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Trade for Growth and Economic Transformation



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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 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 Habib Rab (Lead Economist). The report is led by Wael Mansour (Senior Economist) and prepared by a core team composed of Indira Maulani Hapsari (Senior Economist) and Csilla Lakatos (Senior Economist).

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Part B was prepared by Csilla Lakatos (report lead), Angella Montfaucon, Mochamad Pasha, Lamiaa Bennis, Bayu Agnimaruto, Muhammad Hazmi Ash Shidqi and Jana Mirjam Silberring. Part B benefitted from the comments of Habib Rab. Inputs were also provided by Indonesia's Directorate General of Customs and Excise ---particularly Rudy Rahmaddi--- through the provision of customs data.

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Abbreviations

ASEAN	Association of Southeast Asian Nations	OECD	Organization for Economic Cooperation and Development
BI	Bank Indonesia	OJK	Otoritas Jasa Keuangan
BKPM	Badan Koordinasi Penanaman Modal	PCB	Private Credit Bureau
BPJS	Badan Penyelenggara Jaminan Sosial	PDP	Personal Data Protection
BPS	Badan Pusat Statistik	PLN	Perusahaan Listrik Negara
BRI	Bank Rakyat Indonesia	PP	Percentage Points
CAS	Cooperation Agreements	PPI	Producer Price Index
CEPA	Comprehensive Economic Partnership Agreement	PPP	Purchasing Power Parity
CIT	Corporate Income Tax	PSI	Pre-Shipment Inspection
CPI	Consumer Price Index	PTA	Preferential Trade Agreements
CPO	Crude Palm Oil	QRIS	QR Indonesian Standard
DNDF	Domestic Non-Deliverable Forwards	RCEP	Regional Comprehensive Economic Partnership
DPR	Indonesian House of Representatives	REER	Real Effective Exchange Rates
DLP	Digital Logistics Platforms	R&D	Research and Development
EA	East Asia	RHS	Right Hand Side
EAP	East Asia Pacific	ROA	Return on Assets
EGA	Environmental Goods Agreement	ROE	Return on Equity
FAO	Food and Agriculture Organization	RPJMN	Rencana Pembangunan Jangka Menengah Nasional
FDI	Foreign Direct Investment	SJSN	National Social Security System
FFSR	Fossil Fuel Subsidy Reform	SNI	National Standard Certification
FX	Foreign Exchange	SN-PPK	Strategi Nasional Pengembangan dan Pendalaman Pasar Keuangan
EFI	Equitable growth, Finance, and Institution	SNGs	Sub National Governments
EFTA	European Free Trade Association	SOE	State-Owned Enterprise
EMDE	Market and Developing Economies	SPS	Sanitary and Phytosanitary Measures
GDP	Gross Domestic Product	SSB	Sugar-Sweetened Beverages
GOI	Government of Indonesia	Susenas	Survei Sosial Ekonomi Nasional Indonesia
GVC	Global Value Chains	TBT	Technical Barriers to Trade
IFAD	International Fund for Agricultural Development	THL	Tax Harmonization Law
INSW	Indonesia National Single Window	TSSD	Trade and Environmental Sustainability Structured Discussions
LAR	Loan at Risk	UNICEF	United Nations Children's Fund
LKD	Lembaga Kemasyarakatan Desa	VAT	Value Added Tax
LPG	Liquefied Petroleum Gas	VECM	Vector Error Correction Model
MCS	Market Conduct Supervision	WEO	World Economic Outlook
MFN	Most Favored Nation	WHO	World Health Organization
MOF	Ministry of Finance	WTO	World Trade Organization
MoU	Memorandum of Understanding	YTD	Year-to-Date
MSME	Micro, Small Medium Enterprise		
NLE	National Logistics Ecosystem		
NPL	Non-Performing Loan		
NTM	Non-Tariff Measures		

Executive summary

Executive Summary

A series of destabilizing shocks have weakened global economic conditions and derailed the global economic recovery.

Despite global slowdown, Indonesia has experienced strong growth in 2022 thanks to commodity windfalls and a reopening of the economy.

Economic conditions in Indonesia have remained stable amidst global shocks, but it has not been insulated from price pressures.

Indonesia's external vulnerability has been low to moderate as strong exports have supported the external balance although tighter global finances have put some pressure on the capital account.

I. Economic and Fiscal Update

The Russia-Ukraine war has disrupted global trade and supply chains, exacerbating the rise in global commodity and food prices. Persistently high global inflation accompanied by tepid growth brings fears of stagflation that could endure for several years. Amidst this environment, the US Federal Reserve and other advanced economy central banks sharply tightened monetary policy to curb inflation. This has translated into tighter external financing conditions and financial stress for some emerging markets and developing economies (EMDEs) as capital outflows have intensified.

Real GDP growth has accelerated from 3.7 percent in 2021 to 5.4 percent yoy in the first three quarters of 2022. The spike in coal and palm oil prices since the start of the Russia-Ukraine war has generated windfall corporate earnings. A drop in COVID infection rates and a successful vaccination program has prompted the lifting of mobility restrictions. This has released pent-up demand and led to a sharp acceleration in private consumption. Output of transportation and communications services, trade, and hospitality, as well as manufacturing of food, textiles, and basic metals, have grown the fastest. The unemployment rate has fallen below 6 percent and average wages rose by 12 percent yoy. Nevertheless, a small gap still remains with pre-pandemic levels.

Inflation has picked up, reaching 5.7 percent (yoy) in October. Price pressures have been driven by rising international commodity prices, increased domestic energy tariffs, and higher producer prices. Producer price passthrough to consumer prices, however, has been limited by price control mechanisms, particularly in energy and agriculture. Inflation expectations have risen, leading to some dampening of consumer sentiments in most recent Bank Indonesia consumer surveys. Higher food and fuel prices are eroding purchasing power, with varying impacts across income groups. The price for food has increased by 7.9 percent year-on-year in September 2022. This is estimated to reduce private consumption by 3.7 percent for the bottom 40 and 2.8 percent for the top 20.¹

Commodity exports have strengthened the current account surplus from a 0.2 percent of GDP in 3Q-2021 to 0.9 percent of GDP in 3Q-2022. Non-commodity exports like vehicles, electrical machines, and footwear and clothing have also constituted nearly half of total exports. These have helped offset pressures from rising imports. At the same time, Indonesia is facing tighter external finances like other Emerging Markets and Developing Economies (EMDEs). Outflows of portfolio debt accelerated since July, in line with the US Federal Reserve rate hike cycle, adding to currency pressures. But short-term refinancing needs remain low (2.1 percent of GDP) and foreign exchange reserves remain adequate (6 months of import cover). Sound macroeconomic management and low internal and external imbalances have helped contain market perceptions of sovereign credit risk.

¹ This refers to the bottom 40 percent of the population by expenditure distribution. This category includes poor, economically vulnerable groups, and some middle-income households. The top 20 refers to the 20 percent richer segment of the population by expenditure distribution.

The fiscal consolidation plans in 2022 have been aided by higher taxes from the recovery and commodity windfalls, and lower spending on COVID-related measures.

Bank Indonesia is hiking its policy rate to curb inflation and contain capital outflows though current economic conditions provide space to ease the pace of tightening and safeguard economic growth.

Indonesia is projected to have a robust growth over the next three years though with significant downside risks emanating from the global economic environment.

To address current macro-fiscal policy challenges, the report highlights three policy and institutional areas that may warrant attention going forward.

Indonesia's history, size, location, demographics, and resource endowments set it up for great international trade potential.

The government has run a modest fiscal deficit in the first ten months of the year. It is estimated to widen to 2.7 percent of GDP for the full year due to backloaded spending including compensation to SOEs. By October 2022, total revenues grew by 44.5 percent, a broad-based growth across major revenue categories. Government spending moderated significantly with the reduction of extraordinary COVID support. But these efforts were partially offset by a rising energy subsidy bill and interest costs. The government adjusted fuel prices in September to relieve fiscal pressures, but the fiscal savings will largely accrue in future years. The price adjustment is estimated to have cut the government's total fuel subsidy obligations by just 0.1 percent of GDP in 2022, and by 0.4 percent of GDP in 2023-2025. Fuel subsidies remain substantial, estimated at an average of 1.8 percent of GDP per annum in 2023-25. Tackling the subsidies bill also requires deepening the coverage of social assistance and social insurance systems to protect the purchasing power of vulnerable groups.

Bank Indonesia raised its policy interest rate by a cumulative 175 bps between August and November (from 3.5 to 5.25 percent). Monetary tightening contributes to already high borrowing costs, which weighs on investment and growth. As BI normalizes its monetary policy, growth of broad money in circulation (M2) has also eased. At the same time, the Rupiah has become more resilient to capital flow volatility over time, which may provide space to ease the pace of monetary tightening. Moreover, Indonesia's external exposure has declined. External loans to government and corporates as a share of GDP have fallen to below pre-pandemic levels.

Economic growth in 2022 is estimated at 5.2 percent and to average 4.9 percent over the medium term (2023-25). Nevertheless, downside risks are substantial and could weigh heavily on Indonesia's growth if they materialize. Weaker global demand, tighter global finances, broad-based capital outflows, and currency pressures could trigger a more rapid monetary policy tightening cycle. Average inflation is projected to peak in 2023 at 4.5 percent, and then remaining at BI's upper bound target, an average of 3.5 percent in 2024-2025. The fiscal deficit is projected to remain below 3 percent of GDP government target by 2023 as returns from tax reforms materialize and COVID related expenditures are terminated. The external position is projected to deteriorate slightly with low to moderate risks of vulnerability. The current account balance is projected to turn into a small deficit over the medium term.

The first is about continuing with the implementation of tax reforms to broaden the tax base and improve compliance of business tax collection. This would help create fiscal space for growth and economic resilience to shocks. The second is related to public spending where the authorities could over time move towards a rules-based pricing model for energy to contain subsidy pressures. The third is improving targeting and expanding coverage of existing social assistance and social insurance programs. This means filling coverage gaps, developing a system that provides a guaranteed minimum protection across the lifecycle, and strengthening delivery systems.

II. Trade for Growth and Economic Transformation in Indonesia

Strategically positioned between two continents and at the intersection of many trade routes, Indonesia is endowed with significant natural resources, has a large economy and workforce on the cusp of a demographic dividend. Trade is also deeply intertwined with Indonesia's history, as the country is historically known for its merchants, wealth of spices and resources. Indonesia is the 4th largest country in terms of population, the 16th largest by GDP yet only the 25th largest by exports.

Despite this potential, the growth of Indonesia's tradable sector has lagged the unprecedented expansion of global trade over the past four decades.

After the Asian Financial Crisis, Indonesia's trade openness has more than halved, coinciding with a period of deindustrialization.

At just 1.1 percent of global manufacturing exports, Indonesia has significant scope to build on its comparative advantages to boost export growth and diversification.

Inward looking policies combined with structural constraints to firm and export growth have weighed on Indonesia's international competitiveness.

Achieving the government objective of 35 percent import substitution would disrupt domestic manufacturing and investment.

Between 1980-2020, world trade in goods and services grew at an average annual real rate of close to 5 percent, leading to a more than seven-fold expansion of the volume of global trade. This unprecedented growth in world trade was supported by a steep decline in trade costs, advances in information technology, trade liberalization efforts and the expansion of global value chains (GVCs). During the same period, Indonesia's exports of goods and services expanded only half as much. In contrast, the volume of total exports of Malaysia, Thailand, and the Philippines increased by more than 12-fold.

Indonesia's trade to GDP ratio fell from 72 percent in 2000 to 33 percent in 2020 and is also the lowest among regional peers. Overlapping with the decline in trade openness, the contribution of manufacturing to Indonesia's GDP also fell significantly, from its peak at 31 percent in 2002 to 19 percent in 2021. Compared to other countries in the region, the decline in the share of manufacturing in GDP started at lower levels of GDP per capita and development.

Indonesia's share in world exports has been stagnating and is lower than that of regional comparators. Exports are also concentrated in resource intensive industries and have the lowest sophistication among East Asian peers. Commodity dependence leaves Indonesia vulnerable to the inherent volatility of commodity prices and susceptible to the Dutch Disease. The potential of services to contribute to trade and growth in Indonesia is substantial but remains largely untapped.

The decline in import tariffs has been offset with an increasing incidence of Non-Tariff Measures (NTMs), which in turn has resulted in a much less transparent trade policy framework. Despite recent progress, NTMs continue to impose a significant burden on Indonesian businesses, adding up to an average tariff equivalent of 30 percent, more than in other countries in the region. In addition to barriers on goods trade, restrictions on services trade remain among the highest in the world, despite recent reforms. When it comes to the enabling environment of logistics and trade facilitation, additional reforms are needed to reduce the time, costs, and uncertainty of cross-border transactions. Although trade agreements have been an important vehicle for delivering trade reforms in Indonesia, there is room to improve their content and coverage.

Imports are essential for the Indonesian economy, for domestic value addition and exports, especially in higher-value-added manufactures and priority sectors. Import substitution would also significantly weigh on investment, dependent on imported capital goods and machinery not available domestically. Close to two-thirds of Indonesian exports are generated by firms that both export and import, underscoring the importance of imports for export competitiveness. These importing-exporter firms have been shown to be more productive, export more frequently and to more destinations than those that are engaged in exporting activities only. Existing policies such as local content requirements (LCR), import approvals, certification with national standards and other burdensome NTMs are often used with the objective of import substitution, hurting Indonesia's international competitiveness.

Restrictive trade policies raise domestic food prices and hurt not only Indonesian consumers, but also farmers, two-thirds of whom are net food buyers.

An enabling trade policy framework could play a critical role in boosting Indonesia's long-term growth and economic transformation.

Streamlining and eliminating unnecessary NTMs could have significant economy-wide benefits for the Indonesian economy, boosting GDP by 5 percent.

Given the strong relationship between FDI and services trade, reforms to remove binding constraints to services trade will be important for realizing the potential of recent investment reforms.

Deep and comprehensive trade agreements could be a vehicle for the expansion of trade, diversification, GVC integration and upgrading to higher value industries.

Indonesian consumers pay higher prices for rice and other staple foods than regional peers, while food affordability remains an important challenge. Higher staple food prices are partly explained by restrictive agricultural trade policies: among these, NTMs in the form of import licensing requirements, port of entry restrictions, and import monopolies keep food prices high while their reform could reduce domestic food prices by up to 40 percent.

Targeted reforms to reduce the costs of imported manufacturing inputs, enhance firms' access to new and existing markets, all the while addressing remaining domestic bottlenecks to trade and firm growth will be key to realizing the potential of trade. Trade policy reforms aimed at streamlining and eliminating unnecessary NTMs, removing barriers to services trade, deepening and expanding trade agreements, and improving logistics and trade facilitation performance are needed to create this enabling trade policy framework in Indonesia. All in all, an open, stable, transparent, and predictable trade policy framework will be paramount.

Reforming NTMs, such as import approvals, mandatory certification with national standards and port of entry restrictions, are expected to translate into the largest gains. Such NTM reforms are estimated to increase exports of high value-added advanced manufacturing industries (computers, electronics and optical products, transport equipment, electrical equipment and basic pharmaceutical) the most. NTM reforms could also improve export growth and diversification of Indonesian firms, help boost their survival rates in export markets, strengthen firms' ability to respond to economic shocks and contribute to reducing prices of staple foods and improving nutritional outcomes.

Easing remaining restrictions on foreign entry, on the movement of foreign professionals and competition will be key to boost Indonesia's diversification into services and increase the servicification of the domestic economy. These restrictions reduce the competitiveness of domestic services, which may be benefitting incumbents not only by raising prices at the expense of consumers, but also by raising the cost of services inputs and harming productivity. Services trade restrictions may be particularly harmful, given services' growing role in Indonesia's economy and their potential for contribution to aggregate productivity growth.

Commitments in trade agreements that go beyond traditional market access issues and cover provisions such as competition policy, intellectual property rights, state trading, environmental protection, labor market issues and public procurement would boost Indonesia's trade with member countries and reduce the extent to which trade is diverted with non-members. These effects are even more pronounced in the case of GVC trade and for advanced manufacturing and services and innovative activities. In turn, improved access to foreign markets through new and deeper trade agreements along with diversifying exports can contribute to improved resilience to shocks in Indonesia. Deep and comprehensive provisions in trade agreements are also a signal of commitments to domestic reforms, acting as an insurance policy against potential upticks in protectionism.

Indonesia could build on progress to improve logistics and trade facilitation performance through additional reforms that would unleash added benefits.

Finally, to benefit from the global and domestic transition to a low-carbon economy, Indonesia could strengthen the mutual complementarity between trade and climate policies.

The implementation of remaining trade facilitation commitments and other paperless trade facilitation measures at the ASEAN level have a high potential to decrease costs, by 2.6 percent, whereas by adding paperless trade facilitation measures, the decline in trade costs could reach 8 percent. The implementation of the National Logistics Ecosystem (NLE) will help Indonesia improve its trade and logistics performance, reduce trade costs, and improve certainty of shipments. It will also generate benefits for the government through efficiency in resource deployment, higher trader compliance, and increased security. The implementation of integrated risk management across border agencies could increase the efficiency of trade processing and reduce trade costs.

Increased global demand for goods and technologies to reduce carbon emissions and enable the climate transition present Indonesia with opportunities to diversify production and increase exports of green products and technologies. In addition, access to lower cost and higher quality environmentally friendly goods and technologies through imports will also enable Indonesia's own low-carbon and climate resilient transition. In this context, aligning trade policies with green development is critical. Trade reforms such as eliminating burdensome and costly NTMs on green goods imports, reducing the stringency of local content requirements, harmonizing national standards with international ones, and participating in plurilateral and multilateral trade policy initiatives on trade and climate change will boost Indonesia's green competitiveness.

A. Economic and Fiscal Update



A. Economic and Fiscal update

1. Diagnostic of the Recovery

Commodities windfalls and the reopening of the economy have supported Indonesia's post-pandemic recovery so far, a recovery fraught with risks amidst weakened global economic conditions.

The Russia-Ukraine war has disrupted global trade and supply chains, exacerbating the rise in global commodity and food prices. Persistently high global inflation accompanied by tepid growth brings fears of stagflation that could endure for several years. Global growth is projected to slow down from 6.0 percent in 2021 to 3.2 percent in 2022 (World Economic Outlook, October 2022). Global consumer price inflation is expected to surge from 4.7 percent in 2021 to 8.8 percent in 2022, its highest level since 2008 (International Monetary Fund, 2022a). Amidst this environment, the US Federal Reserve and other advanced economy central banks sharply tightened monetary policy to curb inflation. Fed policy rate hikes have reached 300 basis points (bps) in 2022, leading to a surge in global borrowing costs. This has translated into tighter external financing conditions and financial stress for some emerging markets and developing economies (EMDEs) as capital outflows have intensified.

Growth in the EAP region excluding China is forecast to double to around 5 percent in 2022 from 2.6 percent in 2021 (World Bank 2022b). Growth in China on the other hand is projected to slow to 2.8 percent in 2022 from 8.1 percent in 2021. EAP annual median headline inflation is expected to surpass 5 percent in 2022. The post-pandemic delayed recovery in EAP's domestic demand, the global demand for EAP exports, and measured policy tightening have all contributed to this outcome. So far, financial conditions are relatively benign for EAP. The region's exports have also shown resilience, but they have started to decelerate in the second half of 2022. There are three lingering risks to EAP's economy. First, the slowing global demand. Second, rising interest rates and weaker domestic currencies combining with higher debt burdens. Third, the distortive policy measures in response to current shocks such as price controls and financial forbearance.

Indonesia's growth is performing well, even within EAP and relative to other EMDEs (Figure A.1). Real GDP growth recovered from 3.7 percent in 2021 to 5.4 percent yoy in the first three quarters of the year (3Q-2022). This was supported by recovering private consumption (up 5.1 percent yoy) and strong exports (up 19.6 percent yoy) in 3Q-2022. Exports contributed the most to economic growth, at 4.5 percentage points (pp), largely driven by a positive terms-of-trade shock and buoyant commodity prices. Global economic volatility though poses significant downside risks to Indonesia's recovery, and forces policy tradeoffs between growth and stability.

A series of destabilizing shocks have weakened global economic conditions and derailed the global economic recovery.

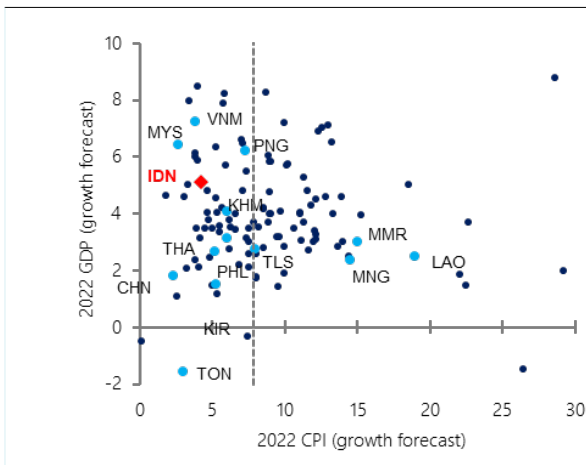
The East Asia Pacific (EAP) region excluding China has bucked the global trend so far, growing faster with lower inflation than other regions.

Indonesia's economy shows a strong post-pandemic recovery amidst uncertain global conditions that pose significant downside risks.

The re-opening of the economy as well as commodity windfalls have supported domestic demand. The decision to lift both mobility and travel restrictions has released pent-up demand.

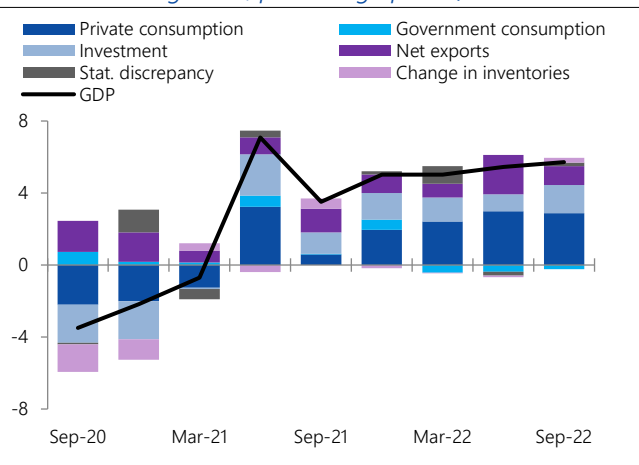
As a result, private consumption surged and contributed to a notable 51 percent of 3Q-2022 growth (Figure A.2). This surge in demand has contributed to rising output of food and beverages, leisure activities, and transport services (Figure A.3). This is also consistent with strong growth in retail sales. Moreover, elevated commodity prices are also supporting private consumption. Commodity windfalls, most notably from coal and crude palm oil (CPO) exports, partly trickle down in three forms. They do so in terms of rising labor incomes in the agriculture and mining sector (World Bank, 2010). Or they trickle down indirectly through financing subsidies, like energy ones, which maintain a lid on domestic prices. They also allow firms benefitting from windfall receipts to repay debt, accumulated during the pandemic, and increase spending on both consumption and investments.

Figure A.1: Indonesia is performing better relative to EAP and other EMDEs
(percent yoy)



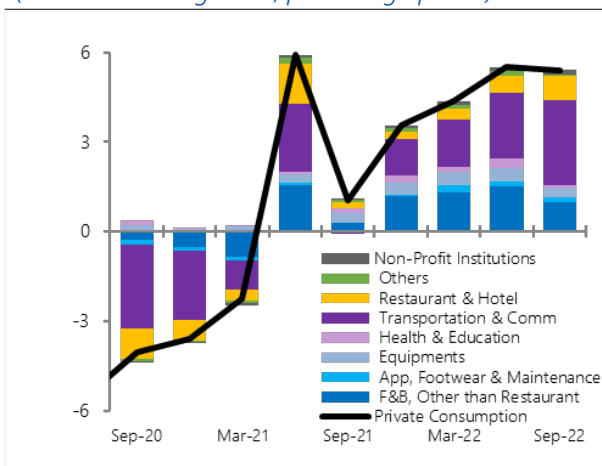
Source: World Bank. Note: Dotted line shows EMDE median BPS, World Bank staff calculation.

Figure A.2: Release of private consumer demand as well as commodity windfalls drive strong growth in 2022
(contribution to growth, percentage points)



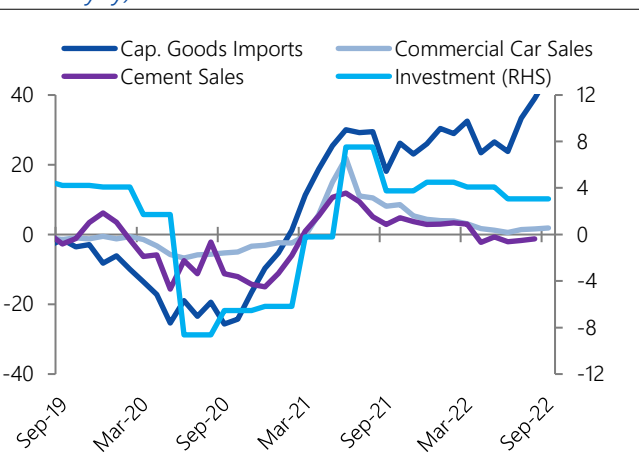
Source: BPS; World Bank staff calculations.

Figure A.3: Private consumption growth contributes to pick up in transport, communications, and F&B
(contribution to growth, percentage points)



Source: BPS; World Bank staff calculations.

Figure A.4: Leading indicators point to muted investment
(percent yoy)



Source: CEIC; World Bank staff calculations.

Nevertheless, concerns about purchasing power and investment are emerging given cost push inflation pressures.

The decision to reopen the economy was taken after COVID-19 infections were brought down and vaccine inoculation rates reached a critical mass.

With mobility almost back to pre-pandemic levels, transportation and communications contributed the most to growth.

Labor market continues to show recovery. The unemployment rate fell from 6.5 percent to 5.9 percent over the past 12 months.

Despite the recovery, the pandemic's scarring effects continue to impact the labor market's long-term dynamics.

Consumer expectations are less upbeat in the second half of 2022, particularly about future economic activity and job availability. Such sentiment comes amidst rising inflationary pressures and expectations of potential erosion of household purchasing power. This was also reflected through moderating growth in high frequency indicators for investment such as imports of capital goods or cement purchase (Figure A.4). This is also in line with rising building material costs and declining public investment. As a result, overall investment growth was relatively muted at 4.1 percent yoy (3Q-2022).

The country faced two short-lived waves of Omicron subvariants in 2022, in January-February and in June-August when daily cases peaked at 55,000 and 5,400, respectively. Cases also increased in October-November, with daily numbers of 6,500 cases in mid-November. Still, the economy continued to reopen throughout the year, with the stringency index declining to 30 by October compared to 67 at the beginning of the year. This was feasible in large part thanks to a successful vaccination campaign, which saw 64 percent of the population fully vaccinated. The government also began rolling out booster vaccines since early 2022. By early November, booster vaccines had reached 25 percent of the population. With high inoculation rates and subsided infection rates, authorities lifted many mobility restrictions and rolled back the COVID-19 fiscal support package.

Contact-intensive sectors have benefitted greatly from almost full removal of occupancy limits and opening hour restrictions in nearly all provinces since March. Most sectors have now returned to pre-pandemic levels². The services sectors such as transportation and communications as well as trade and hospitality grew the fastest with 12.3 and 6.2 percent respectively in Q3-2022. International tourist arrivals have also picked up, reaching 19 percent of pre-pandemic levels by September. Meanwhile, manufacturing growth accelerated to 4.6 percent and recorded increased capital investment, particularly in the food industry during Q3-2022.

Labor markets have improved with the recovery, but pandemic scarring effects remain visible.

Average wages across all sectors increased by 12 percent for the same period, and by a striking 71 percent for female workers in mining, following the surge in commodity prices. New jobs were also created especially in agriculture and mining, which could potentially be attributed to the commodity price boom. However, if job creation is at least in part driven by rising commodity prices, the increase might be temporary. To avoid reversal, it is imperative to ensure that Indonesia's labor market is ready for potential changes in terms of employment and skill requirements (Sousa, Lucchetti, 2015).

The pandemic has resulted in an increased share of workers that were jobless or working reduced hours, increasing the share of informal workers who were also earning less, as well as youth not in employment, education or training (World Bank, 2021a). This could contribute to the deterioration in income and labor skills in general. Wage increases (potentially associated with commodity boom) benefited only selected workers and provided a temporary cushion to deal with inflation. By August 2022, 240 thousand workers were reported to have lost their jobs due to Covid-19 compared to 1.8 million workers in August 2021. Moreover, 3.5 million workers still were working reduced hours compared to 17.41 million workers in August 2021. New graduates and youth were hit particularly hard but showed improvement

² In constant prices form.

as the economy recovered. The shares of both informal workers and youth not in employment, education, or training declined, but remain above pre-pandemic levels. High commodity prices have strengthened external balances, but tightening global financial conditions are weighing in on the currency and reserves.

