

Public

TOWARDS A SECURE AND FAST RECOVERY



December 2020

INDONESIA ECONOMIC PROSPECTS

INDONESIA ECONOMIC PROSPECTS *Towards a Secure and Fast Recovery*

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Preface

The Indonesia Economic Prospects (IEP) is a bi-annual World Bank report that assesses recent macroeconomic developments, outlook and risks, as well as specific development challenges for the Indonesian economy. In doing so, the IEP aims to inform the public policy debate and is geared towards a wide audience, including the general public, the government, the private sector, civil society organizations, and other domestic and international stakeholders.

The IEP has two main parts. Part A highlights key developments in the Indonesian economy over recent months, and places these in a longerterm context. Based on these developments, and on policy changes over the period, the IEP regularly updates the outlook for Indonesia's economy. The ongoing COVID-19 pandemic highlights the continued need for sound macroeconomic monitoring to help the economy weather the impact of the crisis. Part B provides an in-depth examination of selected economic and policy issues, and an analysis of the country's medium-term development challenges.

The IEP is a product of the World Bank Jakarta office and receives strategic guidance from an editorial board chaired by Satu Kahkonen, Country Director for Indonesia and Timor-Leste. The report is prepared by the Macroeconomics, Trade and Investment (MTI) Global Practice team, under the guidance of Lars Christian Moller (Practice Manager) and Ralph Van Doorn (acting Lead Economist). The report is led Abdoulaye Sy (Senior Economist) and the core team is comprised of Alief Aulia Rezza, Angella Faith Lapukeni, Anthony Obeyesekere, Assyifa Szami Ilman, Dara Lengkong, Dwi Endah Abriningrum, Galuh Chandra Wibowo, Gracia Hadiwidjaja, Imam Setiawan, Indira Maulani Hapsari, Josefina Posadas, Kathleen Victoria Tedi, Neni Lestari, Ou Nie, Yus Medina, Ratih Dwi Rahmadanti, Sara Giannozzi and Virgi Agita Sari. Deviana Djalil provided administrative support and coordinated the organization of the report launch event. Dissemination is organized by Jerry Kurniawan and Nugroho Nurdikiawan Sunjoyo under the guidance of Lestari Boediono Qureshi. The report was formatted by Arsianti and edited by Janani Kandhadai.

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Part B was prepared by Animesh Shrivastava (Lead Agricultural Economist) with the help of Jan Joost Nijhoff and Mateo Ambrosio, and under the guidance of Dina Umali-Deininger (Practice manager).

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The findings, interpretations, and conclusions expressed in this report do not necessarily reflect the views of the Executive Directors of the World Bank or the governments they represent, or the Australian government. The World Bank does not guarantee the accuracy of the data included in this work. The data cut-off date for this report was November 27, 2020. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of the World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

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- July 2020: The Long Road to Recovery
- December 2019: <u>Investing in People</u>
- June 2019 : <u>Oceans of Opportunity</u>

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Ah	breviations	
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APBN	Anggaran Pendapatan dan Belanja Negara	LAR	Loan at risk
BI	Bank Indonesia	LHS	Left Hand Side
BLU	Badan Layanan Umum	MoF	Ministry of Finance
BLT	Bantuan Langsung Tunai	MOVE	Merrill Lynch Option Volatility Estimate
BoP	Balance of Payments	MSME	Micro Small Medium Enterpise
BPOM	Badan Pengawas Obat dan Makanan	MTI	Macroeconomics, Trade and Investment
BPNT	Bantuan Pangan Non Tunai	NPL	Non-Performing Loan
BPS	Biro Pusat Statistik	OECD	Organization for Economic Co-operation and Development
BULOG	Badan Urusan Logistik	O&G	Oil and Gas
CAD	Current Account Defisit	ОЈК	Otoritas Jasa Keuangan
CAR	Capital Adequacy Ratio	PEN	Pemulihan Ekonomi Nasional
COVID-19	Corona Virus Disease	РКН	Program Keluarga Harapan
CPI	Consumer Price Index	PLN	Perusahaan Listrik Nasional
DID	Dana Insentif Desa	PSBB	Pembatasan Sosial Berskala Besar
DTKS	Data Terpadu Kesejahteraan Sosial	Raskin	Beras untuk Rumah Tangga Miskin
EAP	East Asia Pacific	Rastra	Beras untuk Keluarga Sejahtera
EMCI	Emerging Market Currency Index	R&D	Research and Development
EME	Emerging Market Economies	RHS	Right Hand Side
EMRP	Ex-Mega Rice Project	SA	Social Assistance
FAO	Food and Agriculture Organization	Sakernas	Survei Angkatan Kerja Nasional
FBD	Food Borne Diseases	SBI	Sertifikat Bank Indonesia
FDI	Foreign Direct Investment	Sembako	Sembilan Bahan Pokok
FL	Food Law	SEMEFPA	Support for Enhanced Macroeconomic and Fiscal Policy Analysis
GDP	Gross Domestic Product	SMEs	Small Medium Enterprises
GFSI	Global Food Security Index	SNG	Sub-National Governments
GoI	Government of Indonesia	SOE	State-owned Enterprises
HHs	Households	SUN	Surat Utang Negara
IEP	Indonesia Economic Prospects	SUSENAS	Survei Sosial Ekonomi Nasional
IGC	International Grain Council	UCT	Unconditional Cash Transfer
IMF	International Monetary Fund	UMKM	Usaha Mikro Kecil Menengah
Jabodetabek	Jakarta Bogor Depok Tangerang Bekasi	VAT	Value Added Tax

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Executive summary: Towards a secure and fast recovery

The Indonesian economy is slowly recovering following the partial reopening of the domestic and global economies. Indonesia and the global economy were severely affected during the second quarter of this year by mobility restrictions and other public health measures introduced to contain the COVID-19 pandemic. Global economic growth and trade picked up during the third quarter as countries reopened partially and deployed unprecedented policy support to fight the pandemic-induced recession. Indonesia's economy also appears to be slowly recovering (growth contracted by 3.5 percent yoy in the third quarter against a 5.3 percent yoy contraction in the second quarter) driven by a partial recovery in consumption - including a significant increase in public spending - investment and net exports. But the impact of the crisis is lingering with domestic demand still significantly weaker than before the crisis (2.8 percent below its 2019 level as of September).

But the pace of recovery is uneven across sectors. Contact-intensive sectors – where jobs are less amenable to tele-work and that rely more on face-to-face interactions including with customers (such as transport, hospitality, wholesale and retail trade, construction, manufacturing) – were hit particularly hard and have only partially recovered. Less contact-intensive sectors such as finance, education, communication and telecommunication were more resilient. Sectors more exposed to foreign demand (such as mining and manufacturing) were partially shielded by the recovery in trade and some commodity prices from their lowest levels in mid-2020.

Several labor market indicators are significantly weaker than before the crisis. The National Bureau of Statistics (BPS) estimates that about 5.1 million people (2.5 percent of the working age population) have become unemployed or exited the labor market and another 24 million individuals (11.8 percent of the working age population) are working reduced hours due to COVID-19. The unemployment rate rose by 1.8 percentage points to 7.1 percent and the underemployment rate increased by 3.8 percentage points to 10.2 percent in the third quarter compared to the year before. In August, between 35 and 50 percent of workers reported earning less than before the crisis (World Bank, 2020d).

The monetary response to the crisis has been strong but involves macro-financial risks that need to be managed. Bold and ambitious central bank responses in advanced economies and emerging markets have eased global financial conditions and stabilized

capital flows. This in turn has allowed the Rupiah to recover and inflation to remain low amid weak domestic demand and energy prices. Bank Indonesia (BI) loosened monetary policy and deployed a large local currency government bond purchase program to further stabilize the economy and help finance the fiscal deficit BI government bond purchases reached 1.8 percent of GDP in August compared to 1.7 percent of GDP on average among emerging markets. BI bond purchases helped maintain financial stability amid high capital flight to safety in March and contributed to lowering long-end local currency government bond yields. But the program involves macro-financial tradeoffs and may heighten concerns about the credibility and effectiveness of monetary policy if not kept time-bound, well calibrated and communicated.

The fiscal response to save lives and livelihoods and stimulate the recovery has been decisive. Albeit relatively low compared to peer countries, public debt is rising, and the fiscal space risks tightening in the absence of reforms. The implementation of the COVID-19 fiscal package has faced bottlenecks in some areas, including in the health sector. But public spending has increased substantially this year to fight the pandemic and help households and firms cope with the crisis. The higher spending, recession-led drop in revenues, and the corporate income tax rate cuts are widening the fiscal deficit and financing needs. Public debt is rising (Table ES.1) and interest payments are projected to increase to 2.4 percent of GDP per year on average in 2021-2022, compared to 1.7 percent of GDP in 2019, and could increase further without reforms. A strategy is therefore needed to maintain the fiscal support for the recovery while meeting medium-term goals.

Notwithstanding the policy response, the current pace of recovery indicates that Indonesia will finish this year in recession, the first time in two decades. Our growth projection for 2020 is revised to -2.2 percent from -1.6 percent in September (Table ES.1), reflecting weaker-than-expected recovery in the third quarter and part of the fourth quarter and persistent mobility restrictions and social distancing amid rising COVID-19 cases.

Nevertheless, simulations show that the government's sizable social assistance (SA) response has the potential to cushion the poverty impact of the crisis this year. But improved effectiveness is critical to meeting the full impact of the SA response. World Bank simulations show that without any SA response, as many as 8.5 million Indonesians could be pushed into poverty this year due to the COVID-19 crisis. They also show that the government's SA package could significantly mitigate this impact, if fully implemented and perfectly targeted. But initial delays and difficulties in reaching some affected groups (particularly in the informal sector) has likely reduced the impact of the SA package. The findings also highlight that many people not initially covered by the SA system have likely fallen into poverty, particularly those who lost their jobs or work in highly affected contact-intensive services sectors. The resulting labor income losses could increase challenges of food affordability and food security, particularly among the poor who allocate a substantial share of their spending to food. Therefore, the coverage, adequacy and responsiveness of the social assistance package would need to be continuously monitored and improved to protect the poor and vulnerable.

The Indonesian economy is expected to start rebounding in 2021 and to gradually strengthen in 2022. This is predicated on a steady reopening of the economy in 2021 followed by further reopening and decline in social distancing through 2022 (Table ES.1). Growth would rebound to 4.4 percent in 2021 driven primarily by a recovery in private consumption. This assumes that consumer confidence improves, and that household income losses remain low thanks to improved labor market outcomes and adequate social assistance. Driven by stronger consumption and investment, growth would strengthen to 4.8 percent in 2022 as confidence improves provided an effective and safe vaccine is available to a large part of the population.

Table ES.1: The Indonesian economy is projected to recover gradually in the next two years, but uncertainty is high

		2019	2020	2021	2022
Real GDP growth	(Annual percent change)	5.0	-2.2	4.4	4.8
Consumer price index	(Annual percent change)	2.8	2.0	2.3	2.8
Current ac- count bal- ance	(Percent of GDP)	-2.7	-0.7	-1.4	-2.0
Government budget bal- ance	(Percent of GDP)	-2.2	-6.0	-5.5	-4.3
Public debt	(Percent of GDP)	30.2	37.5	40.9	43.0

Source: BI; Central Bureau of Statistics (BPS); Ministry of Finance; World Bank staff calculations

Note: 2020-2022 are estimated and forecast figures

Contact-intensive sectors would recover gradually in 2021-2022 but would remain subdued for certain services such as tourism. Growth in more export-oriented sectors such as manufacturing and mining would be supported by stronger global growth, trade and commodity prices.

This baseline outlook is subject to very high uncertainty associated with the dynamics of the pandemic in Indonesia and abroad. Growth could drop to 3.1 percent in 2021 and 3.8 percent in 2022 under a downside scenario of severe tightening of mobility restrictions and increased social distancing in Indonesia, and weaker global growth and commodity prices.

Indonesia's medium-term growth performance critically depends on mitigating the potential negative impacts of the crisis on investment, productivity and human capital. This requires improving further the effectiveness of the crisis response and advancing structural reforms to lift potential growth.

Looking ahead the focus for Indonesia is therefore recommended to be on securing and accelerating the recovery. A first order priority is to avoid setbacks due to adverse developments with the pandemic. Public health remains a top priority to allow the economy to stay open and to move towards a safe full reopening. This requires continued improvement in testing and contact tracing, and other public health measures as well as preparation to procure and widely administer an effective and safe vaccine once it is developed and approved.

Support to affected households and firms would need to be maintained until the crisis is under control and it is important that the policy framework for the recovery remains evidenced-based, transparent and adaptative. Key challenges for social assistance are to sustain the coverage and adequacy of existing programs and strengthen mechanisms to identify and enroll the poor and vulnerable. As the economy gradually recovers, liquidity support channeled through the financial sector would need to be re-calibrated and well-targeted at viable borrowers.

At the same time policies need to take a balanced view between the need for short-term support and the necessity of reaching medium-term goals and mitigating risks. It is important that monetary financing of the deficit is time-bound, well calibrated and transparent, and an exit strategy is clearly communicated. The application of loan forbearance measures would need to be closely monitored and a strategy to unwind them developed. On the fiscal side, some well prioritized tax and expenditure reforms could be implemented to help finance the crisis response and improve the fiscal space. These reforms could include increasing personal income taxation among top earners and raising excises on products with negative health and environmental impact such as tobacco, sugar-sweetened beverages, fossil fuels and single-use plastic bags, and reducing energy subsidies.

Lastly, this edition of the Indonesia Economic Prospects takes a deep dive into one important pathway for Indonesia's recovery and inclusive growth: food security.

The COVID-19 pandemic has put food security high on the public agenda. Global and national food markets and supplies remained resilient during the pandemic, and food prices were largely stable. But many households experienced food shortages due to labor income losses. The government significantly expanded various social protection programs to help households cope and embarked on an ambitious food estates development agenda.

Past policies have expanded domestic food supplies, but at a high cost. Most of the public expenditure in agriculture has been used to provide subsidies, with irrigation and fertilizer subsidies accounting for between half and three-quarters of overall central government spending. Such a heavy focus on subsidies crowded out the much-needed public expenditures on critical growth drivers such as generation and adoption of new technologies, extension, processing and marketing. Consequently, the supply side policies followed so far have not led to increases in agricultural productivity, diversification and competitiveness which are key drivers of long-term food security.

Going forward, the main structural food security challenges for Indonesia relate to improving affordability and nutritional security, especially for the poorer segments of society. Food prices in Indonesia are among the highest in the region. Apart from production costs, prices are high due to a range of offfarm factors like restrictions on domestic and international trade and high processing, distribution and marketing costs. Compared to other countries in the region, the Indonesian diet shows limited diversification and limited micronutrient availability. For instance, Indonesia ranks low internationally in terms of vegetable and fruits consumption per capita. The relatively un-diversified, low-nutrient diet has significant health, mortality and socioeconomic consequences. Children and the poor are disproportionally affected by diet-related health conditions, such as stunting and overweight problems. Indonesia suffers from high productivity losses due to food-borne diseases.

Three shifts are recommended to address food security challenges and modernize the agri-food system. First, the food security approach needs to be broadened to address Indonesia's needs and realize the comprehensive food security vision enshrined in the Food Law. Second, policy goals need to be re-adjusted, policy instruments re-tuned and the policy scope re-defined. Third, public expenditures need to be reallocated for a greater and more productive impact.

To implement this broader food security strategy, policy goals would need to be adjusted to enhance: (i) productivity: shifting from an exclusive focus on increasing output to increasing productivity of crops and livestock; (ii) diversification: transitioning from focusing on selected crops to towards a diversified agriculture that benefits all farmers; and (iii) competitiveness: moving away from protecting the domestic market with import restrictions to supporting the improved competitiveness of agriculture, and opening up vast export markets for domestic producers.

Finally, the quality of public spending in the agrifood system would need to be improved. First, it is recommended that the large fertilizer subsidies are reduced in a phased manner. Instead, these could be redeployed for strengthening technical and regulatory services, which are critical for improving agricultural productivity, managing production-related risks, reducing agriculture's environmental footprint and promoting (demand-driven) agricultural diversification. Second, more resources could be allocated to improve rural and urban infrastructure to improve the marketing position of farmers, reduce post-harvest losses, and mitigate food safety hazards. Third, more investment would be needed in food safety management and other measures for consumer protection. Finally, it is recommended to re-balance irrigation expenditures away from investment in new infrastructure to ensure adequate operations and maintenance as well as on-farm investments to raise irrigation system productivity.

