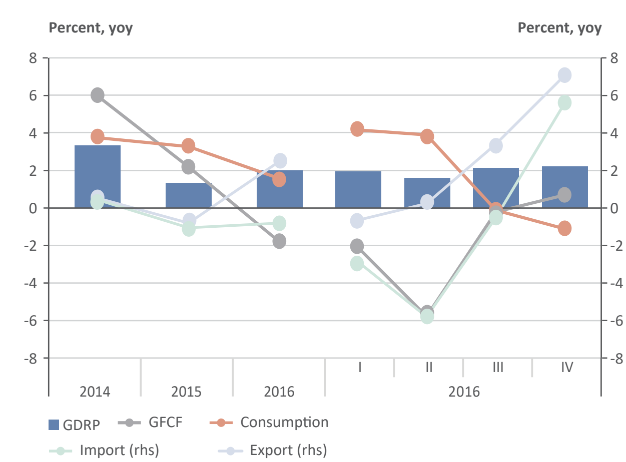
Subsequently, Kalimantan's improved export performance continued into the second half of 2016, thereby sustaining the overall economic performance of Kalimantan. Export growth in East Kalimantan reached as much as 41.9% (yoy) in the fourth quarter of 2016. Overall, the improvement in Kalimantan's export performance was supported by an increase in exports of primary commodities, particularly coal, in the second half of 2016 as a result of rising commodity prices in the global market (Chart 10.6). The improvement in Kalimantan's export performance drove investment, particularly non-construction investment by private corporations, which began to grow positively in the third and fourth quarters of 2016. On the other hand, limited government consumption, impacted by fiscal consolidation,

Chart 10.4. Java Main Commodities Real Export Growth



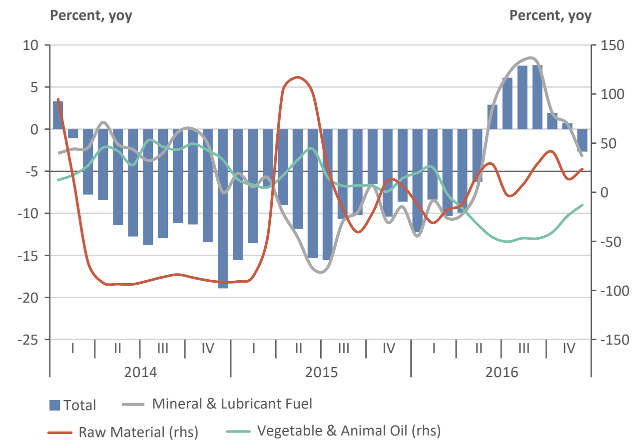
Source: Bank Indonesia

Chart 10.5. Kalimantan Economic Growth by Expenditure



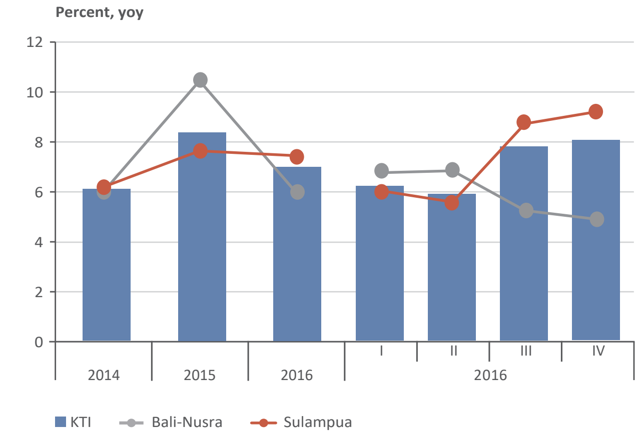
Source: BPS-Statistics Indonesia, calculated

Chart 10.6. Kalimantan Main Commodities Real Export Growth



Source: Bank Indonesia

Chart 10.7. KTI Economic Growth



Source: BPS-Statistics Indonesia, calculated

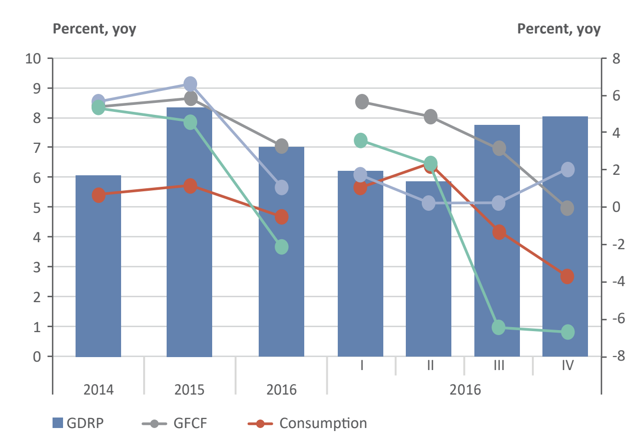
hampered further improvements in investment, particularly in construction investment. Household consumption also slowed in almost all provinces of Kalimantan, partly due to the delayed impact of the improved export performance.

In terms of economic sectors, an improved performance in the tradable sector boosted the economy of Kalimantan in 2016. This improved tradable sector performance, primarily derived from mining and industry, was due to improved coal exports in the second quarter of 2016 and the commencement of new aluminium smelter operations in West Kalimantan. In addition, the upswing in the industrial sector in Kalimantan was also the result of increased production in the palm oil industry. On the other hand, growth of the nontradable sector in Kalimantan continued to underperform, such as in the construction sector. Owing to a lack of government infrastructure projects, there was a fairly profound slump in the growth of the construction industry in 2016.

The economy of KTI still recorded fairly high growth of 7.0% in 2016, even if this was slightly down from the previous year's figure of 8.4%. KTI's slowing growth was attributable to slowing economic growth in the Sulampua and Bali-Nusra region (Chart 10.7). Among the areas in Sulampua which suffered a growth slump were Central Sulawesi, Southeast Sulawesi, West Sulawesi and North Maluku. Meanwhile, the only area in the Bali-Nusra region in which slowing growth occurred was West Nusa Tenggara. Generally speaking, the sluggish economic performance of KTI was brought about by weakening export growth due to the ongoing process of economic consolidation in response to efforts to downstream the mining sector.

The downturn in KTI's economic growth was most prominent in the first and second quarters of 2016. This slowdown was affected by declining investment as well as consolidation efforts related to technical constraints on mining production activities in some mining production areas, such as Papua and West Nusa Tenggara. In contrast, consumption rose in the first half of 2016, mainly on the back of enhanced domestic consumption. However, in the third and fourth quarters of 2016, consumption in the KTI region slowed due to limited government consumption in line with budget austerity measures (Chart 10.8). Meanwhile, the slowdown in investment from the first and second quarters of 2016 continued, both in the construction and non-construction sectors. Non-construction investment declined in line with the weak performance of the mining sector, while the decline in construction investment was ascribable to the limited number of public and private projects undertaken. More positive developments were

Chart 10.8. KTI Economic Growth by Expenditure



Source: BPS-Statistics Indonesia, calculated

seen in exports, the performance of which began to improve late in the second half of 2016, supported by rising mining commodity prices and attempts by businesses to optimize mining export quotas by the end of the year.

In terms of sectors, the economic growth of KTI in 2016 was primarily supported by the performance of several nontradable sectors, such as commerce, transportation and hospitality. The positive developments in these three sectors were in line with the ongoing strength of household consumption accompanied by increased inter-regional trade activity. Economic growth in KTI was also spurred on by an uptick in tourism in several touristic areas, such as Bali, which in 2016 enjoyed a 23.1% spike in tourist arrivals compared to the previous year. The improved performance of the electricity supply sector in KTI in 2016, which recorded fairly high growth, was driven by the onset of operations of several new power plants in the Sulampua and Bali-Nusra regions. In contrast, the tradable sector, most notably mining and manufacturing, in the Sulampua and Bali-Nusra regions endured limited growth in 2016. This situation was primarily attributable to the underperformance of exports and technical constraints faced by a number of mining areas such as West Nusa Tenggara and Papua.

The economic dynamics of various regions throughout 2016 showed that the momentum for economic recovery was still constrained by significant structural challenges. Global uncertainty, exacerbated by fluctuations in commodity prices, resulted in limited regional economic recovery, especially in areas that rely on exports of primary commodities/natural resources. Structural challenges in the regions are closely related to the issues of uneven availability of supporting infrastructure - both connectivity and energy infrastructure - among regions.[1] To reinforce the momentum for regional economic recovery, integrated measures are necessary for pushing economic reforms by optimizing new sources of economic growth in the regions.