High commodity prices have strengthened external balances, but tightening global financial conditions are weighing in on the currency and reserves.

Commodity windfalls have strengthened the current account surplus from a 0.2 percent of GDP in 3Q-2021 to a 0.9 percent of GDP in 3Q-2022 (Figure A.5). This comes on the back of strong export growth, up 32.9 percent yoy, primarily due to rising coal prices, palm oil and base metals³ (Figure A.6). Non-commodity exports like vehicles, electrical machines, and footwear and clothing have also constituted a notable 45.2 percent of total exports. Commodity windfalls have offset pressures from rising imports. The latter were up 29.8 percent yoy in response to the release in pent-up demand. Fuel, intermediate goods such as industrial supplies, as well as transport goods have all contributed the most to the import bill. Commodity windfalls have also offset a widening primary income account deficit as repatriation of company dividends accelerated, especially in the mining sector.

Tightening U.S. monetary policy and global risk aversion towards EMDEs have accelerated non-resident sales of Rupiah debt and exerted pressure on the cost of external borrowing. After the US Fed raised its benchmark interest rate by 75 basis points in July, debt investment outflows in Indonesia accelerated. It recorded US\$1.1 billion in October alone, bringing the total to US\$10.2 billion (0.8 percent of GDP) year-to-date (ytd). Moreover, Indonesia's borrowing costs have increased and surpassed some of the country's peers. The medium-term (3-year) government bond yields picked up between January and November (4.5 – 6.6 percent), while long-term (10-years) government bond yields remained elevated at 7.2 percent. This is a higher rate compared to Thailand, Malaysia, or China (Figure A.7). Nevertheless, the country's macro stability anchors, structural reforms, and corporate earnings linked to commodity windfalls have mitigated some of the impact. As a result, equity inflows grew by 0.4 percent of GDP ytd contributing to a sharp growth in the energy stock index (76.7 percent ytd). FDI has also risen (1.2 percent of GDP for 3Q-2022) with investments in the basic metals and mining sectors comprising 54.3 percent of total FDI.

Net capital outflows have so far put pressure on the Rupiah, which depreciated by 10.2 percent ytd. A rate that is on par with peers. Nevertheless, compared to previous monetary tightening episodes, such as the 2008 global financial crisis and the 2013 Taper Tantrum, pressures on the currency have been moderate (Figure A.8). This is thanks to adequate foreign currency reserves and windfall earnings that supported Bank Indonesia's (BI) triple intervention⁴ to maintain Rupiah stability. Historically, episodes of large net portfolio and other investment outflows in 2009–2019 were associated with a significant drop in gross reserves (World Bank, 2021b). This time is no exception. Foreign reserve assets fell from USD 144.9 billion in December 2021 to USD 130.2 billion as of October 2022. It remains adequate though, covering 5.8 months of imports. On the other hand, the Real Effective Exchange Rate (REER) has

High commodity prices have boosted Indonesia's terms-of-trade and strengthened its external position.

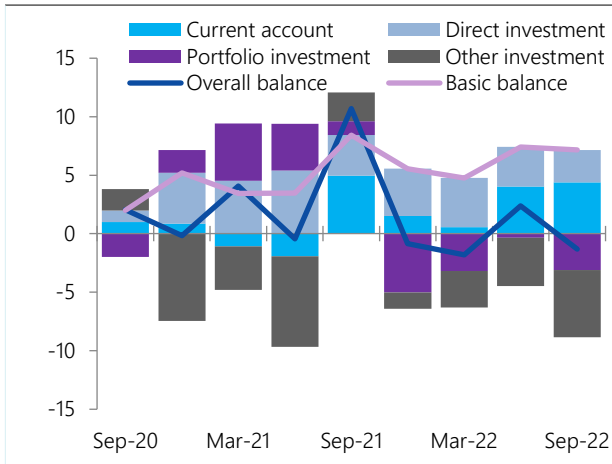
However, Indonesia is facing tighter external financing conditions like other EMDEs.

Pressures from external markets are building up and weighing on the exchange rate.

³ Exports of nickel increased five-folds in yoy terms, underpinned by high demand for electric vehicle battery.

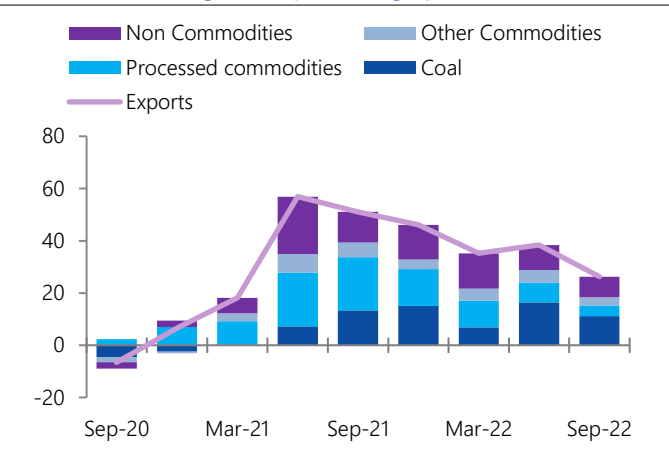
⁴ This refers to BI's use of monetary instruments through operations in the spot foreign exchange (FX), domestic non-deliverable forwards (DNDF) and bond markets reserve requirements.

Figure A.5: The current account surplus continued, owing to ongoing positive terms-of-trade shock (USD billion)



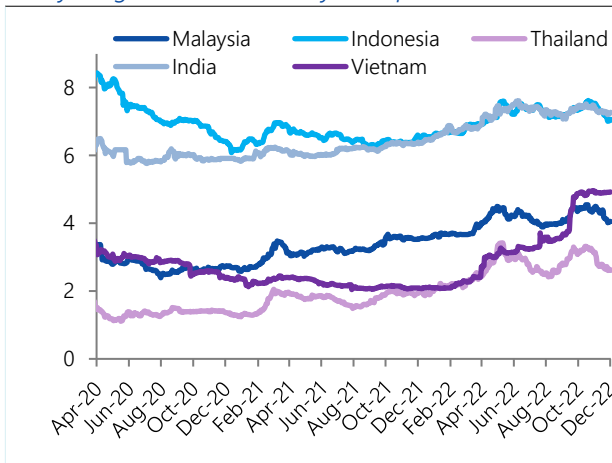
Source: Bank Indonesia, CEIC, World Bank staff calculations.

Figure A.6: The trade balance was supported by commodity windfalls, but prices are starting to stabilize (contributions to growth, percentage points)



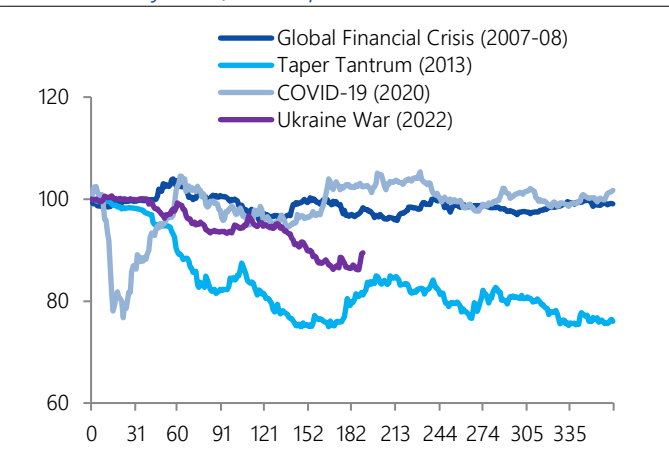
Source: Bank Indonesia, CEIC, World Bank staff calculations.

Figure A.7: Borrowing cost is elevated, above most peers (10-year government bond yields, percent)



Source: Bloomberg, World Bank staff calculations.

Figure A.8: Rupiah depreciation still contained compared to 2013 taper tantrum (index, base year of each episode = 100)



Note: The start of each episode corresponds to February 27th, 2007 for Global Financial Crisis, May 22nd, 2013 for Taper Tantrum, March 2nd, 2020 for COVID-19 and February 24th, 2022 for Ukraine War. Source: Bloomberg, World Bank staff calculations.

appreciated by 0.4 percent ytd in cumulative term, due to lower inflation and currency appreciation relative to trading partners.

Inflation has risen following the partial increase in domestic fuel prices, and remains elevated given rising inflation expectations and potential passthrough of producer prices.

The partial increase in gasoline prices has added to inflationary pressures, with headline inflation peaking in September at 6 percent yoy, its highest level since 2015⁵. Correspondingly, the administered price component of the consumer price index (CPI) increased and contributed 40 percent to total inflation (Figure A.9). Rising energy prices are partially offset by a slowdown in food inflation. As a result, headline

Inflation has reached its highest level in seven years, primarily due to high commodity prices and passthrough from fuel price increases.

⁵ This is the year when the government dropped the subsidy for the RON 88 fuel.

inflation eased in October but overall remained elevated at 5.7 percent yoy. This is above the 4 percent upper ceiling of BI's inflation target band. Inflation is approaching similar levels to other EMDEs (Figure A.9). Core inflation also picked up steadily to 3.3 percent in October, reflecting a narrowing output gap and second-round effects from fuel price hikes.

The overall producer price index (PPI) inflation⁶ shot up to 10.7 percent yoy in Q3 2022. This is largely driven by rising input costs in the mining and quarrying sector as well as in the transport sector. Both sectors are affected by elevated global commodity prices notably that of oil. As a result, the inflation gap⁷ widened to 5.9 pp in Q3 2022 from 4.8 pp in 2021. Historically, when energy prices rise, the inflation gap widens, suggesting that the increase in input costs from higher energy prices is not fully transmitted from producers to consumers (Figure A.10). There could be at least three reasons for this. First, demand is sensitive to price change and producers are concerned about customers response in prevailing economic conditions⁸. Second, producers are reducing their profit margins and/or lowering the quality of the product sold. Third, price controls and subsidies are softening price transmission channels. By contrast, when energy prices are low, producers do not lower retail prices and increase profits.

Using an impulse response function model¹⁰, this report estimates that PPI passthrough to CPI in Indonesia is small and only begins to materialize after five quarters before stabilizing in the medium term (Figure A.11a). The result signals imperfect market transmission mechanisms and market inefficiencies. It also highlights issues of indirect fiscal costs, the role of subsidies and price controls, as well as the role of state-owned-enterprises (SOEs) and their Public Service Obligations. Producer subsidies and price controls, coupled with SOEs presence in many markets in Indonesia soften the impact of shocks on household consumption.

For example, the hospitality sector has the most sizeable passthrough rate relative to other sectors. It takes two quarters for the increase in input costs to pass through to consumers, leading to an increase in the CPI (Figure A.11b). The hospitality sector consists of non-essential or luxury products and services that are not regulated. Hence, the price developments reflect more closely market-based supply and demand dynamics.

Producers in these sectors transmit rising input costs at a slower pace to consumers. For example, rising input costs in the transportation and agriculture sectors is passed on after only one quarter, but at a much lower rate compared to the hospitality sector. This is likely due to government support to producers in the form of fertilizer and fuel subsidies¹¹. Public transfers to producers are high and growing in EAP countries, and Indonesia has among the highest levels of support (World Bank, 2022a). The

At the same time, producer prices have increased sharply, leaving a widening gap with consumer prices and suggesting future inflationary pressures.

The extent of producer price index (PPI) passthrough to CPI in Indonesia has been generally low and substantially lagged.⁹

The role of government intervention seems corroborated by sector variations in the PPI to CPI passthrough rate.

Sectors with government policy interventions, such as agriculture, transport, and electricity, have had relatively muted passthrough of PPI to CPI.

⁶ Producer Price Index is an index that describes the price change rate at the producer level. The Indonesian PPI, published by Indonesia Statistics Agency, covers the calculation of the final demand in the stage of production.

⁷ The gap between producer price inflation and consumer price inflation.

⁸ Bisnis. (2022). Indeks Harga Produsen Naik, Waspada Risiko Lonjakan inflasi! Retrieved from <https://ekonomi.bisnis.com/read/20220804/9/1563093/indeks-harga-produsen-naik-waspada-risiko-lonjakan-inflasi>

⁹ Empirical studies investigating the relation between PPI and CPI yield mixed results. Caporale et al. (2002) tested the causality and found that in France and Germany, change in PPI led to change in CPI. However, results in the United States, Italy, Japan and the United Kingdom showed a reverse causality. Clark (1995) and Bloomberg and Haris (1995), on the other hand, found that there was a weak linkage between PPI and CPI.

¹⁰ The report uses a Vector Error Correction Model to estimate the response function, assuming there is a long-term relationship between the CPI and the dependent variables. Several control variables are included such as money supply, exchange rate and inflation expectation.

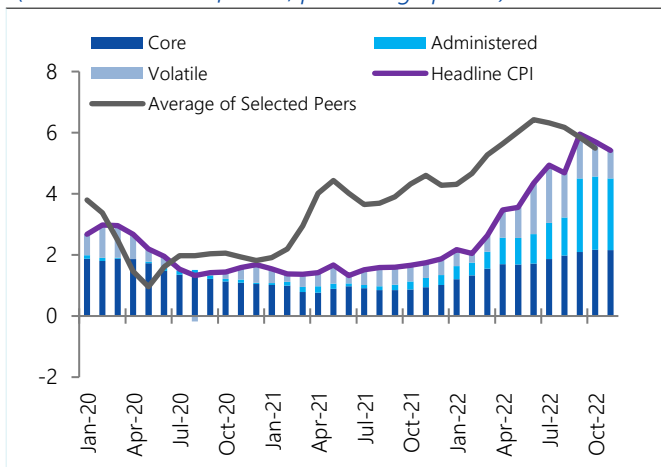
¹¹ The government has also pursued several food price stabilization measures for consumers. These include the establishment of retail price ceilings, the release of lower priced food items into markets through 'market operations' (i.e., Operasi Pasar), as well as distribution cost subsidies for a number of agricultural commodities.

magnitude of the passthrough is the lowest in the electricity sector. This is most likely because electricity tariffs, including for producers, have not been adjusted upwards to reflect cost for several years. Partial passthrough of producer prices will have also reduced business profit margins (Figure A.12).

In the June 2013 fuel price hike, inflation expectations climbed steadily for seven months before subsiding. However, in the November 2014 fuel price hike, inflation expectations declined after two months. In 2022, inflation expectations climbed 1.4 pp since January, bringing the rate to 4.8 percent in October. It spiked by 0.3 pp in October alone, reflecting the impact of the fuel price increase (Figure A.13). If inflation expectations keep climbing, it can risk potentially de-anchoring¹² inflation expectations. This could trigger a more substantial and faster tightening in monetary policy, disrupting the recovery as a result.

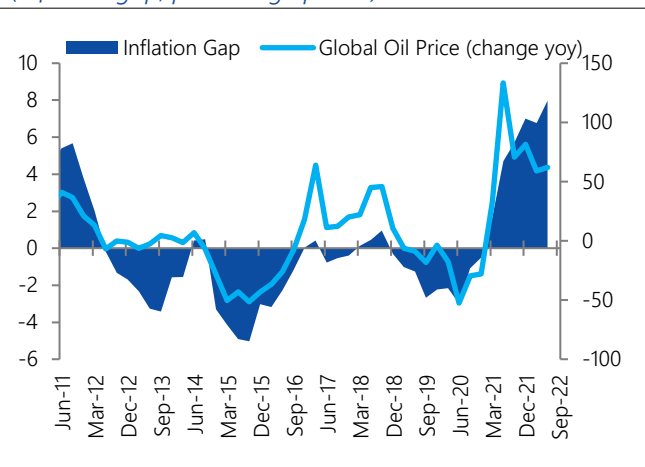
Proxy indicators for inflation expectations rose when fuel prices were hiked. Analysis of past episodes of fuel price hikes have had varying impacts on inflation expectations.

Figure A.9: Administered prices contributed largely to inflation since September
(contribution to inflation, percentage points)



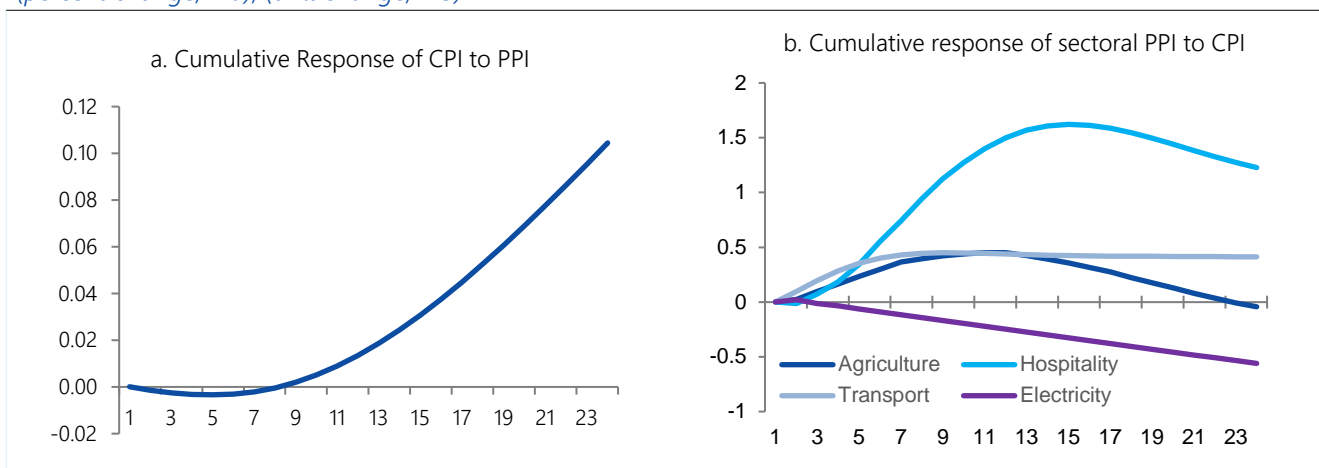
Note: Selected peers are Brazil, China, Malaysia, Philippines, India, and Thailand.
Source: BPS, CEIC, World Bank staff calculations.

Figure A.10: The gap between producer and consumer prices widens when energy price increase
(inflation gap, percentage points)



Note: A positive inflation gap reflects that PPI inflation is higher than CPI inflation, while a negative gap reflects the converse.
Source: BPS, World Bank pink sheet, World Bank staff calculations.

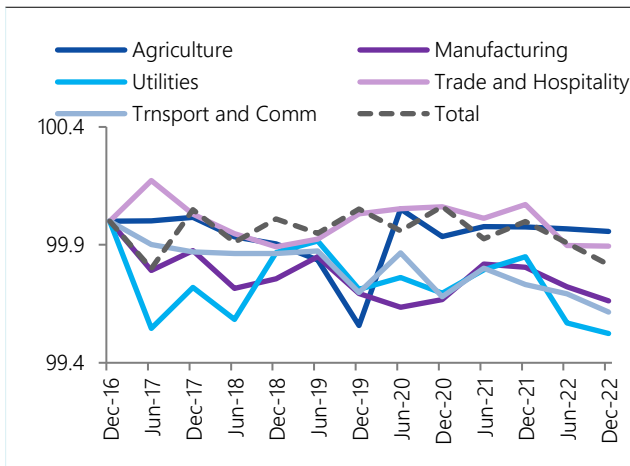
Figure A.11: Passthrough rate from of producers' prices to consumers is limited particularly in regulated sectors
(percent change, 11a); (unit change, 11b)



Note: The graphs show the impulse response function using the Vector Error Correction Model (VECM) model. The aggregate PPI in figure 11a is in natural log (Ln) while the sectoral PPIS in 11b are in level term (index). The X-axis represents the number of quarters.
Source: BPS, BI, World Bank staff estimates.

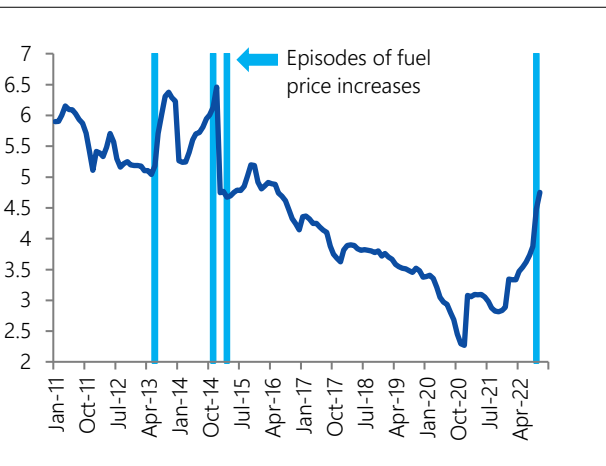
¹² Inflation expectation is considered anchored if it does not respond much to short-term movement in actual inflation (Bernanke, 2022)

Figure A.12: Business profit margins have declined, including in regulated sectors
(business profit margin, by sector, index, Dec 2016 = 100)



Source: BI; Business Activity Sector Survey; World Bank staff calculations.

Figure A.13: Inflation forecasts increased markedly for most episodes of fuel price increase
(change, percent yoy)



Source: Consensus Forecast, World Bank staff calculations.

Inflation jeopardizes poverty reduction efforts in Indonesia and affects a larger segment of the population if prolonged, warranting broad policy interventions to soften the shock on household consumption.

Price for food has increased by 7.9 percent year-on-year in September 2022 and is estimated to reduce consumption by 3.7 percent for the bottom 40 and 2.8 percent for the top 20¹³ (Figure A.14). Food prices increase also have implications on food security (see Box A.1). Fuel prices, on the other hand, have increased by 6.1 percent yoy in September 2022 but the impact on the loss of purchasing power for the bottom 40 and the top 20 are alike at around 0.5 percent. Households in the bottom 40 spend around 63 percent of their budget on food compared to 47 percent for the top 20, making them more vulnerable to food price increases. Meanwhile, the share that households spend on energy is relatively similar across different income deciles (around 8 percent). Poverty is estimated to increase by 1.8 percentage points using the lower-middle-income poverty line (\$3.20 per day, 2011 PPP) due to the food price increase, while the poverty impact of this year's fuel and electricity price increase is estimated to be much smaller at 0.2 pp (Figure A.15). Impacts on inequality measured by Gini coefficients are likely to be limited, at 0.3 Gini points increase.

Indonesia's progress in poverty reduction continued despite the COVID-19 shocks. Indonesia's extreme poverty rate, defined at US\$1.90 2011 PPP per day, dropped from 19 percent in 2002 to 2 percent in 2019 (Figure A.16). Amidst these promising developments, the Government of Indonesia (GOI) committed in 2020 to eradicating extreme poverty by 2024. While this is a laudable goal, measuring extreme poverty with such low incidence in the population becomes increasingly difficult. In addition, a wider focus is warranted to incorporate poor but not extremely poor households in poverty measures. Those are defined as those living below US\$3.20 2011 PPP per day. They have dropped from 61 percent in 2002 to 20 percent in 2019, and further down to 18 percent in 2021 (Figure A.16). Inflationary pressures, especially protracted ones, risk reversing poverty reduction efforts if vulnerable households' purchasing power is not protected against such shocks.

The recent increase in food and fuel prices will reduce the real purchasing power of households although the impacts will vary across population income groups.

Inflation jeopardizes Indonesia's successful poverty reduction efforts.

¹³ This refers to the bottom 40 percent of the population in Indonesia by expenditure distribution. This category includes poor, economically vulnerable groups, and some middle-income households. The top 20 refers to the 20 percent richer segment of the population by expenditure distribution.

Protracted inflation, if not addressed, could also affect the more vocal middle-class and potentially raise social and political discontent, an impact previously observed during the pandemic.

The COVID-19 shock affected better-off, but not the richest, households the most. Consumption growth was considerably lower for the urban population at 0.7 percent compared to rural at 2.6 percent during the pandemic (Figure A.17). In urban areas, the median up to the top 20 percent households (i.e the middle-class) have experienced the most income loss given their reliance on jobs, often formal ones. These jobs were most affected by the pandemic. In contrast, the poorer and wealthiest households were better insulated against the impact. The poor were more often engaged in informal work and agriculture while being supported by government programs, and the wealthiest were able to smooth their consumption, probably mostly through savings. In rural areas, similar patterns emerge but with COVID-19 impacts overall reduced due to lower impacts of mobility restrictions, and a larger part of the population in informal work and agriculture. Thus, the middle-class – an often more politically vocal segment of the population – are the most affected. Softening the impact of shocks on this group requires broader policy interventions. This includes macroeconomic policies to reign-in inflation and an active fiscal policy to expand social protection systems.

Figure A.14: Loss of purchasing power due to shock in prices following yoy inflation (percent)

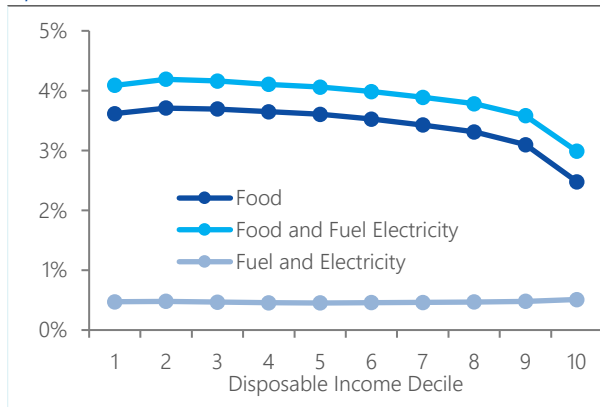
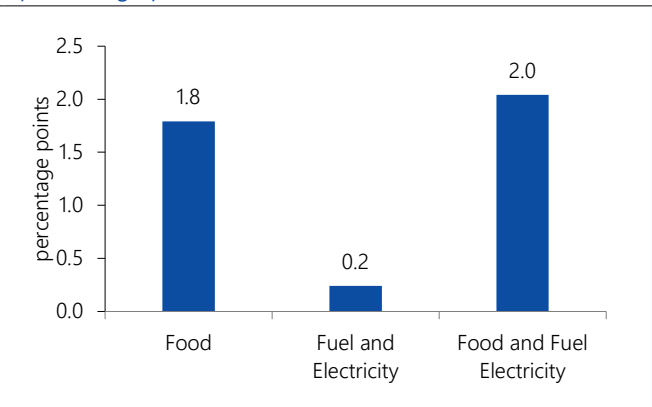
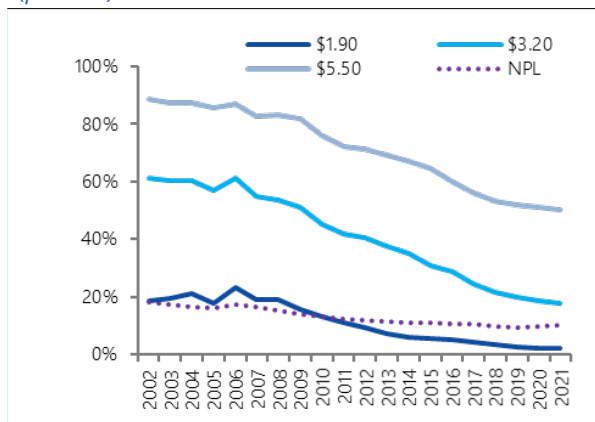


Figure A.15: The poverty impact from food price increase appears to be the largest (percentage points)



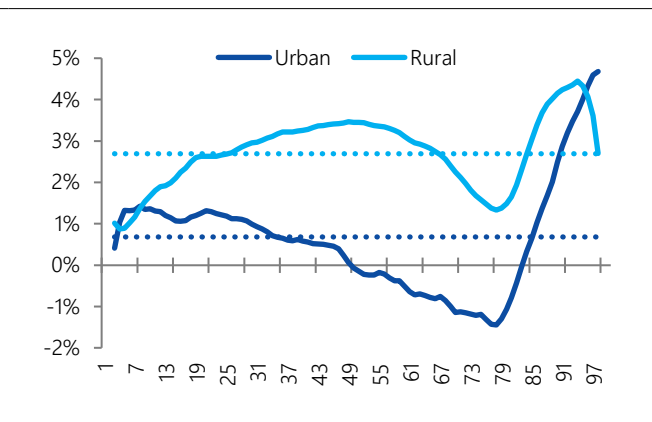
Note: Direct and indirect impact (using IO table) are calculated. Direct impact of food only affects purchased food. Behavioral response is considered but only for food. Poverty and inequality impact are measured using spatially and temporally adjusted \$3.20 2011 PPP. The impact is measured as differences with baseline. Poverty rate at the baseline (adjusted \$3.20 2011 PPP, March 2021) 18 percent and Gini at the baseline (adjusted \$3.20 2011 PPP, March 2021) 37.4. Source: WB staff calculations using Susenas March 2021.

Figure A.16: Poverty dropped starkly from 2002 to 2019 when measured with the absolute international poverty lines (percent)



Source: SUSENAS March 2002 to 2021. NPL denotes National Poverty Line for Indonesia's official poverty estimates.

Figure A.17: Consumption growth incidence curve for 2020 to 2021, by urban/rural (percent)



Source: SUSENAS March 2020 and 2021. Note: 5-point moving average. Dotted lines show overall averages.

