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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROGRAM DOCUMENT FOR A

PROPOSED LOAN

IN THE AMOUNT OF EUR 331.3 MILLION (US$ 350 MILLION EQUIVALENT)

TO

THE REPUBLIC OF INDONESIA

FOR THE

INDONESIA HUMAN CAPITAL DEVELOPMENT POLICY LOAN

May 26, 2022

Social Protection & Jobs Global Practice
East Asia And Pacific Region

Republic of Indonesia

GOVERNMENT FISCAL YEAR

January 1 – December 31

CURRENCY EQUIVALENTS

(Exchange Rate Effective as of April 30, 2022)

Currency Unit: Indonesian Rupiah (IDR)

US$ 1.00 = IDR 14,497

US$ 1.00 = EUR 0.94652153

ABBREVIATIONS AND ACRONYMS

4G	Fourth generation
ADB	Asian Development Bank
ASA	Advisory Services and Analytics
AKM	*Assessment Kompetensi Minimum*
ALMP	Active labor market policy
BI	*Bank Indonesia*
BOP	Balance of Payment
BPK	*Badan Pemeriksa Keuangan*
BPJS	*Badan Penyelenggara Jaminan Sosial*
VIX	Cboe Volatility Index
CPF	Country Partnership Framework
CPI	Consumer Price Inflation
DPF	Development Policy Financing
DPL	Development Policy Loan
DPO	Development Policy Operation
DSA	Debt Sustainability Analysis
EAP	East Asia and the Pacific
EMDE	Emerging Markets and Developing Economies
FX	Foreign Exchange
FY	Fiscal Year
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GRS	Grievance Redress Service
HCI	Human Capital Index
HiFy	High-frequency
ICT	Information and Communications Technology
IDR	Indonesian Rupiah
IMF	International Monetary Fund
JHT	*Jaminan Hari Tua*
JKK	*Jaminan Kecelakaan Kerja*
JKN	*Jaminan Kesehatan Nasional*
JKP	*Jaminan Kehilangan Pekerjaan*
JICA	Japan International Cooperation Agency
Kemenko-PMK	Coordinating Ministry of Human Development and Culture
LAR	Loans at risk
LKPP	*Lembaga Kebijakan Pengadaan Barang / Jasa Pemerintah*
MMR	Maternal mortality ratio
MoF	Ministry of Finance
MoH	Ministry of Health
MoM	Ministry of Manpower
MAPS	Methodology for Assessing Procurement Systems
MoECRT	Ministry of Education, Culture, Research, and Technology
NCD	Non-communicable Disease
NPL	Non-performing Loan
OJK	Financial Services Authority
PFM	Public Financial Management
PIK	Information and Communication Center
PPP	Purchasing Power Parity
PEFA	Public Expenditure and Financial Accountability
PforR	Program for Results
PerPres	*Peraturan Presiden*
REER	Real Effective Exchange Rate
ROA	Return on assets
ROE	Return on equity
RPJPN	*Rencana Pembangunan Jangka Panjang*
RPJMN	*Rencana Pembangunan Jangka Menengah Nasional*

IPF	Investment Project Financing	SAI	Supreme Audit Association
IBRD	International Bank for Reconstruction	SOE	State-owned Enterprise
IGGF	Indonesia Infrastructure Guarantee Fund	SJSN	Sistem Jaminan Sosial Nasional
IHPS	*Ikhtisar Hasil Pemeriksaan Semester*	SPSE	Sistem Pengadaan Secara Elektronik
INEY	Investing in Nutrition and Early Years	*Stranas* Stunting	National Strategy to Accelerate Stunting Prevention
INFORM	Index for Risk Management and Development	VAT	Value-added Tax
JP	*Jaminan Pensiun*		

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REPUBLIC OF INDONESIA

INDONESIA HUMAN CAPITAL DEVELOPMENT POLICY LOAN

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SUMMARY OF PROPOSED FINANCING AND PROGRAM

BASIC INFORMATION

Project ID	Programmatic
P175742	No

Proposed Development Objective(s)

The Program Development Objective is to enhance human capital development in Indonesia by (i) improving the effectiveness of public spending for human capital and (ii) protecting existing human capital investments.