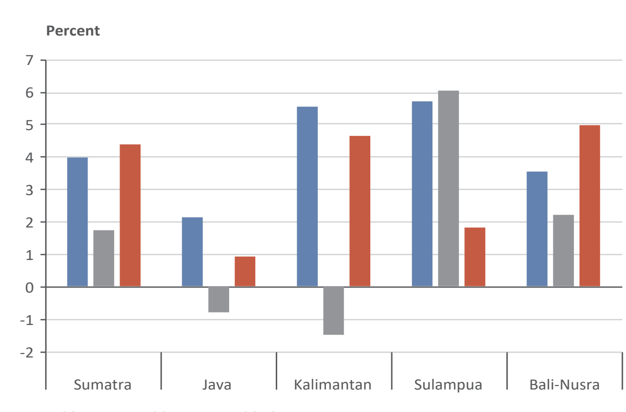
There are at least three structural challenges in the regions that need to be addressed in order to support sustainable economic growth. First, regional economies need to strive for a shift in export income from primary commodity-based exports to processed exports (downstreaming), so as to provide higher added value. Second, local governments need to encourage the development of new sources of economic growth, such as the maritime and tourism industry, which have potential as resource bases for regional economic growth. Third, local governments need to make strategic efforts aimed at structuring the development of urban areas so as to reduce poverty and inequalities between regions. In addition, a strategic role for urban areas, to support the acceleration of the regional economy, both in terms of quality and quantity, among others is by ensuring the provision of basic urban infrastructure (See Box 10.1).

Regional Employment and Welfare Conditions

In 2016, growth of the labor force in almost all regions increased along with a rise in labor force participation rates. The greatest increase in labor force growth was recorded in Kalimantan, followed by Sumatra and Java. Meanwhile, growth of the labor force in KTI slowed due to diminished labor force growth in the Sulampua region (Chart 10.9). The increase in labor force growth in various regions was complemented by improved labor force participation rates. In several provinces, such as East Kalimantan, Southeast Sulawesi and Central Sulawesi, the rise in the labor force participation rate was quite high, driven mainly by a growing number of informal workers, including those who work alone and those assisted by temporary workers. Nonetheless, there were also some areas that recorded a declining labor force, such as East Java (-1.6%), Papua (-1.1%), and North Sumatra (-0.4%). The decline in the labor force in these three provinces was followed by a declining participation in the labor force.

Increased labor force growth was also accompanied by an improvement in the unemployment rate in most regions. This was facilitated by the onset of economic improvements which ramped up employment levels. Lower unemployment rates were particularly in KTI, specifically in the regions of Bali-Nusra and Sulampua, as well as in Sumatra. Unemployment in these regions stood at 3.0%, 4.4% and 5.4% respectively in 2016, down from the previous year's unemployment rates of 3.8% in Bali-Nusra, 5.6% in

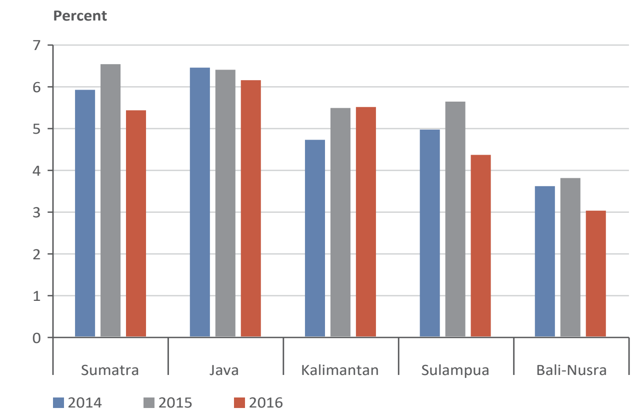
Chart 10.9. Growth of Regional Labor Force



Source: BPS-Statistics Indonesia, calculated

1 Growth Diagnostics Study conducted by Bank Indonesia in 22 provinces in 2016.

Chart 10.10. Regional Poverty Rate



Source: BPS-Statistics Indonesia, calculated

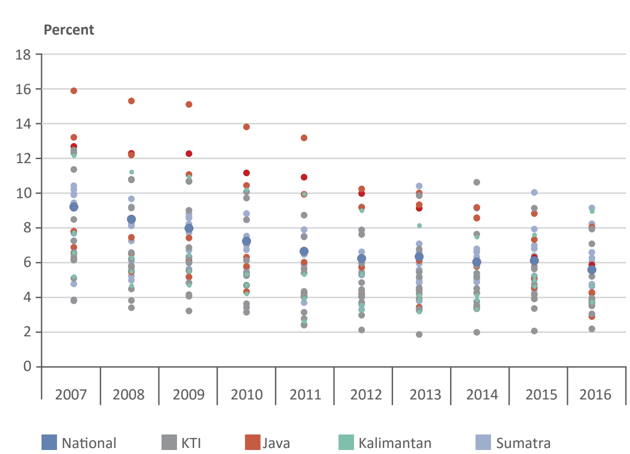
Sulampua, and 6.5% in Sumatra (Chart 10.10). Improved unemployment rates in KTI were recorded in all provinces, supported by increased employment in the social services, trade, and agriculture sectors. In Sumatra, meanwhile, improved unemployment rates were seen in nearly all provinces with the greatest improvements recorded in Bangka Belitung, Aceh and West Sumatra, on the back of rising employment in the trade sector. An exception was the province of Riau Islands, where the unemployment rate went up largely, owing to a decline in employment in the manufacturing sector.

Almost all provinces of Java enjoyed lower unemployment rates, while on the other hand, there was a rise in unemployment rates in Kalimantan related to the poorer performance of the mining sector. The improved unemployment rates in Java were supported by robust recruiting in the trade, transportation and finance sectors, all of which posted better growth compared to other major sectors throughout 2016. However, the relatively weak performance of the manufacturing sector in West Java adversely affected this province's unemployment rate, causing it to increase. Most parts of Kalimantan also endured an increase in open unemployment rates, with the exception of West Kalimantan and North Kalimantan. The higher unemployment rates in Kalimantan were impacted by the underperformance of the mining sector, upon which the economy of Kalimantan is quite reliant. The lower unemployment rates in West Kalimantan and North Kalimantan, meanwhile, were facilitated by a strong absorption of labor in the trade sector. Nationally, the distribution of unemployment rates across provinces showed a narrowing trend in 2016 (Chart 10.11).

In line with the overall decline in unemployment, the public welfare level in most regions improved. Some areas with relatively high poverty rates, such as Papua, West Papua, East Nusa Tenggara and Maluku, saw these poverty rates decline in 2016. The greatest decline in impoverishment was recorded in Java, where 479.5 thousand people moved out of poverty. On the flipside, Java still had the greatest number of impoverished people in the country, with 14.83 million or 53.4% of the total nationwide figure (Chart 10.12). In general, the decline in impoverishment was more prevalent in rural areas, except in Kalimantan where the decrease in poverty rates was more prevalent in urban areas.

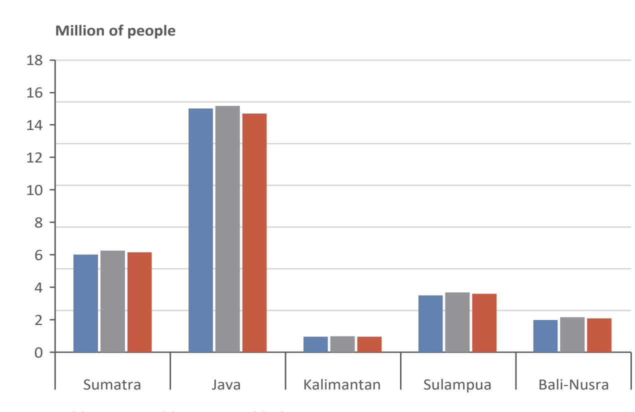
The improved poverty rate in various regions was also attributable to manageable inflation throughout 2016. This was reflected in slowing changes to poverty thresholds consistent with low inflation. These slow changes to poverty lines were predominant in various parts of Java, both in rural areas (3.9% yoy) and urban areas (4.1% yoy). The average poverty line in Java in September 2016 stood at

Chart 10.11. Regional Disparity of Unemployment Rate



Source: BPS-Statistics Indonesia, calculated

Chart 10.12. Regional Poverty



Source: BPS-Statistics Indonesia, calculated

Rp376,381 per capita/month for urban areas, and Rp334,302 per capita/month for rural areas. In Kalimantan, even though the change in the poverty threshold also slowed, it remained higher than that in other regions. In September 2016, the average poverty line in Kalimantan stood at Rp439,500 per capita/month for urban areas, and Rp432,495 per capita/month for rural areas. Improved poverty rates were also brought about by the development of the informal sector, as indicated by the growing number of self-employed people and entrepreneurs.[2]

Income inequality among the population, as reflected in the Gini ratio, also improved in 2016. This improvement was most prevalent in all parts of Java and Sumatra, except West Java, Aceh, and Bangka Belitung, where no change in the Gini ratio was indicated. Despite the improvement, the Gini ratio in Java, in general, remained higher than in other regions (Chart 10.13). Meanwhile, the Gini ratio in various areas of Kalimantan and the Eastern Indonesia Region (KTI) generally showed no improvement. The Gini ratio did however decline in some parts of these two regions which were actually facing the challenge of an underperforming mining sector, such as West Nusa Tenggara, Papua and West Papua. This indicates that the improvement in inequality levels in these areas was more affected by declining incomes among high-earning groups.