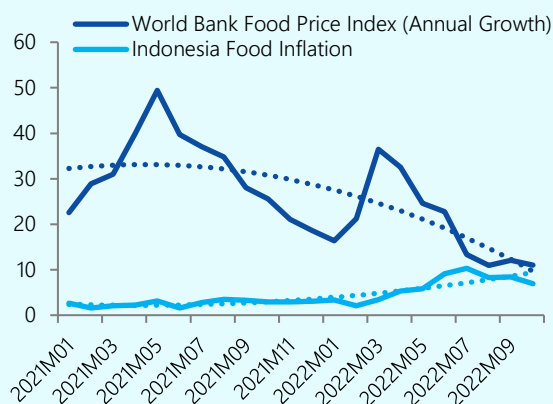
BOX A.1 Food prices and security

Food contributed significantly to inflationary pressures, driven by a mix of recent international and domestic shocks and some policy responses. Annual food inflation hit an eight-year high in July at 10.3 percent, before tapering down to 6.9 percent in October 2022 (Figure A.1.1). The shocks ranged from post-pandemic demand recovery which coincided with the war in Ukraine (cooking oil); production shortfalls due to climatic factors (rice, chilies, shallots), disease outbreaks (beef), and high feed costs (eggs); high global prices and currency depreciation for imported goods (soybean, wheat); and policy factors (cooking oil). While chilies, shallots, and cooking oil had been major drivers of domestic food inflation this year, domestic rice prices have been stable for most of 2022 until recent months.

Multiple risks may hinder or reverse the latest downward trends in food prices in the coming months. At the global level, risks include worsening global economic conditions, a prolonged and deeper conflict in Ukraine, higher input costs and the ongoing La Niña weather pattern. Restrictive trade policies and biofuel policies are also medium-term risks (Baffes, 2022). Domestically, agricultural production costs have already risen by 5.7 percent yoy in October 2022, with the largest increases observed for the transportation and communication component (14.9 percent), as well as fertilizers, pesticides, drugs and feed (8.4 percent)¹⁴ The rising climate variability will continue to pose a risk for agricultural production by increasing the likelihood of lower yields and harvest failures, exacerbating food price volatility.

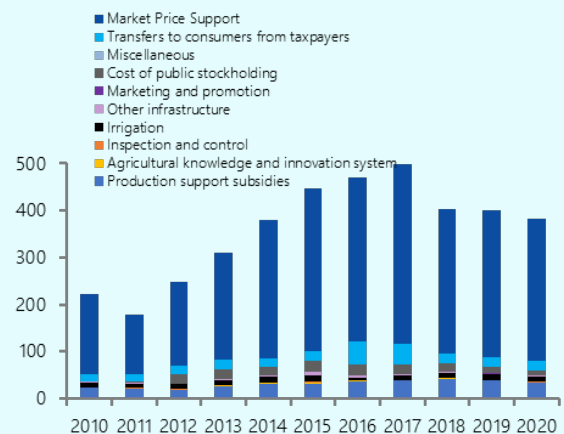
It is important to manage these risks, as food prices in Indonesia were already structurally high. Indonesia's rice retail prices have consistently been the highest in ASEAN over the past decade—28 percent higher than prices in the Philippines, and more than double the prices in Vietnam, Cambodia, Myanmar, and Thailand¹⁵. This is due to market price support for producers in agriculture, which consist of policies that raise domestic prices for agri-food products (Figure A.1.2). These policies include i) restrictive trade measures (e.g., import tariffs, quantitative restrictions, SOE import monopoly for key commodities, and other non-tariff measures) and ii) minimum purchase prices at farmgate level (e.g., for rice). Furthermore, long-term underinvestment in agricultural R&D, extension services and agricultural human capital development have held back productivity improvements that could lower food prices in the long-term. Long supply chains and high distribution costs, owing partly to the country's complex geography, also raise food prices for consumers in the country (World Bank, 2020a).

Figure A.1.1: Annual food inflation – globally and in Indonesia
(percentage of total trade, percentage point)



Source: WB staff estimates using World Bank Commodity Price and Statistics Indonesia (BPS) data.

Figure A.1.2: Total support estimate for agriculture in Indonesia, by item
(index, January 2019 = 100)



Source: WB staff estimates using data from OECD.

¹⁴ WB staff estimates based on data from Statistics Indonesia (2022)

¹⁵ WB staff estimates based on FAO-GIEWS data (2022)

High food prices are expected to exacerbate food insecurity and lead to worsening nutrition outcomes. While only one percent of Indonesian households could not afford an energy-sufficient diet, one-third could not afford a nutrient-adequate diet (FAO, IFAD, UNICEF, WFP, WHO, 2020).¹⁶ This contributes to Indonesia's poor nutrition outcomes. The number of food insecure had also increased during the pandemic. In 2021, prevalence of undernourishment in Indonesia increased to 8.5 percent from 7.6 percent in 2019 (Statistics Indonesia, 2022), reversing a declining trend. Short-term increases in food inflation are also likely to negatively impact poor and vulnerable households more, as poorer households spend a larger share of their expenditure on food.

Policy measures to mitigate the current impact of high food inflation on consumers notwithstanding, longer-term investments are needed to tackle the triple food security challenge. The triple challenge consists of food availability (adequate overall supplies), food access (economic and physical access at the household level) and stability over time. The authorities have deployed several policy instruments, including price control measures, cooking oil subsidies, direct cash transfers for cooking oil and other social protection measures, quantitative export restrictions, CPO levy adjustments, as well as a three-week export ban for CPO and its selected derivatives. However, to strengthen food security in the long term, policies that focus on improving nutrition, lowering food prices, improving affordability, and enhancing the sustainability of food are needed.

2. The Policy Response

The fiscal stance has been narrowing, in accordance with the GOI's goal to reinstate the 3 percent of GDP deficit ceiling, anchored by rising revenues and spending consolidation

Indonesia's fiscal deficit is narrowing as the economy rebounds from the COVID-19 downturn and the government prepares to reinstate the 3 percent of GDP deficit ceiling in 2023.

To support a smooth fiscal consolidation trajectory, the GOI enacted legislation for new revenue measures in late 2021 and passed a 2022 budget law with a 2.4 percent cut to 2021 spending levels. Since that time, windfall revenues and surging subsidy obligations – both underpinned by high commodities prices – have altered some of the underlying calculus. Yet, the authorities have maintained fiscal discipline. The strong revenue collections of 2022 have not translated into major new expenditure efforts; notwithstanding automatic subsidy measures being kept in place to soften cost-of-living pressures on households and businesses. As a result, the budget deficit in 2022 is expected to be around 2.2 percent of GDP smaller than what was anticipated by the 2022 budget law (2.7 percent vs 4.9 percent) (Figure A.18).

Buoyed by economic recovery, strong commodity prices, and reforms, budget revenues have grown at their fastest pace since 2008.

Total revenues grew by 44.5 percent yoy for the first ten months of 2022, with broad-based growth across major revenue categories (Figure A.19). As a result, by end-October, total receipts had already exceeded by 18.2 percent the government's original budget projections for 2022. Year-to-October income taxes were up 60.3 percent, supported by elevated commodity prices and proceeds of the 2022 tax amnesty program¹⁷. Sales taxes, comprising value-added taxes (VAT) and luxury goods taxes, were up 43.8 percent, partly supported by a 1 percentage point increase in the VAT rate since April 1, 2022¹⁸ and rising private consumption. Excise revenues, primarily generated by sales of tobacco products, grew by 19.5 percent following another annual round of excise rate increases. International taxes rose by 37.8 percent,

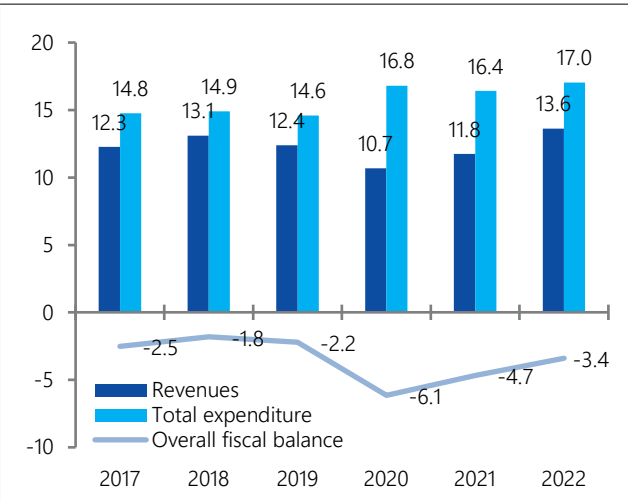
¹⁶ Diets are defined by FAO. Energy-sufficient diet meets needs for short-term subsistence by providing adequate calories for energy balance for work each day. Nutrient-adequate diet meets required levels of all essential nutrients: it not only provides adequate calories, but also relevant nutrient intake values of 23 macro- and micronutrients.

¹⁷ According to a statement by the Minister of Finance in July, 247,918 taxpayers voluntarily disclosed a total of IDR 594.8 trillion (3.2 percent of GDP) in assets and paid IDR 61.0 trillion in taxes.

¹⁸ From April to October 2022, this has generated an extra IDR 43.4 trillion.

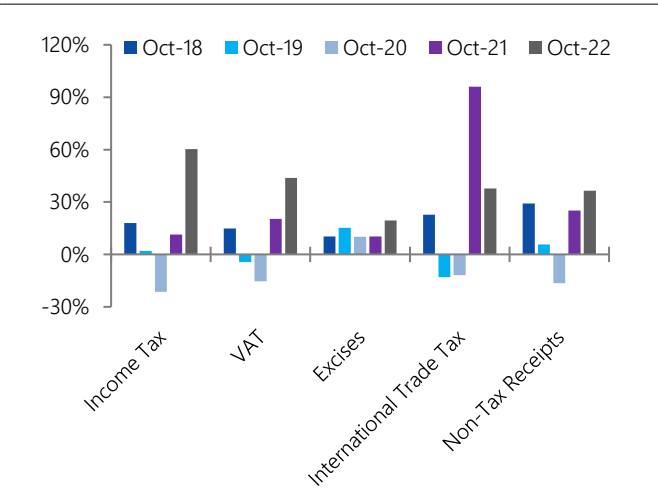
supported by higher export volumes and prices, as well as rebounding imports from the trade and industrial sectors. Non-tax receipts have also jumped 36.5 percent, primarily underpinned by higher prices for Indonesian crude oil and coal exports. As a result, the first ten months' revenue-to-GDP ratio reached its highest level in several years (Figure A.20).

Figure A.18: An orderly adjustment towards the 3 percent of GDP deficit ceiling in 2023
(percent of GDP)



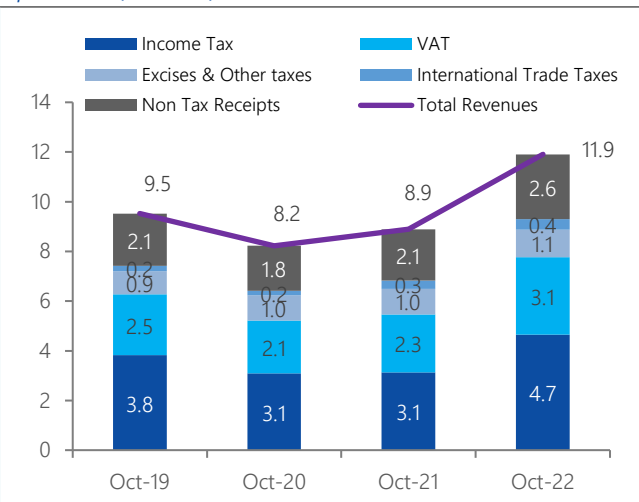
Note: *2022 is the World Bank's full year estimate.
Source: Ministry of Finance; World Bank staff calculations.

Figure A.19: Revenue growth in 2022 has been broad-based
(percent yoy for a cumulative Jan-Oct revenues)



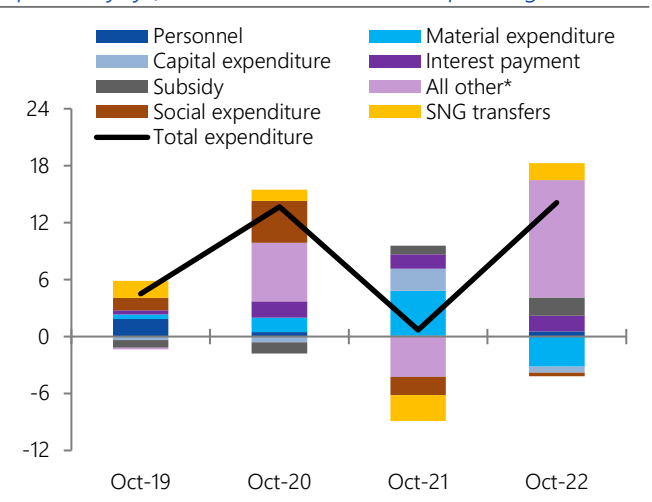
Source: Ministry of Finance; World Bank staff calculations.

Figure A.20: Q1-Q3 revenue ratio has raced past its pre-pandemic level
(percent of GDP of Jan-Oct revenues)



Source: Ministry of Finance; World Bank staff calculations.

Figure A.21: Subsidies and interest payments have contributed to the increase in total spending
(percent yoy for a cumulative Jan-Oct spending)



Note: * "All other" includes compensation to SOEs arising from implicit subsidies, and other uncategorized spending. Year-to-October 2022. 95 percent of other spending was for subsidies.
Source: Ministry of Finance; World Bank staff calculations.

Government has taken a conservative approach to spending in 2022, but these efforts were partially offset by a rising energy subsidy bill and interest costs.

Total expenditure grew by 14.2 percent yoy for the year-to-October. It would have contracted if not for increases in subsidy and interest payment expenditures (Figure A.21). Spending on material and capital contracted by 18.1 percent and 9.5 percent, while that on personnel grew by a modest 3.2 percent. The reduction in material spending stems from rolling back COVID-19 programs that supported households and businesses as well as the health sector. Declining capital spending is mostly a reflection of unusually high spending in 2021 on account of delayed payments for activities done in 2020. Year-to-date spending on social assistance also declined (down 5.8 percent), and should record a sharper contraction by end-2022 due to a spending uptick that took place in December 2021.¹⁹ By contrast, explicit energy subsidies are up 39.5 percent, while implicit subsidies, taking the form of compensation payments to energy SOEs, are up at least IDR 240 trillion.²⁰ Finally, interest payments rose 12.0 percent, reflecting increases in both public debt stock and borrowing costs.

Soaring subsidy costs eroded recent revenue windfalls.

The acceleration in subsidy spending was the result of high global energy prices, growing domestic energy consumption, Rupiah depreciation against the USD, and electricity tariffs maintained below-cost.²¹ Early on, the GOI hoped to absorb higher global energy prices and limit the passthrough to households and businesses. However, by mid-year, estimates of the annual cost had risen sharply to IDR 502.4 trillion.²² On July 1, PLN raised electricity tariffs for government buildings and relatively well-off residential customers. But this had only a modest fiscal impact as the bulk of the electricity subsidies were untouched. Moreover, the main drivers of the overall energy subsidy bill were fuel and LPG subsidies. Simultaneously, the energy SOE, Pertamina, began piloting fuel rationing at service stations in selected districts, but with limited results. By August, the subsidy had become a budget vulnerability, with total energy subsidy fiscal obligations expected to reach almost IDR 700 trillion (around 3.6 percent of GDP) by end of year.²³ The rising subsidy burden was rapidly becoming a risk to public investment and other development spending priorities.

The government adjusted fuel prices in September to relieve fiscal pressures, but the fiscal savings will largely accrue to future years.

In late August, the government signaled its intention to cut subsidies by announcing an IDR 24.2 trillion package of compensation measures aimed at (i) softening the impact of higher fuel prices on poor households and low-income workers, and (ii) subsidizing district-level transportation costs. This was followed, in September, by a 30 percent increase in the prices of subsidized diesel (Solar) and subsidized RON90 gasoline (Pertalite). These adjustments reduced the large gap that had arisen between retail fuel prices and the supply cost guaranteed to Pertamina. However, it did not eliminate it. Post adjustment, the price of Solar is still estimated at only around 55 percent of Pertamina's supply cost²⁴, while the price of Pertalite is around 68 percent²⁵. The policy change, arising in the last four months of this year, is estimated to have cut the government's total fuel subsidy obligations by just 0.1 percent of GDP in 2022, and by 0.4 percent of GDP in 2023-2025.

¹⁹ The 2022 revised budget likewise targeted a 15.1 percent cut to social assistance spending in 2022. Recent increases in social assistance to compensate for fuel subsidy reforms are not large enough to unwind this fully.

²⁰ Unable to calculate the percentage increase due to limited monthly data on 2021 compensation payments.

²¹ For a detailed discussion of energy subsidies and related fiscal challenges, see World Bank 2022a.

²² This IDR 502.4 trillion includes IDR 122 trillion in carried-over arrears to PLN and Pertamina that were cleared in 2022.

²³ While global energy prices were not rising, domestic energy consumption was growing faster than expected.

²⁴ Supply cost refers to the cost of production plus VAT and fuel tax. It may sometimes be referred to as the economic price. It is the benchmark price used by government to calculate compensation payments for Pertamina.

²⁵ Up from an average of 41 percent and 51 percent, respectively, over January-August 2022

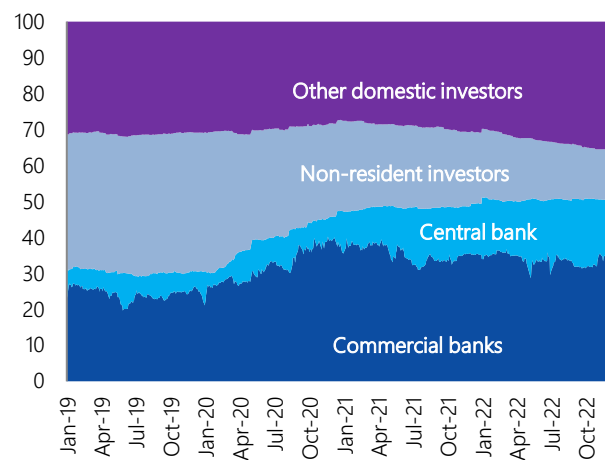
A modest fiscal deficit throughout the first ten months of 2022 lessened financing needs, but a late-year acceleration in spending will lead to a pick-up in borrowing. As of October 2022, the ytd fiscal deficit was 0.9 percent of GDP. However, assuming a consistent path with previous years, public spending commitments are expected to pick up late in the year, widening the fiscal deficit to a 2.7 percent of GDP.

Nonetheless, realized net financing stands at a surplus of IDR 439.9 trillion (year-to-date), equivalent to 2.3 percent of GDP. Gross financing needs are estimated to decline to 5.8 percent of GDP in 2022 from 8.2 percent a year earlier. Furthermore, public debt is also expected to moderate to 38.8 percent of GDP in 2022 from 40.7 percent in 2021. This is healthy territory compared to peers.

The domestic ownership share of government bonds rose to 85.7 percent by end-November, up from 80.9 percent in early 2022, and far above the pre-pandemic share of 61.4 percent in early 2020. This was driven by growing holdings of BI and other domestic investors, that have substituted for the decline in non-resident debt holders (Figure A.22).

The ytd primary market purchases by BI have reached 0.8 percent of GDP. While this is much lower than in 2020-2021, BI's purchases have always been backloaded to Q4. Given external financing pressures, and BI's commitment to sunsetting its exceptional arrangements by year-end²⁶, greater utilization of such arrangements can be expected by end-2022.

Figure A.22: BI and other domestic investors filled the gap left by non-resident withdrawals
(percent to total ownership)



Source: Ministry of Finance, World Bank staff calculations.

The increase in subsidized fuel prices has a negative distributional impact on household consumption and poverty, but the replacement cash transfer program will mitigate the consumption shock.

Only 19 percent of the fuel subsidies are received by the bottom 40 while the top 20 received around 42 percent (Figure A.23). Nevertheless, on average, this amounts to about 2 percent of market income for both the bottom 40 and top 20. Without offsetting measures, the increase in fuel prices would have reduced consumption of the bottom 40 on average by about 0.5 percent of market income (Figure A.24). These estimates suggest that poverty could have increased by 0.26 percentage points using the lower-middle-income poverty line (\$3.20 per day, 2011 PPP), pushing an approximately 690 thousand people into poverty. On the other hand, the distributional impact of the electricity price hike will likely be inconsequential to poverty. Only 1 percent of PLN subscribers will be affected by this reform²⁷, of which a mere 4.3 percent are in the bottom 40.

Financing has increasingly relied on domestic sources as global markets tighten and the GOI draws upon BI's exceptional monetary financing arrangements before their scheduled expiry in 2022.

The increase of subsidized fuel prices without offsetting measures would have had a negative impact on the bottom 40 and increase poverty.

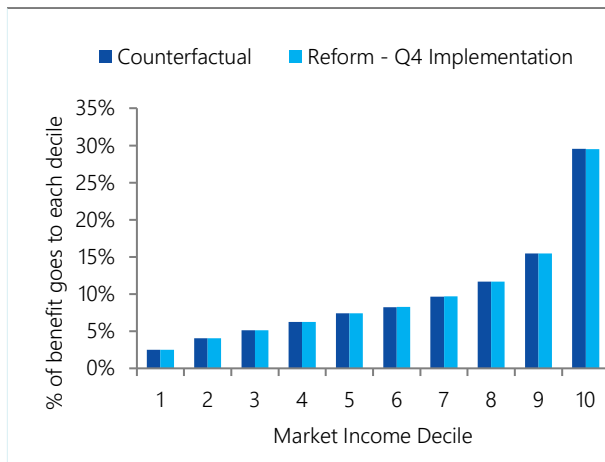
²⁶ While the government and BI have emphasized a commitment to stop monetary financing after 2022, recent 2023 FY Budget law suggest that such operations may still be feasible in the event of an emergency.

²⁷ According to Susenas March 2016, the latest Susenas that asked questions on type of household electricity connections.

The cash transfer program put in place to compensate for the fuel price increase will mitigate the consumption shock on the bottom 40.

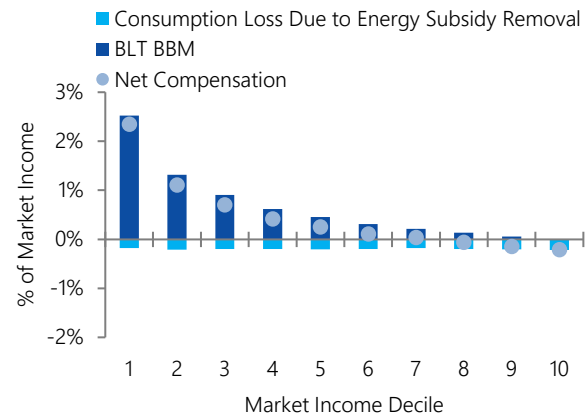
The cash transfer program will be distributed to around 20 million beneficiaries.²⁸ Each beneficiary will receive a total of IDR600,000 in two installments from September to December 2022 and the total cost is IDR 12.39 trillion (68 percent of savings from the energy subsidy, or slightly less than 0.1 percent of GDP). Estimates indicate that this program will mitigate the loss for the bottom 40 and reverse the poverty impact, yielding a net improvement of the poverty rate by 0.28 pp. As a one-off cash transfer, however, the positive poverty contribution may not be sustained.

Figure A.23: Fuel subsidy is poorly targeted
(subsidy to each decile, percent to total)



Source: WB staff calculation using CEQ methodology based on 2019 data. The baseline scenario is the 2019 status quo. The reform scenario is the fuel subsidy reform 2022.

Figure A.24: The cash transfer/BLT BBM program will compensate the bottom 40
(percent of market income)



Source: WB staff calculation using CEQ methodology based on 2019 data.

BI has tightened its monetary policy stance to curb inflation and maintain the spread with the US Fed rate.

Monetary tightening contributes to already high borrowing costs.

Bank of Indonesia has started hiking its policy rate to curb inflation and reduce capital outflows, though current economic conditions allow space to ease the pace of tightening and safeguard economic growth.

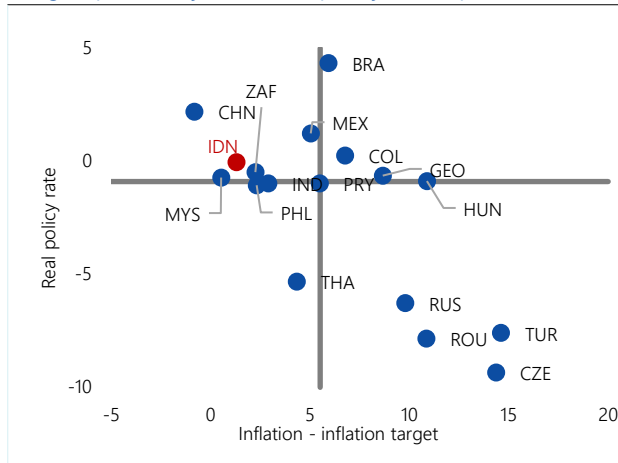
Bank Indonesia raised its policy interest rate by a cumulative 175 bps between August and November (from 3.5 to 5.25 percent). This move was the first hike since February 2021. It also marks the first time that policymakers decided four successive months of hikes, a sign of rapidly changing global landscape. The policy tightening was motivated by several objectives. The first is to curb inflationary pressures and anticipate rising inflation expectations as commodity prices remain high. The second is to maintain a minimum interest rate differential with the US Fed rate and contain capital outflows to protect foreign reserves. The third is to manage exchange rate stability and avoid further depreciation of the Rupiah against a globally strengthening US dollar, and hence reduce imported inflation.

After adjusting for expected inflation, Indonesia's real policy rate has generally remained higher than peers whose real rates were already in negative territory. This comes even though its inflationary gap (the difference between actual inflation and central bank's inflation target) is smaller than most peer countries (Figure A.25). The higher real policy rate in Indonesia could be associated with higher commercial lending rates compared to peers (Figure A.26). As a result, this creates a tradeoff between on the one hand raising borrowing costs for private sector firms and therefore impacting the recovery, and on the other controlling inflation pressures.

²⁸ Beneficiaries (Keluarga Penerima Manfaat / KPM) of Sembako program (BPNT), PKH and PKH non BPNT. Source: Keputusan Direktur Jenderal Pemberdayaan Sosial No. 158/5/HK.01/8/2022 and <https://www.kemenkeu.go.id/informasi-publik/publikasi/berita-utama/Penyaluran-BLT-BBM>

Figure A.25: Real policy rates are high relative to inflation deviation from official targets...

(x-axis, actual inflation minus the official inflation target, percent; y-axis, real policy rates, percent)

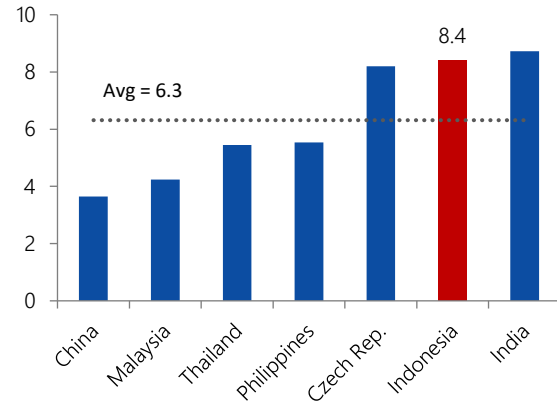


Source: Haver and World Bank staff calculations.

Note: real policy rate is defined as nominal policy rate minus inflation expectation.

Figure A.26: ...which partly led to high borrowing costs

(lending interest rate, percent)



Source: BPS, CEIC, World Bank staff calculations.

As BI normalizes its monetary policy, growth of broad money in circulation (M2) has also eased.

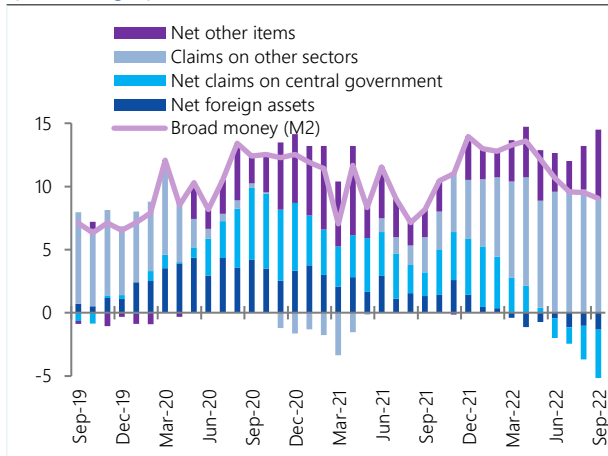
The Rupiah has become more resilient to capital flow volatility over time, which may provide space to ease the pace of monetary tightening.