The government could leverage the development of the agri-food system to advance inclusive growth. Further modernization of agriculture could boost growth, farm incomes, jobs, exports and environmental sustainability while delivering more choice, value, safety and convenience to consumers at more stable and competitive prices.

A. Economic and Fiscal Update

1. A diagnostic of the recovery

a. The economy appears to be slowly turning around but the recovery is partial and uneven.

The COVID-19 pandemic has forced economies around the world to shut down and progress towards full reopening has been difficult. Governments responded to the first wave of infections with domestic mobility restrictions, border closures, widespread testing, tracing and isolations. Indonesia introduced mobility restrictions in March and started a gradual relaxation in mid-June. Mobility restrictions in Indonesia were however on average less stringent compared to benchmark emerging market economies (EME) in Asia and other regions (Figure A.2). Some countries have been successful at containing the pandemic, including some EMEs in the East Asia and the Pacific (EAP) region¹, but cases have risen steadily in Indonesia (Figure A.3). Countries that did not manage to "flatten the curve" effectively have in many cases delayed their reopening or reintroduced stringent restrictions. In Indonesia, the province of Jakarta reintroduced mobility restrictions in mid-September, which were relaxed in phases starting in mid-October.²

The Indonesian economy is suffering from the COVID-19 through both domestic and external channels (Figure A.1). On the domestic front, mobility restrictions and social distancing depressed economic activity. Contact-intensive sectors that need employees at the workplace and face-to-face contacts with customers are vulnerable to mobility restrictions and often the most labor intensive (e.g. services, certain activity in manufacturing). On the external front, Indonesia is exposed to the COVID-19 shock through trade and commodity prices as well as investment and portfolio flows. Economic growth among Indonesia's top export destinations contracted by 4.8 percent yoy in the first half of this year³ and 160 countries around the globe are projected to be in recession in 2020, including all G20 countries and EMEs except China (World Bank, 2020a). Several sectors including mining and manufacturing have significant exposure to foreign demand. Lastly, Indonesia is dependent on capital flows to finance its fiscal and current account deficits.

Indonesia experienced its deepest contraction in two decades during the second quarter of this year. Mobility restrictions around the world led to a rapid and sharp contraction in global economic activity. Indonesia's economy also contracted as domestic demand fell (-5.3 percent yoy in Q2 2020 after 3 percent yoy in Q1 2020), but less than in countries that implemented more stringent lockdowns (Figure A.4)4 or that were more exposed to foreign demand (World Bank, 2020b). Within Indonesia, provinces that experienced increased stay-athome - as opposed to mobility to work, commute and retail places - during the implementation of the mobility restrictions had a deeper contraction in the second quarter (Box A.1).⁵ These findings suggest that a substantial part of the growth performance during this period can be explained by increased social distancing and its negative impact on domestic demand while stronger net exports supported growth.

¹ The EAP countries are Cambodia, China, Indonesia, Lao PDR, Malaysia, Mongolia, Myanmar, Papua New Guinea, the Philippines, Thailand, Timor-Leste, Vietnam and the Pacific Island Countries.

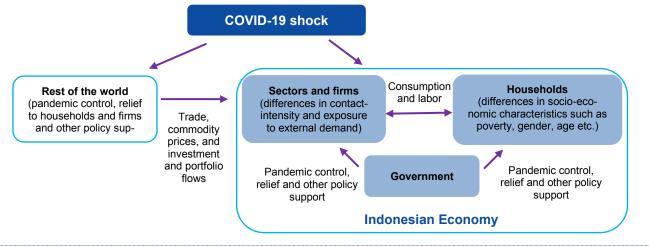
² The existing evidence suggests that countries that implemented early integrated containment measures were more successful at flattening the curve (World Bank, 2020b). The timing for the lifting of lockdowns have also been found to be play an important role (IMF, 2020a). But lockdowns have been less effective in countries with high population density, informality and poverty (Deb, Pragyan, et.al, 2020).

³ Indonesia's top exports destinations are: China, Japan, United States, India, Singapore, Malaysia, Thailand, Euro Area and Australia.

⁴ More generally countries that enforced more stringent lockdowns experienced deeper contractions (IMF, 2020a).

⁵ While swift and stringent containment policies may induce higher shortterm economic costs, they could reduce the need for future lockdowns and social distancing and thereby the medium-term economic and social impact of the pandemic.

Figure A.1: The COVID-19 pandemic has hit the Indonesian economy through external and domestic channels



Source: World Bank staff analysis, various sources

Figure A.2: Countries had different strategies at tightening mobility...

(Government Response Stringency Index)



Source: Oxford COVID-19 Government Response Tracker, World Bank staff calculation

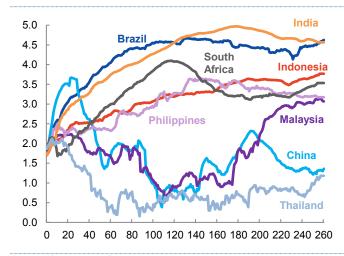
Note: The stringency index is a composite measure based on nine response indicators including school closures, workplace

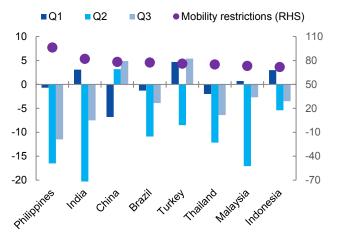
closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest). Green represents an index of stringency of 33 and below, yellow (33-66) and red (66 and above).

Figure A.3: ...with varying success at flattening the curve (Seven-day rolling average of new cases, by number of days since 50 average daily cases were first recorded, log scale)

Figure A.4: Indonesia's economy shrank less than EMEs that implemented tighter mobility restrictions

(GDP growth in LHS, percent yoy,; Median value of the mobility stringency index in Q2 in the RHS)





Source: OECD Quarterly GDP database, CEIC, Oxford COVID-19 Government Response Tracker, World Bank staff calculation Note: The histograms show GDP growth in O1 to O3 2020 with values in the

Note: The histograms show GDP growth in Q1 to Q3 2020 with values in the left-hand axis. The dots show the median value of the stringency index of mobility restrictions in Q2 in the right-hand axis.

Source: Our World in Data, World Bank staff calculation

The economy appears to be turning around but partially and at a slow pace (Figure A.5). The economic contraction slowed down in the third quarter (-3.5 percent yoy) driven by stronger net exports and a substantial rebound in public consumption as government pushed to accelerate the implementation of its fiscal relief and recovery package. Private consumption and investment only recovered partially, and domestic demand remains weak (2.8 percent below its 2019 level as of September). Social distancing, labor income losses and precautionary behavior continued to weigh down on private consumption. Weak economic activity and high uncertainty led to further decline in investment in machinery and equipment, highlighting threats to medium-term growth potential.

The recovery is also uneven across sectors. Social distancing reduces economic activity through lower production and consumer demand except if goods and services can be produced and delivered to customers safely. In this respect, contact-intensity - defined as the ability of a sector to perform work and serve customers remotely - contributes significantly to a sector's resilience to the COVID-19 shock. Less contact-intensive sectors such as finance, education, communication and telecommunication have been more resilient (Figure A.6). But, sectors with a low share of tele-workable occupations that also depend on face-to-face interaction with customers contracted more sharply during the second quarter (e.g. transport, hotel & restaurant), Figure A.6. Growth in these sectors remained subdued during the third quarter, indicating persistent social distancing. Economically important sectors such as mining and manufacturing have substantial exposure to foreign demand, at levels comparable to China's and Malaysia's manufacturing sectors.⁶ These sectors were partially shielded from the sharp contraction by the recovery in global trade and prices of some of Indonesia's export commodities since May (World Bank, 2020c).

b. Unemployment and underemployment have increased substantially and many workers report earning less.

Unemployment and underemployment are significantly higher than before the crisis. The National Bureau of Statistics (Badan Pusat Statistik/BPS) finds that 5.1 million people (2.5 percent of the working age population) have lost their jobs and 24 million individuals (11.8 percent of the working age population) are working reduced hours due to COVID-19, with substantially larger impacts in urban areas and among men (Figure A.7). The BPS estimates that the unemployment rate rose by 1.8 percentage points to 7.1 percent and the underemployment rate increased by 3.8 percentage points to 10.2 percent in the third quarter compared to the year before. However, these figures represent some partial improvement compared to the second quarter. The World Bank High-frequency monitoring of COVID-19 Impacts (Hify) survey shows that the share of household breadwinners who stopped working dropped was 24 percent in May compared to 10 percent in August (Figure A.8).

Many workers report earning less than before the crisis highlighting threats to poverty and food security. The Hify survey shows that 47 percent of people that were working in August also reported reduced incomes, with high prevalence across all sectors (Figure A.8).⁷ The crisis has also led to increased employment in part-time and non-salaried work.⁸ Female labor force participation rose slightly, possibly to compensate for increased job losses among males.⁹ Despite muted inflation, the impact of the crisis on labor income could increase challenges of food affordability and food security among the poor and vulnerable (Box A.2).

⁶ Analysis OECD Trade in Value added database shows that the share of domestic value added embodied in foreign demand (a measure of total export of final and intermediate inputs) in Indonesia's manufacturing and mining sectors are respectively 27 and 55 percent, respectively compared to respectively 29 and 67 percent for China's and Malaysia's manufacturing sectors.

⁷ This is consistent also with results of the World Bank COVID-19 Business Pulse Survey in May 2020 (World Bank, 2020e) which shows that 25

percent firms adjusted working hours as a way to reduce labor cost. 14 percent of firms choose to reduce wages or apply leave without pay and only 12 percent of firms fire their employees.

⁸ In August 2020, the share of part-time workers among female was 36 percent, and 19.4 percent among male workers.

⁹ Female labor participation increased by 1.3 percentage point in August to 53.1 percent while the male labor participation rate dropped by 0.8 percentage points to 82.4 percent.

Figure A.5: The economy appears to be turning around... *(contribution to GDP growth, yoy)*

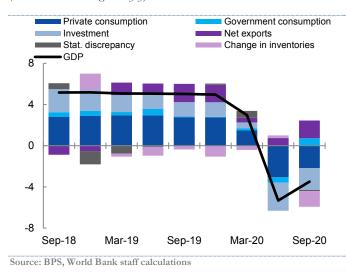
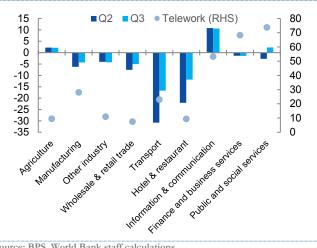


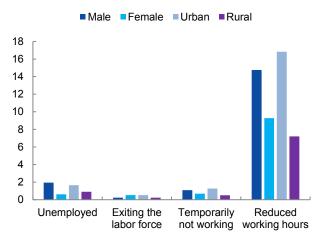
Figure A.6: ...but at an uneven rate

(LHS shows GDP growth in Q2 and Q3 2020, in percent yoy; RHS shows the share of jobs that can be done remotely)



Source: BPS, World Bank staff calculations Note: Definition of tele-workable jobs is taken from Dingel and Nieman's (2020). Other industry includes construction and utilities (water, sewerage and electricity and gas). Finance and business services also includes real estate. Public and social services include public administration, education, health and social services. Averages are weighted by sector share of GDP.

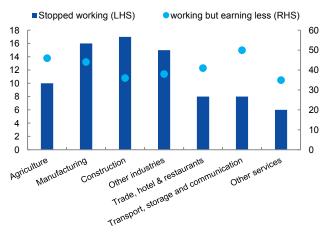
Figure A.7: Unemployment and underemployment have increased significantly relative to the pre-crisis period *(in million people)*



Source: BPS November 2020 Labor Press Release and World Bank staff calculation

Figure A.8: People have been able to return to work but many people are earning less





Source: World Bank Indonesia High-frequency monitoring of COVID-19 Impacts Survey (2020), Round 3 conducted between July and August 2020. Note: the bars show the share of household breadwinners' sector of employment, work status and evolution of earnings in July-August 2020.

Box A.1: The impact of stay-at-home due to COVID-19 on economic growth in Indonesia

Like in other countries, central and local governments in Indonesia implemented mobility restrictions and mandatory social distancing measures to contain the spread of the COVID-19 pandemic. Individuals also adopted voluntary social distancing and reduced their mobility in the face of higher health risk. But there were significant differences in mobility across districts and provinces in Indonesia, including stay-at-home behavior (Figure A.1.1). Using Google Mobility Report, stay-at-home is defined as mobility to residential areas as opposed to mobility in workplaces, transit stations, retail stores etc. Cali and Ryandiansyah (2020) use these spatial differences to assess the relationship between stay-at-home and provincial economic growth.



Figure A.1.1: There are significant differences in stay-at-home behavior across provinces

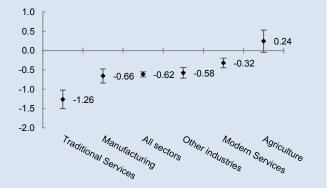
Source: Cali and Ryandiansyah (2020) using Google Mobility Report.

Note: Stay-at-home is defined as mobility to residential areas. The graph shows the percentage point change in stay-at-home relative to baseline between February 15 and June 30.

They find a strong negative relationship between GDP growth and stay-at-home in a province. A 10 percent point increase in stay-at-home in a province reduces its GDP growth rate by 6.2 percentage points relative to a pre-COVID trend growth rate of 5.1 percent (Figure A.1.2). This indicates that the increase in stay-at-home between March and June could explain about 60 percent of the growth outcome in Q2 2020.¹

The relationship between mobility and growth is different across sectors. The elasticity of growth with respect to stay-at-home is larger in absolute terms for more contact-intensive traditional services (such as wholesale and retail trade, accommodation, transportation, etc.) as well as for manufacturing and other industries compared to less contact-intensive modern services (such as finance, telecommunication and communication, education, health etc.), Figure A.14. The effect of lower mobility during COVID-19 on agriculture is positive – potentially due to migration to rural areas – but it is smaller and statistically insignificant.

Figure A.1.2: Traditional contact-intensive services and manufacturing were more affected by lower mobility



Source: Cali and Ryandiansyah (2020) using Google Mobility Report. Note: The graph shows the elasticity of GDP with respect to stay-at-home for each sector. Vertical lines represent 95 percent confidence intervals around the point estimates. Traditional services include wholesale and retail trade, accommodation and food service activity, transportation and storage. Modern services include financial and insurance activity, real estate, telecommunication, education, health, and public administration.

¹ Between April and June 2020, stay-at-home behavior was on average 13.4 percentage points higher than pre-COVID-19 baseline.

Box A.2: Food price inflation and household food security

Food price inflation is a major driver of inflation in Indonesia. Food accounts for 33.7 percent of the Consumer Price Index (CPI) basket and is comprised of raw food (18.9 percent of the CPI basket), processed food (7.0 percent) and food provision/restaurant (8.7 percent).¹ Food price inflation averaged 5.1 percent in 2015-2019 compared to 4.4 percent for energy prices inflation and 4.1 percent for overall inflation. The main driver of food price inflation was raw food, particularly rice, chicken, eggs, onion, garlic, and chilies. Food prices have also been more volatile than other products and services. Research shows that high food price inflation in Indonesia is correlated with weather patterns, agricultural production and food import, domestic demand and seasonal factors such as Ramadan and other religious events.²

Poor and vulnerable households are more exposed to high and volatile food prices. Food accounts on average for 55.3 of household spending (source: Household Socio Economic Survey, SUSENAS). But the share of food in total expenditure is inversely related to income. Households in the bottom decile allocate 64.3 percent of their spending to food while the fifth and sixth decile allocate 57.3 percent and the top 20 percent allocates 41.9 percent. The differences are even more striking for staple food such as rice, where the poorest 20 percent spend 12.2 percent on rice, compared to only 4.1 percent of the richest 20. Poorer households also have higher incidence of malnutrition which is linked to insufficient caloric intake and health conditions.