Organizations

Borrower:	REPUBLIC OF INDONESIA
Implementing Agency:	Coordination Ministry of Human Development and Culture, Ministry of Finance

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Financing	**350.00**

DETAILS

International Bank for Reconstruction and Development (IBRD)	350.00

INSTITUTIONAL DATA

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

Overall Risk Rating

Substantial

Results

Indicator Name	Baseline	Target
Number of districts implementing multisectoral nutrition actions for pregnant women and children under 2 years of age	260 (2020)	514 (2023)
Percentage of pregnant women taking a minimum of 90 iron supplement tablets during pregnancy	38.1 (2018)	50 (2023)
Percentage of new and relapse cases diagnosed and treated in the TB control program	42 (2020)	60 (2023)
Percentage of households that have ever used telemedicine for their health needs	1 (2019)	8 (2023)
Percentage of GDP per capita per day required to purchase 20 cigarettes at average retail sales price	11.3 (2019)	13.78 (2022)
Percentage of eligible salaried employees covered by unemployment insurance	0 (2020)	52.7 (2022)

IBRD PROGRAM DOCUMENT FOR A PROPOSED
INDONESIA HUMAN CAPITAL DEVELOPMENT POLICY LOAN (DPL)
TO THE REPUBLIC OF INDONESIA

1. INTRODUCTION AND COUNTRY CONTEXT

1. **This Program Document proposes a Human Capital Development Policy Loan for the Republic of Indonesia in the amount of US$ 350 million.** The proposed DPL is a stand-alone single tranche IBRD loan that aims to support the Government of Indonesia in enhancing human capital development by (i) improving the effectiveness of public spending for human capital and (ii) protecting existing human capital investments.

2. **Indonesia has been an early and strong champion of the World Bank's Human Capital Project (HCP), launched at the 2018 Annual Meetings, and is committed to accelerating multisectoral efforts to enhance human capital outcomes.** The DPL will support medium- and long-term human capital development by embracing a multisectoral approach and supporting two mutually reinforcing pillars that are aligned with Indonesia's short-, medium- and long-term plans, including the Long-Term National Development Plan (RPJPN) 2005–2025, the Medium-Term Development Plan (RPJMN) 2020–2024 (with Chapter 4 of the RPJMN 2020–2024 focusing prominently on the quality and competitiveness of Indonesia's human resources), and the Human Capital Development Master Plan 2020-2045 currently under preparation.

3. **In recent years, Indonesia has significantly advanced the human capital agenda by reducing stunting, progressing toward universal health coverage, and expanding student enrollment in education.** The period 2010 to 2019 saw robust economic growth, job growth and poverty reduction. The poverty headcount ratio at the national poverty line fell from 13.3 percent in 2010 to 9.4 percent in 2019. In parallel, Indonesia's performance in the World Bank's Human Capital Index (HCI) – which quantifies the contribution of health and education to the productivity of the next generation of workers – steadily improved, with the overall value increasing from 0.50 to 0.54 from 2010 to 2020.

Table 1. Key Human Capital Indicators

Indicator	Indonesia 2020 or latest	Indonesia 2010	East Asia and Pacific 2020 or latest
Probability of Survival to Age 5	0.975	0.966	0.978
Expected Years of School	12.4	11.4	11.9
Harmonized Test Scores	395	398	432
Survival Rate from Age 15-60	0.850	0.828	0.864
Fraction of Children Under 5 Not Stunted	0.723	0.608	0.759
Human Capital Index (HCI)	0.54	0.50	0.59
Non-communicable disease deaths	0.26	0.27	0.21
Smoking	0.39	0.37	0.25

4. **Nevertheless, low absolute levels of human capital represent a key structural bottleneck to achieving Indonesia's inclusive growth and poverty reduction agenda.** Indonesia's HCI score is below the average of countries in East Asia and the Pacific (EAP) and upper-middle income countries. Human capital outcomes also differ significantly across space, socio-economic groups and genders. According to the HCI, a child born in non-metro rural areas is likely to achieve 52 percent of his or her future productivity relative to the benchmark of full health and education. This is 7 percentage points behind the expectation for a child born in the metropolitan cores. Significant differences in HCI scores

across provinces and districts mean that some parts of Indonesia have HCI scores almost at par with Vietnam and China while HCI scores in others are similar to those in Niger and Sierra Leone. The correlation between government spending and HCI performance at the district level is weak. A child born into a family with in the first quintile of the consumption distribution is expected to achieve an HCI that is 10 percentage points lower than a child born into the fifth quintile.[1]

5. **Indonesia's human capital expenditures as compared to Gross Domestic Product (GDP) have been low, though not necessarily as compared to overall public spending.** Indonesia spends 20 percent of its total budget on education, higher than many of its neighbors. But as a share of GDP, spending on education (3 percent of GDP) is lower than in many of these countries. Similarly, the government spends 1.4 percent of GDP on health – about half of what the average lower middle-income country spends. At 0.7 percent of GDP, spending on social assistance also remains at about only half of what the average lower middle-income country spends. A World Bank Public Expenditure Review highlights that Indonesia's low revenue-raising capacity constrains the spending envelope with respect to human capital. Before the COVID-19 pandemic, Indonesia's general government spending was about half of the average of other emerging markets due to its low tax-to-GDP ratio.