BI continues to use non-interest instruments to absorb excess liquidity. The first is a gradual increase of the reserve requirement ratio from 5 percent in March, to 7.5 percent in July, and to 9 percent in September. The second is the gradual release of BI's government bond ownership in the secondary market. BI has also reduced its bond purchase in the primary market as part of its commitment to eliminate budgetary financing in 2022. BI's net claims on the central government thus fell further by -4.1 percent yoy in September, from -1.6 percent yoy in June. M2 growth decelerated to 9.1 percent yoy in September, down from 10.7 percent yoy in June (Figure A.27).

Indonesia's current account surplus together with less exposure to non-resident debt investors have reduced the sensitivity of the Rupiah to sudden portfolio reversals (Table A.1). Three main factors explain the sensitivity of a country's currency to volatility in capital flows: i) the sum of current account balance and FDI inflows (coined as the "basic balance" (Diop, 2018)), ii) the share of non-resident investors' holdings of domestic portfolio assets, and iii) the depth of the financial sector, proxied by the level of private sector credit as a share of GDP. With Indonesia's basic balance of 2.0 percent of GDP, it would take portfolio capital outflows equivalent to more than this level to significantly weaken the Rupiah. Between January and September, Indonesia has seen capital outflows amounting to 0.7 percent of GDP or just over one-third of the country's basic balance. At the same time, exposure to non-resident investors in debt instruments has also declined. This is also another source of resilience. Nevertheless, Indonesia has a relatively shallow financial market that may be less effective as a shock absorber during sudden currency selloffs.

Figure A.27: Money growth decelerated on account of BI's release of its government bond ownership and higher reserve requirement ratio

(growth, percent yoy and contribution to growth, percentage points)



Source: Bank Indonesia and World Bank staff calculations.

Table A.1: Stronger basic balance and less exposure to external investors has reduced the sensitivity of Rupiah to capital outflows

	IDN		Peers	
	2013	3Q-22	2013	3Q-22
Currency depreciation (%)	26.0	6.9	14.0	39.5
Basic balance (% GDP)	-1.9	1.9	1.9	-2.5*
Share of foreign holdings (% gov. LCY debt)	32.0	14.3	23.8	12.6
Private credit (% GDP)	36.1	38.7	98.9	115.5**

Note: Peer countries include Thailand, Malaysia, and Philippines. Source: CEIC, Asian Bonds Online, WDI data in 2020 (for the H1-2022 credit-to-GDP ratio), World Bank staff calculations.

Banking sector vulnerabilities remain low and support to economic recovery continues.

The system-wide non-performing loan (NPL) ratio has barely increased since mid-2020 and stands at 2.8 percent as of September 2022 (Figure A.28). The average loan at risk (LAR) ratio²⁹ for the top banks - defined as the sum of NPLs, restructured loans, and special mention loans - has been on a downward trend for some time and stood at 17.4 percent as of June 2022. This has fallen from 21.6 percent a year ago. The capital adequacy ratio has remained stable at 25.1 percent as of September 2022, well above the regulatory minimum. Provisioning levels relative to NPLs stood at 204.2 percent in August 2022 compared to 182.5 percent a year ago.

First, loan forbearance measures are currently in force until at least March 2023, longer than in most regional peers. Forbearance measures continue to mask the true extent of vulnerabilities, especially pandemic-related scarring. Second, NPLs in certain sectors are much higher than the average level. For instance, as of March 2022, public banks' NPL ratio for the hotel and restaurant sector was at 6.4 percent.

Profitability ratios experienced a decline from pre-pandemic levels³⁰ and then stabilized. Return on assets (ROA), return on equity (ROE), and interest margin to gross income recorded 2.5 percent, 13.8 percent, and 68.8 percent as of July 2022 respectively, compared to the 2.7 percent, 14.7 percent, and 58.0 percent prior to the pandemic. However, these ratios are an improvement from the pandemic and recovery period. Profitability has traditionally been higher than EAP regional peers, due to market structure, lack of competition, and the dominance of state-owned banks.

Banks' asset quality remains generally high, and banks' capital and provisions adequate to withstand potential adverse shocks.

However, current conditions are no reason for complacency and the stability of the banking sector still requires close monitoring.

Banking sector profitability remains stable after a decline from pre-pandemic levels.

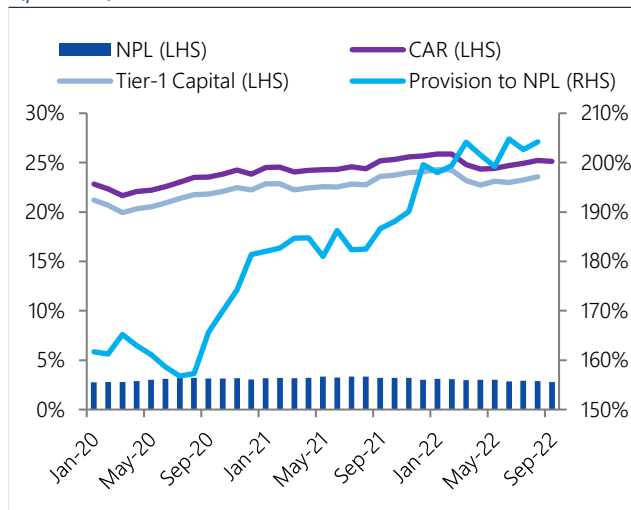
²⁹ As of December 2020, Bank Indonesia defines LAR using restructured loans in collectability (performing loans), restructured & non restructured special mention loans, and NPL.

³⁰ Albertazzi and Gambarcorta (2009) find empirical evidence that bank profitability is procyclical, i.e. decreases during a downturn.

Credit to the private sector remains strong and lending to Micro, Small and Medium Enterprises (MSMEs) is improving.

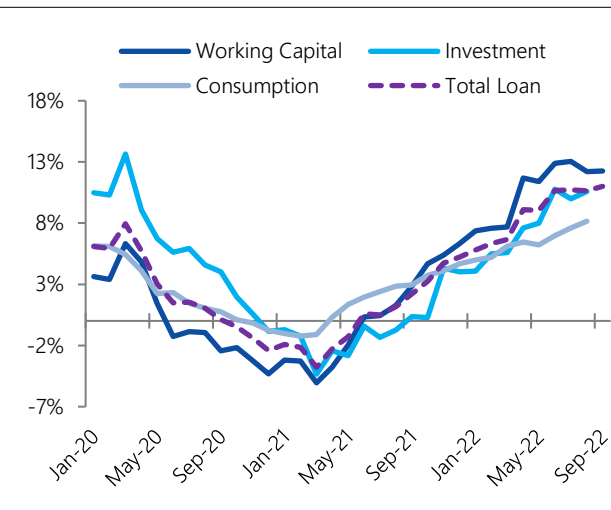
Following a protracted period of negative growth between October 2020 and May 2021, credit growth has been positive for 16 consecutive months. It grew 11 percent yoy in September 2022 (Figure A.29). This marked the 10th month for which credit growth exceeded 5 percent. Growth in credit to the private sector comes amidst tightening monetary policy but in the overall context of adequate bank capital and high asset quality. Survey data also point to stable household demand for credit. Lending to MSMEs stands at IDR 1,299.4 trillion, which accounts for 21.3 percent of all bank lending. This is an increase from the 18 percent level seen during the pandemic and early recovery era. Such outcome is likely driven by a new BI regulation on minimum lending to MSMEs issued in September 2021.

Figure A.28: NPL, CAR, Tier-1 capital and provisioning have been relatively stable (percent)



Source: The Financial Services Authority (OJK).

Figure A.29: Credit growth has been on the rise (percent)



Source: The Financial Services Authority (OJK).

The global economy has slowed significantly in 2022 and is projected to slow further in 2023 with significant downside risks.

The probability of global recession in 2023 remains high.

3. The Outlook

Global growth is projected to slow down sharply to less than half of the rate in 2021 and could stabilize beyond 2023. This steep slowdown comes on the back of a prolonged Russia-Ukraine war, soaring global inflation, and tightening financial conditions. Global inflation in 2020 remained elevated and higher than previously projected at 8.8 percent and is projected to ease to an average of 5.3 percent in 2023-2024 (IMF 2022a). To deal with high inflation, countries are projected to continue tightening monetary policy. This will be one of the most synchronous episodes of global monetary and fiscal policy tightening of the past five decades (Guénette, et al., 2022).

A scenario of persistent inflation, resulting in larger-than-expected policy tightening, would trigger a sharper economic downturn and re-pricing of risk in global financial markets, which could result in a global recession in 2023.³¹ This decline in global output would amplify the large permanent output loss and scarring relative to the pre-pandemic trend. Moreover, uncertainty over the Russia-Ukraine war and the corresponding sanctions could disrupt global energy markets further and keep prices elevated. In China, any severe COVID outbreaks could trigger renewed economic

³¹ The World Bank conducted three scenarios for the global economy outlook using a cross country model for the period of 2022-2024. The base-line scenario assumes that current monetary policy tightening may not be enough to restore inflation in a timely fashion. Global growth will slow substantially. The second scenario assumes that inflation will surge and trigger synchronous global monetary tightening, which will cause a sharp downturn in global growth in 2023 despite still growing positively.

disruptions, which would exacerbate the global slowdown. Several factors could also keep inflation high for protracted periods. This includes further shocks to energy and food prices and de-anchoring of inflation expectations.

Economic growth in 2022 is estimated to end on a high note reaching 5.2 percent (annually) before softening and averaging 4.9 percent in 2023-2025 (Table A.2). This is slightly above the country's estimated potential GDP growth rate of 4.7 percent. The projection is based on three assumptions. First, a continued recovery in domestic demand supporting private consumption - albeit softening given inflationary pressures and tightening monetary and fiscal stance. Second, a recovery in private investment as macroeconomic stability and the implementation of structural reforms, such as those in the Jobs Omnibus law, attract more FDI (see Box A.2). Third, relatively high commodity prices offering positive terms-of-trade for Indonesia and boosting its key exports (i.e., coal, palm oil and metals). On the supply side, contact-intensive sectors most notably transport, hospitality, and services will continue to benefit from the release of pent-up demand. Manufacturing is also expected to rebound, benefitting from rising investments in the sector.

Weaker global demand, especially for commodities, could hurt Indonesia through lower net exports and lower foreign investments. Indonesia has some policy space to absorb external shocks. But rapid global monetary tightening and contagion effects from other EMDEs may trigger larger capital outflows and Rupiah depreciation, further fueling inflation. It would add to an already rising interest burden, which could disrupt GOI's efforts to support the recovery through pro-growth programs. Tighter monetary policy could also lead to more expensive domestic borrowing costs, weakened credit, and thus risk the growth trajectory.

Headline inflation is projected to average 4.2 percent in 2022 as fuel subsidy removal push administered and transport prices up. Inflation is expected to peak in 2023 at an average of 4.5 percent (Table A.2). This follows carry-over and second round effects from the energy price hikes and from global inflation. It also accounts for further passthrough of producers' rising inputs costs to consumers. However, commodity prices are expected to ease in the outlook years. This should help to soften inflationary pressures. Inflation is therefore projected to average 3.5 percent during 2024-2025. As the output gap closes, the authorities have also committed to keep the inflation within BI's target.

The current account balance is projected to turn into a small deficit over the outlook period 2023-2025 (Table A.2). This reflects growing imports as domestic demand maintains its momentum and outweighs softening commodity-based exports. Capital outflows are also projected to persist as global monetary policy continues to tighten, albeit at a slower pace given the decline in non-resident debt holdings over the years. The external financing needs are expected to be largely financed by equity inflows and FDI. As a result, reserves coverage is projected to remain adequate but will decline slightly over the outlook period to 6.3 months of imports in 2025.

In this difficult global environment, Indonesia is projected to have a robust growth albeit at a slower pace.

Nevertheless, downside risks are substantial and could weigh heavily on Indonesia's growth if they materialize.

Average inflation is projected to peak in 2023, slightly above BI's upper bound target.

The external position is projected to deteriorate slightly with low to moderate risks of vulnerability.

The fiscal deficit is projected to remain below 3 percent of GDP in 2023 as returns from tax reforms materialize and COVID related expenditures are terminated.

The deficit is projected at 2.5 percent of GDP in 2023 (Table A.2). Fiscal receipts will initially moderate with slower economic growth and lower commodity prices. But revenues are projected to remain above pre-pandemic levels. Revenues will be supported by VAT collections, as the 1 pp rate hike in April 2022 delivers a full year's yield in 2023. By contrast, GOI spending will have subsided to pre-COVID levels. This comes as pandemic related programs come to an end, energy subsidies are reined in through a combination of recent price adjustments and ongoing easing in global cost drivers, and public investment remains muted. Beyond 2023, revenues are to be buoyed by gains from ongoing tax administration reforms and the next VAT rate increase. Gross fiscal financing needs are expected to decline significantly from their pandemic era highs but increase slightly after 2023 on account of higher interest and amortization costs. At an average of 6.1 percent of GDP over 2023-2025, they remain above pre-pandemic levels.

BOX A.2

FDI liberalization through the Omnibus Law on Jobs Creation

The GOI has pursued one of the most ambitious private sector reforms in decades. Prior to the reform, Indonesia had the 3rd highest level of restrictions on FDI among countries surveyed by the OECD and was the 2nd most restrictive behind all countries in the region next to the Philippines (OECD, 2022). The Negative Investment List (*Daftar Negatif Investasi*) included widespread foreign-equity limits, sectoral reservations for MSMEs, special licensing regimes, and minimum local content requirements. In February 2020 an Omnibus Law on Job Creation (Law No. 11/2020) was submitted to Parliament with the aim of improving the investment climate. The law was promulgated in November 2020, with implementing regulations following in its footsteps. Among these was presidential regulation (PR) 10/2021, later amended by presidential regulation 49/2021, which enacted important investment reform.

The reform removed three key types of restrictions to foreign investment. The removed restrictions, which were part of the previous investment law (Law No.25/2007) are: (i) the category of "sectors open with conditions" by the Investment Law; (ii) the business sectors "reserved for MSMEs and cooperatives" and those that are "open to large businesses on condition that they cooperate with MSMEs and cooperatives"; (iii) discrimination against foreign investments in sectors such as horticulture, plantation (estate crops), postal services, aviation, and shipping. The reform substantially reduced the number of business activities subject to at least one restriction to foreign investment, from 813 to 260. The reform also provided the GOI with flexibility in removing further restrictions and responding to requests from potential investors in the future.³²

The reform also tackled other challenges including improvements in business licensing, and trade reforms and it envisaged further investment liberalization. The new version of the online single submission (OSS) system aims to create an investment-friendly ecosystem and make licensing more efficient. The GOI has established a task force, through presidential decree 11/2021, to help investors overcome existing administrative bottlenecks. Among others, the task force is set-up to quickly resolve investment licensing constraints and provide recommendations for administrative action against officials hindering investment implementation, which raises the cost of investing in Indonesia (BKPM, 2021). While a step in the right direction, the OSS is not fully operational especially for projects categorized as medium to high risk. FDI liberalization was complemented by trade policy reforms in the Omnibus law that removed obstacles to firm competitiveness such as constraints on importing key intermediate inputs and labor reforms to fill critical gaps in skills.

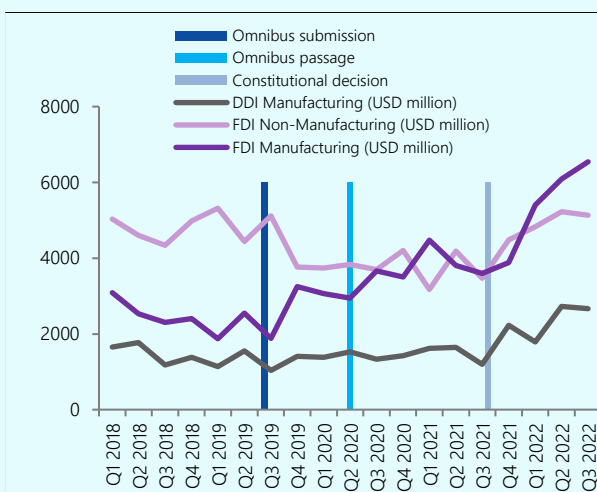
³² The law allowed presidential regulations to reduce investment restrictions, hence providing the GOI flexibility to make change since presidential regulations do not require Parliament approval.

The Omnibus Law on Jobs Creation has also mandated the creation of a sovereign wealth fund to create more longer-term investments opportunities from foreign investors into the country. As a result, the government created a new entity the Indonesia Investment Authority (INA). The GOI has injected an initial capital of US\$5 billion in INA, which was disbursed in two forms: i) cash injections totaling US\$2 billion (occurred in February and November 2021) and ii) a transfer of ownership of shares of two SOES valued at US\$3 billion (in December 2021). INA's operations have started. The fund has signed several framework agreements with global and domestic investors to invest in manufacturing, services, and infrastructure assets in Indonesia. INA's current assets under management (AUM) are valued at 6.8 billion dollars and has set target of US\$20 billion in the near future³³.

Evidence so far suggests that both foreign and domestic investments have responded positively to the reform, especially in fully liberalized sectors. Total FDI realization increased on average by 29.4 percent five quarters after the reform (post-policy) compared to pre-policy (the five quarters before the reform). For the manufacturing sector, average FDI increased by 34.6 percent in the post policy period (Montfaucon and Kidake, 2022). Gross FDI in manufacturing has caught up with non-manufacturing FDI in 2020 and 2021, and surpassed it as of Q3-2022 (Figure A.2.1). Domestic direct investment (DDI) in manufacturing has also been higher than any of its pre-policy levels since Q4-2021, suggesting a synergy with FDI. Analysis of FDI in fully liberalized non-commodity sectors also provides a positive picture. Out of 62 non-commodity sectors, 25 (or 40 percent) had all their subsectors liberalized by PR 10/2021 (i.e fully liberalized). From 2019 to 2021, FDI in fully liberalized non-commodity sectors grew by 13.8 percent. By contrast, FDI in non-fully liberalized sectors shrank by 11.8 percent during the same period (Figure A.2.2). With the reform being recent though, it is hard to dissociate the full reform impact from the economic recovery effect. While more detailed analysis of the reform will become more feasible with more data points going forward, preliminary empirical analysis suggests this response to policy is robust and extends beyond the economic recovery.

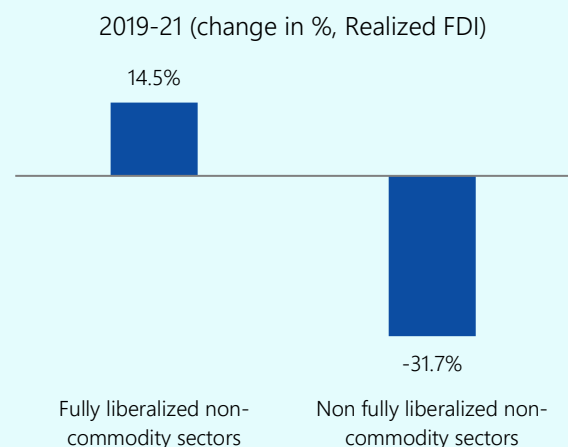
Going forward, the rising investment in liberalized sectors is likely to continue and contribute to the expected long-term impacts of the reform. Further analysis of FDI announcements by investors indicates that, for manufacturing, planned FDI in post-policy period grew by 57.4 percent. It only grew by 9.3 percent pre-reform. In the fully liberalized non-commodity sectors, planned FDI grew by an average of 30.3 percent post-policy, compared to 6.2 percent pre-policy. As a longer-term outcome of enhanced FDI, Indonesia would benefit from larger sources of technology and knowledge transfer, as well as of external funding for the economy. This would eventually boost growth, employment and integration into global value chains. Moreover, removing investments restrictions would, in the longer term, foster market entry, improve commercial performance, and tame price increases thanks to stronger competition.

Figure A.2.1: Indonesia's manufacturing and non-manufacturing FDI inflows (USD million)



Source: World Bank staff estimates using BKPM data.

Figure A.2.2: Difference in growth in realized FDI in liberalized and non-liberalized non-commodity sectors (percent)



Source: World Bank staff estimates.

³³ <https://www.ina.go.id/about-us>

4. Structural Reform Priorities

Sustaining the authorities' efforts to create fiscal space for growth and economic resilience to shocks

The authorities have managed macro-fiscal policy effectively to maintain discipline and credibility during a period of economic turbulence, whilst also trying to address longer-term constraints.

Indonesia's fiscal rules, including debt and deficit targets, have provided important anchors for policy transparency and predictability. Government debt remains sustainable and moderate relative to peer countries. Yet the ensuing increase in interest payments reiterate the need for sustained efforts on creating fiscal space through higher revenue and deeper financial markets. With interest payments in 2023 at around 0.5 percent of GDP higher than the annual average over 2016–2019, public revenues need to rise by at least the same amount to avoid a spending squeeze. The GOI's reforms through the Tax Harmonization Law (THL) are designed to address exactly this longer-term challenge, but further reforms are needed.

Building on these efforts, the authorities have other short-term measures at their disposal to create fiscal space without hurting economic activity.

One positive step in this regard was the recent parliamentary approval of a proposal for a sugar-sweetened beverages (SSB) excise. Secondly, the THL offers the MOF greater flexibility to eliminate unnecessary VAT exemptions. Fiscal receipts generated through reduced exemptions could be used to compensate poor households through targeted transfers (see below). Thirdly, on the spending side, the MOF has the authority to impose a 5 percent haircut upon line-ministry spending, and this can be raised to 10 percent through a ministerial decree.

Over the medium-term, the authorities could further build on the THL to improve revenue collection through base broadening measures.

There is scope to improve tax compliance across all major taxes (see Box A.3), but especially business taxes (i.e., VAT and CIT), which account for around two-thirds of tax revenues. The tax bases for the VAT and CIT could be expanded by lowering their high eligibility thresholds. The IDR 4.8 billion threshold for both these taxes is high even by advanced country standards and could be lowered to IDR 600 million. Exceptions and special treatment in the tax system could be rolled back. Many existing VAT exceptions can be eliminated, special final tax treatment of selected industries withdrawn (e.g., construction and real estate), and wide-ranging tax expenditures subjected to closer scrutiny. New excises could be introduced and implemented at higher tariff rates. This includes the SSB excise and a single-use plastics excise. Further simplifying the tobacco excise regime would also raise revenues in the medium term.

The government could also combine rules-based pricing and targeted social assistance to improve the efficiency of the energy subsidy in the medium-term.

Recent energy price hike helped contain the subsidies bill. Future reforms could further narrow or eliminate the gap between the energy prices consumers pay and the cost of supplying that energy. This could be done systematically using adjustable energy price formulas.³⁴ Yet, realigning energy prices with underlying costs presents a policy trade-off. The swifter the adjustment, the sharper the pain imposed on consumers. The slower the adjustment, the longer those subsidies burden the budget and crowd out other spending. Assistance to vulnerable households should be part of the price adjustment strategy. However, Indonesia's beneficiary databases still have room for improvement so that social assistance can reach all those intended. Given such gaps, it may be appropriate to maintain some level of energy subsidies for these groups, while rigorously enforcing eligibility restrictions. With electricity, this is a simpler affair, as lower voltage grid connections are closely associated with the most suitable

³⁴ Indonesia introduced an adjustable fuel price mechanism a little over half a decade ago. However, the GOI did not carry through with its plans to use the fuel price formula to update administered fuel prices on a regular basis. A key benefit of a rule-based approach is that it removes discretion and instills transparency and predictability.

³⁵ International evidence suggests that poor implementation of such schemes can create distortions in the economy.

BOX A.3

Incorporating third-party data to boost tax collection enforcement

Use of third-party data has been shown to improve tax enforcement internationally. In Denmark, tax evasion is minimal for income that is subject to third-party reporting (Kleven, et al., 2011). In Chile, transactions between firms that are subject to a paper trail have significantly lower tax evasion compared to the transactions at the last step in the VAT chain which is not subject to a paper trail (Pomeranz, 2015). This makes it crucial to identify and address administrative challenges to the accurate and timely reporting of third-party data.

To ensure the effective implementation of the THL, the GOI has developed an ambitious reform agenda to better incorporate third party data within the tax administration. The GOI embarked on tax reform to redress the structural challenge of low tax collections. These reforms are expected to help close Indonesia's tax gap and therefore enhance the fiscal space.³⁶ Recent reforms that help incorporate third party data included the following:

i. Reforms to improve data matching: Two recent reforms aim to standardize the use of the national identification number (NIK). First, the replacement of the tax identification number (NPWP) with the NIK.³⁷ Second, a required mandatory use of NIK for all public services.³⁸ These reforms will lay the foundation for better data matching from third parties.

ii. Reforms to improve IT capacity: Indonesia aims to introduce a Core Tax System in 2023/2024 which will vastly improve their IT capacity to handle third party data. The Directorate General of Taxation (DG tax) is pursuing reforms aimed at having live data integration with third parties such as the civil registration authority. This will allow tax officials to get quick access updated civil registration data such as the NIK, residential address, family members etc. This would be useful for conducting audits.

The reforms represent important first steps, but other key constraints remain:³⁹

First, there are regulatory challenges that can cause third parties to not share data with the tax authority (DG tax). While the overall legal framework for sharing third-party data exists⁴⁰, conflicting laws and regulations mean that data is often not shared by important third parties. For example, the Police does not share car ownership data with DG Tax, citing an exception to the Freedom of Public Information Law and an internal Police regulation.⁴¹ Similarly, data from the Financial Intelligence Unit (PPATK) can only be used for investigating tax crimes.⁴² Hence, it is important to remove regulatory ambiguity regarding third-party data that can hinder it being shared with DG Tax.

Second, data sharing incentives are not aligned for important third parties. While existing regulations provide for a strong penalty for non-compliance, this is often not enforced in practice. On the other hand, third parties do not have a strong incentive to share the data. This can somewhat be addressed by having standardized Memoranda of Understanding (MoU) or Cooperation Agreements (CAs) with clear incentives structures. For instance, Brazil was able to integrate several government and non-government databases via the implementation of such incentives. This allowed tax authorities to pre-populate tax returns. Some key third parties do not have signed MoUs or CAs with DG Tax on data sharing. The ones that have are non-standardized and relatively vague. It is hence important to introduce and enforce incentives for sharing of third-party data via clear and standardized MoUs and CAs.

³⁶ The tax gap was estimated at 6 percentage points of GDP in 2018 (World Bank, 2021b)

³⁷ Change introduced via Tax Harmonization Law 7/2021.

³⁸ Change introduced via presidential regulation 83/2021.

³⁹ The World Bank conducted a detailed assessment of the constraints to the accurate and timely reporting of third-party data. The scope of the study was Personal Income Taxation and included detailed Focus Group Discussions with various Directorates within DG Tax, and important government and non-government third parties."

⁴⁰ MOF ministerial regulation 228/2017 requires 69 types of third parties to share data with DG Tax.

⁴¹ National Police regulation No.7/2021 concerning registration and identification of motor vehicles also specifies the secrecy of vehicle ownership data.

⁴² For getting access to information from the FIU, following Articles 74 and 75 of Law No. 8/2010, DG Tax needs to conduct a tax investigation due to a tax crime.

Third, there is a lack of awareness about exact data usage and concerns about data security among certain third parties relating to data sharing with the tax authorities. This creates challenges to the voluntary compliance with MOF ministerial regulation 228/2017 that requires third parties to share data with DG Tax. Improving awareness via educational campaigns targeted at third parties and improving data security can help encourage voluntary compliance. Indonesia approved the Personal Data Protection (PDP) Bill in September 2022 which is a step in the right direction to allay concerns about data security.⁴³

Fourth, low data quality across third parties remains a key challenge. The unavailability of NIK in some third-party databases, particularly in older datasets, makes data matching challenging. Lack of automation in data sharing means that DG Tax staff must manually check data quality, a time intensive task. Third parties often share data in an ad-hoc, non-standardized manner which adds barrier to its utilization. Data quality / challenges can be addressed by having live and automated data integration with external databases that requires minimal human involvement. A second-best solution could be to have standard data sharing templates in the absence of live data integration.

targets of subsidies. With fuels, approaches could include beneficiary registration and vehicle-class restrictions³⁵.

Improving targeting and expanding coverage of both existing social assistance and social insurance programs is feasible with reforms and current fiscal savings.

Indonesia's social protection system can help households manage rising risks and volatility from external conditions, but it needs to be strengthened to fill remaining coverage and inclusion gaps.

An effective social protection system is critical for preventing negative coping strategies when households face income shocks.⁴⁴ Fortunately, Indonesia can build on its existing social protection programs just as it did in mitigating the impact of COVID-19 on poverty.⁴⁵ However, targeting needs to be improved further to minimize inclusion and exclusion errors. In addition, key groups like the elderly and people with disabilities are not yet fully protected (e.g., pension coverage is extremely low), nor are vulnerable workers who suddenly lose their main income source. This is especially true for non-salaried workers who represent almost 60 percent of the working population and who do not have access to government support through existing social insurance programs. The expansion of coverage and some improvements in adequacy will be key for managing household risk and protecting incomes.

Targeted social schemes bring more poverty reduction per rupiah spent than blanket subsidies.