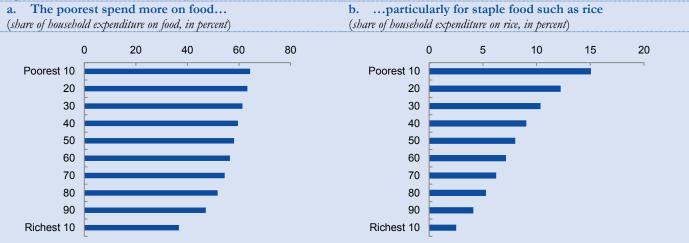


Figure A.2.1: Household food expenditure

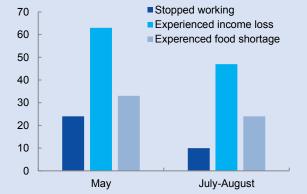
Source: SUSENAS 2019, World Bank Staff Calculation

The COVID-19 shock is exacerbating food security concerns related to food affordability. Food price inflation has fallen sharply since March amid weak demand, low commodity prices, a strong harvest and despite global supply chain disruptions due to COVID-19 and seasonal factors (Ramadan). But the COVID-19 crisis could negatively impact household income and therefore the relative affordability of food both in the short and mediumterm. Existing evidence indicate that the shock reduced labor income and weakened food security amid the PSBB but that both have improved as mobility restrictions were gradually lifted, social assistance was deployed, and the labor market partially improved (World Bank, 2020d). But job market scarring of COVID-19 could affect labor income in the medium-term - particularly among the low skilled, women and youth – thereby heightening food insecurity risks.

Source: SUSENAS 2019, World Bank Staff Calculation

Figure A.2.2: The pandemic's adverse labor market impacts could exacerbate risks on food affordability

(percent of households in May and July-August 2020)



Source: World Bank High-Frequency Monitory of COVID-19 Impacts, Round 1 and Round 3. The bar on income loss is for individuals who kept working.

¹ The CPI weight of food was recently revised by the BPS to 33.7 percent down from 35 to reflect changes consumer expenditure patterns. ² Ismaya and Anugrah, 2018

2. The policy response to the crisis

a. The monetary response to the crisis is unprecedented and bold but some programs require sustained good practice to remain adequate.

An unprecedented and bold policy response by central banks around the world has stabilized financial markets and eased financial conditions (Figure A.9). Central banks worldwide introduced aggressive policy countermeasures such as cutting interest rates, providing liquidity to the banking system, and purchasing government securities to ease monetary conditions, improve market functioning and finance government deficits in some cases. In Indonesia, low inflation and a more stable Rupiah provided space for BI to cut interest rates by a total of 125 basis points since the beginning of the year to a record low of 3.75 percent. BI has also opened the policy toolkit to ease monetary conditions.¹⁰

BI's local government bond purchases are significant and the banking sector's exposure to government bonds has increased. Beyond advanced economies, central banks in at least 18 EMEs have engaged in purchases of various securities this year, including local currency bonds. The size of these purchases varies depending on the objectives and duration of the asset purchases and the available policy space. BI purchases during the first half of the year were aimed at stabilizing and improving the functioning of bond markets in the face of large exit of non-resident investors from the local-currency bond markets. Since July, they have also contributed to financing the government deficit. As of August, BI local currency government bond purchases reached 1.8 percent of GDP (of which 0.9 percent of GDP in the primary market) compared to an EM average of 1.7 percent of GDP (Figure A.10). In October, these purchases rose further to 2.9 percent of GDP.¹¹ In addition, the banking sector has substantially increased its holding of government securities. The share of banks' ownership of local currency government securities rose to 39.2 percent of total outstanding at the end of October, from 26.9 percent at the end of March.12

Capital flows and the Rupiah have stabilized with the easing of global financial conditions. As external financial conditions eased, global bonds issuances by the government and SOEs have supported the return of portfolio flows since April (Figure A.11) in line with other EMs. The return of portfolio flows and BI interventions have helped stabilize the Rupiah after the high depreciation and volatility in March (Figure A.12). But equity and debt outflows from local currency bonds picked up slightly in August and September (Figure A.11). Net foreign direct investment (FDI) inflows also fell below their pre-crisis levels during the first half of the year (USD 8.8 billion vs USD 14.4 billion in 2019) due to weak economic activity and commodity prices, and high uncertainty.

BI's bond purchase program has contributed to lowering local currency government bond yields. But the program involves macro-financial risks that need to be managed. The stabilization of debt outflows in the second quarter was accompanied by a decline in local and foreign currency government bond yields (Figure A.13). The 10-year Rupiah-denominated government bond yield declined further in August, while the 10-year USD-denominated bond yield remained substantially above its pre-COVID-19 level indicating that BI's purchases of local currency markets has contributed to lowering long-end local government bond yields (Figure A.13).¹³ BI intends to act as a standby buyer of government bonds as a back stop financing source until 2022. Central bank's exceptional financing of fiscal deficits is appropriate when time-bound, adequately sized, and implemented in a way that safeguards the credibility of fiscal and monetary policy. Moreover, debt outflows, Rupiah depreciation and weaker inflation anchoring are important risks to assess and manage.

External buffers are improving with the narrowing of the current account deficit and higher international reserves. The current account deficit dropped to 0.7 percent of GDP during the first nine months of this year compared to 2.7 percent of GDP at the end of 2019 (Figure A.14). The fall in domestic demand led to a sharp contraction in imports while exports were aided

¹⁰ BI has sought to ease liquidity conditions by (i) lowering reserve requirement ratios for banks; (ii) increasing the maximum duration for repo and reverse repo operations (up to 12 months); (iii) introducing daily repo auctions; (iv) increasing the frequency of FX swap auctions for 1, 3, 6 and 12-month tenors from three times per week to daily auctions; and (v) increasing the size of the main weekly refinancing operations as needed.

¹¹ Comprising purchases made in sovereign primary market (2.0 percent of GDP), and those in secondary market (0.9 percent of GDP). By October

^{2020,} purchases in primary market represented 34.8 percent of target purchases.

¹² As part of its macroprudential policy, <u>BI reduced banks' reserve require-</u> ments in exchange of macroprudential buffers in the form of sovereign bond holdings, effective on May 1st 2020.

¹³ Based on a sample of EM, the IMF (IMF, 2020c) finds that central bank local asset purchase programs have lowered 10-year local currency bonds by 20 to 60 bps.

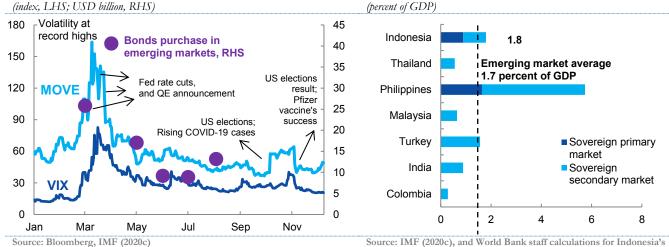
by the recovery in trade, including from the strong rebound in China, and global prices of some of Indonesia's export commodities (including base metals and rubber). These developments together with the weak oil prices relative to pre-COVID-19 have improved Indonesia's terms of trade and widened the goods trade surplus. The significant goods trade surplus has helped reverse the current account balance to a surplus for the first time in nine years (Figure A.14). As of November, international reserves could cover 9.5 months of imports and external debt repayment.

Figure A.9: Central bank interventions around the world have helped ease and stabilize financial conditions (*index*, LHS; USD billion, RHS)

Low inflation and a stable Rupiah provide some room to maintain accommodative monetary policy if warranted. The economic slowdown and muted domestic demand have opened a substantial negative output gap. With negative output gap, low energy prices and a stronger Rupiah, inflation has dropped to recordlow levels (1.6 percent yoy as of November), below BI's target (2-4 percent), and interest rates are firmly in positive territory.

Figure A.10: As of August, BI's bond purchase pro-

gram was slightly higher than the EM average



Note: Emerging markets include 14 countries: Croatia, Poland, Chile, Colombia, Thailand, Hungary, Philippines, Indonesia, India, Malaysia, Romania,

South Africa, Turkey and Ghana. Only 7 of them shown in Figure A.2. In Figure A.1, purple dots represent the size of announced purchase programs (not the actual size of purchases). The CBOE's VIX (Chicago Board Options Exchange Volatility Index) measures the expected volatility of U.S. stock market over the next 30 days. Whereas, the MOVE (Merrill Lynch Option Volatility Estimate) index tracks the movement in U.S. Treasury yield volatility.

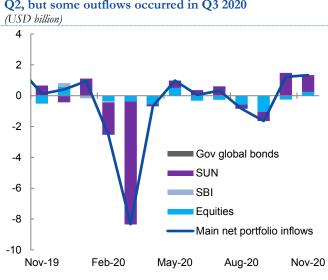
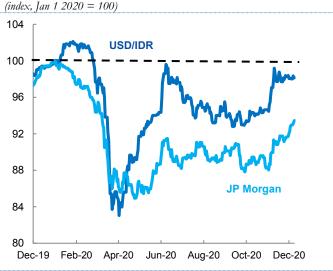


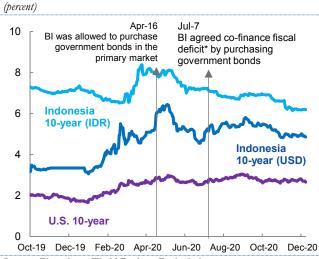
Figure A.11: Portfolio flows have partially recovered in Q2, but some outflows occurred in Q3 2020

Figure A.12: The Rupiah has recovered and stabilized in recent months



Source: CEIC, BI, and World Bank staff calculations Note: SUN and SBI are local currency bonds. Source: CEIC, JP Morgan, and World Bank staff calculations Note: JP Morgan Emerging Market Currency Index (EMCI) tracks the movement of 10 major EM currencies against the USD

Figure A.13: Local currency government bond yields have fallen from their peak this year



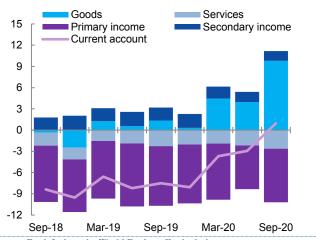
Source: Bloomberg, World Bank staff calculations Note: * Co-financing fiscal deficit, particularly for the implementation of PEN (The National Economic Recovery) program by purchasing more government bonds.

b. The financial sector is overall sound but temporary loan forbearance measures may be masking the full extent of vulnerabilities.

Together with central banks, financial authorities forcefully responded to the pandemic. As of end October, a total of 47 COVID-related financial sector policy measures for banks and non-bank financial institutions have been introduced by different authorities.¹⁴ These policy measures are aimed at supporting financial institutions and business players experiencing difficulties due to the ongoing pandemic, in order to promote economic recovery while maintaining financial stability.

The pace of credit growth fell sharply despite the significant policy support as economic activity collapsed. Banks have drawn down a significant part of their statutory reserves between January and May in extending credit, and the interest rate spread of bank lending has hovered steadily between 4 and 4.2 percent. Total credit to firms by commercial banks stood at IDR 5,520 trillion in August, a mere 1 percent yoy growth rate as opposed to the 6-8 percent pace registered between February and April (Figure A.16). Private consumption and investment growth have slowed down in tandem with credit growth in recent months. As of August, MSMEs received only around 18 percent of total

Figure A.14: The current account balance reversed to a surplus for the first time in nine years, driven by weak domestic demand and stronger terms of trade (USD billion)



Source: Bank Indonesia, World Bank staff calculations

bank lending to firms.¹⁵ Yet, many MSMEs are still facing reduced cashflow and financial difficulties.

The available data on non-performing loans suggests that the banking sector is overall sound and resilient. The system-wide non-performing loan (NPL) ratio edged up slightly since the beginning of the pandemic and the capital adequacy ratio remains well above the regulatory minimum (Figure A.15). The loan-to-deposit ratio¹⁶ dropped to 85.4 percent while the shortterm liquidity ratio¹⁷ is close to 25 percent indicating ample liquidity in the banking system.

But loan forbearance measures may be temporarily masking the true extent of vulnerabilities. Loan forbearance measures deployed in response to the pandemic may be deflating the level of NPLs and inflating real capital ratios. For instance, as of late September 2020, over 100 banks have participated in the Financial Services Authority (OJK)'s loan restructuring programs which has benefited 15.4 percent of bank debtors (for a total of IDR 885 trillion) and 182 financial companies (for a total of IDR 169 trillion). These restructured

¹⁴ According to the COVID-19 financial policy compendium maintained by the Finance, Competitiveness and Innovation Global Practice, World Bank, these include: (i) 14 banking sector measures, mainly prudential/regulatory forbearance measures and borrower support measures, (ii) 11 li-

quidity and funding measures, including liquidity relief measures, asset purchases and policy rate cuts, (iii) 11 measures related to financial market functioning and NBFIs and (iv) 5 payment system measures.

¹⁵ Source: Financial Service Authority (OJK) Banking Statistics.

¹⁶ Defined as liquid asset/ (deposits + short-term funding).

¹⁷ Defined as liquid asset/ (deposits + short-term funding).

loans currently not yet classified as NPLs due to the exceptional measure.¹⁸ The loan restructuring program was initially intended as a one-year program but has been extended until mid-March 2022 given the ongoing crisis. While such loan forbearance measures may be warranted during extraordinary times, financial institutions need to ensure that the underlying loan restructurings are based on robust selectivity and viability assessments, with close monitoring by OJK. Otherwise, borrowers could face unaffordable repayment burden down the road (both on principal and capitalized interest), creating further pressures on banks' performance.

A wider definition of loans at risk is warranted and calls for close monitoring of vulnerabilities at the level of the sector and individual banks. The loan at risk (LAR) ratio, defined as the sum of NPLs, restructured loans and special mention loans,¹⁹ constitutes a more informative measure of banking sector vulnerabilities during these extraordinary times. Several major Indonesian banks have elevated levels of LAR well above 20 percent as of June. In the event of worsening economic conditions and rising firm insolvencies and bankruptcies, a large portion of LAR could turn into NPLs, which would negatively impact banks' provisioning and capital levels, adding significant stress to the banking sector.

c. The government fiscal response has been decisive, but public debt is increasing.

The government introduced a substantial fiscal package to respond to the COVID-19 crisis. The fiscal response package is estimated at IDR 695 trillion²⁰ or 4.3 percent of GDP, a level comparable to China and Philippines but lower than Thailand and Malaysia (Figure A.17).²¹ The package aims at saving lives and protecting livelihoods by strengthening health care (12.7 percent of the package), expanding social protection (34.5 percent), providing support to Micro, Small and Medium Enterprises (MSMEs) (18.4 percent), and offering tax incentives for firms (17.4 percent), while also cutting the corporate income tax rate in two stages from 25 to 20 percent.

But the execution of the package has faced bottlenecks in some areas. As of mid-October, close to 60 percent of the National Economic Recovery Program (Pemulihan Ekonomi Nasional, PEN) was disbursed. While budget execution for social protection and support to MSMEs is well on track, it has lagged behind for healthcare and support to sectoral ministries and sub-national governments (SNGs) (Figure A.18). The sluggish disbursement of the health package reflects several challenges, including a) slow procurement and disruptions, including the scarce availability of health equipment in the global market; b) complex approval and verification processes for reimbursements to hospitals and incentives to health care workers;²² and c) limitations to the Ministry of Health's (MoH) capacity, including a cumbersome internal process for procurement.

Nevertheless, government spending will increase substantially this year, the fastest rate since 2011. As of October, spending execution of the revised 2020 Budget stood at 74.5 percent, compared to 73.0 percent of the same period in the previous year. Overall spending grew by 13.6 percent yoy for the year-to-Octoberperiod, driven by other expenditures,²³ social spending and transfers to SNG, while capital spending contracted.

The recession is leading to a significant decline in fiscal revenues this year. The corporate income tax rate cuts will constrain fiscal revenues in the coming years. Fiscal revenues contracted by 15.4 percent yoy for the first ten months of the year. Weak commodity prices led to a sharp contraction in oil and gas (O&G) and natural resources non-tax revenues, while subdued consumption and imports reduced revenues from the value added tax and luxury goods sales tax. The revenue-to-GDP ratio risks remaining stagnant well below its pre-COVID level in the medium term due to the permanent impact of the corporate income tax rate cuts from 25 percent to 22 percent in 2020 and a further cut to 20 percent in 2022. In contrast, tobacco excises contributed to increased revenues from excises. Other non-tax revenue, which mainly consists of profits

¹⁸ The policy measure entails banks relaxing their assessment of loan quality and restructurings for debtors with loan up to IDR10 billion which are affected by the COVID-19 pandemic.

¹⁹ The special mention loan is the loan quality category in collectability 2, in which there are arrears in principal and / or interest payments of up to 90 (ninety) days, and / or rarely experience an overdraft.

²⁰ Not all items in the package were new in the Budget while other new expenditure items were not included in the size of the package. Part of social assistance spending (PKH, *Kartu Prakerja* and *Sembako*) was already in the original budget (IDR 62.7 trillion), while compensation payments to Pertamina and PLN and the B-30 renewable energy subsidy (total IDR 77.4 trillion) as well as the net increase in Regional Incentive Fund (*Dana Insentif*

Daerah, DID) transfers (IDR 3.5 trillion instead of the announced IDR 5 trillion) were not fully counted in the package.