6. **COVID-19 has put recent human capital gains at risk and increased the impetus of both investing better and protecting better.** The pandemic has led to a sharp contraction in private consumption, as well as substantial losses of labor income and business revenue that has affected households' consumption and ability to access services and invest in human capital.[2] While the fiscal response to COVID-19 in human-capital-related areas has been strong (with nominal increases in central government budget allocations for health, education and social protection of 87 percent, 19 percent and 31 percent, respectively, between 2019 and 2020), it is expected that elements of the broader COVID-19 fiscal package, such as health, social assistance, and firm support, will be phased out as the virus comes under control and the economic recovery strengthens. Already, the package's budget allocation has shrunk to 2.6 percent of GDP in 2022, down from realized spending equivalent to 4.0 percent of GDP in 2021.

7. **Despite government efforts, the pandemic has also laid bare underlying challenges in the quality and equity of human capital service delivery.** Key challenges to improving Indonesia's human capital outcomes include the high stunting rate, the relatively low quality of education, the double burden of high prevalence of both communicable diseases and noncommunicable diseases (NCDs), and gaps in the equitable and good-quality delivery of health services and in making sure social insurance can protect from risks related to unemployment and old age. Human capital progress is further threatened by climate change.

8. **Despite notable improvements, at 24.4 percent Indonesia's stunting rate remains high.** Recent efforts to address stunting have led to impressive progress but according to a recent public expenditure review the lack of clarity on the roles and responsibilities of central, district, and village governments is a key constraint. Accordingly, to sustain and continue to improve recent gains the government is endeavoring to formalize governance arrangements, institutional roles and mandates of ministries and agencies. Stunting in Indonesia also has significant gender dimensions. Girls face increased health risks during pregnancy and undernourished girls are more likely to deliver low-birth weight babies. Indonesia continues to perform poorly on interventions targeting maternal health, including anemia during pregnancy. Iron deficiency anemia occurs at all ages but is more prevalent in pregnant women and young children. The prevalence of anemia among pregnant women in Indonesia is much higher than the EAP average (44.2 percent compared to 26.1

[1] Sari and Tiwari (2021). Girls show a higher average human capital potential than boys (HCI score of 0.56 vs. 0.52).
[2] Private consumption fell by 2.7 percent in 2020, while according to the World Bank High Frequency Survey, 63 percent and 45 percent of household primary breadwinners earned less than before COVID-19 in May 2020 and October 2021, respectively.

percent). Meanwhile, according to the Health Ministry, 48.9 percent of pregnant women are anemic.[3] In turn, maternal anemia can cause disruption in fetal growth which increases the risk of stunting. Micronutrient supplementation for pregnant women reduces the risk of anemia and stunting, but consumption of these supplements is still lacking in Indonesia. The proportion of women who consumed the recommended 90 or more iron supplement tablets during their last pregnancy also varies significantly by province, ranging from 14 percent in West Papua to 64 percent in Yogyakarta. Stunting may also be exacerbated in Indonesia by climate impacts. For example, recent research has found a link between climate change-induced monsoon delays and stunting in Indonesia.[4]

9. **Another key human capital challenge is the relatively low quality of education.** Learning is low, with seventy percent of Indonesian children unable to demonstrate basic literacy on the Program for International Student Assessment in 2018. Many teachers still lack basic competencies. On average, teachers scored only 53 out of 100 points in a study conducted by the Ministry of Education, Culture, Research and Technology (MoECRT) in 2015. Teachers' lack of basic competencies has a negative impact on their ability to transmit knowledge to and help students. To better align the overall education system with student learning, it is important to strengthen student learning assessments and for teachers to have the competencies to use the assessment results.