Analysis of the overall impact of fiscal policy on poverty and income distribution has shown that diverting expenditures away from blanket subsidies, such as those for fuel and VAT exemptions, and towards targeted cash transfers or subsidized social insurance contributions would yield a better benefit-cost ratio (World Bank, 2020a; 2020b). Such analysis also estimated that a significant part of the required financing could be found with reforms in these areas. However, these calculations assume good targeting which in turn require that the data available are robust and current. Existing plans to pursue social protection reform also include an important focus on data and

⁴³ The PDP law provides an overarching framework of ensuring data security for personal data and was approved by the Indonesian House of Representatives (DPR) on September 20, 2022.

⁴⁴ Negative coping strategies are strategies used by households dealing with income loss that can erode human capital accumulation and/or income generation in the long term. Examples include limiting food consumption or reducing its quality, taking children out of school, selling productive household assets, etc.

⁴⁵ For a detailed discussion on Indonesia's social assistance and social insurance system, its role in reducing poverty and vulnerability, improving food security and access to service, see World Bank (2020a) and World Bank (2019).

information systems as gateway tools for supporting a more integrated policy and delivery.

To achieve this, the government could consider a system that provides a guaranteed minimum protection across the lifecycle. This can happen through social assistance directed at lifting people out of poverty and complementing it with a coherent set of social insurance programs. These would include in particular unemployment insurance and pensions, which allow households to smooth consumption over the lifecycle. Importantly, there should be a role for mechanisms that support social insurance coverage expansion for vulnerable populations, blurring the lines between traditional social assistance and social insurance to address gaps in coverage while the system matures.

Extending coverage of flagship social assistance programs and introducing cash transfers for poor and vulnerable elderly/disabled would be an important first step. Social insurance programs are quite comprehensive, especially following the recent introduction of unemployment insurance, but coverage is low. The social assistance minimum could thus be complemented by differential and well-targeted subsidies to cover social insurance premiums and contributions for vulnerable, non-salaried workers. The current RPJMN⁴⁶ already mandates increasing coverage of employment social security schemes for non-salaried workers and the government is actively pursuing strategies for this. Those include options to subsidize premiums for poor and vulnerable workers. Global experience suggests that most workers in Indonesia will remain in the informal sector for at least the next few decades making it important to find ways to delink social insurance coverage from labor market status. In health insurance, the government has achieved high coverage by paying the premium for workers in the bottom part of the income distribution. Similarly for employment-related social insurance, some workers that are currently not covered may require government support, while others are able to pay some or all of their contributions. Increasing coverage would require determining the level of required subsidies and setting up mechanisms for voluntary participation that minimize transaction costs. Depending on budget constraints, it may be necessary to begin with the coverage expansion for short-term risks such as death and work injury where the premium is relatively low.

In particular, it will be necessary to establish an expanded social registry that can be used to support delivery of programs beyond the bottom 40 percent and is able to draw relevant information from other administrative databases in real time (that is, a “federated” social registry). On the demand side, fostering digital applications and enrolment processes will be especially important for dealing with covariate shocks like the current inflation spike as well as idiosyncratic shocks that move households into poverty. Improved coordination between social assistance and social insurance programs both in terms of policy as well as their delivery systems can help minimize inclusion and exclusion errors. Finally, there is also potential to leverage technology to improve the integration of social protection delivery systems.

A “future-ready” social protection system that pays adequate benefit levels should be accessible to all Indonesians regardless of where and how they make a living.

Guaranteed minimum protection can be largely achieved by expanding coverage of both existing social assistance and social insurance programs.

Underpinning these reforms requires the strengthening of delivery systems.

⁴⁶ The Government’s National Medium Term Development Plan (Rencana Pembangunan Jangka Menengah Nasional).

Table A.2: Selected macroeconomic indicators

	2019	2020	2021	2022	2023	2024	2025
	Actual			WB projection			
Real GDP growth and inflation, percent change							
Real GDP	5.0	-2.1	3.7	5.2	4.8	4.9	5.0
Consumer Price Inflation (CPI) (average, %)	2.8	2.0	1.6	4.2	4.5	3.6	3.4
Consumer Price Inflation (CPI) (end of period, %)	2.6	1.7	1.9	5.4	3.7	3.4	3.3
Private Consumption	5.2	-2.7	2.0	5.0	4.6	4.9	5.0
Government Consumption	3.3	2.0	4.2	-1.5	0.2	1.4	-1.2
Gross Fixed Investment	4.5	-5.0	3.8	4.6	5.5	5.9	6.1
Exports	-0.5	-8.1	24.0	17.0	11.0	8.9	9.0
Imports	-7.1	-16.7	23.3	13.8	11.0	10.0	9.5
Fiscal accounts, central government, percent of GDP							
Revenues	12.4	10.7	11.8	13.3	12.4	12.5	13.0
of which Tax Revenue	9.8	8.3	9.0	10.6	10.0	10.2	10.7
Expenditures	14.6	16.8	16.4	16.1	14.9	15.1	15.4
Primary Balance	-0.5	-4.1	-2.6	-0.7	-0.3	-0.4	-0.2
Fiscal Balance	-2.2	-6.1	-4.7	-2.7	-2.5	-2.5	-2.4
Central Government Debt(a)	30.2	39.3	40.7	38.8	38.1	37.8	37.7
Balance of Payments, percent of GDP unless indicated otherwise							
Current Account Balance	-2.7	-0.4	0.3	0.9	-0.1	-0.5	-1.2
Exports, Goods and Services	17.9	16.9	20.8	22.6	21.7	21.4	21.3
Imports, Goods and Services	-18.2	-15.1	-18.4	-19.5	-19.8	-19.8	-20.4
Net Foreign Direct Investment	1.8	1.3	1.4	1.5	1.5	1.6	1.6
Gross Reserves (months of imports of goods and services)	9.7	7.5	7.0	5.7	6.4	6.3	6.3
Terms of Trade (2019=100)	100.0	111.5	140.1	300.0	214.0	207.2	...
Memorandum items							
Nominal GDP (IDR trillion)	15,833	15,438	16,971	19,451	21,188	22,857	24,648
Per Capita GDP (US\$)	3,877	3,757	3,856	4,018
Nominal GDP (US\$ billion)	1,119	1,059	1,186	1,282

B. Trade for Growth and Economic Transformation in Indonesia



B. Trade for Growth and Economic Transformation in Indonesia

1. Introduction

Strategically positioned between two continents and at the intersection of many trade routes⁴⁷, Indonesia is endowed with significant natural resources, has a large economy and a workforce on the cusp of a demographic dividend. Trade is also deeply intertwined with Indonesia's history, as the country is historically known for its merchants, wealth of spices and resources. Indonesia is the 4th largest country in terms of population, the 16th largest by GDP yet only the 25th largest by exports.

Between 1980-2020, world trade in goods and services grew at an average annual real rate of close to 5 percent, leading to a more than seven-fold expansion of the volume of global trade (Figure B.1). This unprecedented growth in world trade was supported by a steep decline in trade costs, advances in information technology, trade liberalization efforts and the expansion of global value chains (GVCs). During the same period, Indonesia's exports of goods and services expanded only half as much. In contrast, the average volume of exports of Malaysia, Thailand, and the Philippines increased by more than 12-fold during 1980-2020.

Indonesia's trade to GDP ratio fell from 72 percent in 2000 to 33 percent in 2020 and is also the lowest among regional peers. Coinciding with the decline in trade openness, the contribution of manufacturing to Indonesia's GDP has also significantly declined, from its peak at 31 percent in 2002 to 19 percent in 2021 (Figure B.3). Compared to regional peers, this decline in the share of manufacturing in Indonesia's economy started at lower levels of GDP per capita and development (Figure B.4).

Indonesia's international competitiveness has been stagnating and is lower than in regional comparators. Furthermore, exports are concentrated in resource intensive industries and have the lowest sophistication among East Asian peers. Commodity dependence leaves Indonesia vulnerable to the inherent volatility of commodity prices and susceptible to Dutch Disease. The potential of services to contribute to trade and growth in Indonesia is substantial but remains largely untapped.

Indonesia's history, size, location, demographics, and resource endowments set it up for great international trade potential.

Despite this potential, the growth of Indonesia's tradable sector has lagged the unprecedented expansion of global trade over the past four decades.

After the Asian Financial Crisis, Indonesia's trade openness has more than halved, coinciding with a period of deindustrialization.

At just 1.1 percent of global manufacturing exports since 2000, Indonesia has significant scope to build on its comparative advantages to boost export growth and diversification.

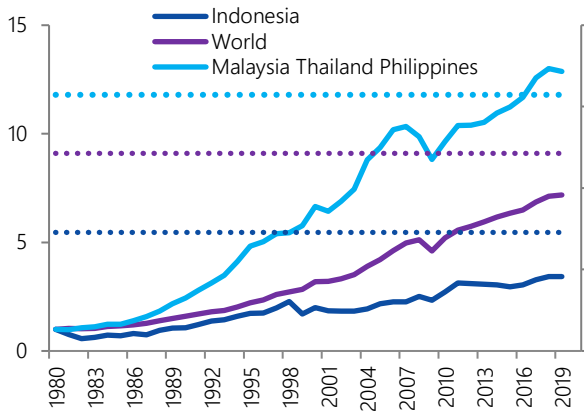
⁴⁷ UNCTAD estimates that 40 percent of the world's commercial maritime trade is carried out through Indonesian waters and territorial waters of this region.

Inward looking policies combined with structural constraints to firm and export growth have weighed on Indonesia's international competitiveness.

The decline in import tariffs since the 1990s has been offset with an increasing incidence of Non-Tariff Measures (NTMs), which in turn has resulted in a much less transparent trade policy framework. Despite recent NTM reform progress, NTMs continue to impose a significant burden on Indonesian businesses, more than for regional peers. In addition to barriers on goods trade, there are also restrictions that hamper the competitiveness of services sectors. When it comes to the enabling environment trade logistics and trade facilitation, additional reforms are needed to reduce the time, costs, and uncertainty of cross border transactions. Although trade agreements have been an important vehicle for delivering trade reforms in Indonesia, there is room to improve their content and coverage.

Figure B.1: Indonesia's exports have lagged the unprecedented expansion of global trade during the last four decades

(Volume of exports of goods and services, 1980=1 (LHS); Average annual growth, percent (RHS))



Source: World Bank, IMF.

Figure B.2: Exports to GDP ratio remains below that of comparators, limiting the contribution of trade to growth and development

(GDP per capita and exports/GDP, 1980-2020)

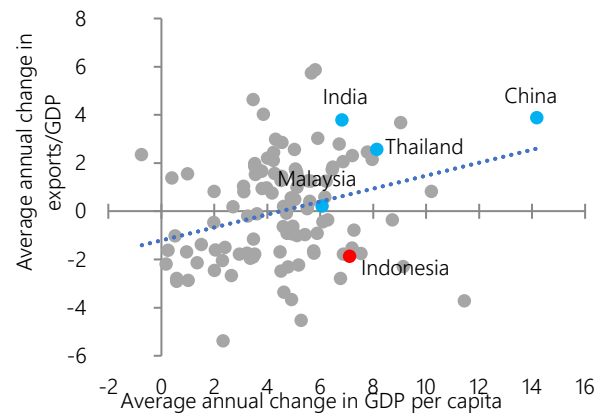
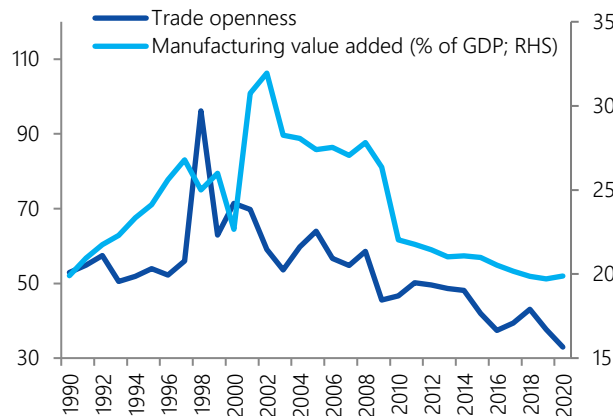


Figure B.3: The decline in trade openness after the AFC was closely followed by a fall in the contribution of manufacturing to GDP

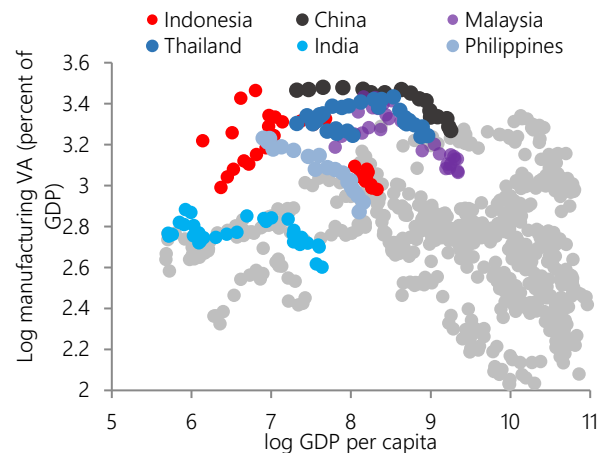
(Percent of GDP)



Source: World Bank.

Figure B.4: The drop in manufacturing share started at lower levels of development in Indonesia than in regional comparators

(GDP per capita and manufacturing value added, 1990-2020)



Improving – rather than restricting – access to imports could help Indonesia diversify into higher-value-added and more advanced manufactures.

The comprehensive reform program through the Omnibus Law on Job Creation laid the foundations to boost competitiveness and support long term-growth.

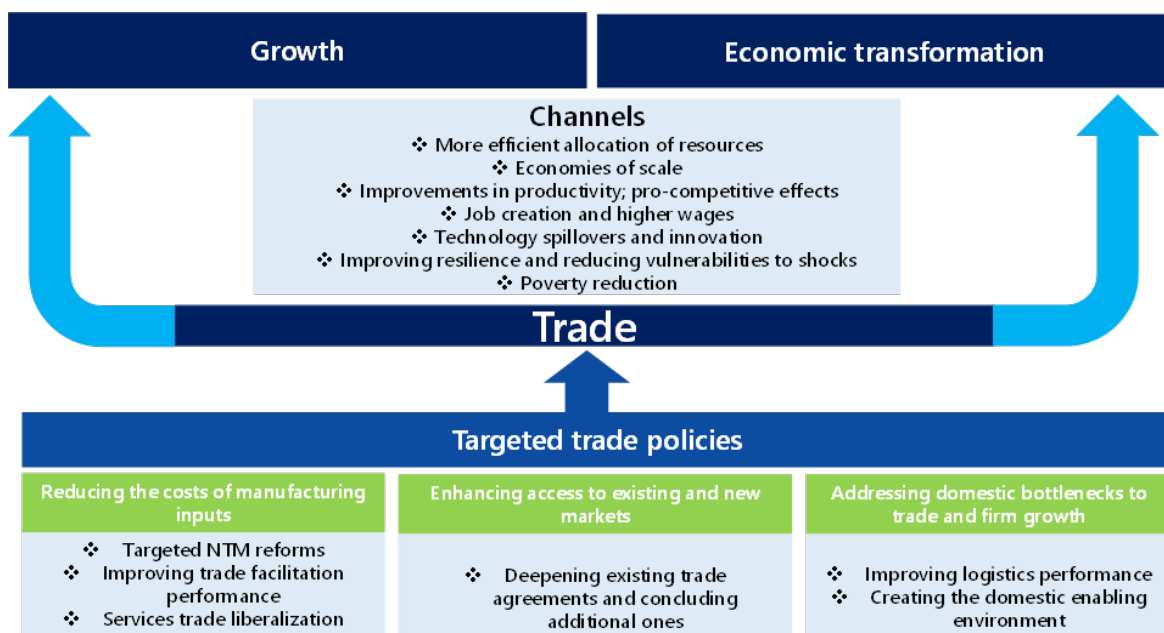
An enabling trade policy framework could play a critical role in boosting Indonesia's long-term growth and economic transformation.

Imports are essential for exports, especially in complex value chains and high value-added products, while the expansion of GVCs has further strengthened the link between imports and exports. In Indonesia, firms that both import and export accounted for a quarter of total imports and nearly two-thirds of total exports. These importing-exporter firms are more productive and also export more frequently and to more destinations than those that are engaged in exporting activities only. Furthermore, Indonesian firms using imported inputs tend to grow faster and pay higher wages than those that do not use imported inputs. At the same time, an increased use of imports in manufacturing is associated with improved diversification and higher product quality.

As highlighted in Box A.2, foreign investment has been responding positively to the reforms. Looking ahead, complementing reforms under the Omnibus Law on Job Creation with further trade reforms could result in larger multiplier effects on investment and growth. In turn, boosting the potential of trade for growth and economic transformation could support Indonesia's objective to becoming a high-income country by 2045 (Figure B.2).

Targeted reforms to reduce the costs of imported manufacturing inputs, enhance firms' access to new and existing markets all the while addressing remaining domestic bottlenecks to trade and firm growth will be key to realizing the potential of trade. Further trade policy reforms aimed at streamlining and eliminating unnecessary non-tariff measures, removing barriers to services trade, deepening and expanding trade agreements, and improving logistics and trade facilitation performance are needed to create this enabling trade policy framework in Indonesia (Figure B.5). All in all, an open, stable, transparent, and predictable trade policy framework will be key. This chapter outlines these recommendations and their expected impacts, within the context of current trade policies and outcomes.

Figure B.5: An Enabling Trade Policy Framework for Growth and Economic Transformation in Indonesia



2. The Case for International Trade as a Driver of Growth and Economic Transformation

Indonesia could build on its significant trade potential to boost growth and economic transformation.

International trade allows countries to specialize in the production of goods and services in line with their comparative advantages, which results in a more efficient allocation of resources. Trade also allows firms to realize the benefits of economies of scale, to build on productivity gains and pro-competitive effects. As businesses grow and become more productive through trading, they create jobs and boost wages. In addition, trade can be a source of knowledge spillovers and innovation, improve countries' resilience and reduce their vulnerability to shocks. All these factors can contribute to higher growth, economic transformation, and poverty reduction. Evidence shows, for instance, that a 1 percentage point increase in the ratio of trade to GDP increases income per capita between 0.5-2 percent, spurring the accumulation of physical and human capital and increasing output for given levels of capital⁴⁸. The economic success stories of many countries are associated with their increased participation in international trade⁴⁹.

International trade increases productivity of firms and countries.

Through pro-competitive effects, openness to trade supports the growth of more efficient firms⁵⁰ as well as the reallocation of resources into more productive industries, which in turn result in firm-level and aggregate productivity gains. For instance, a 1 percentage point increase in openness has been found to raise aggregate productivity by 1.2 percent in the long run⁵¹, while a 1 percentage point reduction in tariffs on inputs used in a sector improves total factor productivity in that sector by 2 percent⁵¹. Indonesia specific evidence also supports these overall findings: for instance, a 10-percentage point fall in input tariffs has been associated with a productivity gain of 12 percent for Indonesian businesses that import their inputs, at least twice as high as any gains from reducing output tariffs⁵³. Furthermore, imported inputs have been found to have a positive effect on firm productivity in Indonesia, with a 1 percent increase in the number of varieties of imported inputs improving productivity by 0.03 percent⁵⁴.

Trade benefits consumers through lower prices and a higher variety of products and has been strongly linked with poverty reduction.

Trade is estimated to have reduced the price of a household consumption basket of a typical low-income household by two-thirds⁵⁵. The positive links between trade and poverty reduction are also well established. Indonesia made impressive gains in poverty reduction and trade has contributed to this. The extreme poverty rate measured at US\$ 1.90 2011 PPP per day, dropped from 19 percent in 2002 to 3 percent in 2019. Poverty has been found to decline especially in districts with a greater sector exposure to input tariff liberalization in Indonesia, a 2.06 percentage point decline in input tariffs resulting in a 6.7 percentage point reduction in the poverty headcount⁵⁶.

⁴⁸ Frankel and Romer 1999 based on a set of 63 countries.

⁴⁹ Spence et al. 2008; Connolly and Yi 2015.

⁵⁰ Melitz 2003.

⁵¹ Alcalá and Ciccone 2004 based on a sample of 138 countries.

⁵² Ahn et al. 2019.

⁵³ Amiti and Konings 2007.

⁵⁴ Pane and Panturu 2022.

⁵⁵ Fajjgelbaum and Khandelwal 2016.

⁵⁶ Kis-Katos and Sparrow 2015.

Innovation, knowledge transfers and technology upgrading are also channels through which trade benefits growth and structural transformation.

As highlighted by the COVID-19 pandemic, trade and diversification can be a source of resilience to shocks.

Domestic policies to address inequalities and trade-related adjustments are key to ensure that the gains from trade are equitably distributed.

Imports are essential for the Indonesian economy, for domestic value addition and exports, especially in higher value-added manufactures.

Trade can facilitate access to technologies and knowledge embodied in trade of products and services. Access to advanced technologies through imports can in turn foster innovation by domestic firms. The acquisition of production capabilities embodied in goods has been found to be an important source of knowledge spillovers⁵⁷. Using a sample of Indonesian firms, imports of intermediate inputs were found to facilitate technology transfers, which in turn benefitted skill-biased technological change and increased the wage share of skilled labor⁵⁸.

Although trade in GVC-intensive industries was initially more negatively affected by COVID-19 than non-GVC intensive industries, it also recovered faster and stronger⁵⁹. GVC networks were also able to rapidly adjust. GDP of countries with strong trade linkages to countries with few COVID-19 cases recovered faster⁶⁰. Recent evidence highlights that countries were able to build resilience to shocks through greater diversification of import sources and by making inputs from different countries more substitutable⁶¹. In contrast, policies aimed to reduce dependence on international trade, , may in fact contribute to reducing resilience to shocks⁶².

Trade liberalization creates winners as well as losers. The distribution of gains is highly sensitive to country-specific factors and influenced by national policies. Gains depend on labor market rigidities that define the mobility of workers and capital across firms and industries⁶³. In some advanced economies, import competition had an adverse effect on manufacturing jobs, especially in the absence of complementary policies. While on average trade is associated with higher wages, it is also a source of wage inequalities. Trade has impacted wages of different types of workers to different degrees and contributed to an increase in the wages of skilled relative to unskilled workers⁶⁴.

Close to two-thirds of Indonesian exports are generated by firms that both export and import. These firms have been shown to be more productive, and able to export more frequently and to more destinations than those that are engaged in exporting activities only. Achieving the government objective of 35 percent import substitution could disrupt domestic manufacturing and investment, as businesses would need to replace imported inputs with potentially more costly and potentially lower quality domestic ones. Improving rather than restricting access to imported inputs would boost Indonesia's international competitiveness (see Box B.1).

⁵⁷ Hausman, Hwang and Rodrik 2007.

⁵⁸ Yasar and Rejesus 2020.

⁵⁹ IMF 2022b.

⁶⁰ WTO 2021.

⁶¹ IMF 2022b.

⁶² OECD 2021a; IMF 2022.

⁶³ Pavcnik 2017.

⁶⁴ Helpman 2016.

BOX B.1

Import substitution to boost Indonesia's manufacturing industries

Import substituting industrialization has been at the core of Indonesia's growth and economic transformation strategy, with the most recent goal to substitute 35 percent of imports by 2022. Import substitution aims to reduce reliance on imports, boost demand for domestic products and incentivize the growth of domestic industries. The recent import substitution policy does not target specific industries. It is expected that industries that account for a large share of imports such as machinery, chemicals, metals, electronics, food, electrical equipment, textiles, vehicles, and rubber would be prioritized⁶⁵. Existing policies such as local content requirements, import approvals, compulsory certification with national standards and other NTMs are often used with the objective of import substitution.

Import substitution would limit gains from trade and cause disruptions to domestic manufacturing as well as investment, the most import intensive component of final demand. Imported inputs are crucial for manufacturing industries, especially in priority and higher-value-added sectors. Overall, imported intermediate inputs added up to more than 10 percent of total manufacturing costs and 20 percent of intermediate input costs in Indonesia (Figure B.6), while the share is much higher in priority industries such as beverages, textiles and clothing, electronics, and pharmaceuticals (Figure B.7). Import substitution would also significantly weigh on investment, dependent on the domestic availability of imports of capital goods and machinery. Among final demand components, investment (gross fixed capital formation) is the most intensive in imported inputs (9.5 percent). Additionally, estimates show that imported varieties in Indonesia cannot be easily substituted as goods are highly differentiated and potential gains from imported varieties are high.⁶⁶

Import substitution would limit businesses' access to key inputs, reducing their productivity, with an adverse impact on importing exporter firms. Access to imported inputs has been a source of productivity gains for Indonesian firms: a 10-percentage point fall in input tariffs led to a firm-level productivity gain of 12 percent, facilitated by learning, quality, and variety effects⁶⁷. In addition, firms that are more integrated with the global economy tend to be on average close to 20 percent more productive than non-integrated firms⁶⁸. Import substitution adversely impacts the increasing number of firms engaged in international trading activities (Figure B.8), especially exporting firms that also import. These importing-exporters accounted for a quarter of total imports and nearly two-thirds of Indonesian exports, underscoring the importance of imports for further boosting export potential (Figure B.9). The remaining 37 percent of exports come from firms that do not import directly but may likely purchase imported inputs through third parties. Evidence shows that these two-way traders are more productive and export more frequently and to more destinations than firms engaged in exporting transactions only⁶⁹.

Improving – rather than restricting – access to imported inputs can help the Indonesian economy to diversify into higher-value added activities. Evidence also shows that an increased use of imports in manufacturing is associated with improved diversification and higher product quality⁷⁰. Indonesian firms using imported inputs have been shown to grow faster, are more productive, and pay higher wages. The real wage premium obtained by a worker in a firm that sources 10 percent of its inputs from abroad has been estimated to be about 3.7 percent⁷¹.

Open, predictable, and mutually supportive trade, industrial, investment policies have become key to boosting exports and competitiveness. The expansion of global and regional value chains has also strengthened the link between exports and imports. Imports are essential for exports, especially in complex value chains and higher-

⁶⁵ Ministry of Industry 2022.

⁶⁶ Estimated elasticity of substitution for 4876 HS-6 products for Indonesia is 7.2 and the average imported product has been experiencing a positive variety gain at 1 percent a year on average between 1989 and 2021.

⁶⁷ Amiti and Konings 2007.

⁶⁸ Javorcik et. al 2012.

⁶⁹ Cali et al. 2022.

⁷⁰ Rahardja and Varela 2015.

⁷¹ Rahardja and Varela 2015.

value-added products (transport equipment and electronics). As a result, barriers on imports are effectively a tax on exports, while export restrictions can also affect the efficient functioning of GVCs and raise costs. As GVC trade crosses borders multiple times, it leads to a compounding and accumulation of trade barriers. Since its inception in the 1970s, Indonesia’s import substitution strategy has not reduced reliance on imported inputs⁷². At the same time, barriers to trade dampen Indonesia’s international competitiveness, lead to a misallocation of resources and result in significant efficiency losses, limiting growth and structural transformation.

Figure B.6: Imports account for an important share of manufacturing and investment costs
(Percent of total)

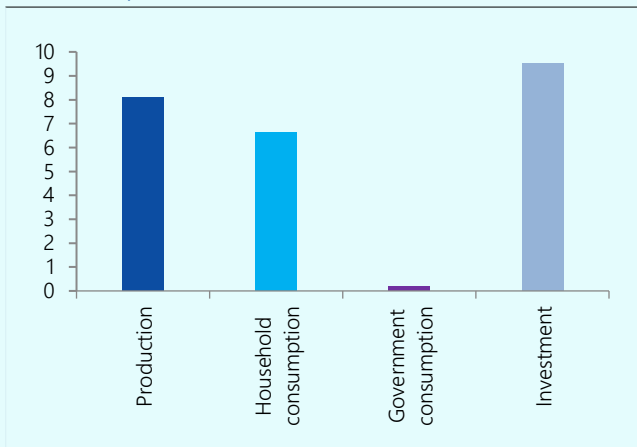
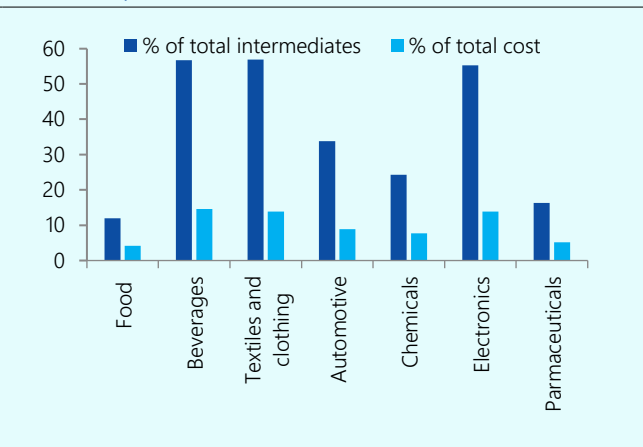


Figure B.7: Import intensity of Industry 4.0 priority industries
(Percent of total)



Source: World Bank based on BPS Input Output table for 2016.