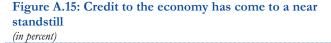
²¹ For the 10 East and Asia Pacific (EAP) countries where comparable data are available the average of their fiscal response package is 4.9 percent of GDP.

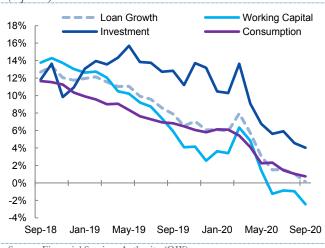
²² The government allocated IDR 6.63 trillion of financial incentives for 1.4 million front-line health care workers in the form of salary top-up. Eligible workers are proposed by health care facilities and validated by the Ministry of Health.

²³ Other expenditures include spending for arrear payments for energy subsidies to PLN and Pertamina, pre-employment card, and contribution of the Government's national health insurance scheme for Non-Recipient Workers and Non-Employee Participants.

from Government entities, such as SOEs and Public Service Entities (*Badan Layanan Umum*/BLU), increased 38.7 percent yoy. As of October 2020, cumulative government revenues reached 75.1 percent of the revenue target.

The fiscal deficit and public debt will increase substantially this year. After accounting for below-theline spending on the PEN program, other investments and government lending, the year-to-October fiscal deficit stood at IDR 764.9 trillion or 4.7 percent of GDP, compared to 1.8 percent of GDP during the same period last year. Public debt rose to 36.4 percent of GDP at end-September 2020, compared to 30.2 percent of GDP for the same period last year. Exposure to explicit contingent liabilities in the form of loan guarantees to SOEs amounted to 1.6 percent of GDP in Q2 2020, well below the guarantee ceiling of 6.0 percent of GDP but is trending up and warrants vigilant monitoring²⁴. The fiscal deficit is projected to reach 6.0 percent of GDP in 2020, slightly above the revised budget. The debt level in is projected to reach 37.5 percent of GDP, 7 pps higher than in 2019, compared to 9.3 pps on average among the major emerging countries. (Figure A.19).

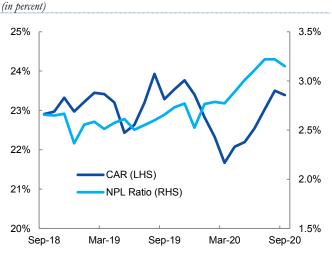




Source: Financial Services Authority (OJK)

Indonesia met its gross financing needs predominantly through the issuance of government securities (bonds and sukuk) and through external loans. Support from multilateral and bilateral partners led to a large increase in foreign exchange loans, especially in the form of fast-disbursing program loans. As of October, Indonesia issued 158.9 trillion in global bonds and IDR 999.7 trillion worth of IDR denominated bonds and sukuk. As shown previously, BI's local currency government bond purchase program has contributed to lowering their yields. However, investor interest (as measured by the bid-cover ratios in auctions) is still below February levels, and the share of non-resident investment in local currency securities has fallen to 27.3 percent at end-September from 37.8 percent at end-February.





Source: Financial Services Authority (OJK)

²⁴ Especially as the COVID-19 response packages has expanded the span

of loan guarantees to MSMEs and corporates, including SOEs

Figure A.17: The Governments' COVID-19 fiscal response package is substantial

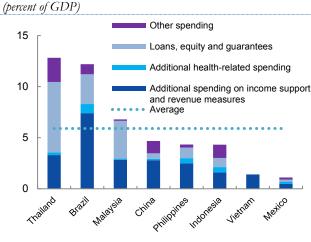
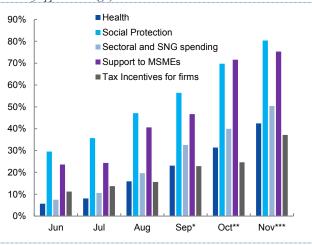


Figure A.18: Execution of the COVID-19 fiscal response package has been uneven

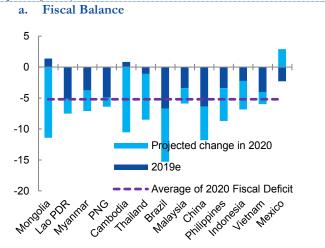
(percent of approved budget)

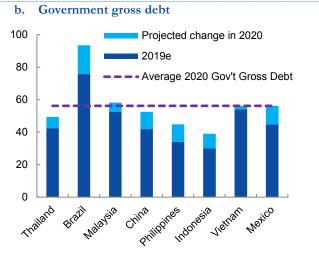


Source: Ministry of Finance, World Bank staff estimates. Notes: *Data as of September 21; **Data as of October 14, ***Data as of November 18

Source: International Monetary Fund (June 2020), World Bank staff estimates. Note: The "other spending" category includes the foregone revenues and tax incentives. "Average" represents the mean of the fiscal package of the countries presented in the chart. Data for Indonesia's fiscal package is based on the restructured scheme of the package, published in the October 2020 monthly budget report (*APBN Kita*)







Source: World Bank staff estimates using data from MoF, IMF, and Institute of International Finance.

Notes: Estimates refer to general government, except for Indonesia and Malaysia, which refer to central government only. "Average" represents the mean of the variable of interests of the countries presented in the chart.

3. The outlook

a. The Indonesian economy is projected to recover gradually but risks are high.

The outlook rests on assumptions on the impact of the crisis and the dynamics of the pandemic. The second and third quarter macroeconomic data show the extent of the contraction and recovery. At the same time, substantial uncertainty remains regarding the dynamics of the pandemic and its medium-term effects. The outlook presented in this report is built on the following assumptions: **Social distancing:** the current level of mobility restrictions and social distancing is expected to remain overall steady during the first half of 2021 and then gradually decline through 2022. Several vaccines have reached advanced stages of development and testing, but widespread availability across the world and Indonesia's large territory will take time (Box A.1). Moreover, the vaccine is unlikely to be a silver bullet, some level of social distancing will remain, and

December 2020

time will be needed for consumer and business confidence to firm up.

- *Scarring:* research points to the likely negative impact of the crisis on potential growth (World Bank 2020a, World Bank 2020b). In the case of Indonesia, the crisis could damage potential output through lower investment and productivity growth due to weak business sentiment and uncertainty, high firm exit and low entry, weaker labor supply and human capital. But the drop in potential GDP growth could be mitigated by the implementation of structural reforms aimed at boosting investment, productivity and human capital.
- *Trade and commodity prices:* Trade and commodity prices have improved since May 2020 and are projected to rebound in 2021 with oil prices increasing by about 10 percent while coal, metal and agricultural prices will increase modestly by 2 to 1 percent.
- *Fiscal and monetary support:* Substantial fiscal support is expected to be maintained at least until 2022 in Indonesia and most advanced countries and EMEs and central banks are assumed to maintain their accommodative stance throughout the forecast horizon.

Our growth projection for 2020 is revised to -2.2 percent from -1.6 percent in September. This reflects the weaker-than-expected recovery in the third quart and part of the fourth quarter and persistent mobility restrictions and social distancing.

The economy is projected to start rebounding in 2021 and strengthen in 2022 (Table A.1). The partial rebound observed in Q3 2020 and during part of Q4 2020 is expected to slowly and gradually take root in 2021 provided the pandemic is well contained and there is no substantial increase in mobility restrictions or social distancing. Growth in 2021 is projected to rebound to 4.4 percent, partly driven by a base effect and assuming consumer confidence improves and household income is supported by stronger labor market and adequate social assistance.²⁵ Growth would strengthen to 4.8 percent in 2022 if confidence improves, uncertainty declines, and if an effective and safe vaccine is available and administered to a substantial part of the population. Contact-intensive sectors would recover gradually in 2021-2022 but remain subdued for certain services such as tourism. Growth in more export-oriented sectors such as manufacturing and mining would be supported by stronger global growth, trade and commodity prices.

Growth is projected to improve in the medium term if the pandemic is well contained, structural reforms are implemented and help mitigate the impact of the crisis on potential output. Growth is projected to improve to 5.1 percent per annum on average in the medium term. This assumes that the need for social distancing is negligible in the medium term and that the recovery in investment is more gradual due to the impact of the crisis on corporate balance sheets.

The CAD is projected to be contained in the short term but to gradually widen as domestic demand recovers. Weak domestic demand and improved terms of trade will keep the CAD contained in the short term. The CAD is projected to recover towards pre-crisis levels in the medium term as the trade balance surplus narrows due to stronger domestic demand, the services trade deficit persists due to weak international travel and dividend payments to foreign investors recover gradually as economic activity and profits recover (Table A.1). Inflation is expected to remain low in the short term and to remain within BI's inflation target band in the medium term as the domestic and global economy, and energy prices recover.

The fiscal deficit is expected to remain elevated until 2022 and public debt to stabilize by 2024. The fiscal deficit is projected to remain above 3.0 percent of GDP until 2022 and public debt is projected to increase significantly to 43.0 percent of GDP by 2022 (Table A.1) and then decelerate and stabilize starting in 2023-2024. Fiscal revenues are projected to recover gradually, driven by the expected improvement in commodity prices, economic conditions and subject to revenue reforms.²⁶ Expenditures are projected to decrease gradually as fiscal relief measures are maintained partially in the short-term and phased out as the pandemic and its socio-economic impacts are contained.27 Meanwhile, the increased level of interest payments because of the higher level of debt will put pressure on fiscal space in the absence of significant reforms.

²⁵ This is 0.3 percentage points below our September projections reflecting a slower and more protracted recovery in consumption and investment and subdued growth in contact-intensive sectors, particularly in services ²⁶ This is subject to the impact of recently introduced initiatives, such as imposing VAT on e-commerce and introducing a plastic bags excise, ongo-

ing tax administration reforms, such as the adoption of a new tax IT system and HR and business process reforms at the tax collection agency to improve tax compliance, and new initiatives to broaden the tax base and raise selected tax rates, discussed further below.

²⁷ The National Economic Recovery program is expected to be maintained through 2021 with about half of spending compared to 2020.

As a result, the government's net financing needs are expected to remain elevated in the short term. They are projected to average 4.9 percent of GDP in 2021-2022 compared to 2.5 percent of GDP in 2017-2019. These are expected to be met through domestic and global bond and sukuk issuances, with BI's role as stand-by buyer gradually reducing over time in line with falling financing needs.²⁸

Risks to the outlook are severely skewed to the downside due to the uncertainty associated with the future path of the pandemic, the depth of the crisis and its scars, and potential adverse trade and commodity price developments:

- The future path of the pandemic: a surge of new cases could trigger a tightening of mobility restrictions or greater individual precautionary behavior and social distancing. Similarly, a resurgence of cases in advanced and EMEs could weaken global growth, trade and investment flows. Additionally, slower-than-expected progress on the availability of an effective and safe vaccine would weaken consumer and business confidence and dampen economic activity longer-than-expected.
- **Deeper scars from the pandemic shock:** Potential and actual output could take longer to recover due to deeper scars on firms' balance sheets and the labor market;
- Adverse trade and commodity price developments: Weaker global demand or a slower economic recovery among the advanced economies and China would weaken trade and commodity prices and hence the growth and external outlook.

The materialization of some of these risks would slow the recovery. An increase in mobility restrictions and social distancing domestically and around the globe, combined with weaker global growth could lower Indonesia's growth to 3.1 percent in 2021 (-1.3 pps relative to baseline) and 3.8 percent in 2022 (-1 pps relative to baseline).

b. Simulations show that the government's sizable social assistance package has the potential

to cushion the poverty impact of the crisis this year, but the effectiveness of the response need to be monitored and improved to fully protect the poor and vulnerable.

The government's large social assistance (SA) package has likely cushioned the poverty impact of the crisis this year.29 The SA package announced in April was further expanded in August with the addition of new programs and new top-ups to existing ones (see Annex Table 1). World Bank simulations show that this expanded package has likely cushioned the impact of the crisis on poverty this year despite the projected lower growth and weaker labor market (Figure A.20 Panel a).³⁰ Simulations show that without SA response, 8.5 million people would fall into poverty. But under full implementation and perfect targeting of the government's expanded SA package, the number of poor would decrease by as many as 1.7 to 2.1 million individuals. The findings indicate that the SA package could be highly effective in protecting the bottom 30 percent of households and potentially provide some significant yet partial compensation to households in the middle of the distribution (40th to 80th percentile).

But initial delays and difficulties in reaching some affected groups (particularly in the informal sector) could reduce the effectiveness of the SA package. The average net effect on poverty presented above masks significant heterogeneity, with some people escaping and others falling into poverty. Individuals who have likely fallen into poverty due to the crisis ('the new poor') are those who lost their jobs or work in highly affected contact-intensive services sectors (such as wholesale and retail trade, restaurant and hotels, transport etc.), (Figure A.20 Panel b). These individuals may also have faced challenges in accessing existing SA measures.³¹ While poverty may even drop in many regions, some areas such as Bali and Kalimantan are expected to experience an increase in poverty due to their heavy reliance on the most affected economic sectors. These findings highlight the need to sustain the coverage and adequacy of existing SA programs while strengthening mechanisms to identify and enroll the "new poor".

²⁸ Between 2021 and 2023, nearly 85 percent of the gross financing needs are projected to be financed through the issuance of the government's rupiah-denominated bonds.

²⁹ The World Bank Indonesia Economic Prospects, July 2020 edition, estimates the SA package at 0.9 percent of GDP.

³⁰ Estimates are from the World Bank paper "Poverty, Pandemic, and Policy: Distributional Impact of COVID-19 pandemic in Indonesia" (Tiwari et al., forthcoming) which uses a poverty simulation model that combines macroeeconomic projections for GDP and sectoral output growth with precrisis microdata from household and labor force surveys (SUSENAS and Sakernas 2019)

³¹ The measures were rolled-out quickly and effectively particularly for the existing poor/vulnerable that were already eligible and/or enrolled in social programs. Programs such as Dena Desa, Kartu Pra Kerja and others were put in place or adapted to capture the "new poor" but ran into initial implementation challenges that delayed their roll-out. The HiFy survey found that nearly 90 percent of households in the bottom 40 percent reported to benefiting from at least one relief measure as of early August 2020, indicating that 10 percent of households in the bottom 40 percent who experienced income shocks were not receiving any SA.

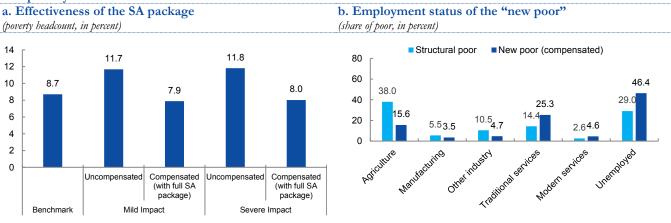


Figure A.20: The government's SA package could cushion the poverty impact of the crisis, but some people could fall into poverty

Source: BPS, World Bank staff calculation. Source: BPS, WB staff calculation.

Note: The numbers refer to simulated poverty rates in 2020 under benchmark and crisis scenarios. The results are an update to June 2020 estimates, based on the recent macroeconomic projection and an expanded government relief programs consisting of twelve social assistance packages introduced since the beginning of the pandemic. 'Benchmark' shows the forecasted poverty rate in 2020 without Covid shock; 'Uncompensated' scenario shows 2020 Covid19 poverty shock when there is absence of government compensation; 'Compensated' scenario shows 2020 poverty rate (simulated), after considering the full SA package. The simulations are based on three scenarios: (i) benchmark (growth estimate of 5.0 percent); (ii) a mild shock (growth estimate of -2.2 percent estimated under assumptions of a deep global recession and moderate domestic restrictions); and (iii) a severe shock (growth estimate of -2.5 percent estimated under assumptions of a deep global recession and severe domestic restrictions). Macroeconomic forecasts for growth in sectoral GDP are as follows, for the mild and severe impact scenarios respectively: Agriculture (1.8 % and 1.6%), Manufacturing (-3.0% and -3.5%), other industry (-2.5 and -2.9), traditional services (-7.6% and -8.4%), and modern services (4.4% and 4.2%).