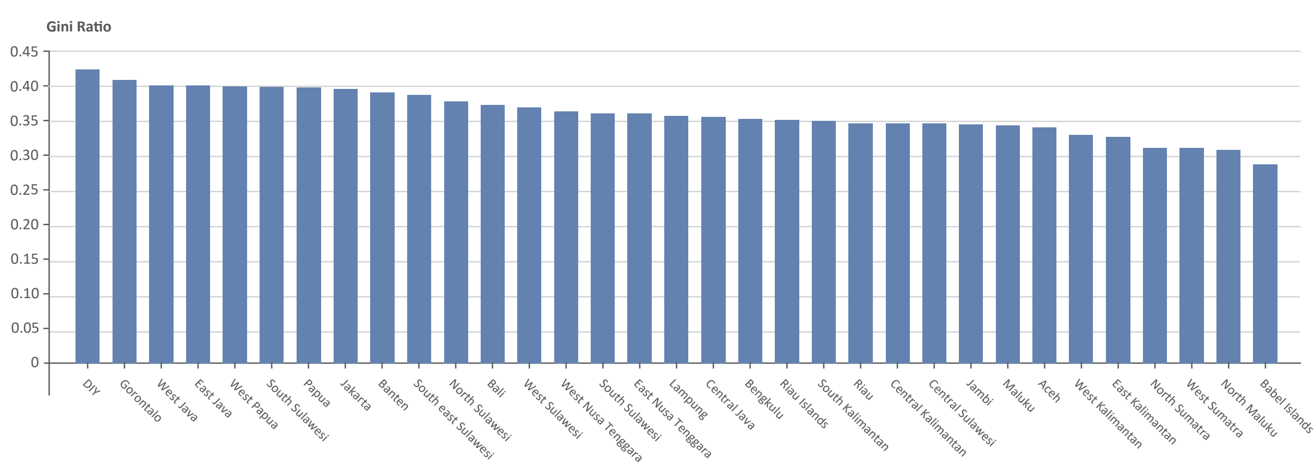
10.2. Regional Inflation

Regional Inflation Dynamics

Trends in regional inflation supported the goal to meet the national inflation target at 4±1%. The national inflation eventually recorded at 3.02% in 2016. Most provinces in Java recorded fairly low inflation of below 3% by the end of 2016, including Jakarta where inflation stood at 2.37% and it contributed significantly to national inflation (Figure 10.2). Various areas in Kalimantan and KTI also recorded quite low inflation. In fact, some areas in KTI, such as North Sulawesi, Central Sulawesi, Gorontalo and North Maluku, even recorded inflation below 2%. In contrast, most areas in Sumatra experienced greater inflationary pressure than in other parts of the country. There were some areas in Sumatra where inflation reached even more than 5%, including Bangka Belitung (6.75%), North Sumatra (6.34%), and Bengkulu (5.00%).

The ability to keep inflation under control in many regions in 2016 was aided by a relative decline in domestic demand, managed inflation expectations, and the strengthening of the rupiah. Price corrections for certain commodities that are part of the administered prices inflation, such as vehicle fuel, kerosene, as well as inter-city transport and railway fares, also had a positive impact in terms of controlling inflation. In addition, a delay to the Government's energy policy plans, which included price hikes for 900 volt-

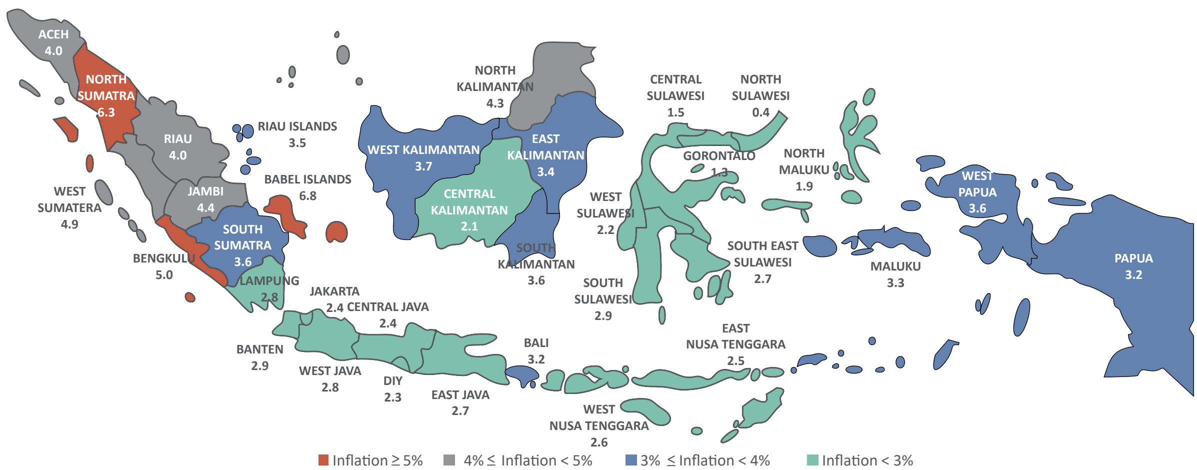
Chart 10.13. **Regional Gini Ratio in 2016**



Source: BPS-Statistics Indonesia, calculated

2 Based on the results of the 2016 Economic Census by BPS-Statistics Indonesia, the number of non-agricultural entrepreneurs increased by approximately 17.6%, compared with the results of the 2006 Economic Census, to 26.7 million.

Figure 10.2. Map of Regional Inflation in 2016



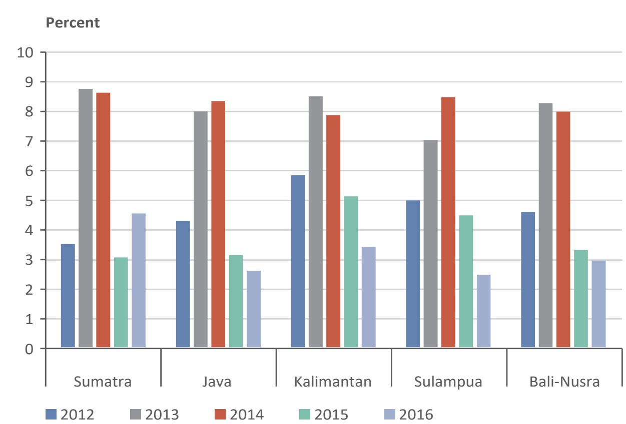
Source: BPS-Statistics Indonesia, calculated

ampere (VA) electrical power users as well as 3-kg Liquefied Petroleum Gas (LPG) cylinders, also dampened rising inflationary pressure in all regions.

The inflation rates recorded in most of the country's regions were the lowest in the last five years. The Sulampua region recorded the lowest inflation rate in Indonesia of just 2.46%, followed by Java (2.59%), Bali-Nusra (2.93%), Kalimantan (3.40%) and Sumatra (4.53%) (Chart 10.14). Some provinces in the Sulampua region, such as North Sulawesi and West Sulawesi, even experienced monthly deflation in each of the first four months of 2016, on the back of a policy which reduced electricity rates and fuel prices. Furthermore, the decline in fuel prices has led to a lower transportation fares from April to July 2016. The policy on the reduction of electricity tariff and fuel prices, and the subsequent drop in transportation fares, resulted in a fairly evenly-spread easing of inflationary pressure in all regions in the first half of 2016. Meanwhile, various commodities that classify into category of core inflation, such as gold, jewellery, school fees, and housing leases, was relatively stable in all regions. This manageable core inflation was inline with Bank Indonesia's policy of managing domestic demand, maintaining the stability of the exchange rate, and shaping inflation expectations.

Low inflationary pressure in numerous regions in the first half of 2016 was also influenced by a sustained supply of food. The harvest season of rice production in April-May 2016, complemented by an increase in the supply of broiler chicken and eggs, spurred on low inflation in the first half of 2016. Rice production in some production centers also saw an increase compared to 2015, even amid the weather phenomenon of La Nina which took place throughout 2016.[3] Fairly large increases in rice production were recorded in South Sumatra, West Java, South Sulawesi, Lampung and East Java. Meanwhile, the supply of broiler chicken in various regions in the first half of 2016 also increased as the supply of day old chicks (DOC) was maintained. However, food inflation pressure remained prevalent for several commodities, such as shallots and various types of chilli, due to constraint on their supply from several major production centers.