Figure B.8: The number of trading firms in Indonesia has been increasing
(Number of firms and percent of total)

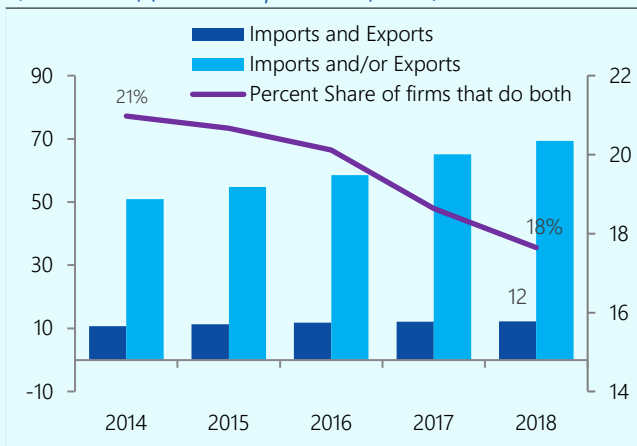
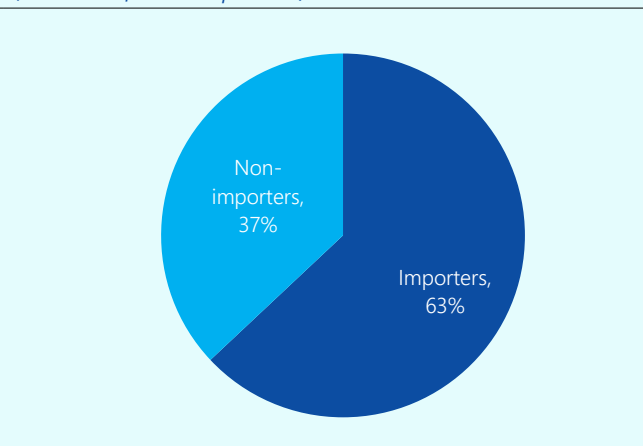


Figure B.9: Exporters that are also importers account for two-thirds of exports (percent of total)
(Percent of total exporters)



Source: World Bank based on DG Customs data.

Restrictive agricultural and food trade policies can contribute to raising domestic food prices and hurting not only Indonesian consumers, but also farmers, two-thirds of whom are net food buyers. Instead of distortive trade policies, targeted measures to remove restrictive trade policies, achieve nutritional adequacy and sustainability are needed (see Box B.2).

⁷² Ing, Pangestu and Cadot 2017.

BOX B.2

Import restrictions on agricultural and food products

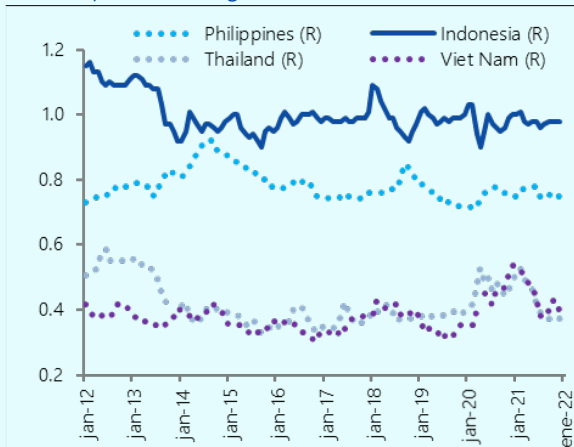
Indonesia has made important progress on enhancing food availability, but faces challenges related to food affordability and nutritional adequacy. First, Indonesian consumers pay higher prices for rice and other staple foods than regional peers (Figure B.10), while affordability remains an important challenge. Policy measures to enhance productivity and reduce barriers to agricultural and food imports could contribute to improving the affordability of food in Indonesia. Second, one-third of Indonesians could not afford nutritionally adequate diets compared to about one percent who could not afford an energy-sufficient diet. Policies to encourage diversification into more nutritious foods (livestock, fruit and vegetables) and reducing policy distortions that currently favor production of rice could improve nutritional adequacy⁷³.

Higher prices are partly explained by producer support policies and restrictive agricultural trade policies. The effective rate of protection which averaged at 27 percent of total consumption between 2011-20, is among the highest compared to peers⁷⁴. In turn, high agricultural and food prices hurt Indonesian consumers, especially the poor. High prices also hurt farmers, two-thirds of whom are net food buyers and overall do not benefit from high prices for their produced agricultural outputs.

NTMs contribute significantly to high food prices in Indonesia. Trade policies in the form of import licensing requirements, port of entry restrictions, and import monopolies keep food prices high while their reform could reduce them by up to 40 percent (Figure B.11). The recently adopted licensing system for export and import transactions, the Commodity Balance (Neraca Komoditas) could potentially increase the transparency of the licensing process. However, reliable and internally consistent data poses a problem for successful implementation. At the same time, evidence shows that import approvals remain among the most burdensome NTMs. Instead, import approvals could be replaced with automatic licenses for products not subject to quantitative restrictions.

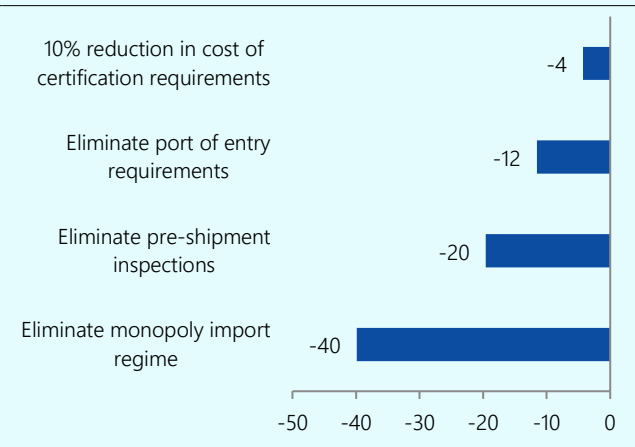
Reducing reliance on food imports is often perceived as the right strategy to reduce vulnerability to shocks however, evidence shows that using there are more effective policies to encourage domestic production and reduce vulnerability to shocks. Open trade policies are the most effective means of balancing out supply and demand imbalances across countries. Countries open to trade have been better placed to respond to shocks in the short-term and to recover more quickly in the medium and long term. More generally, policies to advance the development of more productive and diverse food production systems can contribute to achieving long term food and nutrition security^{75,76}.

Figure B.10: Rice prices in Indonesia have been systematically higher than in regional peers
(Retail price, US\$/kg)



Source: FAO, Cali et al. 2021.

Figure B.11: Targeted NTM reforms would reduce food prices in Indonesia
(Percent)



⁷³ World Bank 2022a.

⁷⁴ OECD Producer and Consumer Support Estimates as share of Gross Farm Receipts.

⁷⁵ Pangestu 2022.

⁷⁶ For example, reforms to move from quantitative restrictions to a more transparent and predictable tariff on rice in the Philippines led to 26 percent decline in the price of rice, 6.3 percent increase in rice consumption, ultimately translating into a 2.1 million decline in hungry and malnourished (IFPRI 2019).

3. How have Indonesia's Trade Policies Impacted Trade Outcomes?

Scope to liberalize Indonesia's trade policy framework and boost access to imports for production

During the last 50 years, Indonesia made some progress on trade reforms, including through countercyclical episodes of trade liberalization.

The decline in import tariffs has been offset by an increasing incidence of NTMs.

The policy substitution towards the use of NTMs resulted in a much less transparent trade policy regime.

NTMs lead not only to efficiency and productivity losses for Indonesian businesses but also have wide-ranging adverse effects on exports, households, and investment decisions.

Episodes of high oil and other commodity prices were often associated with inward looking trade policies, while adverse economic shocks and low commodity prices incentivized deregulation and trade liberalization efforts⁷⁷. For instance, the 1970s oil boom created the fiscal policy space to intensify government intervention, escalate import substitution objectives and the focus on the development of strategic industries. Conversely, the end of the oil boom and the start of the global recession in 1980s led to significant deregulation and export diversification, to reduce Indonesia's commodity dependence. Overall, facilitated by multilateral, regional, and bilateral commitments, Indonesia's import tariffs decreased from 15 percent in 1990, to 5.2 percent in 2000 and further to 2 percent in 2020 (Figure B.12)⁷⁸.

The use of NTMs has been increasing and is much higher than in regional comparators. NTMs are applied on close to 90 percent of all imported consumer goods but have a high incidence on imports of intermediate inputs and capital goods, often not available domestically and crucial for domestic production. While many NTMs are used to achieve legitimate non-trade policy objectives such as the protection of consumer health and safety, there are many other cumbersome, costly, and unnecessary NTMs that distort trade. The four NTMs that have been found to be among the most burdensome for Indonesian firms are pre-shipment inspections (PSI), restrictions on port of entry, import approvals and mandatory certification of compliance with Indonesian National Standards (SNI). For instance, port of entry restrictions mandate that certain imports go through designated Indonesian ports/airports with adequate screening facilities. However, implementation raises trade costs and increases prices to consumers as goods are not able to enter through their natural entry port in line with market demand.

Compared to tariffs, NTMs are an opaquer policy instrument, operating through a maze of administrative rules and regulations, spanning across multiple Ministries and government agencies. Furthermore, measuring NTMs' impact is complex and is highly dependent on implementation but also on industry, product, and firm context⁷⁹. The use of NTMs can often be discretionary, increasing the possibility for corruption. All in all, the shift towards the use of less transparent types of trade policy instruments can have wide-ranging unintended consequences.

As a first order effect, NTMs increase trade costs and the price of imported inputs, compelling firms to source their inputs from other more costly and potentially lower quality domestic sources. Given the international fragmentation of production and complex value chains, NTMs also result in cascading trade costs as intermediate goods cross borders multiple times through the stages of production, dampening Indonesian firms' integration in GVCs. NTMs also increase the price of imported products for consumers, reducing their purchasing power, especially for the poorest. These measures also increase the price of imported capital goods, weighing on investment, dependent on imports of machinery not available domestically.

⁷⁷ Ing, Pangestu and Cadot 2018.

⁷⁸ There are a few remaining tariff peaks in sectors such as beverages and tobacco, clothing, transport equipment and agricultural.

⁷⁹ For instance, MSMEs may find it more difficult than larger firms to comply with certain NTM requirements either due to lack of information, capacity or the cost of compliance relative to sales.

Compared to other countries in the region, the adverse impact of NTMs in Indonesia is more pronounced, suggesting lower implementation efficiency and higher compliance costs.

Recently, Indonesia has made some progress in reducing the incidence of some NTMs and increasing the transparency of the regulatory framework.

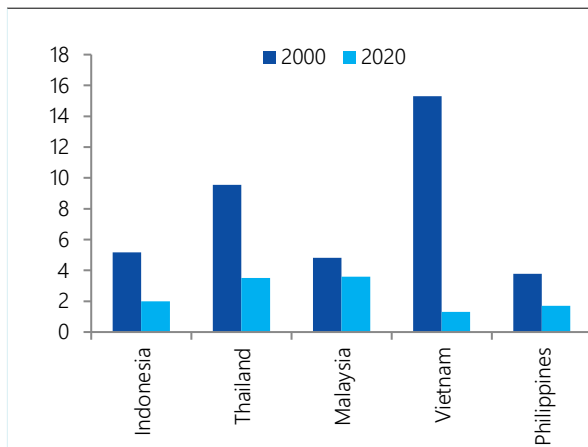
Despite these reforms, NTMs continue to impose a significant burden to Indonesian businesses, adding up to an average tariff equivalent of 30 percent.

Even when the same measures are applied to the same goods in different countries, the cost of the measures differs across countries, depending on how the measures are implemented. Analysis reveals that the cost of applying certain NTMs in Indonesia is significantly higher compared to other countries: for instance, port of entry restrictions in Indonesia inflict a tariff equivalent of 22 percent, over twice as costly as when port of entry restrictions are applied in other ASEAN economies (Figure B.13)⁸⁰. Additionally, imports of intermediate products facing NTMs were more affected as a result of both international and domestic COVID-19 measures in 2020-2021.⁸¹

Recently, Indonesia has made some progress in reducing the incidence of some NTMs and increasing the transparency of the regulatory framework. Regulatory consolidation led to a decline in the number of NTM regulations, from 147 in 2020 to 116 in 2021 for import-related NTMs, and from 30 in 2020 to 18 in 2021 for export-related NTMs. In addition to regulatory consolidation, the incidence of NTMs such as pre-shipment inspections (PSI) have also been reduced (Figure B.14)⁸². For instance, the share of the value of imports affected by PSI dropped from 15 percent in 2020 to just 5 percent in 2021. The number of affected products also decreased, from 14 percent to 2 percent in 2021, continuing a significant downward trend since 2018. Regulations related to import approvals halved in 2021, after a decade-long upward trend, although import approvals remain the most stringent among NTMs, affecting even more products in 2021. The number of regulations and the product coverage of certification with SNI also dropped in 2021.

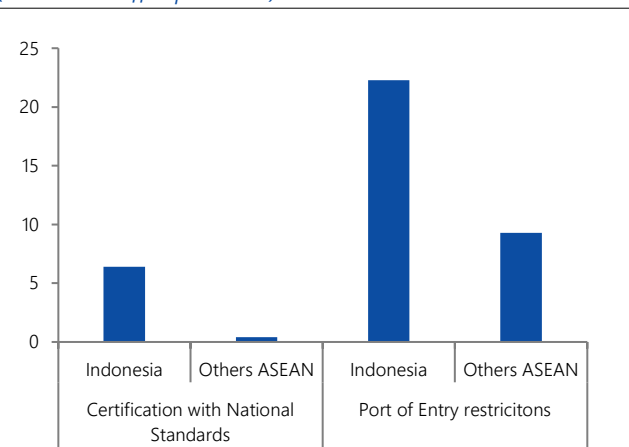
Overall, technical barriers to trade (TBT) amount to a tariff equivalent of 13 percent, sanitary and phytosanitary measures (SPS) to 22 percent, and PSI to 15 percent. Different types of NTMs are also often cumulatively applied on the same product, compounding the costs faced by firms. Capital goods such as transport equipment, machinery and electronics are among the most affected, covered by NTMs that add up to tariff equivalents 60-130 percent (Figure B.15).

Figure B.12: Average applied tariffs are low
(Percent)



Source: World Bank.

Figure B.13: Compliance with NTMs in Indonesia is more costly than in regional comparators
(Percent tariff equivalent)

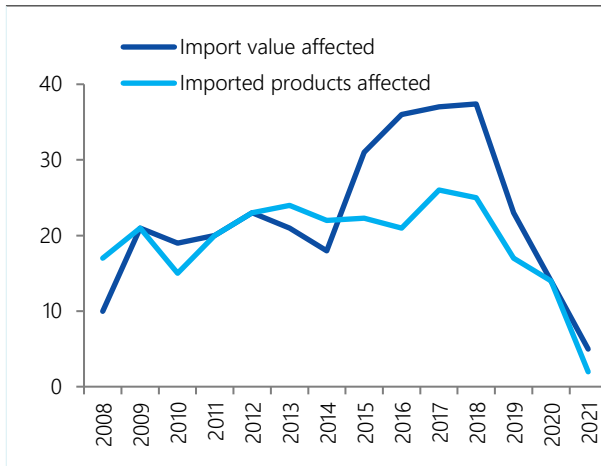


⁸⁰ Montfaucon, Yar Khan and Agnimaruto 2022.

⁸¹ Majune and Montfaucon 2022.

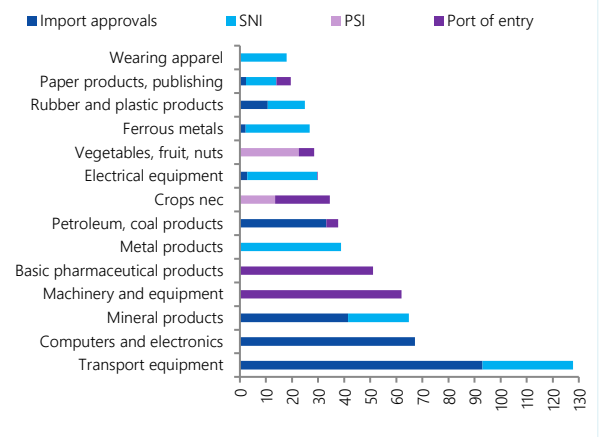
⁸² MoT Regulation 20/2021 abolished 23 regulations related to PSI.

Figure B.14: The incidence of pre-shipment inspections has significantly declined
(Percent of total)



Source: World Bank.

Figure B.15: NTMs are often cumulatively applied and impose significant costs, especially on imports of capital goods
(Percent tariff equivalent)



Local content requirements (LCR) that favor domestic inputs can affect production through higher costs and reduced availability of inputs, especially in the case of renewable energy and green technologies.

In addition to barriers on goods trade, there are significant restrictions that hamper the competitiveness of services sectors in Indonesia, despite recent reform progress.

Trade agreements have been an important vehicle for delivering trade reforms in Indonesia, their number increasing from 1 in 2000 to 13 in 2022.

To comply with LCRs, firms are often required or incentivized to substitute imported inputs for what may be more expensive and lower quality domestically produced ones, leading to increases in costs, loss of efficiency and inefficient allocation of resources. LCRs are often imposed with the objective of helping the development of local industries, although stringent and high minimum LCRs act as a deterrent to their growth. Indeed, LCRs applied in other countries for the purposes of developing domestic productive capability of renewables have mostly led to increased costs⁸³. Despite significant potential to expand the use of wind and solar energy in Indonesia, their growth has been lagging, partially due to stringent LCRs.

As part of implementing regulations for the Omnibus Law on Job Creation, key barriers to FDI were removed and restrictions on the movement of foreign workers were relaxed⁸⁴. Despite these reforms, Indonesia's services trade restrictiveness remains amongst the highest in the world, close to four times higher than less protectionist countries (Figure B.16). Among services sectors, the most protected are legal, accounting, distribution, and telecoms, while the least protected are sound recording, architecture, and motion pictures. Protectionist measures are driven by remaining restrictions on foreign entry and restrictions on the movement of foreign professionals (Figure B.17). These restrictions reduce the competitiveness of domestic services, which may be benefitting incumbents not only by raising prices and profits at the expense of consumers, but also could be harming productivity by raising the cost of key services inputs.

Through its existing trade agreements, Indonesia benefits from preferential market access to countries that account for one-third of world GDP; those countries in turn cover two-thirds of Indonesia's international trade in goods. Among these, the most recently ratified Regional Comprehensive Economic Partnership (RCEP)⁸⁵ covers close to 60 percent of Indonesia's trade flows, while the ASEAN-China agreement applies to close to half of Indonesia's trade flows. Preferential trade agreements (PTAs) have

⁸³ Probst et al. 2020.

⁸⁴ Government Regulation 34/2021 removed the requirement for an employer to have an Expatriate Manpower Employment Plan in order to employ expatriate workers for a number of positions and also removed the requirement for an employer to obtain a written license from the Ministry of Manpower to employ expatriate workers.

⁸⁵ RCEP was signed on 15 November 2020 by 10 ASEAN countries, along with Australia, China, Japan, New Zealand and South Korea. Indonesia ratified the RCEP in September 2022.

eliminated most tariffs and streamlined trade regulatory frameworks with other partner countries. Most Favored Nation (MFN) tariffs applied to trade with other WTO members, remain higher at an average of 5.5 percent.

Agreements signed before 2010 were rather shallow and mostly focused on areas such as tariff liberalization, trade facilitation and customs, countervailing and anti-dumping measures, investment, and services. More recently, the content of Indonesia's agreements has been converging towards a more comprehensive coverage to address provisions such as non-tariff measures, intellectual property protection, and movement of capital⁸⁶. Other deep provisions such as labor market regulations, state trading in agriculture, and state aid are less frequently included (Figure B.20). Indonesia's deepest trade agreements generally include policy areas that aim at boosting economic integration (tariff preferences, services, investment, movement of capital, intellectual property rights, and visa and asylum), supported by policy areas for protecting economic integration rights such as trade facilitation and customs, Sanitary and Phytosanitary Measures (SPS), Technical Barriers to Trade (TBT), and anti-dumping and countervailing measures. Compared with peers in the region such as Malaysia, Thailand and Vietnam, the number and the depth of Indonesia's PTAs is also more shallow.

Important progress has been made with the implementation of the Indonesia National Single Window (INSW) and the launch of National Logistics Ecosystem (NLE). Among notable reforms, the digitalization of border and logistics transactions has been a key pillar of the strategy to reduce trade costs, with the deployment of the INSW (the trade single window) and INAPORTNET (the port single window). In addition, the flagship reform program initiated with the launch of the NLE aims to simplify government business processes, eliminate repetition and duplication, boost integration between logistics service systems, and facilitate payment transactions, all within an integrated framework. As highlighted by the COVID-19 pandemic, countries that were more advanced with digitization were able to be much nimbler in responding and adapting to the economic shock induced by the pandemic. COVID-19 also highlighted that port-related measures worsened trade outcomes in Indonesia when lockdown measures were imposed, particularly through imports subject to restrictions such as port of entry or pre-shipment inspections.⁸⁷

The 2018 Logistics Performance (LPI) Index⁸⁸ highlighted improvements in overall logistics performance, with Indonesia ranking as a consistent performer. Indonesia performs better than regional peers on ability to track and trace consignments but lags behind on competence and quality of logistics services (Figure B.19). Insufficient logistics infrastructure and logistics services (outside of the main metropolitan areas) lead to long transit times, poor capacity usage (empty backhauls), adding to a complex cross-border regulatory framework which leads to unpredictable delays and costs. There are also large geographic heterogeneities, with logistics costs amounting to 12 percent around the Jakarta area, much lower than the 20 percent in Sumatra or 30 percent in Kalimantan⁸⁹. The competitive environment for logistics service providers is subject to uneven treatment and geographical restrictions of foreign logistics providers, and competition from large SOEs which are present across all logistics sectors⁹⁰.

The content and coverage of Indonesia's trade agreements has deepened over time, although there is significant room for additional and deeper agreements.

When it comes to the enabling environment for trade, logistics performance has been high on the government's agenda.

Logistics performance has been improving, with main remaining constraints being insufficient logistics infrastructure and logistics services.

⁸⁶ Japan-Indonesia, ASEAN – Republic of Korea, ASEAN – Australia – New Zealand, EFTA-Indonesia CEPA, and RCEP.

⁸⁷ Majune and Montfaucon 2022.

⁸⁸ The updated LPI index is expected to be published in 2023.

⁸⁹ World Bank 2017.

⁹⁰ OECD 2021b.

Indonesia performs well on trade facilitation, although additional reforms are needed to reduce the time, costs, and uncertainty of cross border transactions.

Indonesia ratified the WTO Agreement on Trade Facilitation in 2017 and has since implemented close to 90 percent of its commitments. On trade facilitation indicators, Indonesia performs above the Philippines but slightly below Vietnam and Thailand (Figure B.18). Remaining challenges include the high number of documents required for imports and exports (including originals), the limited use of pre-arrival processing of import documents, and insufficient border agency cooperation. In addition, uncertainty about the cost and time of border and post-border processes add to direct costs, affecting traders' ability to plan logistics services (such as trucking and warehouse receipt), production, and even exports. Even companies classified as priority importers are subject to delays by other border agencies. In turn, these inefficiencies result in higher costs and time delays for traders, with an adverse effect on Indonesia's competitiveness.

Figure B.16: Services trade restrictiveness is among the highest
(Index, 2021)

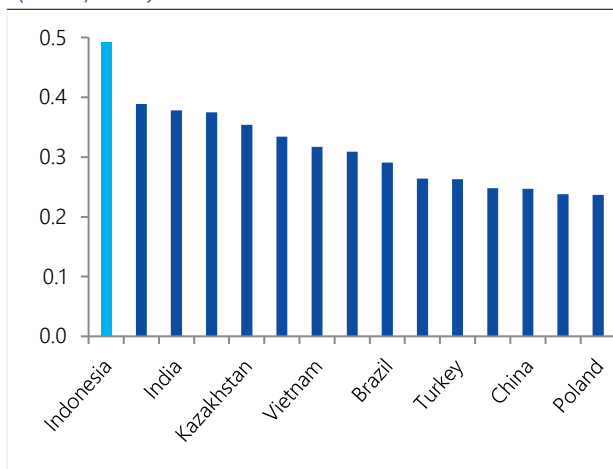
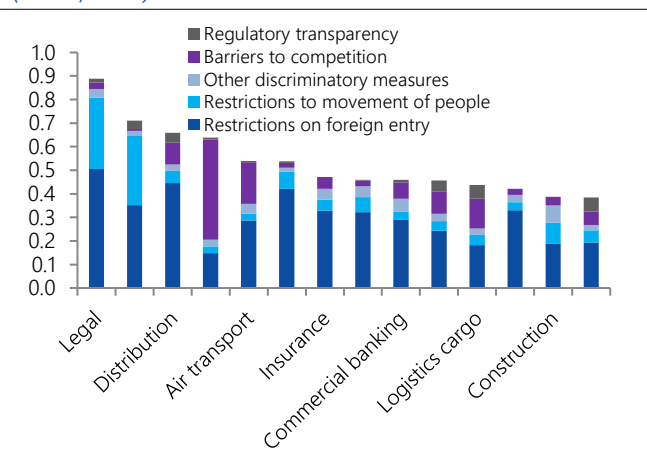


Figure B.17: Restrictions on foreign entry and on the movement of professionals account for
(Index, 2021)



Source: World Bank, OECD.

Figure B.18: Performance on trade facilitation indicators
(Index, 2021)

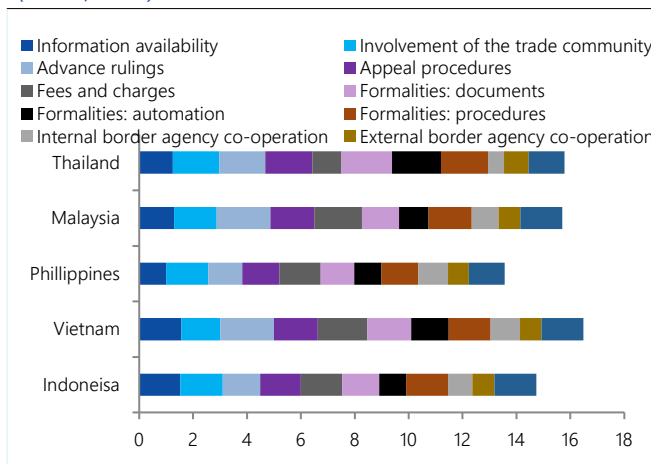
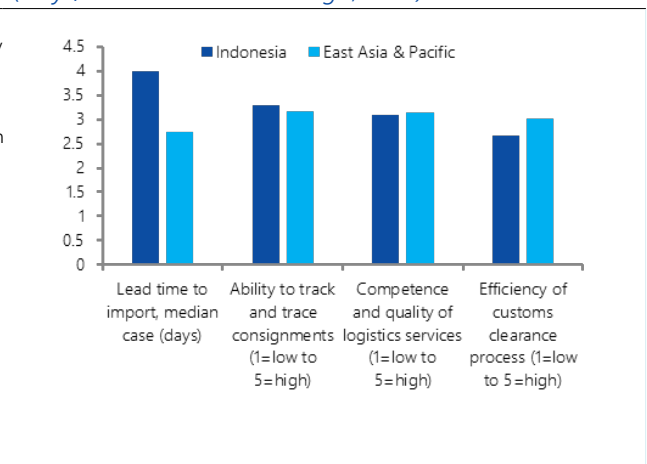


Figure B.19: Logistics performance has been lagging EAP peers
(Days/Index 1=low to 5 = high, 2018)



Source: World Bank, OECD.

Figure B.20: Depth of Indonesia's trade agreements

	ASEAN Free Trade Area	ASEAN - China	ASEAN - Japan	Japan - Indonesia	ASEAN - India	ASEAN - Korea, Republic of	ASEAN - Australia - New Zealand	Chile - Indonesia	ASEAN - Hong Kong, China	Australia - Indonesia	AFTA	EFTA-Indonesia CEPA
Year of entry into force	1992	2005	2008	2008	2010	2010	2010	2019	2019	2020	2021	2021
Tariffs	●	●	●	●	●	●	●	●	●	●	●	●
Trade Facilitation and Customs	○	○	○	○	○	○	○	○	○	○	○	○
Export Taxes	○	○	○	○	○	○	○	○	○	○	○	○
Sanitary & Phytosanitary Standards	○	○	○	○	○	○	○	○	○	○	○	○
Technical Barriers to Trade	○	○	○	○	○	○	○	○	○	○	○	○
State Trading Enterprise	○	○	○	○	○	○	○	○	○	○	○	○
Anti-Dumping and CVM	○	○	○	○	○	○	○	○	○	○	○	○
State Aid	○	○	○	○	○	○	○	○	○	○	○	○
Public Procurement	○	○	○	○	○	○	○	○	○	○	○	○
Services	○	○	○	○	○	○	○	○	○	○	○	○
Competition Policy	○	○	○	○	○	○	○	○	○	○	○	○
Environmental Laws	○	○	○	○	○	○	○	○	○	○	○	○
TRIPS	○	○	○	○	○	○	○	○	○	○	○	○
Intellectual Property Rights	○	○	○	○	○	○	○	○	○	○	○	○
TRIMS	○	○	○	○	○	○	○	○	○	○	○	○
Investment	○	○	○	○	○	○	○	○	○	○	○	○
Labour Market Regulation	○	○	○	○	○	○	○	○	○	○	○	○
Movement of Capital	○	○	○	○	○	○	○	○	○	○	○	○
Visa and Asylum	○	○	○	○	○	○	○	○	○	○	○	○
● Legal enforceability												
○ Weak enforceability/best endeavor												

Source: World Bank, OECD.