Table A.1: Key macroeconomic indicators, 2019-2022

	2019	2020	2021	2022
	Actual		Projection	
Growth	and inflation, percent chang	ge		
Real GDP	5.0	-2.2	4.4	4.8
Private Consumption	5.2	-2.3	4.5	4.6
Government Consumption	3.2	2.6	4.4	4.5
Gross Fixed Investment	4.4	-5.0	4.0	4.3
Exports	-0.9	-7.9	1.5	8.0
Imports	-7.7	-11.5	0.5	6.5
CPI (year-average)	2.8	2.0	2.3	2.8
Fiscal accounts of	of Central Government, perc	ent of GDP		
Revenues	12.4	9.8	9.9	10.4
of which tax revenue	9.8	7.6	7.9	8.5
Expenditures	14.6	15.8	15.3	14.7
of which interest expenditure	1.7	1.8	2.2	2.5
Fiscal Balance	-2.2	-6.0	-5.5	-4.3
Central Government Debt	30.2	37.5	40.9	43.0
Balance of Payments	, percent of GDP unless ind	icated otherwise		
Balance of Payments	0.4	1.5	1.3	0.7
Current account balance	-2.7	-0.7	-1.4	-2.0
Financial account, of which	3.3	2.2	2.8	2.8
Net FDI inflows	1.8	1.2	1.4	1.7
Foreign exchange reserves (months of imports of goods and services)	11.0	10.6	10.0	9.1
Terms of trade (2019 = 100)	100	106.1	107.3	105.3

Source: Ministry of Finance, Bank Indonesia and World Bank staff projections.

4. Policy priorities to secure and accelerate the recovery

Looking ahead the priority for Indonesia would be to secure and accelerate the recovery. The key policy priorities are to contain the pandemic, support affected household and firms and revitalize growth and jobs, and improve the medium-term fiscal stance.

Public health remains a top priority to allow the economy to remain open and to move towards a safe full reopening. Public confidence that the pandemic is under control is critical for individual social distancing behavior and spending (Chetty and et al., 2020). This requires continued improvement in testing and tracing capacity and other public health measures as well as preparation to procure and widely administer an effective and safe vaccine once it is developed and approved.

Policy support would need to be maintained until the recovery strengthens and it is important that the policy framework for the recovery remains evidenced-based, transparent and adaptative. Millions of workers have lost their jobs or are working reduced hours with lower earnings. Firms in hard hit sectors are still facing tight liquidity and difficult financial situations. Lifelines for these affected groups would need to be maintained until the green shoots of recovery take root and strengthen. It is important to evaluate and adjust programs to improve coverage, targeting and adequacy. Key challenges for social assistance are to further improve coverage of households in the bottom 40 percent and expand programs to include affected households in the informal sector. As the economy gradually recovers, it is critical that liquidity support channeled through the financial sector is calibrated accordingly and is well-targeted at viable borrowers with temporary liquidity problems.

At the same time, it would be important for policy to remain balanced and not lose sight of mediumterm challenges and goals. While withdrawing policy support too early would risk prolonging or deepening the crisis, policies need to take a balanced view between the need for short-term support and the necessity of containing medium-term risks. It is recommended that monetary financing of the deficit remains time-bound, well calibrated and transparent, and an exit strategy developed and clearly communicated. On the financial sector side, the application of loan forbearance measures needs to be closely monitored and transparently communicated by the relevant authorities. It is essential that policymakers continue to closely oversee financial sector vulnerabilities and be prepared for potential stress by further strengthening the banking resolution framework, expanding financial safety nets and updating the crisis management framework, among other things.³² Exit strategies for forbearance measures introduced to date need to be developed and agreed upon by policymakers, and include timely resolution of troubled banks where needed.

On the fiscal front, some immediate tax and expenditure actions could help raise resources to finance the crisis response and recovery, contain public debt and improve fiscal space for priority spending in the medium-term. These include protecting and expanding the existing revenue base through i) increasing the personal income tax rate on top incomes and expanding the income range that is taxed at this rate; ii) raising excises on products with a negative health impact (such as tobacco and sugarsweetened beverages) to support public health spending, as well as on products with a negative environmental impact (such as fossil fuels and single-use plastics) to support infrastructure, fisheries and tourism; and iii) ensuring that more businesses will pay the new, lower corporate tax by eliminating the special tax treatment on construction and lowering the tax threshold for SMEs. It is important to complement these actions with administrative reforms that address poor tax compliance by improving capacity and efficiency, including through investment in digital and human resources, and simplification of business processes. At the same time, it is important to phase out the remaining wasteful energy subsidies and replace them by targeted social support, which would increase fiscal space further.

Lastly, it is critical to advance structural reforms to protect and lift Indonesia's potential to grow, create good jobs and raise income in a sustainable way. Part B of this report takes a deep dive on such needed reforms in the area of food security.

mechanisms, putting in place clear and reliable funding mechanisms for liquidity and resolution purposes.

³² Additional potential policy actions include, for instance, strengthening the legal framework for bank resolution, establishing resolution planning

Box A.3: Progress towards an effective and safe COVID-19 vaccine

An ambitious global quest for a COVID-19 vaccine is underway and has made significant headway. Large financial and human resources have been deployed to accelerate the development of an effective and safe COVID-19 vaccine. The first candidate vaccine emerged within one month and a half after the virus was genetically sequenced. As of end-September, eleven candidate vaccines were in large-scale efficacy trials or phase 3 (Figure A.3.1). Once a vaccine's efficacy and safety are established, relevant country regulators review trial results and decides whether to approve the vaccine. Authorizations for emergency use may be given before final approval during pandemic situations. However, in addition to the uncertainty around the availability, safety and effectiveness of the vaccine itself, it is important to understand that the vaccine will not be a 'silver bullet' and countries will need continued testing, treatment and isolation while ensuring non-COVID health services are not disrupted.

A key challenge for the global community is to ensure wide and equitable access to approved COVID-19 vaccines. There are challenges to wide and equitable access to vaccines both across and within countries. High income countries can afford to procure large vaccine supplies and diversify suppliers while poorer countries are constrained by weaker finances and negotiation power. Within countries, interventions are needed for affordable and timely access in more remote areas, those considered at high risk or essential workers (such as the elderly and health workers), and for poorer segment of the population. As part of the global effort for fair and equal access, the World Bank has mobilized USD 12 billion to support countries procure COVID-19 vaccines for up to a billion people and to also help strengthen their delivery systems.

Figure A.3.1: Stages of readiness of COVID-19 vaccine candidates (*index*, 2019 = 100)



Source: WHO, The Guardian. Figure is as of September 30, 2020.

Indonesia has taken steps to ensure access to the vaccine across its large territory. Indonesia has budgeted USD 2.4 billion in 2021 for COVID-19 vaccination for up to 160 million people and plans to procure vaccines from Sinopharm-Kimia Farma, Sinovac – Bio Farma, Genexine/Genoxine-Kimia Farma and Gavi COVAX Market Commitments. Presidential Decree No. 99-2020 on procurement and implementation of COVID-19 vaccines also clarified the roles and responsibilities across ministries and agencies with the Ministry of Health responsible for defining priority groups and areas and monitoring potential side effects in collaboration with the National Agency for Drugs and Food Control/Badan POM.

B. Food Security

1. Introduction

Food security has always been an important goal for Indonesia³³. The government has developed a distinctive set of policies, programs and institutional arrangements in pursuit of the food security goals. This analysis examines the impact of Covid-19 on food security and the challenges it has exposed. It also explores the multidimensional nature of the food security agenda which involves ensuring food availability as well as affordability and food safety and quality. Finally, it focuses on the changes in the food security approach and policies that would help to revitalize the agri-food system and better position it to respond to on-going changes, emerging risks as well as opportunities.

2. The Impact of Covid-19

The Covid-19 pandemic induced a sharp economic shock although, in Indonesia, the agriculture sector proved a notable exception. As mentioned in Part A, in the second quarter (Q2) of 2020, while overall growth for Indonesia fell by 5.3 percent year-on-year (yo-y), the agriculture, forestry and fisheries sector recorded a positive 2.2 percent y-o-y growth and a 16 percent quarterly growth³⁴. In fact, across the East Asia and Pacific region, agriculture turned out to be one of the least impacted sectors. In most countries, due to lockdowns and shrinking demand, job losses were prevalent among those working in construction, transportation and storage, and accommodation and food services (see Figure B.1), while the agriculture sector (broadly defined to include allied activities such as forestry and fisheries) served as buffer for less skilled workers 'displaced' from other sectors.

Initial concerns about looming food crisis eased over time. The sudden, global economic lockdown initially triggered some worries about food security. For instance, temporary export restrictions were introduced by some grain exporting countries. However, these were soon removed as it became clear that grain supplies remained relatively stable and (international) grain markets relatively well-stocked. In fact, most staple foods are expected to register major increases in trade quantities for the first time in four years. Global grain prices have remained stable, with stock accumulations among major exporters. Agricultural commodity price indices have remained stable, although they are gradually beginning to inch up due to the recovery in export prices and depreciation of the US dollar (see Figure B.2). However, the food price indices have remained well below the levels reached during the previous food price crises of 2007-07 and 2011-12 (see Figure B.3).

In Indonesia, weather conditions have been classified as normal for most provinces. In particular, the extent of paddy-producing areas affected by climatic disasters and pests in 2020 remains below the long-term average. Yields of dry-season rice are expected to be somewhat lower than last year. However, rainfalls for Oct-Dec 2020 offer optimal conditions for sowing wetseason paddy. Forecasts suggest better than normal production levels and the projections by the International Grain Council (IGC) estimates the ending stock for 2020-21 at a somewhat higher level than the 2019-20 stock (Figure B.4).

As global food markets remain resilient, the main impact of the pandemic on food security is through reduced purchasing power and disruptions in domestic supply chains. At the household level, the impact of Covid-19 was felt through sharp income declines, following work stoppages. In the initial stage, Covid-19 induced losses were acute, with income reduction relative to pre-Covid-19 levels ranging between 35 percent and 50 percent across the various sectors. In May, at the low point of the crisis, some 33 percent households reported shortage of food and 38 percent reported eating less than they should. However, with economic revival the situation has become better. By late July/early August the respective percentages had changed to 24 percent and 31 percent. In the longer run, though, reduced household income and purchasing power due to the economic impact of the Covid-19 pandemic, coupled with supply chain disruption of nutrient-rich items, may push households to reduce the quality and quantity of their food consumption, increasing food insecurity and malnutrition levels.

The pandemic induced food shortages have played out differently for households with different socioeconomic and locational characteristics. Households facing the greatest challenges in returning to pre-

³³ According to the Food and Agriculture Organization (FAO) of the United Nations, food security exists when "all people at all times have physical and economic access to sufficient safe and nutritious food that

meets their dietary needs and food preferences for an active and healthy life."

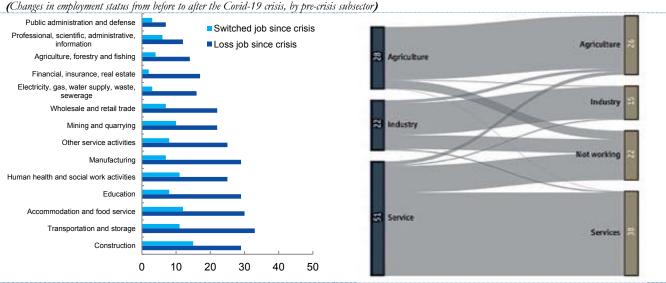
³⁴ The latter was partially a result of the shift in peak harvesting season from Q1 to Q2 in 2020.

pandemic levels of food shortage include femaleheaded households, those in the bottom 40 percent income percentile and those in urban areas and outside Java (see Figure B.5).

The poor and vulnerable households are more exposed to the structurally high and volatile food prices. As shown in part A of this report (Box A.2), food accounts on average for 55.3 percent of household spending and the share is even higher for poorer households in the bottom decile (64.3 percent in the bottom 10 percent compared to 41.9 percent among the top 20 percent). The differences are even more striking for staple food such as rice, where the poorest 20 percent spend 12.2 percent on rice, compared to only 4.1 percent of the richest 20. Rice prices in Indonesia are the highest in the region, partly due to structural support policies that amount to a heavy implicit tax on the consumers. Given the structure of the food budget, this "tax" turns out to be highly regressive, hitting the poorest households the hardest. As such, poorer households also have a higher incidence of malnutrition and "hidden hunger" due to their relative inability to afford more diverse and nutritious diets.

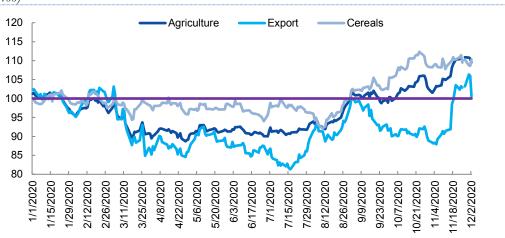
In response to concerns about possible global food shortages as a result of the pandemic, the government has embarked on the development of food estate projects. The main objective would be to increase Indonesia's rice self-sufficiency, although the objective of increasing farmer incomes has also been mentioned. One proposed food estate would be developed in the Ex-Mega Rice Project (EMRP) location in Central Kalimantan. Another proposed food estate project is located in North Sumatra on the western side of Lake Toba. These initiatives may contribute to increasing the availability of food commodities, albeit in locations that are distant from main consumption centers. The positive contribution of the food estate model towards improving the food system and modernizing the agriculture sector will depend on the approach taken, including the way in which the private sector is involved, and the management of environmental and social risks.

Figure B.1: The contraction led to a loss of jobs in services and manufacturing



Source: World Bank (2020c)





Source: World Bank Commodity Price Data

Figure B.3: Global food price index remains below the levels of the 2007-08 and 2011-12 crises ...

(FAO Food and Cereal Price Indices (Jan 2000 - Nov 2020; nominal, 2014-16=100))

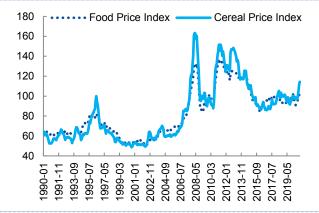
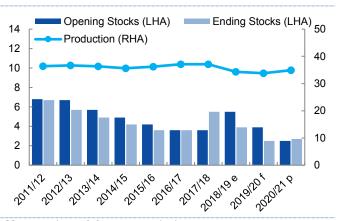


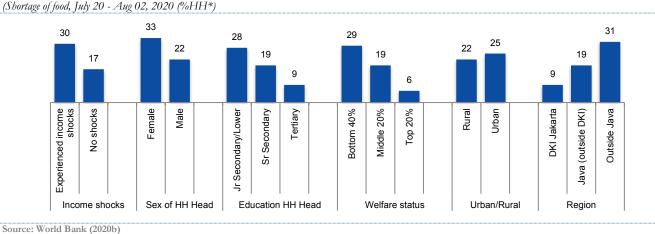
Figure B.4: ... and for Indonesia the projections for the 2020-21 ending-stock are slightly above the 2019-20 level. (Food Balance Sheet of Rice in Indonesia (million tons, milled basis))



Source: FAO Monthly Food Price Index.

Note: e=estimate, f=forecast, p=projection. Source: International Grain Council (IGC),

Figure B.5: The reduction in Covid-19 induced food shortages has played out differently for households with particular socio-economic and locational characteristics



3. The Food Security Approach in Indonesia

Indonesia has adopted a comprehensive vision of food security which is enshrined in the "Food Law" (FL) of 2012. The FL provides the overarching framework - philosophy, basic principles, scope, other guidelines - of food policy. The philosophy of FL is that food is the most essential human need, whose fulfillment is part of human rights guaranteed in the 1945 Constitution of the Republic of Indonesia. FL clearly acknowledges that the state has obligations to achieve food availability, affordability and fulfilment of food consumption and to meet the requirements of sufficient, safe, excellent, and nutritionally balanced food both at the national and local levels and to all individuals in the entire territory of the Republic of Indonesia. This approach is aligned with the overall international approach to food security.

Food security policy in Indonesia has had two distinct strands. On the supply side, the basic strategy has been to boost food production for strategic commodities, with predominant focus on rice. This has been pursued through a range of instruments and institutional arrangements, including provision of subsidized fertilizers, seeds, credit and other inputs through public distribution mechanisms, investment in irrigation systems and output price support through public procurement. On the demand side, the government has tried to provide support to vulnerable groups through various consumer support and social protection schemes.

On the supply side, the food security policies have had a narrow focus on rice. Despite the broad vision of food security contained in the FL, the food security strategy has revolved around promoting self-sufficiency in five "strategic commodities": rice, maize, soybeans, sugar and beef. Of these, the predominant focus has been on rice, given its weight in the Indonesian diet, with domestic self-sufficiency in production of rice being regarded as a barometer for food security. But the focus on rice and staple foods means that calorie-sufficiency rather than nutritional quality has become the de facto goal of food security. This has belied the fundamental motivation for pursuit of food security - to raise nutritional levels to sustain healthy lives³⁵ – and left the space open for the emergence of a damaging "nutrition gap" in Indonesia despite rising levels of prosperity.