Chart 10.14. Regional Inflation 2012-2016



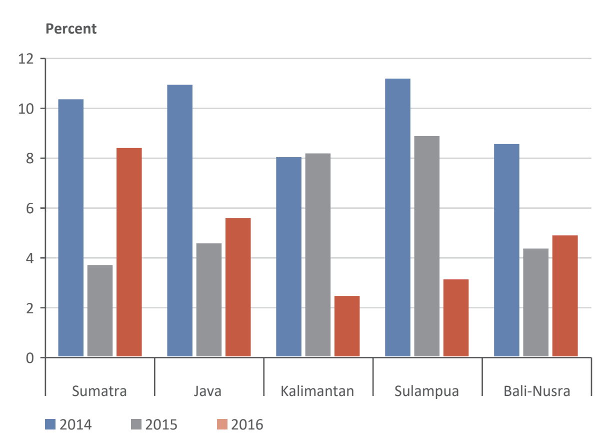
Source: BPS-Statistics Indonesia, calculated

3 The Ministry of Agriculture released pre-forecast figures (pre ARAM II) at the end of December 2016 which showed an increase in rice production in 2016 from the previous year of 3.74 million tons to 79.14 million tons. Relatively large increases in rice production in 2016 were recorded in South Sumatra (21.81%), West Java (6.83%), South Sulawesi (7.66%), Lampung (11.13%), East Java (2, 93%), North Sumatra (8.86%), Jambi (48.13%), West Kalimantan (15.21%), Banten (7.56%) and South Kalimantan (7.67%)

Many regions experienced rising inflationary pressures at the end of the first half of 2016. This continued into the second half of the year, fuelled by food price increases. The increase in inflation at the end of the first half of 2016 was also influenced by the seasonal factor of National Religious Holidays (HBKN), especially in the lead up to Eid al-Fitr. This year inevitably sees air fares as well as land-based inter-city transportation fares soar. In June 2016, which was the peak of the HBKN period, the steepest rises in inflation in terms of air fares were in Papua (34.24%), Bengkulu (28.40%) and West Java (27.19%). However, compared with previous years, the inflationary pressure exerted in the HBKN period in 2016 was the lowest in the last five years. This was the result of various policies pursued by governments at both the central and local level, along with solid coordination between the Government and Bank Indonesia in addressing potential price volatility in HBKN periods. Coordination at national levels and sub-national level, through Inflation Control Team (TPI) and Regional Inflation Control Team (TPID), focused on strengthening supplies and improving distribution, including by bolstering supplies from various sources.

Entering the second half of 2016, the dynamics of inflation in various regions remained under control despite the general increase in food inflation pressure. After Eid al-Fitr, inflationary pressure in different regions subsided in the July-August period as food prices and transport fares dropped. After Eid al-Fitr in 2016, food prices underwent a significant correction as this time of year coincided with the harvesting of numerous food commodities in several production centers. Rising inflationary pressure persisted, however, from price increases of various horticultural commodities, especially red chillies and shallots. The rise in the price of red chilies that continued from the beginning of 2016 pushed up food inflation pressure in Sumatra (Chart 10.15). The increased price of red chillies was caused by production disruptions due to unfavorable weather and the Gemini virus in a number production centers in North Sumatra. The greater inflationary pressure from food prices in Sumatra caused this region's overall inflation rate in 2016 to be at a higher level than other regions.

Chart 10.15. Regional Food Inflation



Source: BPS-Statistics Indonesia, calculated

Challenges of Controlling Regional Inflation

The main challenges involved in controlling regional inflation throughout 2016 were still associated with food production and logistics. Food inflation continued to act as a trigger for greater inflationary pressure in certain areas, especially Sumatra. In general, among the challenges involved in controlling regional food inflation were the inadequate supporting infrastructure for food production and logistics, the high dependence of food production on climatic and weather factors, and the high land conversion rate. In addition, the uneven quality of the logistics infrastructure in different areas resulted in continuing high transport costs in logistics.

The limited capacity and quality of the supporting infrastructure for food production was one of the factors that led to less than optimal food productivity. The low capacity of agricultural infrastructure was reflected in the relative lack of technically irrigated land and the inability of reservoirs to meet the irrigation needs of agricultural land. The percentage of irrigation systems that were needed major repairs in many regions remained quite high. Data from the Ministry of Public Works and Public Housing (PUPR) showed that approximately 3 million hectares of irrigation channels (out of 7.3 million hectares) needed to be included in a rehabilitation program. Currently available reservoirs for irrigation was only able to serve 760 thousand hectares of rice paddies out of a total of 7.1 million hectares.

Differences in the capacity of logistics infrastructure among regions led to logistics inefficiencies that affected the flow of food supply and resulted in continuing large food price disparities among regions. This situation, among other things, was also affected by empty backhauls in marine transportation because of the uneven economic scale among regions. In addition, the uneven carrying capacity of infrastructure and port services, including those related to the depth of port sea lanes, handling capacities and port fees, contributed to the high cost of logistics by sea. This caused some ports in Sumatra to function more as feeders for ports in Singapore (transhipment to Singapore, rather than direct shipping). The ratio of road availability, which facilitates land transport, was also less than optimal, thereby restricting inter-regional access of food producers to consumer areas.

The production pattern of agricultural commodities in the regions, which still has a high level of dependence on climatic and weather factors, caused vulnerability in food supply continuity across time and regions. Regional cropping patterns, which are largely still traditional and yet to optimize the use of technology, are the cause of the high dependence of food production on climatic factors. This situation often results in crop failures due to drought, natural disasters, or pest attacks. The prevalence of traditional patterns of food production means that the growth of food production largely relies on an increase in harvest areas, through the expansion of paddy fields, or an increase in cropping intensity.[4]

The issue of the scale of agricultural-productive land conversion also represents a challenge for the sustainability of food production. In Java, which is the country's main agricultural-productive area, the amount of agricultural land has actually tended to decline, from 5.6 million hectares in 2002 to 3.3 million hectares in 2014. This change in land use generally involves agricultural land being turned into plantations, industries or residential settlements. This, in turn, has had an impact on food production performance. Act No. 41 of 2009 on the Protection of Sustainable Food Agricultural Land, as well as Government Regulation No. 25 of 2012, explicitly regulate land conversion. Nevertheless, the Ministry of Agriculture has noted that not all regencies/cities have adopted the rules on sustainable food agricultural land in their respective Regional Spatial Plans (RTRW).

To address these challenges, the top priorities for ensuring the stability of regional food prices in the future are to strengthen the logistics infrastructure and support food production. The accelerated development of supporting infrastructure and improvement of food production are greatly needed to achieve food security, for which domestic agricultural products are to be prioritized. Regional Inflation Control Teams (TPID) should be more focused on efforts to strengthen regional food production capacities and logistics, while also striving to overcome the problem of inflation, which is structural in nature. In the short term, TPID needs to encourage the strengthening of inter-regional trade cooperation as a way of supporting food supply continuity across time and regions. This is associated with food surplus and deficit conditions among regions, as well as the continuity of production which affects food supply chains. Inter-regional cooperation also needs to be optimized as a means of marketing the agricultural produce of each region.

10.3. Regional Finance

Regional Budget Posture

The aggregate of regional budgets (APBD) in 2016 was higher than that of the previous budget year. The total revenue budget rose by 14.5%, higher than the increase in the expenditure budget of 13.6%. This brought about a slight narrowing of the APBD deficit in 2016 (Table 10.1). An improved budget posture was seen in all regions, with the highest budget increases in several provinces of Java and the Eastern Indonesia Region (KTI), such as West Java, Banten, Papua and East Nusa Tenggara.[5]

The increase in regional budgets on the revenue side was bolstered by Central Government transfers (16.2%), especially components of Special Allocation Funds (DAK) which rose almost three-fold. The increase in Central Government transfers in regional budgets was driven by the allocation of regional balanced funds and village funds in the 2016 Revised State Budget which increased by 24.6% over 2015's realization to Rp776.3 trillion. The total allocation of transfers to the regions was greater than the expenditure of Ministries, amounting to Rp767.8 trillion. Village Fund allocations also increased to Rp47 trillion, much higher than the realization in 2015 of Rp20.76 trillion. Meanwhile, Revenue Sharing Funds (DBH) declined (-31.5%), mainly from oil & gas and general mining due to the relatively poor performance of the oil and coal mining sector since 2015.