Trade restrictions dampen the dynamism of Indonesia's domestic and export sectors

At no more than 1.1 percent of global manufacturing exports since 2000, Indonesia's international competitiveness has been stagnating relative to comparators. Indonesia has the scope to do more to build on its comparative advantages and capture a higher share of the global manufactures market (Figure B.21). For example, the share of Vietnam in global manufacturing exports increased by more than six-fold, from 0.2 percent in 2000 to 1.6 percent in 2020. Inward-looking trade policies have been contributing to these below potential outcomes.

Seven out of the ten biggest export products are resource-intensive, namely palm oil, coal, gold, gas, ferro-alloys, rubber, and copper. Altogether they added up to a third of goods exports in 2020. Among these, coal, palm oil, petroleum oil and gas accounted for more than a quarter of total exports during 2000-2020, although the relative importance of petroleum oil and gas exports has declined, replaced by the rising share of coal and palm oil (Figure B.24). The export basket mirrors that of countries with much lower productivity, not in line with potential comparative advantages in labor intensive products.

In the context of better diversified countries, resource dependence could boost growth, however it has also been associated with adverse economic outcomes such as reduced competitiveness, revenue volatility, and declining terms of trade. Additionally, natural resource dependence is a channel for Dutch Disease: a boom in domestic demand from commodity windfalls triggers a shift of productive resources towards commodities and non-tradeable services, away from more productive tradeable manufactures. The Dutch Disease is also associated with an appreciation of the real exchange rate and a loss on competitiveness of the export sector. As highlighted by many historical developments in Indonesia's trade flows, episodes of high commodity prices were often associated with a loss of manufacturing competitiveness⁹¹.

Exports of manufactures such as transport equipment (motor vehicles and motorcycles), chemical products, footwear and food products increased but only slightly between 2001-2010 and 2011-2020, while the shares of machinery and electronics, textiles and clothing and wood products have declined (Figure B.23). In turn, peers in the region such as Thailand and Malaysia were able to build on existing productive capacities to diversify into additional and higher-value-added industries, increasing their economic complexity. Furthermore, Indonesia's participation in

The trade policy framework described earlier together with broader inward-looking development strategies have had a dampening effect on Indonesia's international competitiveness.

Exports are also concentrated in commodities and have the lowest sophistication among comparators (Figure B.22).

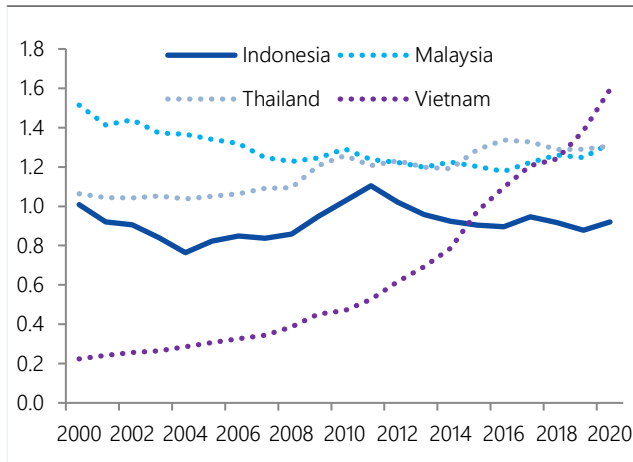
In turn, commodity dependence leaves Indonesia vulnerable to the inherent volatility of commodity prices and susceptible to the so-called resource curse and Dutch Disease.

The sectoral composition of manufacturing exports remained broadly unchanged during the last two decades.

⁹¹ Ing, Pangestu and Cadot 2017.

global value chains is highly uneven, characterized by high forward participation in commodities and low backward participation in manufacturing. Indonesia has the lowest backward participation in GVCs among peers in the region while at the same time backward participation has also been declining from 19 percent in 2005 to 12.9 percent in 2015⁹².

Figure B.21: Manufacturing export competitiveness
(Percent of world total)



Source: World Bank WITS database.

Figure B.22: Export sophistication is low, much below regional peers
(EXPY export sophistication index)

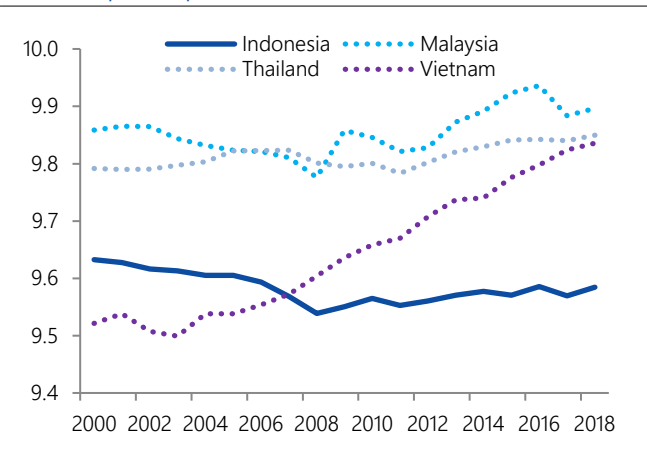
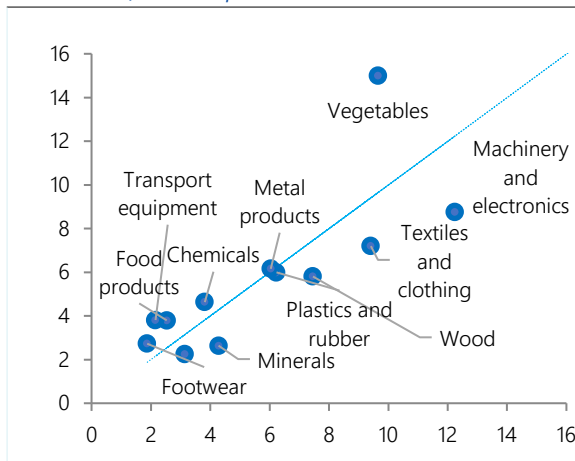
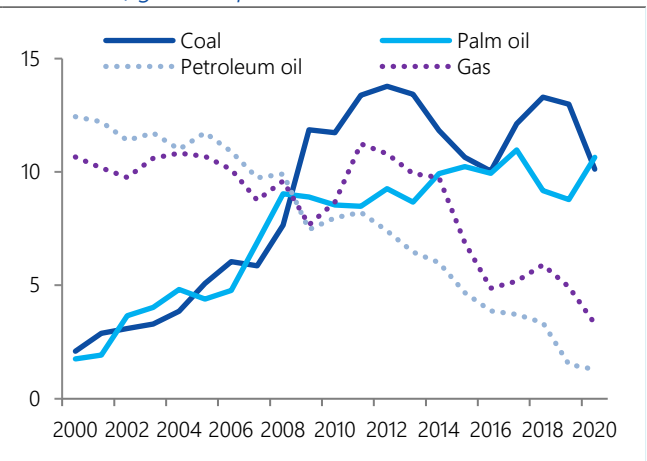


Figure B.23: The structure of exports remained broadly unchanged during the last two decades
(Percent of total exports)



Source: World Bank WITS database.

Figure B.24: Exports of coal and palm oil have been steadily increasing
(Percent of goods exports)



The potential of services to contribute to trade and growth in Indonesia has been lagging.

Whilst services account for 46 percent of GDP and 49 percent of employment in 2020, at about 15.8 percent of the total exports, services exports remain below that of peers and have been contributing to a long-standing trade deficit in services. Compared to peers in the region such as the Philippines and Thailand that have services exports amounting to as high as 44 percent and 26 percent of total exports, respectively, the potential of the Indonesian services sector has been largely untapped. The importance of services for Indonesia's growth is underscored by the strong forward

⁹² High uneven participation in GVCs is an outcome of both policies as well as structural factors. For instance, evidence shows that overall, countries with a larger domestic market such as Indonesia have lower the backward GVC participation. This is because countries with a larger market are able to draw on a wider array of domestic raw materials and intermediates. Conversely, a country that primarily supplies intermediate goods to an assembler will typically have a higher forward participation.

linkages to the rest of the economy: eight out of the twelve main service sectors have more pronounced forward linkages than the average of all sectors in the economy. Therefore, policies affecting services sectors have implications for the competitiveness of others as well as for the rest of the Indonesian economy.

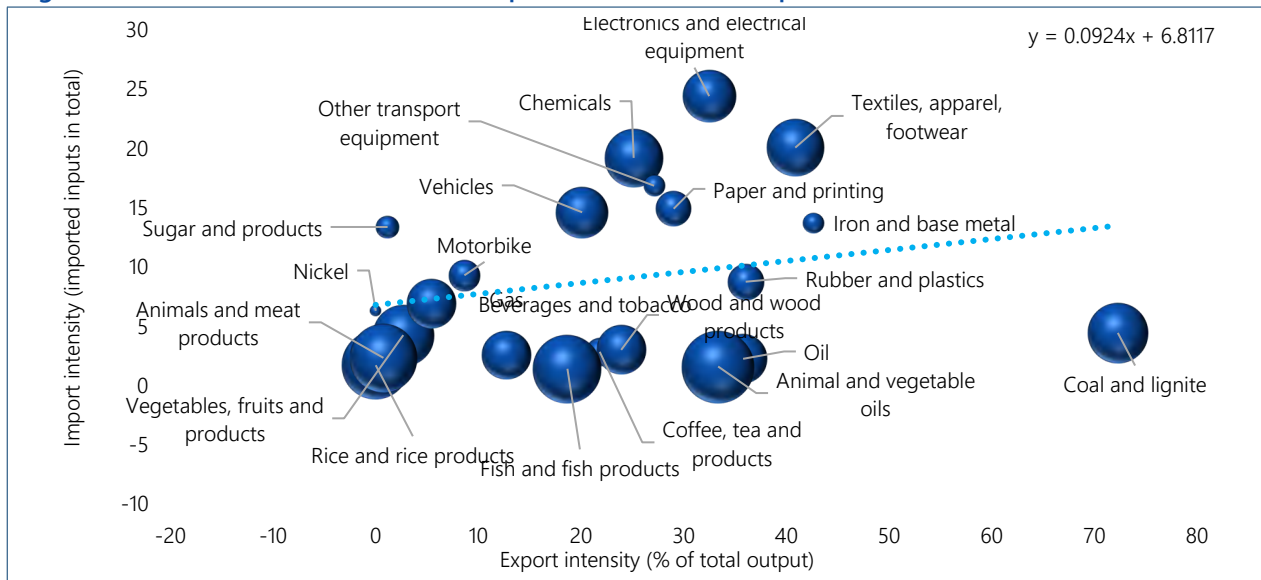
On average, imports account for 12 percent of all manufacturing industries' production costs and 20 percent of their intermediate input use. In addition, investment (gross fixed capital formation) in Indonesia relies on imported capital goods and machinery not available domestically, accounting for 10 percent of total gross fixed capital formation. Manufacturing industries such as electronics and electrical equipment, textiles, apparel, footwear, chemicals, and transport equipment are among those that are the most export oriented but also the most intensive in the use of imports, accounting for an important share of domestic value addition in Indonesia. A simple correlation indicates that export orientation is positively associated with import intensity in Indonesia's manufacturing industries (Figure B.25). Trade barriers and policies focused on substituting imports for domestic production thus have a direct and adverse impact on exports of these industries, limiting their growth potential.

The most labor-intensive manufacturing sectors such as transport equipment, vegetables, fruits and products are not among the most export oriented. In turn, export-oriented industries such as coal and lignite, iron and base metals, rubber and plastics and vegetable oils account for a relatively low share of labor value added. Based on its existing capabilities, Indonesia has great potential for diversification and with the right enabling policies, it could leverage existing capabilities to scale up, diversify and upgrade into higher value-added manufactures and services sectors.

Imports are crucial for Indonesia's economy, exports, and investment, while industries more intensive in imports tend to be more export oriented.

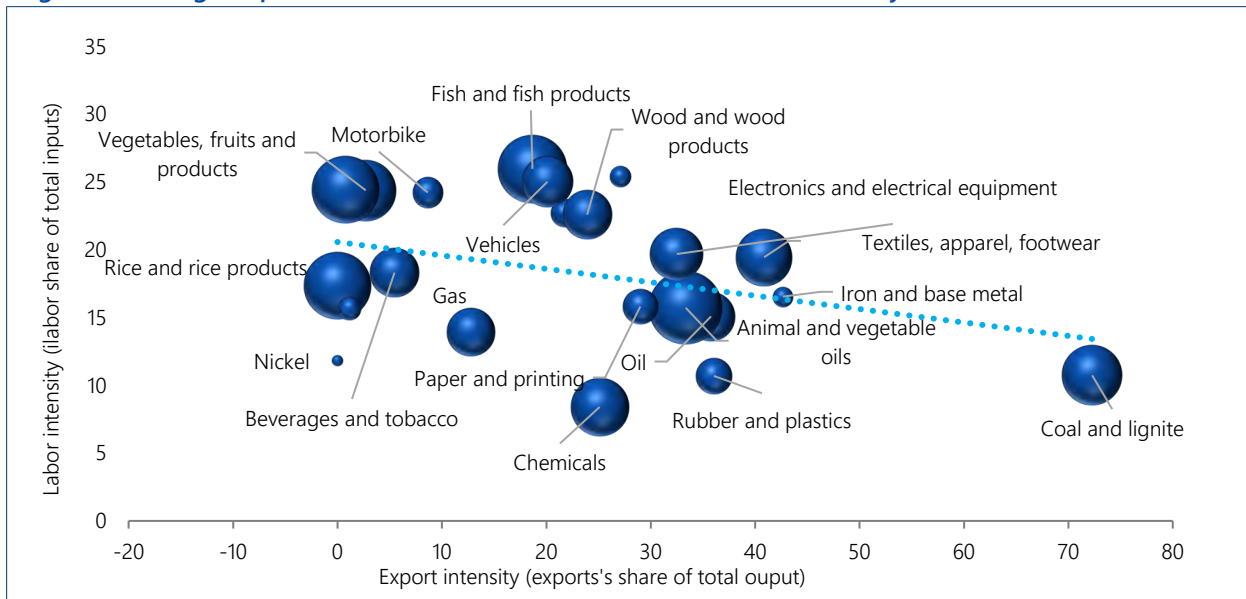
Indonesia has not been able to build on its comparative advantages in labor intensive manufacturing, and high export orientation is associated with low labor intensity (Figure B.26).

Figure B.25: Sectors more intensive in imports are also more export oriented



Source: World Bank based on BPS Input Output table for 2016. Bubble size represents share of value added.

Figure B.26: High export orientation is associated with low labor intensity



Source: World Bank based on BPS Input Output table for 2016. Bubble size represents share of value added.

4. Policy Recommendations and their Potential Economic Impacts

The above analysis points to four trade policy recommendations: (i) streamlining burdensome and eliminating unnecessary NTMs; (ii) deepening existing trade agreements and pursuing additional comprehensive ones; (iii) improving trade facilitation and logistics performance; (iv) removing binding constraints to services trade; and (v) boosting green competitiveness through trade reforms. These reforms complement recent reforms under the Omnibus Law on Job Creation to boost economic transformation and growth in Indonesia.

a. Streamlining burdensome and eliminating unnecessary NTMs

Overall, the four recommended NTM reforms could increase Indonesia's total exports by 10 percent and investment by 27 percent over the medium- to long run (Figure B.32)⁹³. Reforming import approvals and requirements for mandatory certification with national standards are expected to translate into the largest gains. Conversely, such targeted NTM reforms are not expected to lead to a surge in imports. To the contrary, exports are found to expand more than imports. Exports of high value-added advanced manufacturing industries such as computers, electronics and optical products, transport equipment, electrical equipment and basic pharmaceutical products benefit the most. Similarly, such reforms would boost demand for mineral and metal products⁹⁴, crucial for the development of downstream industries in the mining sector.

NTM reforms could have significant economy-wide benefits for Indonesia, boosting GDP by 5 percent.

⁹³ Lakatos, Montfaucon and Agninaruto 2021.

⁹⁴ Investment is intensive in the use of raw and processed mineral products.

Targeted NTM reforms could improve export growth and diversification of Indonesian exporting firms into new products and markets.

Evidence shows that exposure to existing NTMs has had an adverse effect on firm-level export values and quantities: for instance, a 10 percent increase in exposure to port of entry restrictions and national standard certifications is estimated to have led to an 0.8 percent decline in export values (Figure B.27). Higher exposure to NTMs is also associated with a lower number of products exported and a decrease in the number of export market destinations: a 10 percent increase in exposure to port of entry restrictions and national standard certifications resulted in a 0.1 and 0.2 percent decline in the number of exported products reached by Indonesian exporting firms, respectively (Figure B.28).

Figure B.27: Exporters exposed to NTMs have lower export growth... (Percent)

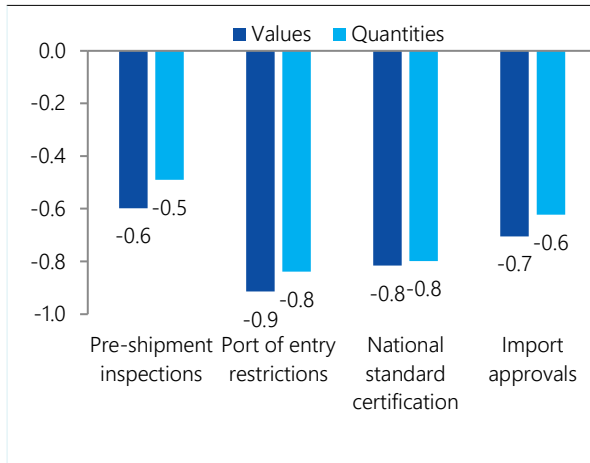


Figure B.28: NTMs reduce exporters' ability to tap into new products and markets (Percent)

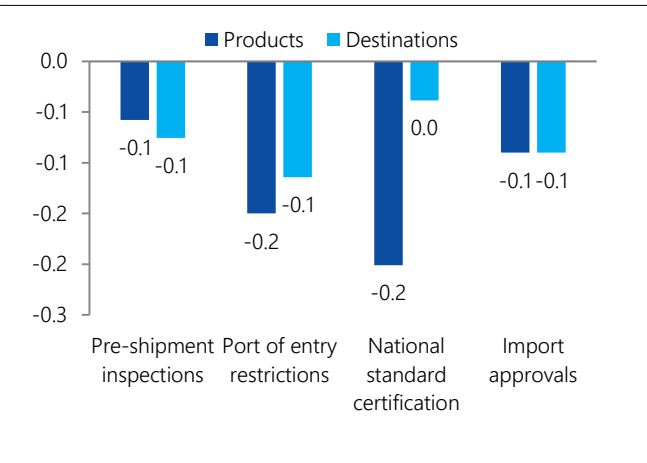


Figure B.29: NTMs reduce firms' export survival... (Percent)

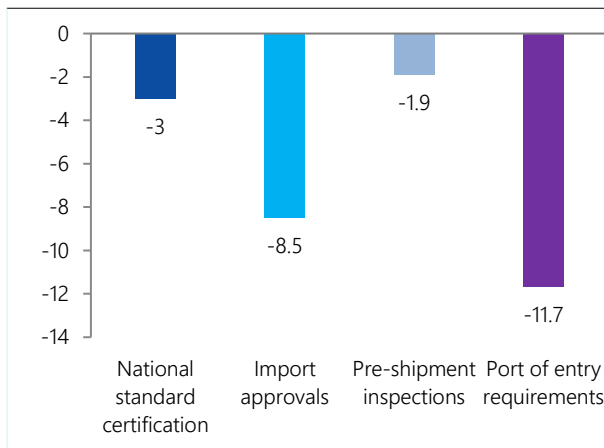


Figure B.30: ...and their ability to respond to foreign demand shocks (Percent)

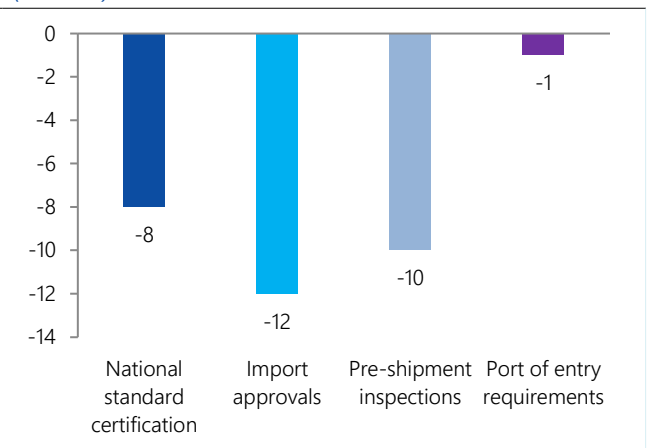


Figure B.31: NTMs have been hampering the recovery of firms from the COVID-19 shock
(Survival rate (1 – Exit Rate))

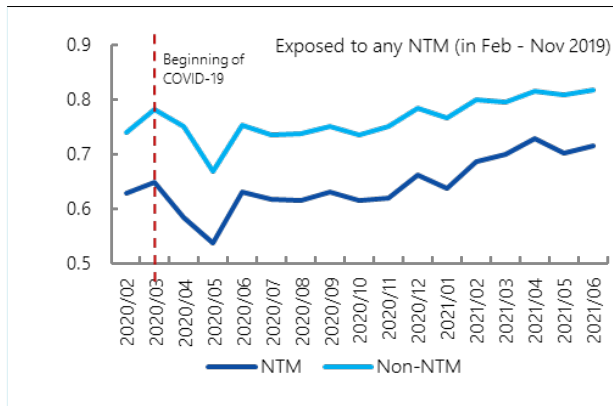
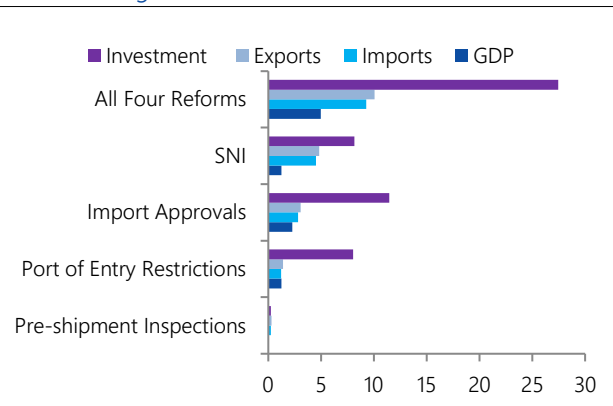


Figure B.32: NTM reforms could have significant benefits for growth, exports, and investment
(Percent change)



Source: Cali and Montfaucon 2021; Ghose and Montfaucon forthcoming; Cali et al. 2022; Lakatos, Montfaucon and Agnimaruto 2021.

NTM reforms could also help boost firm survival rates in export markets and strengthen their ability to respond to economic shocks.

NTM reforms could also contribute to reducing domestic prices of staple foods and improving nutritional outcomes in Indonesia.

Although Indonesia's trade agreements have become more frequent and deeper, there is significant scope for further deepening existing PTAs and pursuing new ones.

When faced with economic shocks, firms – especially producers and smaller firms – see a much larger drop in their export values when they are exposed to NTMs. Given an adverse exchange rate shock, the drop of firms' exports is magnified by up to 8-12 percent in the presence of NTMs (Figure B.30). In addition, higher exposure to NTMs is negatively associated with lower firm survival rates (Figure B.29). Evidence also shows that NTMs have been hampering the recovery of Indonesian exporting firms from the COVID-19 shock (Figure B.31)⁹⁵.

Agricultural and food imports are subject to burdensome and costly NTMs such as inefficiently implemented SPS measures, port of entry requirements, and import monopolies which put an upward pressure on the price of imported food products. NTMs hurt poorest households the most, given that the share of food in their consumption baskets is much larger. Furthermore, poor Indonesian farmers do not benefit from reduced import competition as they are net food consumers⁹⁶. It is estimated that lifting unnecessary NTMs and streamlining their implementation could lower food prices by 8 to 55 percent and reduce undernourishment by about 5 percent or 0.5 percentage points⁹⁷. Such reforms would also improve the use of imports as buffers in the case of domestic food supply shocks.

b. Deepening existing trade agreements and pursuing additional comprehensive ones

Modern trade agreements go beyond traditional market access issues and cover provisions such as competition policy, state trading, intellectual property rights, labor market issues and public procurement. These so-called 'Deep' trade agreements could boost Indonesia's integration in global value chains and help businesses upgrade to higher value-added and advanced manufacturing and services, incentivizing domestic economic transformation.

⁹⁵ Ghose and Montfaucon 2022.

⁹⁶ World Bank forthcoming.

⁹⁷ Cali et al. forthcoming.

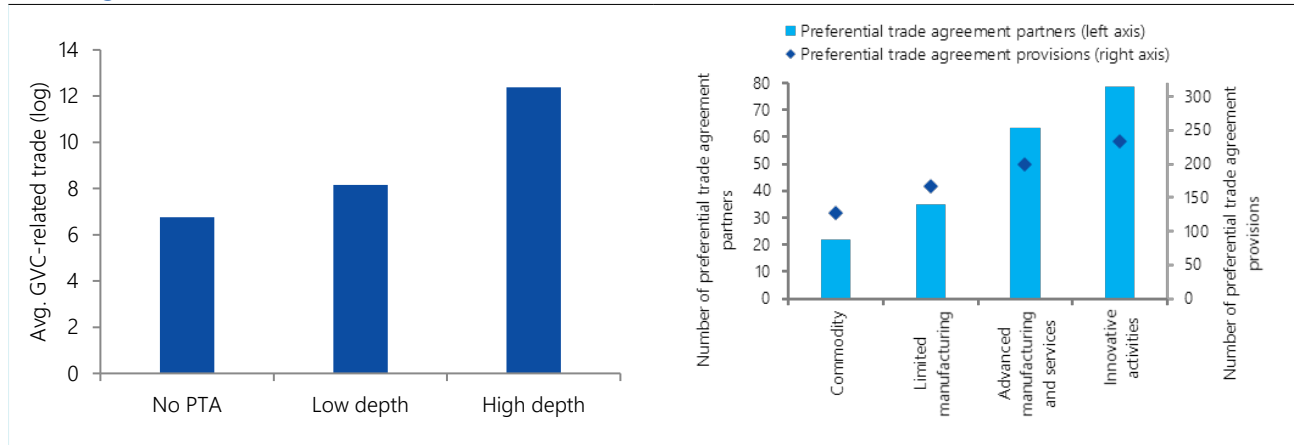
Deep trade agreements could be a vehicle for expansion of trade, diversification, global value chain integration and upgrading to higher value industries in Indonesia.

Deep trade agreements can have positive spillover effects on exports to non-members by reducing trade costs for members and non-members alike.

Deep provisions contribute to more trade among member countries and reduce the extent to which trade is diverted with non-members⁹⁸. These effects are even more pronounced in the case of GVC trade (Figure B.33) and for advanced manufacturing and services and innovative activities (Figure B.34). The inclusion of NTM provisions in DTAs results in larger increases in exports of small firms⁹⁹. Deep trade agreements also boost services trade by about 30 percent more compared to shallow agreements¹⁰⁰. In turn, improved access to foreign markets through new trade agreements along with diversifying exports, and integration into GVCs can contribute to improved resilience to future shocks in Indonesia. Trade agreements can also reduce trade policy uncertainty among member countries¹⁰¹.

The inclusion of non-discriminatory commitments such as those related to competition policy, domestic subsidies, and state-owned enterprises are found to increase (rather than reduce) exports to non-members. Even in policy areas where preferences can be granted (e.g., public procurement), other specific provisions are de facto non-discriminatory and have positive spillovers on non-members' producers¹⁰².

Figure B.33: Deep trade agreements are associated with higher levels of GVC trade... Figure B.34: ...and a channel for GVC upgrading



Source: World Bank.

Commitments under deep trade agreements could be a vehicle for domestic reforms in Indonesia.