The policy mix used to support food security has also generated only limited gains over time. Most of the central government spending in agriculture has been used to provide subsidies to farmers for fertilizer, seeds, credit and irrigation services as well as other private goods like equipment. Over the period 2005-20, for example, spending on irrigation and fertilizer subsidies accounted for between half and three-quarters of overall central government spending on agriculture (see Figure B.6). While this no doubt raised outputs and stabilized domestic supplies of rice and other strategic crops, it did not lead to increases in productivity, diversification and competitiveness of Indonesian agriculture, which is key to long-term food security. This is because the large share of subsidies crowded out much needed public expenditure from critical growth drivers such as research, innovation, extension, diversification, processing and marketing.

Fertilizer subsidies, which account for 25-30 percent of the annual agricultural budget, are expensive, poorly targeted, regressive, subject to leakage and cost-ineffective at increasing production³⁶. Fertilizer subsidies are an important plank of the government's food security policy, and have been justified in terms of national food security and small farmer income support. However, in practice there is little social welfare or market failure justification for fertilizer subsidies in Indonesia. Evidence suggests that targeting is weak: on average, farmers pay similar prices for fertilizer, regardless of their land size or revenues from rice, and many targeted farmers pay above the ceiling price. Also, the subsidies appear to be regressive in practice, disproportionately benefiting larger farmers, and prone to 'leakage' to non-targeted farmers at higher than state-set prices.

The contribution of fertilizer subsidies to promoting food security is also unclear. Fertilizer costs account for a very small proportion of rice production costs and, as such, the impact of fertilizer subsidies on rice profitability and rice prices is limited. Evidence also suggests that subsidies may have led to unbalanced use of fertilizers (see Figure B.7), leading to both over-application (falling incremental yields) and increasing environmental degradation. Field programs have demonstrated the potential for farmers to earn more money by using less fertilizer and applying site specific nutrient management approaches. Further, studies also suggest that the cost of producing fertilizer

³⁵ Improving nutrition was the core motivation for the establishment of the Food and Agriculture Organization (FAO), as memorialized in its foundation plaque: "...[on] 16th of October 1945, representatives of 44 nations met and established the Food and Agricultural Organization, the first of the new United Nations Agencies. For the first time, nations organized to raise levels

of nutrition and improve production and distribution of food and agricultural products." (emphasis added)

³⁶ See "The Fertiliser Sector and Subsidy Policy in Indonesia - Key Takeaways", Australia Indonesia Partnership

for Economic Governance program, 2017.

is higher in Indonesia than in other countries; as such, nearly half of the fertilizer subsidy goes *de facto* to protecting the domestic SOE producers. Overall, fertilizer subsidies are an ineffective way to promote food security.³⁷

State-Owned Enterprise BULOG plays an important role in Indonesia's food system and rice market. BULOG (Badan Urusan Logistik) is the national logistic agency which has mandates to secure food provision and maintaining price stability at the producer and consumer level, and manage food buffer stocks. Since 2018, BULOG's mandate for rice distribution to the low-income groups (through the Raskin or Rastra programs) has been transferred to the Ministry of Social Affairs, under which BULOG now has to compete with private sector buyers in procuring rice for the non-cash food subsidy program (BPNT). While food availability and rice prices have been relatively stable, rice consumer prices have been higher in Indonesia than in any other country in the region. This may benefit a relatively small proportion of net sellers of paddy/rice, but high rice prices hurt poor consumers, including the majority of farmers who are net buyers. In addition to this consumer tax, the cost of the SOE model of price stabilization and buffer stock operation tends to be inherently high.

Indonesia provides the highest level of support to agriculture among emerging and OECD economies (see Figure B.8). According to OECD analysis (OECD, 2020), the total support provided (measured as the global value of support granted to the agricultural sector, and comprising producer support, consumer support and general services support³⁸), as a share of GDP, increased from 1.3 percent 2000-02 to 3.1 percent in 2017-19. During this period the sharpest increase was in producer support, which increased from 7 percent of gross farm receipts to 24 percent. Sugar, cocoa, maize and rice were among the most supported commodities, with transfers amounting to over 40 percent of gross farm receipts in each case over the period 2017-19. On average, during the 2000s, farmers received prices that were 30 percent higher than world prices (with wide variation across commodities). On the other hand, expenditure for general services - which are potentially linked to promoting productivity, new tech-

³⁷ An OECD study in 2015 (*Transitory Food Insecurity in Indonesia*) study found that fertilizer and other input subsidies have only minor effects on food security (decreasing rates of undernourishment) as they do not effectively decrease production costs and hence have limited effects on rice prices. ³⁸ Producer support represents transfers to agricultural producers measured at the farm gate level and comprises market price support, budgetary payments (e.g. input subsidies) and the cost of revenue foregone. Consumer support represents transfers from consumers of agricultural commodities,

nology adoption, diversification and structural transformation in agriculture – measured around 1.4 percent of agricultural value added throughout the 2000s and was significantly lower than the OECD average.

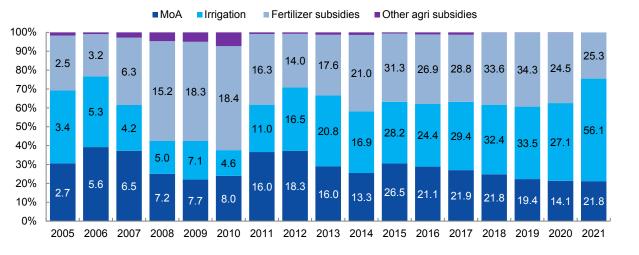
The support is provided through distortionary instruments that have undermined productivity and competitiveness of agriculture and imposed implicit costs upon the consumer. Agricultural support ("transfers") has been provided mainly in the form of market price support and subsidies to producers for various agricultural inputs. These transfers are among the potentially most distorting and through the 2000s accounted for more than 90 percent of the gross transfer to producers. These transfers have distorted incentives at the farmer level towards the "targeted" crop and technical choices, and have resulted in a decline in agriculture competitiveness, productivity and profitability over time. Further, key market support prices have been propped up by import restrictions on staple foods, non-tariff barriers including various administrative requirements, and restrictions on private sector participation in key grain markets. The overall effect of these restrictive policies has been to impose a heavy implicit tax on the consumers. This tax for the period 2012-19 adds up to over USD 238 billion. The tax represents, the true cost of protective, food self-sufficiency policies, the burden of which has fallen on Indonesia's consumers, and particularly the poorest. Notably, this tax burden is higher than in comparator countries and continues to increase in Indonesia while falling elsewhere. Between 2013-15, the tax on consumers in Indonesia totaled USD 98 billion compared to USD 3 billion in Brazil and USD 5 billion in Vietnam (see Figure B.9). In 2015, the consumer tax for the entire EU (28 countries) was USD 22 billion (or USD 437 per person) compared with USD 36 billion (USD 1300 per person) for Indonesia.

Barriers to investment have stifled innovation and restricted the emergence of high-value and diversified farming. Restrictions on foreign investment in the agriculture sector, combined with insufficient public support to local producers, have prevented high-value segments, such as a competitive horticulture industry, from developing.

measured at the farm gate level. (If negative, the consumer support estimate measures the burden (implicit tax) on consumers through market price support (higher prices), that more than offsets consumer subsidies that lower prices to consumers.) General services support represents transfers that are linked to measures creating enabling conditions for the primary agricultural sector through development of private or public services, institutions and infrastructure .

Figure B.6: A significant portion of central government spending has been used to subsidize private inputs rather than provide public goods

(Composition of Central Government Agriculture Spending: 2005-202; IDR trillion)

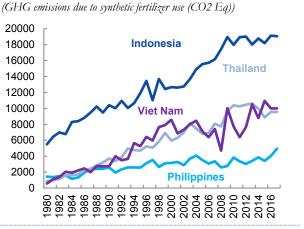


Source: World Bank (2020a)

(Share of Fertilizer Use for Rice 2010-11, in percent)

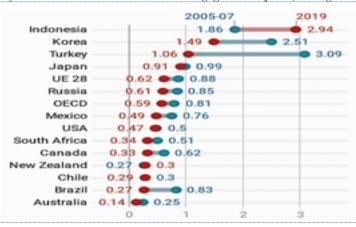
Figure B.7: Subsidies may have led to unbalanced use of fertilizers, leading to both over-application (falling incremental yields) and increasing environmental degradation

% Share of Fertilizer Use for Rice (2010/2011)	Global Average	Japan	Vietnam	India	China	Indonesia
Nitrogen	64.8	36.1	53.3	60.8	65.5	83.1
Phosphate	21.0	36.1	29.6	23.7	20.4	8.5
Potassium	14.2	27.8	17.1	15.5	14.1	8.4



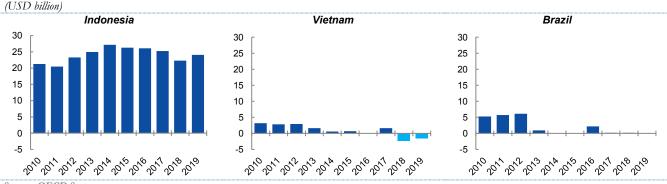
Source: International Fertilizer Industry Association, FAOSTAT.

Figure B.8: Indonesia's "total support" to agriculture remains as the highest among emerging and OECD economies (*Total Support to Agriculture as percent of Gross Domestic Product in OECD and Emerging Countries (percent): Average 2005-07 vs 2019)*



Source: OECD.Stat

Figure B.9: Indonesia's agricultural and trade policies constitute another "barrier" to effective resolution of the country's food and nutritional security challenges



Source: OECD.Stat.

4. Food Security Situation in Indonesia

The overall food security performance in Indonesia can be regarded as mixed, especially with respect to the FL goal of food security in terms of availability, affordability and (nutritional) quality of food. To date, food security policies have aimed at improving availability. Going forward, the policy focus should shift to enhancing affordability and nutritional quality.

Availability

Regarding availability, even if Indonesia is more than 80 percent self-sufficient in rice, maize and sugar (see Figure B.10), imports of high value and processed foods have increased five-fold since the early 2000s (see Figure B.11). The latter does not necessarily pose a food security issue since it is common for high-income countries to cost-effectively meet their food supply needs through international trade.

However, large imports of high-value foods imply that there are missed opportunities for Indonesian farmers and firms, especially in the semi-processed and processed segments. The foregone opportunities for production, value-addition, employment and exports in fruits and vegetables, for instance, can be seen when comparing Indonesia's imports and exports with countries that have similar natural endowments and production conditions, such as Thailand and Vietnam (see Figure B.12). Indonesia has enormous agro-ecological potential to produce fruits and vegetables, but this remains largely untapped.

Affordability

Food affordability for the Indonesian consumer is influenced by various off-farm factors that affect key food prices. These factors include domestic and international trade, processing, marketing and distribution, and related policy, regulatory and institutional underpinnings. Appropriately addressing the trends and drivers in these areas can provide additional, tools to improve the food security situation.

On average, food prices in Indonesia are among the highest in the region. Rice prices are much higher in Indonesia than in other Asian countries despite significant public support for rice production. Over the period 2012-20, rice prices in Indonesia were, on average, more than double the rice prices in Vietnam, Myanmar, Cambodia and Thailand and about 25 percent higher than the prices in the Philippines. (see **Error! R eference source not found.**). Price inflation has been high also for nutritious foods rich in proteins or micronutrients, such as fruits, vegetables and livestock products (see Figure B.14). As already mentioned, high prices impose a heavy burden on Indonesian consumers, weakening food and nutritional security of Indonesia's poor and vulnerable.

Prices are high due to high processing and distribution costs. In case of rice, for instance, this involves high milling costs. Rice milling in Indonesia is highly fragmented and has relatively low levels of technical efficiency. Some 175,000 small mills have a milling recovery under 56 percent, while it is 62 percent for the 2,000 large scale mills. Larger and more efficient modern mills play a more prominent role in Thailand and Vietnam. The processing costs and milling losses are compounded by high distribution costs. Increased production efficiency gains, combined with improving the efficiency of rice milling and reduced post-harvest losses could result in substantial additional rice output that would improve food security from a self-sufficiency perspective.

These high processing and distribution costs are compounded by trade-inhibiting policies, regulatory barriers and under-developed food logistics. Import and export restrictions on staple and other foods, non-tariff barriers such as limited ports of entry for horticulture imports, onerous pre-shipment and other administrative requirements have the effect of lowering market competitiveness and raising the price for consumers. Moreover, Indonesia's logistics system lags behind many regional peers, in terms of infrastructure availability and quality, cost, timeliness and customs management. Relatively high costs are associated with logistics administration, transport, warehousing, and inventory management. Trucking costs at various destinations, especially in eastern Indonesia, can be considerable. This is partly due to poor road infrastructure driving up costs, but also related to local regulations that constrain the movement of containerized transport. Further, backhaul problems, low frequency of shipping and poor port infrastructure drive-up inter-

³⁹ Kementerian Kesehatan Republik Indonesia. 2020. Profil Kesehatan Indonesia Tahun 2019. Jakarta. island costs. Finally, these marketing inefficiencies contribute to an overall rising trend in the margins between farm-gate and retail rice prices (see Figure B.15).

Nutritional Quality and Safety

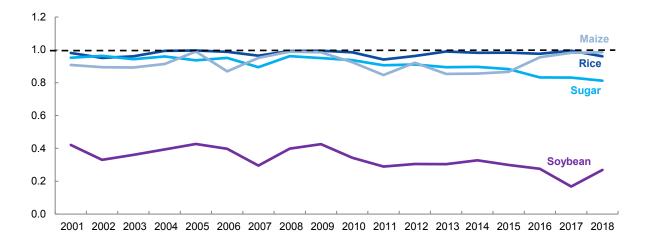
There is a significant nutrition gap in Indonesia. High prices and limited availability of fruits, vegetables and livestock products has impeded the adoption of healthy, more nutritious and diversified diets. Compared to other countries in the region, the Indonesian diet shows limited diversification and limited micronutrient availability (see Figure B.16). Also, Indonesia ranks very low internationally in terms of vegetable consumption (with average of 43kg/year per capita) and fruits (66kg/year per capita).

The relatively undiversified, low nutrient diet has significant health, mortality as well as socio-economic consequences. This nutritional insecurity has produced alarming incidence of diet-related health conditions and non-communicable diseases. Prominent among these are the relatively high rates of stunting among children under five years old (30.8 percent in 2019³⁹), growing incidence of overweight people and obesity (more than one-fifth of the adult population), and rapid growth in the incidence of (and deaths attributed to) diet-related non-communicable diseases, such as diabetes and cardiovascular conditions.

The food crop mix in Indonesia is not keeping up with the changes in consumer diets and preferences. Food consumption patterns are changing in Indonesia, especially in the urban areas. Most notably, rice consumption has decreased by 4.4 percent per year during 1996-2011. However, Indonesia's policy emphasis on rice and other grains—in R&D and rice-focused irrigation investments-- has contributed to a lag in food crop diversification which would have been more responsive to changing domestic consumer demand (as has been the case in China) (see Figure B.17). It should be noted that oil palm makes the bulk of the oil crop subsector in Indonesia, while oil crops in China are more soybeans, and non-tree crop oils sources.

With respect to food safety and public health, Indonesia needs to be better prepared to manage risks associated with urbanization and changing diets. Annual illness and deaths from food-borne diseases (FBD) are estimated to be 20 million people and 23,000 deaths for Indonesia compared to 8 million people and 3,500 deaths for Vietnam. Indonesia suffers one of the biggest productivity losses from FBD (see Figure B.18). Children and the poor are disproportionally affected. For Indonesia and other East Asian countries, this burden is expected to more than double by 2025 if no action is taken. However, with the right preventive measures and investments in public health systems, this could be cut by half.