On the expenditure side, the aggregate allocation of capital spending in the regional budgets of 2016 increased in line with capital expenditure needs to support infrastructure development. The greatest increase in capital expenditure was seen in KTI, with an overall rise in excess of 30%, especially in the provinces of South Sulawesi (51%), East Nusa Tenggara (47%), South Kalimantan (22%), and Papua (15%). In addition, the allocation of transfer spending also rose significantly in all regions in line with Village Fund related transfer needs. On the other hand, the portion allocated to personnel expenditure was still large enough, thereby typically restricting the budget allocation for regional development.

4 Bappenas (National Development Planning Agency) estimates that the growth rate of rice production in Indonesia over the past five years was primarily attributable to the expansion of harvest areas (65.28%), while the remainder of this growth derives from growth in productivity, at 34.72% (as calculated from 2014 FAO data)

5 Aggregation of Regional Budget (APBD) data for provinces and regencies/cities and their districts

Table 10.1. Aggregate Regional Budget 2016

Rp trillion

Uraian	2015	2016*
A. Revenues	898.5	1.028.4
1.1 Regional Own Revenues	214.5	229
1.1.1 Local Tax	154.1	160
1.1.2 Local Retribution	12.5	11.7
1.1.3 Local Wealth Management Result	6.9	7.6
1.1.4 Others Own Revenues	40.9	49.7
1.2 Transfer	659.2	732.4
1.2.1 Balancing Funds	536.5	623.5
1.2.1.1 Revenue Sharing Funds	145.6	99.7
1.2.1.2 General Allocation Funds	355.3	382.4
1.2.1.3 Special Allocation Funds	35.5	141.3
1.2.2 Adjustment and Special Allowance Funds	122.7	108.9
1.3 Other Revenues	24.9	67
B. Expenditure	958.1	1.088
2.1 Personnel Expenditure	371.1	400.6
2.2 Goods and Services Expenditure	202.3	222.2
2.3 Capital Expenditure	222.1	248.7
2.4 Special Allocation Expenditure	55.9	67.3
2.5 Transfer	39.6	144.1
2.6 Other Expenditure	67.1	5
Surplus (Deficit) (A-B)	-59.63	-59.56

*preliminary figures as of May 2016
Source: Ministry of Finance, calculated

Realization of Regional Revenues and Expenditure

The realization of regional revenue in 2016 was lower than that in 2015 due to lower tax revenues. Relatively weak economic growth led to limited Own-Source Revenues (PAD) from tax (Figure 10.3). Revenues from DBH also decreased, primarily for Tax Revenue Sharing Funds. Meanwhile, DBH from natural resources began to improve, especially in Kalimantan and KTI, consistent with performance improvements in these regions' major sectors and rising global prices of key export commodities such as oil, coal, palm oil, copper, gold, and nickel.

Another component of local revenue, General Allocation Funds (DAU), also went down, with the largest decrease recorded in Kalimantan and KTI. This was partly influenced by the conversion of the distribution of DBH and DAU into non-cash form, in line with the implementation of the regulation on DAU distribution, aimed to maintain a reasonable balance position of local governments' funds.[6] In general, this regulation aims to encourage Regional Governments to optimize the use of their funds.

The regulation allows for the distribution of transfers to regions in the form of Government Securities (SBN) in the event that the funds position of a Regional Government exceeds a certain limit set by the Ministry of Finance.[7] The implementation of this regulation encouraged the lowering of Regional Government funds in the financial system by the end of 2016. However, the lower amount of outstanding funds from local governments was also affected by a decline in local revenues.

Budget austerity measures taken by the Government in the second half of 2016 also impacted on regional transfers in the form of DAU. The Government postponed the transfer of DAU to 169 regions, consisting of 26 provinces and 143 regencies/cities, amounting to Rp19.42 trillion, or about 5.04% of the total DAU allocation in 2016.[8] Three criteria were used to determine the postponement of DAU transfers. These were fiscal capacity, expenditure needs, and the approximate cash balance position of the region at the end of 2016. Several regions in KTI were quite affected because of their high dependence on DAU. Overall, however, the impact of the DAU postponements on the economy was relatively limited because of the relatively small amount of postponed DAU transfers compared to DAU as a whole. In addition, some regions which endured DAU transfer postponements also optimized the use of Accumulated Unused Budget Funds (SILPA) as well as existing local revenues.

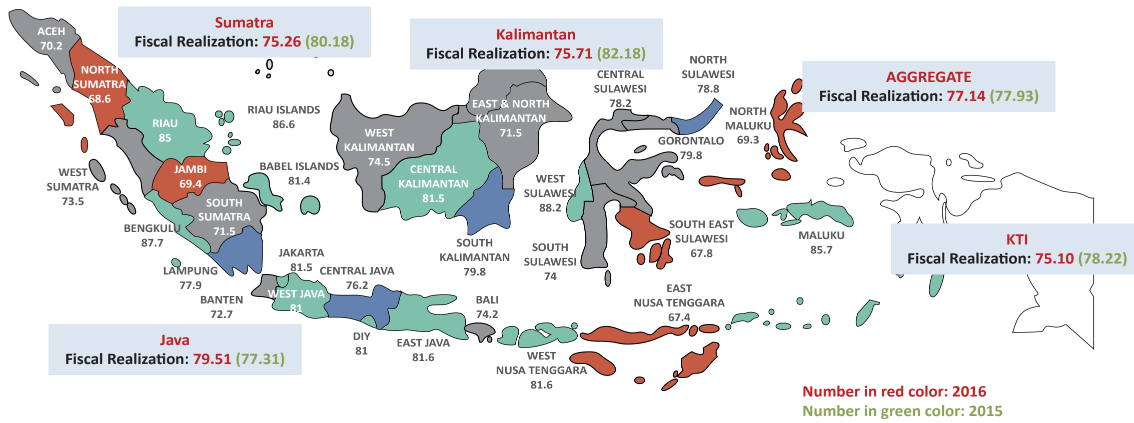
On the expenditure side, the realization of aggregate Regional Government expenditure in 2016 was lower than that in 2015. Expenditure realization in Sumatra, Kalimantan and KTI was restrained, most notably capital expenditure principally due to various constraints on infrastructure projects. These constraints included issues of land acquisition as well as other administrative issues related to project developments. A number of regions recorded low expenditure realization, including East Nusa Tenggara, Southeast Sulawesi, North Sumatra, North Maluku, and Jambi. The absorption of Regional Government expenditure was more sustained by spending on goods and services, particularly in Java. Meanwhile, the realization of aggregate transfer expenditure related to Village Funds reached 99%, thereby contributing to the expenditure realization performance in various regions.

6 Ministry of Finance Regulation No. 235/PMK.07/2015 as adjusted by the Ministry of Finance Regulation No. 93/PMK.07/2016 on the Conversion of the Distribution of DBH and/or DAU into non-cash form.

7 Unreasonable Cash Position refers to excess cash and cash equivalents after the deduction of operating expenditures and capital expenditures for the next three months, and with regard to the volume of the Regional Budget, the allocation of DBH or DAU, or other factors associated with the financial capacity of the region.

8 Ministry of Finance Regulation No. 125/PMK.07/2016 on the Postponement of the Distribution of Some General Allocation Funds in the 2016 Budgetary Year.

Figure 10.3. Realization of Regional Fiscal Expenditure



RGB ≥ 80% 75% ≤ RGB < 80% 70% ≤ RGB < 75% RGB < 70% Data is not available

Source: Team of Evaluation and Monitoring of APBN and APBD Realization, calculated

Regional Fiscal Challenges

The fiscal challenges faced by the regions were primarily associated with revenues that remained dependant on Central Government transfers as well as the less than optimal realization of Regional Government expenditures. Own-Source Revenues (PAD) were still unable to fully meet the expenditure needs of most regions. In 2016, a decrease of DBH in regions that have a dependency on natural resource exports served to depress PAD. This was especially true for regions outside of Java, such as East Kalimantan, Papua and the Riau Islands. The ratio of Own-Source Revenues (PAD) to Regional GDP was lowest in Sumatra, followed by Kalimantan, Java and the Eastern Indonesia Region (KTI). Significant increases in transfers to the regions were not matched by the below optimal realization of expenditure by local governments. At the technical level, numerous disbursement problems associated with regional expenditure were caused by the late submission of bills due to poor administrative discipline, the lack of qualified human resources in the procurement of goods and services, delays to or failures of tender processes, as well as the failure to meet certain prerequisites in carrying out work.