Deep and comprehensive commitments included in trade agreements are also a signal of signatories' commitments to domestic reforms. In the presence of protectionist measures, DTAs may act as an insurance policy against potential upticks in protectionism and reduce trade policy uncertainty between member countries. With the increase of its multilateral, regional and bilateral commitments, Indonesia's trade policy space has been narrowing and may lead to a tension between inward looking and outward looking trade strategies.

c. Accelerating trade facilitation and logistics reforms

Across ASEAN, the combined implementation of WTO TFA binding and non-binding commitments and other paperless trade facilitation measures have a high potential to decrease costs by 2.6 percent, whereas by adding paperless trade facilitation measures, the decline in trade costs could reach 8 percent¹⁰³. The unfinished reform agenda relates to improving documentary requirements, automation, procedures,

Indonesia can build on important progress with implementing its WTO TFA commitments through additional reforms that would unleash added benefits.

⁹⁸ Laget, Rocha and Ruta, et al. 2020; Mattoo, Mulabdic and Ruta 2017.

⁹⁹ Rocha and Ruta 2022.

¹⁰⁰ Dhingra, Freeman, and Huang 2021

¹⁰¹ Brenton, Ferrantino and Maliszewska 2022.

¹⁰² Fernandes, Rocha and Ruta 2021.

¹⁰³ UN Global Survey on Digital and Sustainable Trade Facilitation 2021.

and internal border agency cooperation. Targeted reforms such as (1) reducing the number of documents required to import and export and the time for preparing such documents; (2) promoting the availability of full-time automated processing for Customs; (3) completing the development of pre-arrival processing of import documentation; (4) expanding the application of Post-Clearance Audits; (5) reinforcing the Authorized Economic Operators programs; and (6) improving border agencies by risk management systems are key.

Indonesia has made great progress in advancing with digitalization of logistics and trade facilitation processes. That includes the implementation of the Indonesia National Single Window (the trade single window), the port single window (INAPORTNET), and the more recently launched NLE program. The implementation of the NLE will help Indonesia improve its trade and logistics performance, reduce trade costs, and improve certainty of shipments. It will also generate benefits for the government through efficiency in resource deployment, higher trader compliance, and increased security. Supply chain stakeholders will benefit from higher productivity and a more level playing field due to more transparent and efficient trade and logistics processing.

DLPs demonstrated ability to improve logistics performance for end users with lower costs, shorter time, higher certainty, and more transparency of prices and services offering. While the sector is still growing, policy makers would need to hedge risks, such as (1) monopolistic behaviors that would result from market consolidations and market exits, (2) data security, ensuring that platforms have strong policies related to data security, data protection and data privacy, (3) ensuring that roles and responsibilities are clearly stated by DLPs, including liability, ensuring that measures are taken to protect consumers, and protecting labor rights.¹⁰⁴

Risk assessment is a key component of trade facilitation, as highly compliant traders benefit from swift shipment processing whereas risky traders are subject to in-depth inspections. However, risk management has not yet been adopted by all border agencies, while the lack of coordination among agencies leads to inefficient and costly licensing and inspection processes. Border agencies coordination is needed to realize TFA commitments related to documents (acceptance of copies and the reduction of number of documents required), automated processing of licensing, and border agencies' cooperation at the border. Additional cross-border paperless measures, such as the electronic exchange of customs declarations, the electronic exchange of certificates of origin, the electronic exchange of SPS certificates (partially implemented in 2021) and strengthening the regulatory framework for electronic transactions would boost trade facilitation with benefits for traders. At the same time, the integration of risk profiles could improve cargo targeting and reduce the need for excessive levels of physical inspection.

d. Removing binding constraints to services trade

The COVID-19 pandemic accelerated Indonesia's digital transformation including by boosting demand for services such as telehealth, online education, digital entertainment, and online groceries. However, the adverse impact of the pandemic on traditional services sectors has been significant, especially for traditional services that cannot be supplied remotely. Among these, travel services accounted for 55 percent and transport for 13 percent of services exports pre-pandemic and have not

Sustained reforms to boost the digitalization of logistics and trade facilitation processes and successfully implementing the National Logistics Ecosystem could help reduce logistics costs.

Supporting logistics digitalization, including the growth of Digital Logistics Platforms (DLPs), also requires protecting users.

The implementation of integrated risk management across border agencies could increase the efficiency of trade processing and reduce trade costs.

Indonesia could build on post-COVID opportunities to catalyze international trade in services through targeted reforms.

¹⁰⁴The World Bank 2022c.

yet seen a full recovery. Conversely, some modern cross-border services benefitted from increase in demand, in particular in sectors where workers are able to work from home or can adopt adequate social distancing practices (e.g., call centers, banking, insurance).

Globally, two-thirds of services trade flows are delivered through FDI and establishing a commercial presence abroad, compared with only 30 percent that are delivered through direct cross-border supply¹⁰⁵. Services trade restrictions may be particularly harmful, given services' growing role in Indonesia's economy and their potential contribution to aggregate productivity growth. Services trade reforms could boost Indonesia's diversification into services, increase the servicification of the domestic economy and upgrading into higher value-added manufacturing and services.

e. Boosting green competitiveness through trade reforms

Increased global demand for goods and technologies to reduce carbon emissions and enable the climate transition present Indonesia with opportunities to diversify production and increase exports of green products and technologies. In addition, access to lower cost and higher quality environmentally friendly goods and technologies through imports will also enable Indonesia's own low-carbon and climate resilient transition.

Indonesia's ability to diversify away from primary products, reduce carbon emissions, adapt to climate change, and transition to a low-carbon economy is strongly interlinked with trade and trade policy. Targeted trade policies could boost firms' green competitiveness and incentivize them to increase green activities, adopt green technologies, boost investment and innovation in clean sectors, and create green jobs. Trade policies could also encourage consumers to make more environmentally friendly purchasing decisions.

Among Indonesia's 13 trade agreements only four contain environmental provisions¹⁰⁶, of which none are legally enforceable. Evidence shows that trade agreements with environmental provisions have the potential to mitigate adverse deforestation as well as land use change effects (Figure B.36). It is found that PTAs without such environmental provisions lead to an average 5 percent increase in the annual land area harvested, while there is no evidence of an increase in agricultural extensification following PTAs that include environmental provisions. Further, Indonesia has not been directly engaged with plurilateral environment related trade initiatives¹⁰⁷. For instance, Indonesia is not among the 46 members of the WTO engaged in plurilateral negotiations seeking to eliminate tariffs on green goods under the Environmental Goods Agreement (EGA), although results show that the benefit in terms of market access would be significant (Figure B.35).

Given the strong relationship between FDI and services trade, reforms to remove binding constraints to services trade could be key for realizing the potential of recent investment reforms.

To benefit from the global and domestic transition to a low-carbon economy, Indonesia could adapt to new sources of international demand, adjust its existing productive capabilities, and cultivate new green industries.

Aligning trade policies with green development is critical.

Direct participation in multilateral and plurilateral environment-related trade policy initiatives and the inclusion of enforceable environmental provisions in trade agreements could benefit Indonesia.

¹⁰⁵ Maurer, Lanz, and Magdeleine 2016.

¹⁰⁶ ASEAN-Republic of Korea, ASEAN-Japan, Indonesia-Chile, and Indonesia-Japan.

¹⁰⁷ Indonesia also does not participate in the three recently launched multilateral initiatives aimed at tackling issues at the nexus between trade policy and climate change, namely the Trade and Environmental Sustainability Structured Discussions (TESSD), the Informal Dialogue on Plastics Pollution and Sustainable Plastics Trade (IDP), and the Fossil Fuel Subsidy Reform (FFSR).

Eliminating burdensome and costly NTMs on green goods imports and reducing the stringency of local content requirements would boost access to green technologies in Indonesia.

Estimates suggest that NTMs on green goods impose significant costs, equivalent to a 20 percent tariff. Among NTMs, SPS measures are estimated to be the costliest with a tariff equivalent of 147 percent, while TBT also impose a cost burden equivalent to a tariff of 26 percent. Specifically, authorization requirements for SPS reasons, certification requirements and requirements to pass through specific ports of entry translate into a tariff equivalent of 58 percent, 12 percent, and 10 percent respectively (Figure B.37). Several NTMs are also more costly on green goods in Indonesia compared to other regional peers. For example, the tariff equivalent of pre-shipment inspections and port of entry restrictions applied on imports of green goods is estimated 12 percentage points and 21 percentage points higher in Indonesia, respectively (Figure B.38). Finally, local content requirements are often cited as the most distortive especially in the case of renewable energy and green technologies¹⁰⁸. Reducing their stringency would allow firms to source their inputs more cost-effectively and at the desired quality.

The enabling trade policy framework for the transition to a greener and more sustainable trade in Indonesia could be ensured through six targeted policy measures: (1) Fully liberalizing remaining tariffs and removing unnecessary NTM on imports of green goods and technologies, including through multilateral/plurilateral participation; (2) Harmonizing existing local standards with international ones and developing new standards that are aligned with international standards and practices; (3) Reducing the stringency of local content requirements especially for renewable energy and green technologies; (4) Including enforceable environmental provisions in trade agreements and participating in plurilateral and multilateral trade policy initiatives on trade and climate change; (5) Strengthening the mutual complementarity between trade and climate policies; and (6) Complementing trade reforms with targeted policies to ensure a Just Transition, and more broadly, an equitable distribution of gains from liberalization.

Figure B.35: Participation in the WTO EGA would have important benefits for Indonesia
(Percent change)

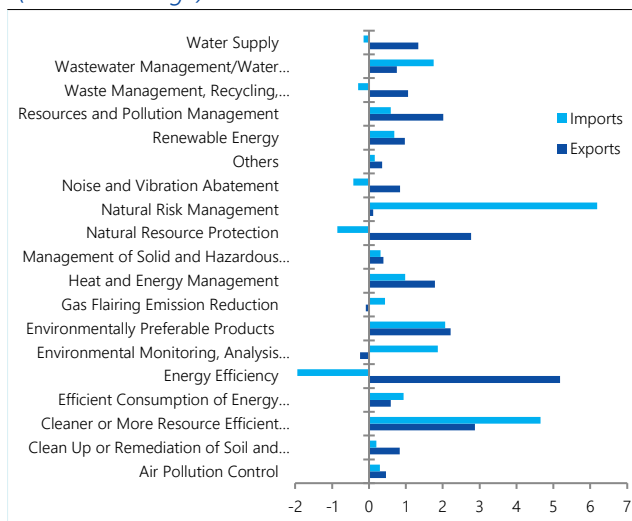
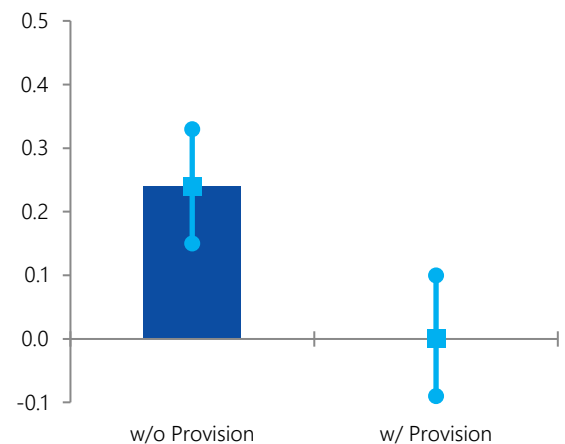


Figure B.36: Trade agreements with environmental provisions limit deforestation effects
(Percent forest loss)

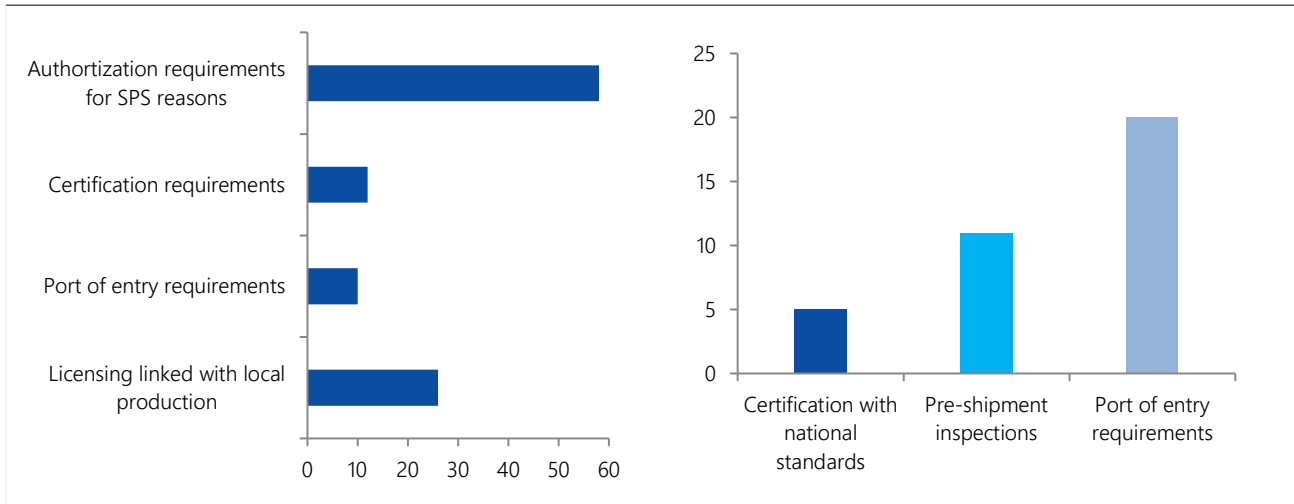


Source: Montfaucon, Yar Khan and Agnimaruto 2022; Abman et al. 2021.

¹⁰⁸ World Economic Forum 2021.

Figure B.37: Cost of specific NTMs in Indonesia on imports of renewable energy products
(Percent)

Figure B.38: Cost of NTMs on green goods compared to other countries in East Asia
(Percent difference)



Source: Montfaucon, Yar Khan and Agnimaruto 2022; Abman et al. 2021.

References

- Abman, R., Lundberg, C., and Ruta, M. 2021. The Effectiveness of Environmental Provisions in Regional Trade Agreements. Policy Research Working Paper No. 9601. World Bank, Washington, DC.
- Ahn, J., Dabla-Norris, E., Duval, R., Hu, B., & Njie, L. 2019. Reassessing the productivity gains from trade liberalization. *Review of international Economics*, 27(1), 130-154.
- Albertazzi, U. and Gambacorta, L. 2009. Bank profitability and the business cycle. *Journal of Financial Stability*, 5, issue 4, p. 393-409, <https://EconPapers.repec.org/RePEc:eee:finsta:v:5:y:2009:i:4:p:393-409>.
- Alcalá, Francisco, and Antonio Ciccone. 2004. "Trade and productivity." *The Quarterly journal of economics* 119.2 (2004): 613-646.
- Amiti, M., and Konings, J. 2007. "Trade Liberalization, Intermediate Inputs, and Productivity: Evidence from Indonesia." *American Economic Review*, 97 (5): 1611-1638.
- Arvis, J.-F., Ojala, L., Wiederer, C., Shepherd, B., Raj, A., Dairabayeva, K., & Kiiski, T. 2018. *Connecting to Compete 2018, Trade Logistics in the Global Economy*. Logistics Performance Index. The World Bank: Washington, D.C.
- ASEAN. 2021. Digital and Sustainable Trade Facilitation in the Association of Southeast Asian Nations (ASEAN) 2021. Based on the United Nations Global Survey on Digital and Sustainable Trade Facilitation
- Battogtivor, E. Majune, S., Montfaucon, A.F.L (forthcoming). Revising the Gains from Trade.
- Baffes, J. 2022. Risks in global food markets [web log]. Retrieved 2022, from <https://blogs.worldbank.org/developmenttalk/risks-global-food-markets>.
- Borchert, I., & Di Ubaldo, M. 2021. "Deep Services Trades Agreements and their Effect on Trade and Value Added." Policy Research Working Paper; No 9608. World Bank: Washington, DC.
- Bernanke, B. 2022. Inflation Expectations and Monetary Policy. 2022 Inflation Expectations: Determinants and Consequence. Retrieved November 24, 2022, from <https://www.nber.org/lecture/2022-inflation-expectations-determinants-and-consequence-keynote-ben-bernanke-inflation-expectations>.
- Bennis, L. 2017. Unpublished Policy Note. Helping reform Dwell Time regulation (DT) for Indonesia's logistics costs' reduction.
- Bisnis. 2022. Indeks Harga Produsen Naik, Waspada Risiko Lonjakan inflasi! Bisnis.com. Retrieved from <https://ekonomi.bisnis.com/read/20220804/9/1563093/indeks-harga-produsen-naik-waspada-risiko-lonjakan-inflasi>
- BKPM. 2021, June. President Joko Widodo Establishes Indonesia's First Investment Acceleration Task Force. BKPM. Retrieved November 24, 2022, from <https://www.bkpm.go.id/en/publication/detail/news/president-joko-widodo-establishes-indonesias-first-investment-acceleration->
- Blomberg, S. B., Harris, E. S. 1995. *Economic Policy Review - Federal Reserve Bank of New York*, Vol.1 (3), p.21-35
- Brenton, Paul, Michael J. Ferrantino, and Maryla Maliszewska. 2022. *Reshaping Global Value Chains in Light of COVID-19: Implications for Trade and Poverty Reduction in Developing Countries*. World Bank Publications.
- Cali, M., Ghose, D., Ruta, M., Montfaucon, A.F.L. 2022. Trade Policy and Exporters' Resilience: Evidence from Indonesia. Policy Research Working Paper No 10068. The World Bank.
- Cali, M., and Montfaucon, A.F.L. 2021. "Non-Tariff Measures, Import Competition, and Exports." Policy Research Working Paper Series 9801 (The World Bank.). <https://openknowledge.worldbank.org/handle/10986/36387>.

- Cali M., Pasha, M., Darko, F.A., Sumarto, S., Hidayat, T., and Tiwari, S. forthcoming. Nutritional Impacts of Trade Policies: Evidence from Indonesia. World Bank Working Paper.
- Caporale, G. M., Margarita K., Nikitas P. 2002. "Causality Links between Consumer and Producer Prices: Some Empirical Evidence." *Southern Economic Journal* 68, no. 3: 703–11. <https://doi.org/10.2307/1061728>.
- Clark, T. E. 1995. Do producer prices lead consumer prices? *Federal Reserve Bank of Kansas City Economic Review* 80(3):25-39
- Connolly, M., and Yi, K.M. 2015. "How much of South Korea's growth miracle can be explained by trade policy?." *American Economic Journal: Macroeconomics* 7 (4): 188-221.
- Dhingra, S, R Freeman, and H Huang. 2021. "The impact of non-tariff barriers on trade and welfare". LSE Centre for Economic Performance Discussion Paper DP1742.
- Diop, N. 2018. Global Financial Market Turmoil: Why is Southeast Asia Exposed but Resilient? World Bank MTI Viewpoint.
- Ekins, P., D. Zenghelis. 2021. *The costs and benefits of environmental sustainability*. Sustainability Science 16, 949–65. <https://doi.org/10.1007/s11625-021-00910-5>
- Fajjgelbaum, P. and Khandelwal, A. 2016. "Measuring the Unequal Gains from Trade," *The Quarterly Journal of Economics*, 131.
- FAO, IFAD, UNICEF, WFP and WHO. 2020. *The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets*. Rome, FAO. <https://doi.org/10.4060/ca9692en>
- Fernandes, Ana Margarida, Nadia Rocha, and Michele Ruta, eds. *The Economics of Deep Trade Agreements*. 2021.
- Frankel, J. A., & Romer, D. H. 1999. Does trade cause growth?. *American economic review*, 89(3), 379-399.
- Ghose, D., Montfaucon, A.F.L (forthcoming), GVC Firms, Covid-19 and NTMs in Indonesia.
- Guénette, J.D., Kose, M.A., Sugawara, N. 2022. "Is a Global Recession Imminent?" Equitable Growth, Finance, and Institutions Policy Note No. 4, World Bank, Washington, DC.
- Hausmann, Ricardo, Jason Hwang, and Dani Rodrik. 2007. "What you export matters." *Journal of economic growth* 12.1 (2007): 1-25.
- Helpman, E. 2016. Globalization and wage inequality (No. w22944). National Bureau of Economic Research.
- Ing, L. Y., Pangestu, M. E., & Cadot, O. 2017. Indonesia's trade policies in the new world trade. In *The Indonesian Economy* (pp. 57-88). Routledge.
- International Monetary Fund. 2022a. *World Economic Outlook: Countering the Cost-of-Living Crisis*. Washington, DC.
- International Monetary Fund. 2022b. *World Economic Outlook: Global Trade and Value Chains During the Pandemic*. Washington, DC.
- Javorcik, Beata, Fitria Fitriani, Leonardo Iacovone, Gonzalo Varela, and Victor Duggan. 2012. "Productivity performance in Indonesia's manufacturing sector." .
- Kis-Katos, Krisztina, and Robert Sparrow. 2015. "Poverty, labor markets and trade liberalization in Indonesia." *Journal of development Economics* 117: 94-106.
- Kleven, H. J., Knudsen, Kreiner, C. T., Pedersen, S., Saez, E. 2011. Unwilling or unable to cheat? Evidence from a tax audit experiment in Denmark. *Econometrica*, 79(3), 651–692. <https://doi.org/10.3982/ecta9113>
- Laget, E., Rocha, N., Ruta, M., & Osnago, A. 2020. Preferential Trade Agreements and Global Value Chains. Review of Industrial Organization. (Orefice and Rocha 2014);

- Lakatos, C., Montfaucon, A., and Agnimaruto, B. 2021. Green Goods and Technologies Trade in Indonesia. A Firm Level Perspective.
- Majune, S and Montfaucon, A.F (forthcoming). Covid-19, Non-tariff Measures and Ports: The Impact of Lockdown Policies on International Trade in Indonesia
- Mattoo, A., Mulabdic, A., & Ruta, M. 2017. *Trade creation and trade diversion in deep agreements*. The World Bank.
- Maurer, Andreas, Joscelyn Magdeleine, and Rainer Lanz. "Measuring trade in services in a world of global value chains." Research handbook on trade in services. Edward Elgar Publishing, 2016. 42-65.
- Melitz, Marc J. 2003. "The impact of trade on intra-industry reallocations and aggregate industry productivity." *Econometrica* 71 (6): 1695-1725.
- Ministry of Industry. 2022. *Reflection of the 76th Indonesian Independence Day to build an independent, sovereign, advanced, equitable, and inclusive domestic industry*. Indonesia.
- Montfaucon, A.F and Kidake, V. 2022. "Early Impacts of Indonesia's Investment Reforms" World Bank mimeo
- Montfaucon, A.F., Khan, S.Y., and Agnimaruto, B. (forthcoming). *The Relative Cost of Non-Tariff Measures in Indonesia: A Benchmarking Exercise with other East Asian Economies*. Washington, DC: World Bank.
- Narjoko, D., Anas, T. and Herdiyanto, R., 2018. The elusive pursuit of import substitution in 21st century Indonesia. *Asian Economic Papers*, 17(1), pp.73-93.
- Negara, S. D. 2017. "Assessing the impact of local content requirements on Indonesia's manufacturing." *The Indonesian Economy*: 213.
- OECD. 2021a. "Global Value Chains: Efficiency and Risks in the Context of COVID-19." Tackling Coronavirus (COVID-19): Contributing to a Global Effort, OECD, Paris.
- OECD. 2021b. *OECD Competition Assessment Reviews: Logistics Sector in Indonesia*. [oe.cd/comp-asean](https://www.oecd.org/comp-asean/)
- OECD. 2022. *FDI restrictiveness (indicator)*. doi: 10.1787/c176b7fa-en
- Ohnsorge, Quaglietti, Rastogi. 2021. Chapter 3, HIGH TRADE COSTS. Causes and Remedies. Published in The World Bank. *Global Economic Prospect* (June 2021).
- Osnago, A., Rocha, N., & Ruta, M. 2019. Deep Trade Agreements and Vertical FDI: The Devil is in the Details. *Canadian Journal of Economics*, 52(4), 1558-1599.
- Pane, D.D., Patunru, A.A. 2022. The role of imported inputs in firms' productivity and exports: evidence from Indonesia. *Rev World Econ*. <https://doi.org/10.1007/s10290-022-00476-z>
- Pangestu, M.E. 2022. Four paths to respond to the food price crisis. *World Bank Blogs: Voices*. Washington DC.
- Pavcnik, N. 2017. The impact of trade on inequality in developing countries (No. w23878). National Bureau of Economic Research.
- Pomeranz, Dina. 2015. "No Taxation without Information: Deterrence and Self-Enforcement in the Value Added Tax." *American Economic Review*, 105 (8): 2539-69.
- Probst, B., Anatolitis, V., Kontoleon, A. and Anadón, L.D. 2020. The short-term costs of local content requirements in the Indian solar auctions. *Nature Energy*, 5(11), pp.842-850.
- Setyawan, D. 2020. Energy efficiency in Indonesia's manufacturing industry: A perspective from Log Mean Divisia Index decomposition analysis. *Sustainable Environment Research*, 30 (link).
- Rahardja, S. and Varela, G. J. 2015. *The Role of Imported Intermediate Inputs in the Indonesian Economy*. World Bank. <https://openknowledge.worldbank.org/handle/10986/23509>

- Rocha Gaffurri, Nadia Patrizia; Ruta, Michele. 2022. *Deep Trade Agreements : Anchoring Global Value Chains in Latin America and the Caribbean* (English). Washington, D.C. : World Bank Group.
- Statistics Indonesia. 2022. Prevalensi Ketidacukupan Konsumsi Pangan (Persen). Badan Pusat Statistik. Retrieved November 25, 2022, from https://www.bps.go.id/indikator/indikator/view_data/0000/data/1473/sdgs_2/1
- Sousa, L., Lucchetti, L. 2015. What does the end of the commodity boom mean for poverty in Latin America? [web log]. Retrieved from <https://blogs.worldbank.org/developmenttalk/what-does-end-commodity-boom-mean-poverty-latin-america>.
- Spence, M. et al. 2008. *The growth report: Strategies for sustained growth and inclusive development. Commission on Growth and Development Final Report*. Washington, DC.
- UNFCCC. 2022. *Enhanced Nationally Determined Contribution - Republic of Indonesia*. Retrieved from https://unfccc.int/sites/default/files/NDC/2022-09/23.09.2022_Enhanced%20NDC%20Indonesia.pdf.
- United Nations. 2021. *Digital and Sustainable Trade Facilitation Global Report*. Based on the United Nations Global Survey on Digital and Sustainable Trade Facilitation
- World Bank. 2022a. *Indonesia Economic Prospects, June 2022: Financial Deepening for Stronger Growth and Sustainable Recovery*. Washington, DC: World Bank.
- World Bank. 2022b. *Reforms for Recovery" World Bank East Asia and Pacific Economic Update (October)*. World Bank, Washington, DC. Doi: 10.1596/978-1-4648-1921-6. License: Creative Commons Attribution CC BY 3.0 IGO
- World Bank. 2022c. *Climate Change Risks and Opportunities for the Indonesian Financial Sector: Background Note for the forthcoming Indonesia Country Climate Development Report (CCDR)*.
- World Bank. 2022d. Review of digital logistics platforms. Working Paper in preparation of the Logistics Performance Index 2022 (unpublished draft).
- World Bank. Forthcoming. *Indonesia Poverty Assessment*. Washington, DC: World Bank.
- World Bank. 2021a. *Indonesia Economic Prospects, December 2021: Green Horizon, Toward a High Growth and Low Carbon Economy*. Washington, DC: World Bank.
- World Bank. 2021b. *Indonesia Economic Prospects, June 2021: Boosting the Recovery*. Washington, DC: World Bank.
- World Bank. 2020a. *Indonesia Economic Prospects, December 2020: Towards a Secure and Fast Recovery*. Washington, DC: World Bank.
- World Bank. 2020b. *Indonesia Public Expenditure Review 2020: Spending for Better Results*. World Bank, Washington, DC. World Bank. <https://openknowledge.worldbank.org/handle/10986/33954> License: CC BY-NC 3.0 IGO.
- World Bank 2020c. *Opportunities and Challenges to Promote Development of a Domestic Supply Chain to Support the Growth of Renewables in Indonesia: The Role of the Extractives Industry*.
- World Bank. 2019. *Indonesia Economic Quarterly, December 2019: Investing in People*. Washington, DC: World Bank.
- World Bank 2017: Unpublished. Lamiaa Bennis. April 25th, 2017. Policy note. Helping reform Dwell Time regulation (DT) for Indonesia's logistics costs' reduction.
- World Bank. 2010. *Boom, Bust and Up Again? Evolution, Drivers and Impact of Commodity Prices: Implications for Indonesia*. World Bank, Jakarta. World Bank. <https://openknowledge.worldbank.org/handle/10986/13276> License: CC BY 3.0 IGO.
- World Economic Forum. 2021. "Delivering a Climate Trade Agenda: Industry Insights – White Paper." Geneva, Switzerland.
- World Trade Organization. 2021. *World Trade Report. Economic Resilience and Trade*.
- Yasar, M., and Roderick M. R. 2020. "International linkages, technology transfer, and the skilled labor wage share: Evidence from plant-level data in Indonesia." *World Development* 128: 104847



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