Source: Own estimates, based on data from FAOSTAT, International Trade Center/UN COMTRADE

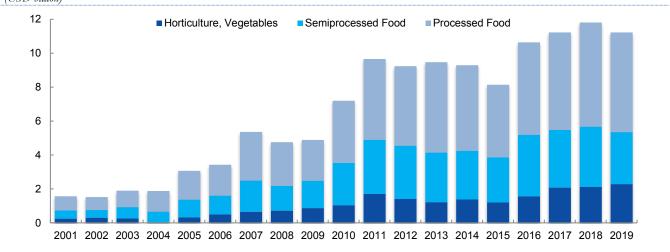
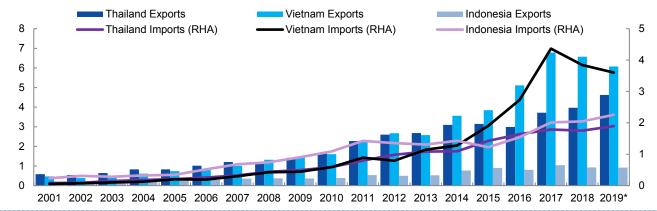


Figure B.11: Imports of High Value Food in Indonesia (USD billion)

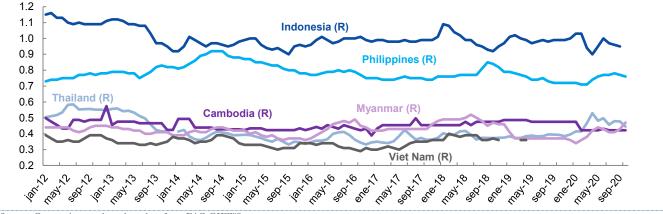
Source: Own estimates, based on data from ITC/UN COMTRADE





Source: Own estimates, based on data from ITC/UN COMTRADE

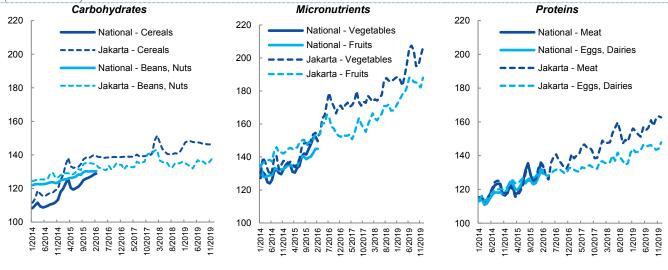
Figure B.13: Rice prices in Indonesia are much higher in Indonesia compared to other Asian countries despite significant public support for rice production



(Retail price of rice in selected Asian countries, 2012-20, USD/kg)

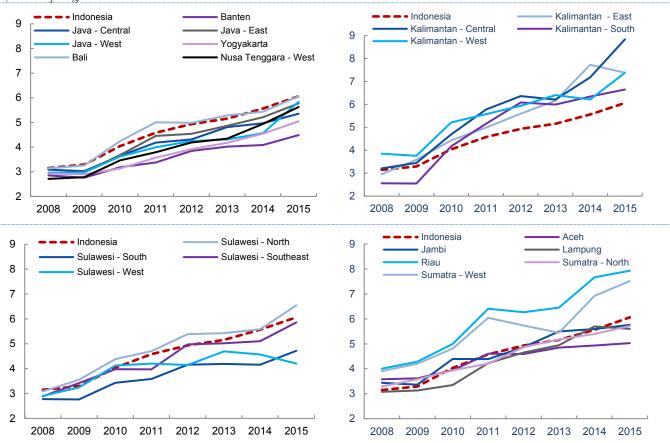
Source: Own estimates, based on data from FAO GIEWS

Figure B.14: Consumer Price Index (CPI) of Food Items Disaggregated by Food Groups, National and in Jakarta (base 2012 = 100)



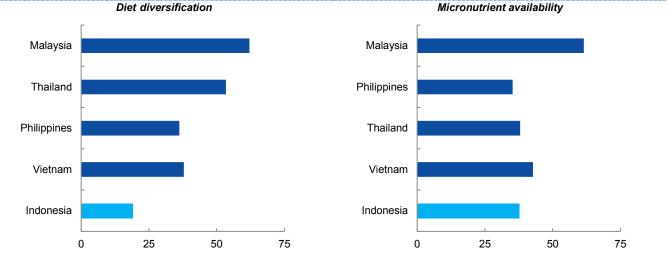
Source: BPS





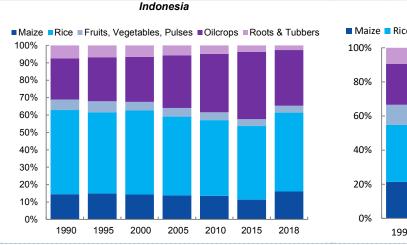
Source: Own estimates, based on data from BPS

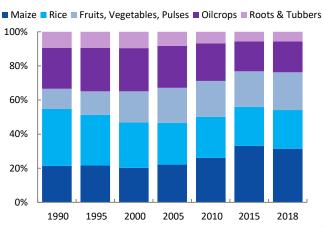




Source: The Economist Intelligence Unit.





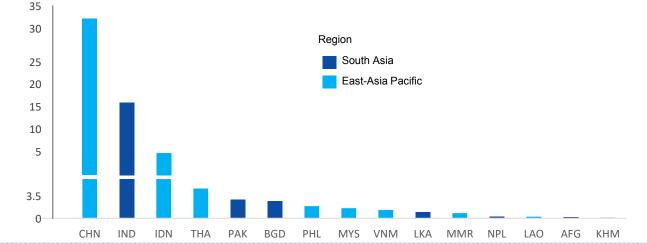


China

Source: Own estimates, based on data from FAOSTAT.

Figure B.18: Indonesia needs to be better prepared to manage the likely risks associated with income growth, urbanization and changing diets





Source: Jaffee et al. (2019).

5. Revitalizing Food Security and Agri-Food Development

Three shifts are recommended to modernize and transform the agri-food system. First, the food security approach needs to be broadened to address Indonesia's evolving needs and realize the comprehensive vision enshrined in the FL. Second, policy goals need to be re-adjusted, policy instruments re-tuned and the policy scope re-defined. Third, public expenditures need to be reallocated for a greater and more productive impact.

The broadening of the food security agenda would involve moving beyond self-sufficiency in rice and other strategic commodities to a more balanced consideration of food availability, affordability, nutritional adequacy and quality for all, especially for the poorest consumers. This would entail a number of strategic changes: (i) promoting diversification (especially horticulture and livestock) to increase the supply of micro-nutrients and proteins at reasonable prices; (ii) supporting not just primary production, but off-farm processing and value-addition; and (iii) focusing on quality, not just quantity of food.

To better serve this broadened food security agenda and strategies, policy goals would need adjustment. These include : (i) shifting from an exclusive

⁴⁰ Oil crops in Indonesia is mostly oil palm, while oil crops in China are soybeans and other non-tree vegetable oil crops

focus on increasing output to increasing productivity of crops and livestock; (ii) transitioning from protecting farmers of selected crops to enabling structural transformation towards a diversified agriculture that benefits all farmers; and (iii) moving away from protecting the domestic market with import restrictions to supporting the improved competitiveness of agriculture, and opening up vast export markets for domestic producers. Current trade restrictions and price support policies effectively tax Indonesian consumers by making a broad range of foods much more expensive than they would be under a different policy regime. As a result, Indonesia's poor can scarcely afford to purchase a nutritionally balanced diet.

There would also be the need to re-tune the policy instruments. For instance, it is time to remove nontariff barriers, which produce multiple distortions at different levels. In particular, it is recommended that rice imports are de-monopolized and administrative controls replaced with tariffs. These tariffs could be periodically adjusted when there are large shifts in domestic and international prices. In this regard, lessons can be learnt from the recent liberalization of rice imports in the Philippines, whereby the revenues from newly introduced tariffs (that replaced other import restrictions) are being used to compensate affected farmers through public support to improve productivity or diversify cropping systems. Similarly, direct market interventions such as price support or subsidies could be avoided in favor of approaches that fix underlying market failures. For instance, the provision of credit and/or input subsidies could be replaced by measures to deepen rural or value-chain finance.

Further, the scope of policies should be re-defined.

First, the policy focus could be expanded beyond maintaining supply and price stability of select strategic commodities to increasing productivity of agriculture, promoting nutritional adequacyand enhancing farmer incomes. Second, policies should seek to promote private sector involvement in the off-farm value chain activities (such as inputs supply, processing, storage, trading and marketing) by improving the investment climate and ensuring that SOEs do not crowd out private enterprises. Third, policies should seek to foster innovation and competitiveness by enabling investments in the development and dissemination of new technologies, improving farmer skills and promoting farm-enterprise productive partnerships. Finally, policies should also seek to strengthen food safety and food quality regimes, especially by fostering systems and capacities for improved surveillance, reporting, diagnostics and managements of food-borne hazards.

Finally, changes should be made to public expenditures to better align with the strategic and policy shifts. There are a number of steps that could be taken here. First, it is recommended that the large fertilizer subsidies are reduced in a phased manner. Instead, these could be re-deployed for strengthening technical and regulatory services (e.g. promotion of new technologies, climate smart agriculture R&D, e-extension and digital market services) which are critical for improving agricultural productivity, managing production-related risks, reducing agriculture's environmental footprint and promoting (demand-driven) agricultural diversification. Second, more resources could be allocated to improve rural and urban infrastructure (farm to market roads, warehousing facilities, wholesale markets, clean and healthy wet markets) to improve the marketing position of farmers, reduce post-harvest losses, and mitigate food safety hazards. Third, more investment should be made in food safety management and other measures for consumer protection. Household food security is ultimately about consumption of affordable, healthy, and safe foods. Public policies and spending could be strengthened to support this. Finally, it is recommended that irrigation expenditures are re-balanced away from investment in new infrastructure to ensure adequate operations and maintenance of existing infrastructure as well as on-farm investments to raise irrigation system productivity.

Overall, the government could leverage the development of the agri-food system to advance other national priorities. Further modernization of agriculture could boost growth, farm incomes, jobs, exports and environmental sustainability, while delivering more food choice, value, safety and convenience to consumers at more stable and competitive prices. Thus, it would also serve the broader goals of inclusion, nutrition, resilience, competitiveness and long-term economic growth.

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Phase	Program name	ey Government SA Program	Increased cover-	· ·	Implementation
	U U	Benefit type, beneficiary selection and coverage	age above pre COVID-19	Benefit level & dura- tion	·
Phase I: 8 packages introduced in April 2020	Sembako	Existing food assistance program, targeting the poorest 25 percent in- cluded in the DTKS	Expansion from 15.2 to 20 million households, identi- fied among those already in the DTKS	Increased benefits of IDR 200,000/month (for 12 months)	Monthly, for 9 months (starting in March for existing households, expansion started in April)
	РКН	Existing family conditional cash transfer, targeting the poorest 15 percent in the DTKS	Expansion from 9.2 to 10 million households identi- fied among those already in DTKS	Increased benefits by 25% for 12 months	Monthly-for 9 months (starting in April)
geting jobseel or above who mal education ceiving PKH of tional cash tra- ing household area, who are covered in an programs (Se and Pra-KerjaSembako (Jabodetabek)Newly launche tional cash tra- ing household area, who are covered in an programs (Se and Pra-KerjaSembako (Jabodetabek)New food trar Covid-19 affe ble residents to and districts s the capital (BoElectricity Sub- sidy for House- holdsNewly launche tional cash tra 31 percent of Village Fund)BLT Dana Desa (Village Fund)Newly launche tional cash tra 31 percent of Village Fund (program will b cated targetin holds, uncove bako, PKH, ar program and a Covid-19Phase II:Electricity Sub- sidy for House- holdsNewly launche to to Newly launche to and cash tra and program will b cated targetin holds, uncove bako, PKH, ar program and a Covid-19	Kartu Pra-Kerja	Pre-employment card tar- geting jobseekers, age 18 or above who are not in for- mal education and not re- ceiving PKH or Sembako	Expansion from 2 to 5.6 million in to- tal	Training: IDR 1 million (one time), benefits of IDR 600,000/month (4 months), IDR 50,000/months (3 months)	Launched in April, roll- ing out progressively
	Newly launched uncondi- tional cash transfer, target- ing households in DTKS and <i>outside</i> Jabodetabek area, who are not currently covered in any of existing programs (Sembako, PKH, and Pra-Kerja)	9 million house- holds	IDR 600,000/month (3 months), then IDR 300,000/month (6 months)	April-December, 2020	
		New food transfer covering Covid-19 affected vulnera- ble residents of Jakarta and districts surrounding the capital (Bodetabek)	1.3 million house- holds in Jakarta, 600,000 house- holds in periphery districts (Bodetabek)	Food package equiva- lent to IDR 600,000/month (3 months), then IDR 300,000/month (6 months)	April-December, 2020
	sidy for House-	Newly launched electricity fee waiver and partial dis- counts for households	All households subscribing to 450VA (24 million households) and R1/900VA or R1/T900VA (7.2 million house- holds) electricity connection. ⁴¹	HHs with 450 VA – fee waiver (9 months) HHs with 900 VA – 50% off bills (9 months)	April-December, 2020
		Newly launched uncondi- tional cash transfer using 31 percent of Indonesia's Village Fund (Dana Desa) program will be re-allo- cated targeting rural house- holds, uncovered by Sem- bako, PKH, and Prakerja program and affected by Covid-19	11 million rural households, priori- tizing those who lost main source of income due to Covid-19 ⁴²	IDR 600,000/month (3 months), then IDR 300,000/month (6 months)	April-December, 2020
New pro- grams intro- duced on		Newly launched electricity fee waiver for UMKM	501,000 micro/ul- tra-micro-enter- prises	Fee waiver for micro/ul- tra-micro enterprises with 450 VA	May-December, 2020

 ⁴¹ These add up to 50 million households in the 2019 SUSENAS.
⁴² The WB simulation model assumes 12.5 million households on basis of earlier plans from MOF.

2020 (top- ping up the on-going Phase I pro- grams)					
	UCT for Sem- bako Benefi- ciaries	New one-time uncondi- tional cash transfer, target- ing Sembako beneficiaries who are not receiving PKH	9 million house- holds	IDR 500,000 (one time)	August, 2020
	Rice Assis- tance for PKH Beneficiaries	New rice assistance for all PKH beneficiaries	10 million house- holds	15 kg rice/month (for 3 months)	August-October 2020
	Banpres Produktif	Newly launched grant for micro/ultra-micro enter- prises affected by Covid-19 and not receiving credit program	12 million micro/ul- tra-micro enter- prises	IDR 2,400,000 (one time)	Launched in August, application opens until December 2020
	Wage Subsidy	Newly launched uncondi- tional cash transfer for workers with salary < IDR 5,000,000 and registered on BPJS TK	15.7 million work- ers	IDR 1,200,000/two- month (2 months)	September-December 2020

Source: World Bank staff compilation from various sources

Annex Table 2: Budget outcomes

(IDR trillion)

20122013201420152016201720182019ActualActualActualActualActualActualActualActualActualA. State revenue and grants1,3381,4391,5501,5081,5561,6661,9441,9611. Tax revenue9811,0771,1471,2401,2851,3441,5191,5462. Non-tax revenue352355399256262311409409B. Expenditure1,4911,6511,7771,8071,8642,0072,2132,3091. Central government1,0111,1371,2041,1831,1541,2651,4551,4962. Transfers to the regions481513574623710742758813C. Primary balance-53-99-93-142-126-124-11-73D. SURPLUS / DEFICIT-153-212-227-298-308-341-269-349(percent of GDP)-1.8-2.2-2.1-2.6-2.5-2.5-1.8-2.2									
A. State revenue and grants 1,338 1,439 1,550 1,508 1,556 1,666 1,944 1,961 1. Tax revenue 981 1,077 1,147 1,240 1,285 1,344 1,519 1,566 2. Non-tax revenue 352 355 399 256 262 311 409 409 B. Expenditure 1,491 1,651 1,777 1,807 1,864 2,007 2,213 2,309 1. Central government 1,011 1,137 1,204 1,183 1,154 1,265 1,455 1,496 2. Transfers to the regions 481 513 574 623 710 742 758 813 C. Primary balance -53 -99 -93 -142 -126 -124 -11 -73 D. SURPLUS / DEFICIT -153 -212 -227 -298 -308 -341 -269 -349		2012	2013	2014	2015	2016	2017	2018	2019
1. Tax revenue 981 1,077 1,147 1,240 1,285 1,344 1,519 1,546 2. Non-tax revenue 352 355 399 256 262 311 409 409 B. Expenditure 1,491 1,651 1,777 1,807 1,864 2,007 2,213 2,309 1. Central government 1,011 1,137 1,204 1,183 1,154 1,265 1,455 1,496 2. Transfers to the regions 481 513 574 623 710 742 758 813 C. Primary balance -53 -99 -93 -142 -126 -124 -11 -73 D. SURPLUS / DEFICIT -153 -212 -227 -298 -308 -341 -269 -349		Actual							
2. Non-tax revenue 352 355 399 256 262 311 409 409 B. Expenditure 1,491 1,651 1,777 1,807 1,864 2,007 2,213 2,309 1. Central government 1,011 1,137 1,204 1,183 1,154 1,265 1,455 1,496 2. Transfers to the regions 481 513 574 623 710 742 758 813 C. Primary balance -53 -99 -93 -142 -126 -124 -11 -73 D. SURPLUS / DEFICIT -153 -212 -227 -298 -308 -341 -269 -349	A. State revenue and grants	1,338	1,439	1,550	1,508	1,556	1,666	1,944	1,961
B. Expenditure1,4911,6511,7771,8071,8642,0072,2132,3091. Central government1,0111,1371,2041,1831,1541,2651,4551,4962. Transfers to the regions481513574623710742758813C. Primary balance-53-99-93-142-126-124-11-73D. SURPLUS / DEFICIT-153-212-227-298-308-341-269-349	1. Tax revenue	981	1,077	1,147	1,240	1,285	1,344	1,519	1,546
1. Central government 1,011 1,137 1,204 1,183 1,154 1,265 1,455 1,496 2. Transfers to the regions 481 513 574 623 710 742 758 813 C. Primary balance -53 -99 -93 -142 -126 -124 -11 -73 D. SURPLUS / DEFICIT -153 -212 -227 -298 -308 -341 -269 -349	2. Non-tax revenue	352	355	399	256	262	311	409	409
2. Transfers to the regions 481 513 574 623 710 742 758 813 C. Primary balance -53 -99 -93 -142 -126 -124 -11 -73 D. SURPLUS / DEFICIT -153 -212 -227 -298 -308 -341 -269 -349	B. Expenditure	1,491	1,651	1,777	1,807	1,864	2,007	2,213	2,309
C. Primary balance -53 -99 -93 -142 -126 -124 -11 -73 D. SURPLUS / DEFICIT -153 -212 -227 -298 -308 -341 -269 -349	1. Central government	1,011	1,137	1,204	1,183	1,154	1,265	1,455	1,496
D. SURPLUS / DEFICIT -153 -212 -227 -298 -308 -341 -269 -349	2. Transfers to the regions	481	513	574	623	710	742	758	813
	C. Primary balance	-53	-99	-93	-142	-126	-124	-11	-73
(percent of GDP) -1.8 -2.2 -2.1 -2.6 -2.5 -2.5 -1.8 -2.2	D. SURPLUS / DEFICIT	-153	-212	-227	-298	-308	-341	-269	-349
	(percent of GDP)	-1.8	-2.2	-2.1	-2.6	-2.5	-2.5	-1.8	-2.2