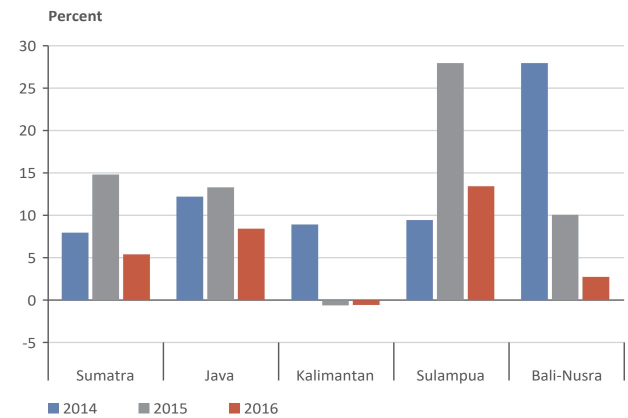
A range of initiatives were undertaken by both the central government and regional governments to accelerate the absorption of regional budget spending in 2016. The implementation of the regulation on the conversion of the distribution of DBH and/or DAU into non-cash form had positive implications for regional budget management. Through this regulation, efforts were made to encourage sound, efficient, and effective regional budget management, so as to stimulate an optimal and timely uptake of the budget as a means of expediting regional development. This reduced local government deposits in the financial system in unreasonable amounts. In addition, the speeding up of various budget-related administrative ratifications, the revision of procurement rules, the acceleration of infrastructure project tenders, efforts to tighten the monitoring of budget realization and budget balances on a periodic basis in conjunction with governors at the provincial level, as well as the optimization of technology to expedite procurement process (e-catalogues and e-procurement administered by Government Goods and Services Procurement Policy Agency/ LKPP) all helped to elevate the financial performance of regional governments.

Regional Financial Stability

In general, bank lending in the regions remained fairly weak in 2016. Bank lending in most regions was boosted by loans to the household sector, consistent with the solid household consumption. However, this was more of an offset from lower lending expansion to the corporate sector as businesses sought to undertake internal consolidation. Furthermore, credit risk, as reflected by Non-Performing Loans (NPL), increased, although the NPL ratio was still below 5%. While all regions endured slowing lending growth, this was particularly true for the areas of Bali-Nusra and Kalimantan which recorded negative growth associated with the limited recovery of mining activities. On the other hand, the amount of deposits went up in almost all regions, except in Bali-Nusra and Sulampua.

A downturn in overall bank lending in the regions was in line with the consolidation in business sector. The most prominent slowdown in corporate lending growth was seen in KTI, which a decline from 20.6% in 2015 to 9.4% in 2016

Chart 10.16. Regional Credit Growth to Corporate Sector



Source: Bank Indonesia

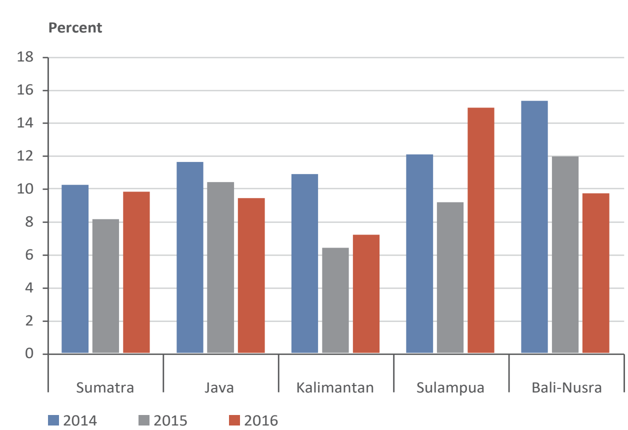
(Chart 10.16). This was mainly due to a slowdown in lending to the manufacturing and trade sectors in Sulampua, as well as to the hospitality sector in Bali-Nusra. Corporate bank lending in Sumatra also saw lower growth mainly due to a fall in lending to the manufacturing and trade sectors. Meanwhile, increased trading activity in Java was not complemented by an increase in corporate lending, which instead slowed from 13.4% in the previous year to 8.5% by the end of 2016. In Kalimantan, negative growth in corporate lending was still recorded in line with the limited mining and construction activities in this region.

Weakened corporate lending was coupled with increased credit risk, although the overall NPL ratio remained at below 5%. An increase in the NPL ratio for corporate loans was seen in almost all regions. In Java and Sumatra, the NPL ratio for corporate loans at the end of 2016 stood at 3.4% and 2.4% respectively, up from the corresponding position at the end of 2015 of 2.3% for both (Chart 10.17). The greatest increase in NPLs in the corporate sector took place in Kalimantan, with a ratio of 6.2% at the end of 2016, compared to the previous year's figure of 5.3%. This development must be seen in light of the region's limited mining and construction activities. In contrast, there was an improvement in the NPL ratio for corporate loans in KTI at the end of 2016, from 4.5% in 2015 to 4.2%. This was largely due to a significant decline in corporate NPLs in Sulampua from 5.2% in 2015 to 3.9%.

In line with the strong growth in household consumption, bank lending to the household sector in 2016 experienced increased growth in almost all regions. The highest increase occurred in Sulampua with growth of 15.3%, up from 9.2% at the end of 2015 (Chart 10.18). This increase in the growth of household lending in Sulampua was primarily driven by a greater distribution of Multipurpose Loans. Meanwhile, lending to the household sectors in Sumatra and Kalimantan grew by 9.8% and 7.2% respectively, up from the respective growth figures for these regions at the end of 2015 of 8.2% and 6.4%. In these two areas, the increased growth in household lending was similarly driven by Multipurpose Loans. In contrast, there was a slowdown in the growth of lending to the household sector in Java at the end of 2016 compared to the previous year's position - from 10.4% to 9.4%. This slowdown in Java mainly derived from slowing growth of both Multipurpose Loans and Vehicle Loans (KKB).

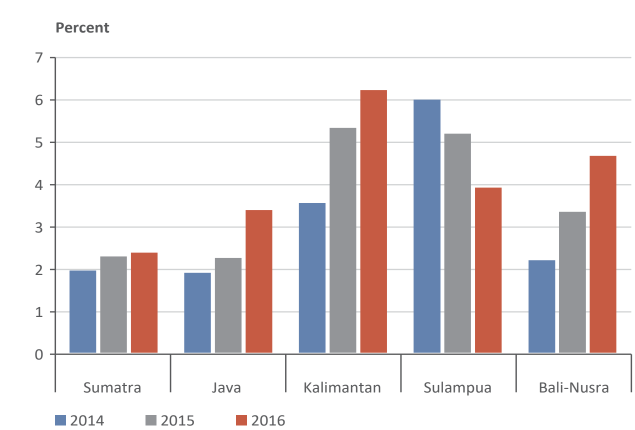
The risk for household loans remained under control at a fairly low level of NPL, reflecting an improvement in household income. In general, NPL ratios for KKB and Multipurpose Loans were lower than those in 2015. However, the credit risk for mortgages (KPR) increased. The highest NPL ratio for loans to the household sector was recorded in Kalimantan, with an increase to 2.1% from the 2015 figure of 1.8% (Chart 10.19). The increase in NPLs in Kalimantan was

Chart 10.17. Regional Credit Growth to Household Sector



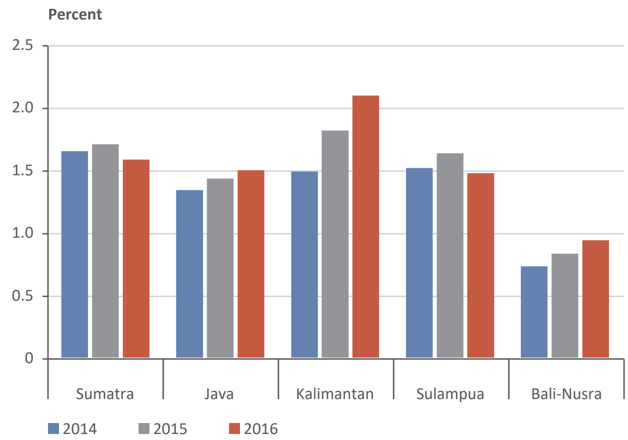
Source: Bank Indonesia

Chart 10.18. Corporate Sector Regional NPLs



Source: Bank Indonesia

Chart 10.19. Household Sector Regional NPLs



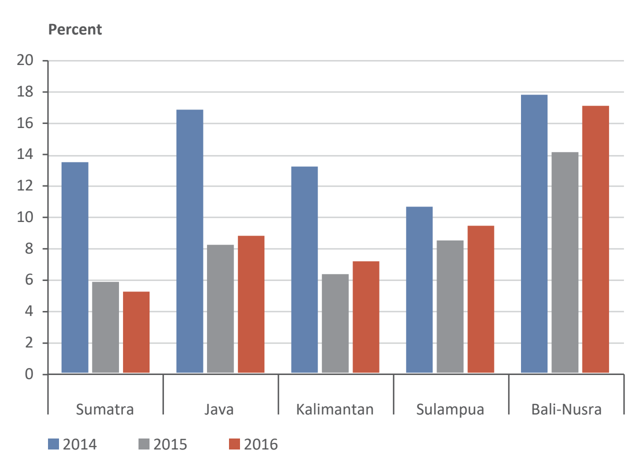
Source: Bank Indonesia

mainly attributable to a rise in bad mortgage loans to 4.0% from 3.4% in 2015. The NPL ratio for loans to the household sector in Java edged up slightly, from 1.4% in 2015 to 1.5% in 2016, mainly owing to an increase in non-performing loans for apartments and houses (KPA and KPR). On the other hand, the NPL ratios for household loans in Sumatra and Sulampua were lower in 2016 compared to those at the end of 2015. In Sumatra, a drop to 1.6% from 1.7% was recorded, mainly because of a decline in non-performing Multipurpose Loans. A decrease in non-performing Multipurpose Loans also spurred on an improvement in the NPL ratio in the household sector in KTI. In fact, all areas of KTI, both in Bali-Nusra and Sulampua, enjoyed an improvement in non-performing Multipurpose Loans.