Source: MoF; World Bank staff calculations

Note: Budget balance as percentage of GDP uses the revised and rebased GDP

Annex Table 3: Balance of payments

(USD billion)

	2018	2019 2019						2020		
	2010	2019	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
Balance of payments	-7.1	4.7	2.4	-2.0	0.0	4.3	-8.5	9.2	2.1	
Percent of GDP	-0.7	0.4	0.9	-0.7	0.0	1.5	-3.1	3.8	0.8	
Current account	-30.6	-30.4	-6.6	-8.2	-7.5	-8.1	-3.7	-2.9	1.0	
Percent of GDP	-2.9	-2.7	-2.5	-3.0	-2.6	-2.8	-1.3	-1.2	0.4	
Trade balance	-6.7	-4.2	-0.3	-1.3	-0.9	-1.7	2.6	1.8	7.2	
Net income & current transfers	-23.9	-26.1	-6.3	-6.9	-6.6	-6.4	-6.2	-4.7	-6.2	
Capital & Financial Account	25.2	36.7	9.9	6.8	7.5	12.5	-3.1	10.6	1.0	
Percent of GDP	2.4	3.3	3.7	2.4	2.6	4.4	-1.1	4.3	0.4	
Direct investment	12.5	20.1	5.9	5.8	5.2	3.1	4.0	3.9	1.1	
Portfolio investment	9.3	22.0	5.5	4.6	4.6	7.3	-6.1	9.8	-1.9	
Other investment	3.3	-5.6	-1.6	-3.6	-2.5	2.1	-0.7	-3.1	1.8	
Errors & omissions	-1.7	-1.6	-0.9	-0.5	0.0	-0.1	-1.8	1.6	0.0	
Foreign reserves*	120.7	129.2	124.5	123.8	124.3	129.2	121.0	131.7	135.2	

Source: Ministry of Finance, Republic of Indonesia; World Bank staff calculations

Note: *Reserve at end-period

	2000	2011	2012	2013	2014	2015	2016	2017	2018	2019
National Accounts (% change) ¹										
Real GDP	4.9	6.2	6.0	5.6	5.0	4.9	5.0	5.1	5.2	5.0
Real investment	11.4	8.9	9.1	5.0	4.4	5.0	4.5	6.2	6.6	4.4
Real consumption	4.6	5.1	5.4	5.7	4.7	4.9	4.3	4.6	5.1	4.9
Private	3.7	5.1	5.5	5.5	5.3	4.8	5.0	5.0	5.1	5.2
Government	14.2	5.5	4.5	6.7	1.2	5.3	-0.1	2.1	4.8	3.2
Real exports, GNFS	30.6	14.8	1.6	4.2	1.1	-2.1	-1.7	8.9	6.5	-0.9
Real imports, GNFS	26.6	15.0	8.0	1.9	2.1	-6.2	-2.4	8.1	11.9	-7.7
Investment (% GDP)	19.9	31.3	32.7	32.5	32.4	32.4	32.2	32.6	33.0	32.8
Nominal GDP (USD billion)	165	893	918	915	891	861	932	1,016	1,042	1,119
GDP per capita (USD)	857	3,688	3,741	3,668	3,532	3,368	3,605	3,886	3,945	4,193
Central Government Budget (% GDP) ²										
Revenue and grants	13.9	15.5	15.5	15.1	14.7	13.1	12.5	12.3	13.1	12.4
Tax revenue	7.8	11.2	11.4	11.3	10.9	10.8	10.4	9.9	10.2	9.8
Non-tax revenue	6.0	4.2	4.1	3.7	3.8	2.2	2.1	2.3	2.8	2.6
Expenditure	15.0	16.5	17.3	17.3	16.8	15.7	15.0	14.8	14.9	14.6
Consumption	2.7	3.8	3.9	4.1	4.0	4.5	4.6	4.4	4.7	4.5
Capital	1.7	1.5	1.7	1.9	1.4	1.9	1.4	1.5	1.2	1.1
Interest	3.4	1.2	1.2	1.2	1.3	1.4	1.5	1.6	1.7	1.7
Subsidies	4.2	3.8	4.0	3.7	3.7	1.6	1.4	1.2	1.5	1.3

			T 1 1 1 1		•			
Anney	Table	4 •	Indones1a's	historical	macroeconomic	indicators	s at a	glance
Innea	Lanc	т.	indonesia s	motorica	macroccononne	maicatore) αι α	grance

			2012		2014					
National Accounts (% change) ¹										
Real GDP	4.9	6.2	6.0	5.6	5.0	4.9	5.0	5.1	5.2	5.0
Real investment	11.4	8.9	9.1	5.0	4.4	5.0	4.5	6.2	6.6	4.4
Real consumption	4.6	5.1	5.4	5.7	4.7	4.9	4.3	4.6	5.1	4.9
Private	3.7	5.1	5.5	5.5	5.3	4.8	5.0	5.0	5.1	5.2
Government	14.2	5.5	4.5	6.7	1.2	5.3	-0.1	2.1	4.8	3.2
Real exports, GNFS	30.6	14.8	1.6	4.2	1.1	-2.1	-1.7	8.9	6.5	-0.9
Real imports, GNFS	26.6	15.0	8.0	1.9	2.1	-6.2	-2.4	8.1	11.9	-7.7
Investment (% GDP)	19.9	31.3	32.7	32.5	32.4	32.4	32.2	32.6	33.0	32.8
Nominal GDP (USD billion)	165	893	918	915	891	861	932	1,016	1,042	1,119
GDP per capita (USD)	857	3,688	3,741	3,668	3,532	3,368	3,605	3,886	3,945	4,193
Central Government Budget (% GDP) ²										
Revenue and grants	13.9	15.5	15.5	15.1	14.7	13.1	12.5	12.3	13.1	12.4
Tax revenue	7.8	11.2	11.4	11.3	10.9	10.8	10.4	9.9	10.2	9.8
Non-tax revenue	6.0	4.2	4.1	3.7	3.8	2.2	2.1	2.3	2.8	2.6
Expenditure	15.0	16.5	17.3	17.3	16.8	15.7	15.0	14.8	14.9	14.6
Consumption	2.7	3.8	3.9	4.1	4.0	4.5	4.6	4.4	4.7	4.5
Capital	1.7	1.5	1.7	1.9	1.4	1.9	1.4	1.5	1.2	1.1
Interest	3.4	1.2	1.2	1.2	1.3	1.4	1.5	1.6	1.7	1.7
Subsidies	4.2	3.8	4.0	3.7	3.7	1.6	1.4	1.2	1.5	1.3
Budget balance	-1.1	-1.1	-1.8	-2.2	-2.1	-2.6	-2.5	-2.5	-1.8	-2.2
Government debt	97.9	23.1	23.0	24.9	24.7	27.5	28.3	29.4	29.8	30.2
o/w external government debt	51.4	11.7	11.9	11.8	13.3	16.0	16.6	17.5	17.6	17.9
Total external debt (including private sec-	87.1	25.2	27.5	29.2	32.9	36.1	34.3	34.7	36.0	36.1
tor)										
Balance of Payments (% GDP) ³ Overall balance of payments		1.3	0.0	-0.8	1.7	-0.1	1.3	1.1	-0.7	0.4
Current account balance	4.8	0.2	-2.7	-3.2	-3.1	-2.0	-1.8	-1.6	-2.9	-2.7
Exports GNFS	42.8	23.8	23.0	22.5	22.3	19.9	18.0	19.1	20.3	17.9
Imports GNFS	33.9	21.2	23.2	23.2	22.7	19.3	17.1	18.0	21.0	18.3
Trade balance	8.9	2.7	-0.2	-0.7	-0.3	0.6	0.9	1.1	-0.6	-0.4
Financial account balance		1.5	2.7	2.4	5.0	2.0	3.1	2.8	2.4	3.3
Direct investment	-2.8	1.3	1.5	1.3	1.7	1.2	1.7	1.8	1.2	1.8
Gross official reserves (USD billion)	29.4	110	113	99	112	106	116	130	121	129
Monetary (% change) ³										
GDP deflator ¹	20.4	7.5	3.8	5.0	5.4	4.0	2.4	4.3	3.8	1.6
Bank Indonesia benchmark policy rate						6.3	4.8	4.3	6.0	5.0
(%)										
Domestic credit (eop)		24.6	23.1	21.6	11.6	10.4	7.9	8.2	11.8	6.1
Nominal exchange rate (average, IDR/USD)	8,392	8,776	9,384	10,46 0	11,86 9	13,38 9	13,30 9	13,38 1	14,23 8	13,40 3
Prices (% change) ¹					2	-	-		-	2
Consumer price Index (eop)	9.4	3.8	3.7	8.1	8.4	3.4	3.0	3.6	3.1	2.6
Consumer price Index (average)	3.7	5.3	4.0	6.4	6.4	6.4	3.5	3.8	3.2	2.8
Indonesia crude oil price (USD per barrel,	28	111	107	107	60	35	51	61	55	67
eop)⁴	20		107	107	00		51	01	55	07

eop)⁴ Source: ¹ BPS and World Bank staff calculations, using revised and 2010 rebased figures. ² MoF and World Bank staff calculations, ³ BI, ⁴ CEIC Note: Consumer price index was rebased in 2007, 2012, and 2018. Figures are based on the reported base year.

Annex Table 5: Indonesia's development indicators at a glance

	2000	2011	2012	2013	2014	2015	2016	2017	2018	2019
Demographics ¹										
Population (million)	212	245	248	252	255	258	262	265	268	27
Population growth rate (%)	1.4	1.3	1.4	1.3	1.3	1.3	1.2	1.2	1.1	1.
Urban population (% of total)	42	51	51	52	53	53	54	55	55	5
Dependency ratio (% of working-age population)	55	51	50	50	49	49	49	48	48	4
_abor Force ²										
Labor force, total (million)	98	117	120	120	122	122	125	128	131	13
Male	60	73	75	75	76	77	77	79	80	8
Female	38	44	46	45	46	46	48	49	51	5
Agriculture share of employment (%)	45	36	35	35	34	33	32	30	29	2
Industry share of employment (%)	17	21	22	20	21	22	21	22	23	2
Services share of employment (%)	37	43	43	45	45	45	47	48	48	4
Unemployment, total (% of labor force)	8.1	7.4	6.1	6.2	5.9	6.2	5.6	5.5	5.4	5
Poverty and Income Distribution ³										
Median household consumption (IDR 000 per month)	104	421	446	487	548	623	697	765	835	87
National poverty line (IDR 000 per month)	73	234	249	272	303	331	354	374	401	42
Population below national poverty line (million)	37.5	30.0	28.7	28.6	27.7	28.5	27.8	26.6	25.7	25
Poverty (% of population below national poverty line)	19.1	12.5	12.0	11.4	11.3	11.2	10.9	10.6	9.8	ç
Urban (% of population below urban poverty line)	14.6	9.2	8.8	8.4	8.3	8.3	7.8	7.7	7.0	6
Rural (% of population below rural poverty line)	22.4	15.7	15.1	14.3	14.2	14.2	14.1	13.9	13.2	12
Male-headed households	19.1	12.4	11.9	11.2	11.2	11.0	10.7	10.5	9.7	ę
Female-headed households	17.9	13.4	12.7	11.7	11.9	13.1	12.3	11.8	11.2	10
Gini index	0.30	0.41	0.41	0.41	0.41	0.40	0.39	0.39	0.38	0.
Percentage share of consumption: lowest 20%	9.6	7.4	7.5	7.4	7.5	7.2	7.1	7.0	7.0	6
Percentage share of consumption: highest 20%	38.6	46.5	46.7	47.3	46.8	47.3	46.2	45.7	45.4	45
Public expenditure on social assistance (% of GDP) ⁴		0.5	0.5	0.7	0.6	0.8	0.7	0.7	0.7	C
lealth and Nutrition ¹										
Physicians (per 1,000 people)	0.2		0.3	0.3		0.3		0.4	0.4	
Under five mortality rate (per 1000 children under 5 years)	52	33	31	30	29	28	27	26	25	
Neonatal mortality rates (per 1000 live births)	23	17	16	16	15	15	14	13	13	
Infant mortality (per 1000 live births)	41	27	26	25	24	23	23	22	21	
Maternal mortality ratio (modeled est., per 100,000 live births)	272	221	214	207	199	192	184	177		
Measles vaccination (% of children between 12 and 24 months)	76	80	82	87	86	87	88	90	89	
Public health expenditure (% of GDP)	0.7	0.9	1.0	1.0	1.1	1.2	1.4	1.4	1.4	1
ducation ³										
Primary net enrollment rate (%)		92	93	92	93	97	97	97	98	
Female (% of total net enrollment)		49	49	50	48	49	49	49	49	
Secondary net enrollment rate (%)		60	60	61	65	66	66	79	79	
Female (% of total net enrollment)		50	49	50	50	51	51	49	49	
Tertiary net enrollment rate (%)		14	15	16	18	20	21	19	19	
Female (% of total net enrollment)		50	54	54	55	56	55	53	53	
Adult literacy rate (%)		91	92	93	93	95	95	96	96	
Public spending on education (% of GDP) ⁵		3.3	3.3	3.3	3.3	3.5	3.4	3.1	3.0	3
Public spending on education (% of spending) ⁵		18.9	17.9	17.3	17.4	19.3	20.0	20.0	20.0	18
/ater and Sanitation ¹										
Access to at least basic drinking water services (% of pop-						••				
ulation)	76	85	86	87	87	88	89	89	••	
Urban (% of urban population)	90	93	94	94	94	95	95	95		
Rural (% of rural population)	66	76	77	78	79	80	81	82		
Access to at least basic sanitation facilities (% of popula-										
tion)	41	62	64	66	67	69	71	73		
Urban (% of urban population)	63	74	75	76	77	78	79	80		
Rural (% of rural population)	25	50	52	54	57	59	62	65		
Dthers ¹										
Proportion of seats held by women in national parliament	0	40	10	10	47	47	4-7	00	00	
(%)	8	18	19	19	17	17	17	20	20	

Source: ¹ World Development Indicators; ² BPS (Sakernas); ³ BPS (Susenas) and World Bank; ⁴ MoF, World Bank staff estimate and calculations, Social assistance includes spending on Raskin, health insurance for the poor, scholarship for the poor, family hope program (PKH), cash for work (PKT, 2018), and remaining MOSA and social protection function expenditures and actuals; ⁵ MoF.



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