After experiencing a continual decline since 2013, lending to Micro, Small, and Medium Enterprises (MSMEs) began to show increased growth in 2016. The highest growth in MSMEs lending took place in KTI, especially in Bali-Nusra, with growth of 17.1%, up from 2015's growth figure of 14.1% (Chart 10.20). The increased growth in lending to MSMEs in various parts of KTI was supported by additional lending to the trade sector. Accounting for a large portion (over 60%) of total loans to MSMEs in KTI, the trade sector enjoyed stronger lending growth of 11.5% (yoy) in 2016. MSME lending growth in the trade sector also boosted the overall performance of MSME credit in Java and Kalimantan, where respective growth rates of 8.8% and 7.1% were recorded in 2016, up from the corresponding 2015 figures of 8.2% and 6.3%. On the other hand, there was a slowing of MSME lending growth in Sumatra, from 5.8% in 2015 to 5.2%, due to a decline in lending to the trade and agriculture sectors. In terms of type of use, growth of MSME loans for working capital was strongest in all regions, except Sumatra. The increased growth in MSME lending was complemented by enhanced credit quality, as reflected in the improved NPL ratios for MSME lending in almost all areas. The only regions to suffer a deterioration in NPL to MSMEs were Java and Bali-Nusra, although the NPL ratios there remained under the risk limit of 5% (Chart 10.21).

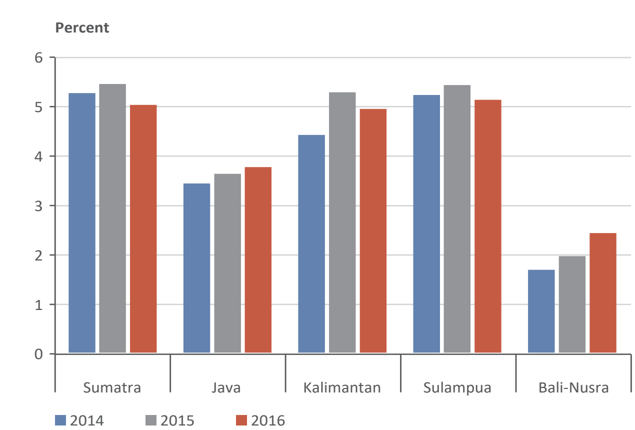
Lending by Regional Development Banks (BPD) was still limited in 2016, although slightly better than lending growth for banks as a whole. Growth in lending by BPD was sustained by growth in consumer loans which accounted for a dominant portion of BPD loans. A fairly large rise in the disbursement of investment loans by BPD was recorded, from 3.3% the previous year to 8.1%. Hence, lending by BPD was still constrained, most notably in Sumatra, followed by Java, Kalimantan and KTI. There was, however, an overall improvement in credit risk for BPD by the end of 2016, as reflected by a decline in NPL ratios, mainly in Java and Kalimantan. A slight increase in the BPD credit risk occured

Chart 10.20. Regional Credit Growth to MSMEs



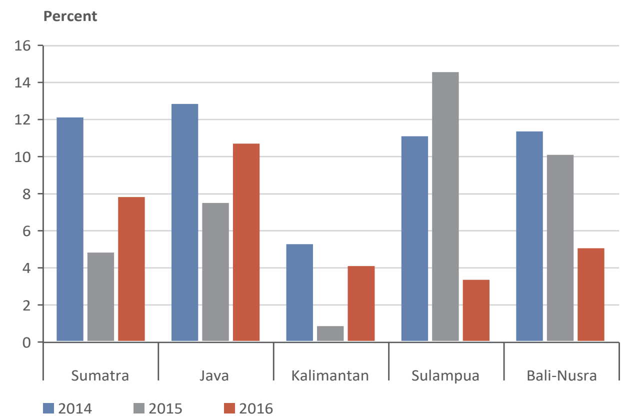
Source: Bank Indonesia

Chart 10.21. MSMEs Regional NPLs



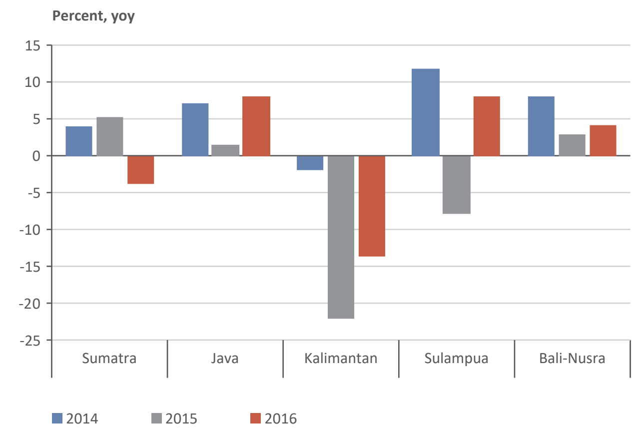
Source: Bank Indonesia

Chart 10.22. **Regional Bank Deposits Growth**



Source: Bank Indonesia

Chart 10.23. **Regional Nonbank Financing Growth**



Source: Financial Service Authority, calculated

in Sumatra and KTI, which primarily due to an increase in NPLs in the trade sectors there.

In terms of funding sources for banks, there was increased growth of deposits in 2016. The greatest growth in deposits occurred in Java with growth of 10.7% (yoy), higher than the corresponding figure in 2015 of 7.5% (Chart 10.22). In fact, increased growth in deposits was recorded in almost all regions, with the exception of Sulampua and Bali-Nusra which endured slowing growth. The overall increased growth of deposits primarily derived from savings and deposits, while the growth of demand deposits slowed. With deposits grew at a stronger rate than lending, the Loan to Deposit Ratio (LDR) decreased in most areas, especially in Java where it fell to 87.2% in 2016 from 89.8% at the end of 2015. The reason for this is that the distribution of deposits was concentrated in Java, while demand for loans from Java in 2016 was still relatively limited. On the other hand, the LDR in several regions outside Java was relatively high, even exceeding the 100% level in some cases. For example, the LDR of banks in KTI and Sumatra stood at 102.6% and 100.1% respectively, while in Kalimantan it was recorded at 91%. The high LDR in KTI was mainly recorded in Sulawesi (135.9%), while the LDR in Bali-Nusra and Sulampua stood at below 100%.

Amid the slowdown in lending, loan disbursements by Financing Companies (multifinance) increased in many regions in 2016 (Chart 10.23). This improvement in lending from financing companies occurred in almost all areas. Although there was an increase in lending from financing companies in Kalimantan, this area still experienced negative growth compared to the previous year. The region which recorded the highest increase in financing company lending growth was Java, with growth of 8.1% - the equivalent of growth in bank lending in Java. Meanwhile, lending by financing companies in Sumatra contracted by 3.7%. In terms of value, lending by financing companies was still considered relatively low compared to lending by banks, with an approximate share of 9% of total loans disbursed.

Box 10.1. Developing Competitiveness of Urban Areas as Engines for Regional Economic Growth

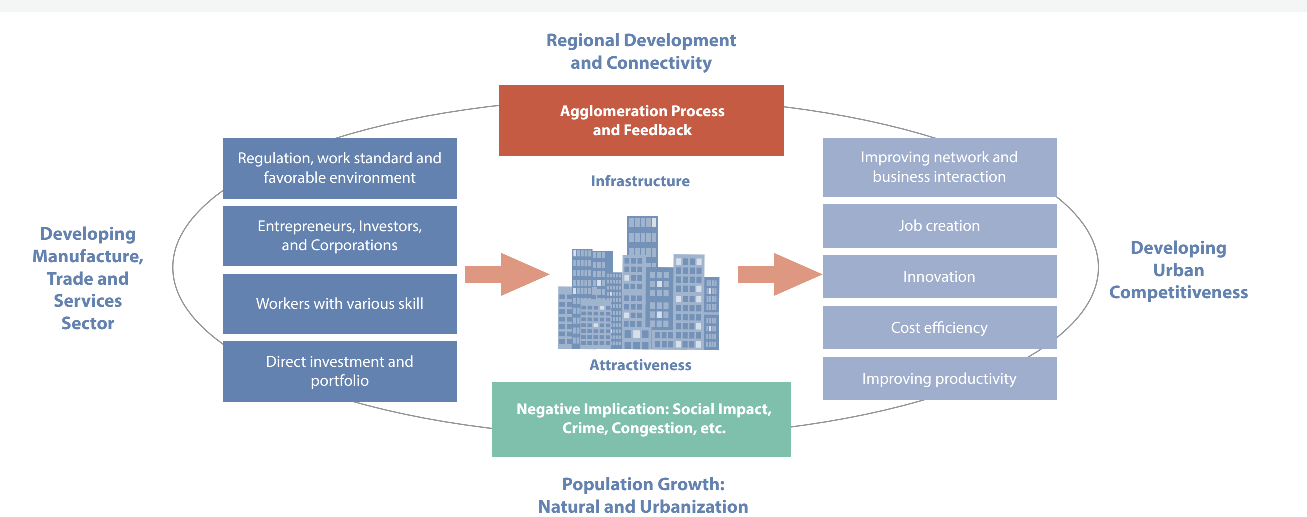
Urban areas, as the places where people with various kinds of skill and expertise tend to gather and meet, have great potential to become the driving force behind regional economies. The development and management of urban areas in a planned, integrated, and sustainable manner is key to improving the competitiveness of these areas as a means of fostering numerous economic activities, including creative industries, while also encouraging innovations that create further competitive advantages (Figure 1). To date, however, the competitiveness of urban areas in Indonesia in general still falls below that of its peer countries, as indicated, among other things, by the relatively low elasticity of the rise in income per capita for each increase in urbanization.

In the structure of regional economies, urban areas play a dominant role. In Java, the aggregate contribution of cities to the area's total Gross Regional Domestic Product (GRDP) in 2013 was a considerable 51.4%. The economy of Java, which dominates the national economy, has the highest concentration of the country's cities (58.5%). Sumatra, meanwhile, contributes 22.2% to GDP and has 22.1% of the country's cities. Urban areas in KTI and Kalimantan contribute 11.3% and 8.1% respectively to the total economy, and contain a respective 15.0% and 4.4% of the country's cities.

There needs to balance development among regions in order to balance inter-regional migration of people of a productive age. Disparities between the rate of urban development in Java and that outside Java are considered to be a major cause of migration to Java. This puts an ever-growing burden on Java, with the potential to fuel even greater and deeper inequality and poverty. Moreover, this situation, in turn, will hamper the economic development of regions outside Java. Although poverty rates have improved in all regions, the percentage of impoverished people in KTI is still higher than in other regions. Meanwhile, poverty rates in urban areas tend to be lower than those in rural areas (Chart 1).

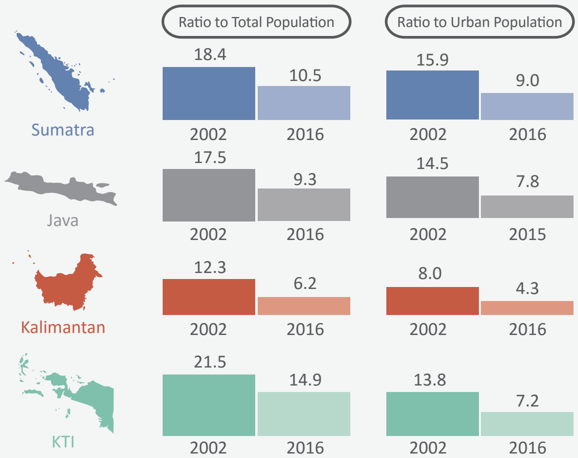
The 2015-2019 National Medium Term Development Plan (RPJMN) emphasizes the urban development strategies toward a competitive and sustainable manner, and seeks to ensure that this development is integrated with surrounding areas. Meanwhile, the medium to long-term urban development strategy is geared towards reaching the stage of livable cities in 2025, and then will gradually move towards green cities, and from there to smart cities by 2045. The development of cities outside of Java is also a priority so that equitable development across the country's many regions can be realized. From 2015-2019, urban development is being oriented towards the development of: (i) 5 new metropolitan areas outside of Java and Bali; (ii) 7 existing

Figure 1. Agglomeration and Urban Development Challenges



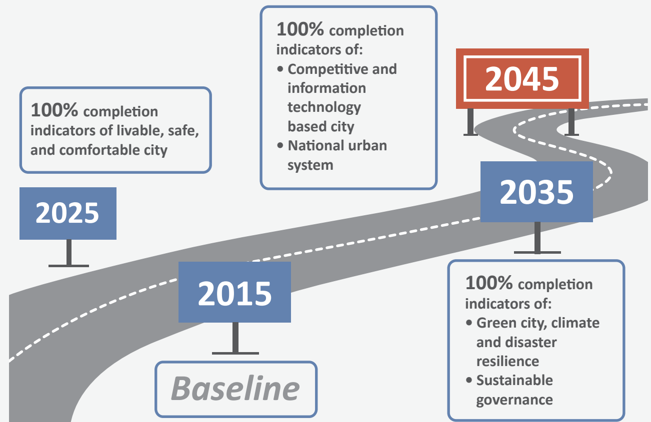
Source: Bank Indonesia

Chart 1. **Average Percentage of Poverty in Urban Area**



Source: BPS-Statistics Indonesia, calculated

Chart 2. **Urban Development 2015 - 2019**



Source: National Medium-Term Development Plan 2015, Government Work Plan 2016, National Development Planning Agency

metropolitan areas; (iii) 20 (medium size) autonomous cities outside of Java to be optimized as centers of national/ regional activity; (iv) 10 new cities; and (v) 39 new economic growth centers.

In general, the urban development still faces some challenges. The main obstacle in the development of urban areas is planning which has yet to be integrated with limited budget allocation. Other factors involved in the less than optimal development of urban areas include the limited capacities of local governments and basic infrastructure services, as well as the uneven quality of human resources. From a regional perspective, regions outside Java, in general, face the challenge of poor quality human resources. These regions typically have an outward migration pattern, or outflow of human resources, many of whom have better quality education and work in non-agricultural sectors, while the opposite is true for arriving migrants, or the inflow of human resources. The motives for migration, both within and between regions, are mainly to get a better education or to earn a higher income.

Urban development is particularly being geared towards the creation of smart cities by building a stronger interaction between the public and the government through the use of technology. This strong interaction allows for the active participation of the public in planning, implementation and monitoring processes, in an effort to enhance the efficiency of public services and urban management as well as the resilience and sustainability of cities. In term of implementation, the development of smart cities faces multi-sectoral challenges. These challenges are quite diverse, ranging from planning, development, and licensing services to the carrying capacity for the comprehensive fulfillment of Urban Services Standards (SPP). The smart city development initiative, which has been initiated in several cities, such as Surabaya, Bandung, Balikpapan, Jakarta and Makassar, is quite progressive. The development of smart cities being undertaken in those cities is focused on improving public services and strengthening financial governance and procurement.

Urban development must take into consideration the integration and linkage of the development of surrounding areas. The links between satellite cities and villages encourage the strengthening of the development and empowerment of rural areas, thereby narrowing existing gaps between cities and villages. Among the initiatives underway aimed at the development of rural areas based on information technology are Banyuwangi Smart Village and Digital MSMEs programs. These initiatives require the involvement of various stakeholders such as local governments, SOEs, and MSMEs. Furthermore, connectivity between smart cities and smart villages also promotes food supply efficiency, thereby reducing logistics costs. Financial inclusion in terms of expanding public access to finance supports the economic integration of urban areas with surrounding areas.

Looking ahead, to accelerate the development of cities, including the move towards smart cities, policy strategies should be prioritized on five things. First, there is a need for guidance maps on the development of smart cities which are complete, detailed, comprehensive and integrated, as laid out in the 2015-2019 National Medium Term Development Plan (RPJMN). Second, the development of cities needs to be focused on the completion of five urban service sectors namely (i) urban transport systems; (ii) the availability of clean water and sanitation; (iii) drainage, urban flood management and disaster risk management; (iv) housing and slum management; and (v) waste and refuse management. Third, DAK for Infrastructure should be more focused on providing clean water, sanitation, and drainage in the regions, while also supporting the revitalization of watersheds. Fourth, the utilization of information technology facilities to improve the data collection process should be optimized while, at the same time, also serving as a medium for the dissemination of information to the public. Fifth, the development of a supporting infrastructure for information technology should be encouraged, including ensuring broadband access in all regions. In addition, urban development needs to be accompanied by intensive measures aimed at controlling inflation in order to maintain public purchasing power as well as sustain a wage policy that allows for people to live a decent life.