10. **In the health sector, key challenges are related to the high prevalence of both communicable and non-communicable diseases (NCDs) and disparities in the quality of health services including between urban centers and rural and remote areas.** Indonesia continues to struggle with high premature adult mortality, a key constituent of the HCI, resulting from the dual burden of disease including the continued high impact of Tuberculosis (TB) and other communicable diseases, and a rising disease burden caused by NCDs. The prevalence of NCD deaths (the probability of dying between ages 30 and 70 from cardiovascular disease, cancer, diabetes, or chronic respiratory diseases) is 26 percent; this is higher than the average for EAP at 21 percent. A main underlying factor is the high incidence of smoking. Thirty-nine percent of the population age 15 and older are current smokers.[5] In parallel, the prevalence of TB and other communicable diseases remains high. Even before the COVID-19 pandemic, Indonesia was the third largest contributor to the global TB burden, next only to India and China, with stark implications not only for the Indonesian population's health but also for the productive use of its human capital and for economic growth. It is estimated that before COVID-19 annual economic costs due to TB were between $6.9 billion and up to US$ 52 billion, mostly because of loss of human capital due to premature death and illness.[6] COVID-19 has further aggravated the situation by disrupting access to essential health services. Among all programs, TB has taken the worst hit and between 2019 and 2020 the number of TB notifications decreased by 31 percent, threatening to reverse past gains and creating additional morbidity, mortality and the risk of increased drug resistant TB.[7] Broader challenges to the equity and quality of health services include the lack of a regulatory framework for the practice of telemedicine. In principle, this could be key to mitigate the acute shortage of medical workers especially in rural and remote areas. In turn, this shortage is a key factor underlying the significant disparities in health outcomes across space: Some provinces have infant, under-five and adult mortality rates at par with China and other well-performing upper middle-income countries, while the same outcomes in the worst performing provinces were comparable to Liberia or Zimbabwe.

[3] The MoH also demonstrates that in Indonesia, anemia affects more women and girls than males in general. Anemia prevalence of females and males was estimated at 27.2 percent and 20.3 respectively.
[4] Thiede and Gray (2020).
[5] This is higher than the average for EAP at 25 percent.
[6] Collins *et al.* (2017) and Silva *et al.* (2021). Loss of human capital due to premature death is estimated to account for 86.6 percent of the economic cost of TB, loss of human capital due to illness for 10.1 percent, provider medical costs for 2.2 percent, and direct non-medical costs for 1.1 percent. Collins *et al.* (2017).
[7] WHO (2021a).

11. **In addition, significant challenges exist in social insurance.** Indonesia's social insurance system (*Sistem Jaminan Social Nasional,* SJSN) consists of *Badan Penyelenggara Jaminan Sosial* (BPJS) Healthcare (BPJS *Kesehatan*) and BPJS Employment (BPJS *Ketenagakerjaan*). BPJS Healthcare administers the National Health Insurance (JKN) while BPJS Employment manages work-accident insurance (JKK), death benefit insurance (JKM), a defined contributions old-age savings scheme (JHT) and a defined benefits pension scheme (JP) for private sector workers,[8] as well as the recently introduced unemployment insurance (JKP).[9] The social insurance system has expanded rapidly but workers are not yet sufficiently protected against risks emanating from unemployment, ill health, or natural disasters. The coverage of informal non-salaried workers by programs managed by BPJS Employment has remained stubbornly low and was only 3.1 percent in 2019,[10] threatening old-age income security for millions.

12. **Indonesia's human capital progress is further threatened by climate change.** Indonesia is ranked in the top-third of countries in terms of climate risk, with high exposure to all types of flooding, and extreme heat. The intensity of these hazards is expected to grow as the climate changes. Climate change threatens Indonesia's human capital development with increasingly common and severe weather events endangering food security, public health, and economic livelihoods. Several climate-sensitive communicable diseases are present, including dengue, Japanese encephalitis, malaria, and typhus. Other health issues such as heat stroke and heat exhaustion can come from prolonged exposure to extreme heat, as well as exacerbate pre-existing chronic conditions. Further climate-change related health risks include increased flooding which worsens water quality, elevating the risk of diarrhea, typhoid, and cholera. Climate change also increases the likelihood and severity of shocks that affect households' wellbeing due to sudden job and income losses, necessitating reinforced risk management strategies including strengthened unemployment insurance and other social insurance.[11] Finally, climate threats to the agriculture sector may result in higher stunting rates, exacerbating the challenge Indonesia faces in this area.

13. **As economic and natural disaster shocks become more frequent in a context of limited fiscal space, 'business as usual' will not be sufficient for Indonesia to accelerate progress on human capital to mitigate the short-term impact of COVID-19 and address long-standing challenges.** Instead, proactive policies are needed to ensure that previous achievements are sustained, and Indonesians can seize the opportunities presented during the recovery period. Human capital development will be critical in facilitating Indonesia's structural transformation during what will likely be the endemic phase of COVID-19 and in the face of the threats posed by climate change. Given the need for synergistic investments across social sectors, coordinated human capital interventions can play a transformational role in helping Indonesia to 'build back better' and increase the country's resilience to future shocks.

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[8] Defined benefit pension schemes promise a specific income while defined contributions schemes rely on individual savings accounts and thus the income depends on factors such as the amount paid into the pension and the account's investment performance.

[9] Law No. 40/2004 introduced SJSN as the basis for the redefinition and integration of the previously fragmented social insurance system. It mandates that social security be made accessible not only to salaried formal workers, civil servants and military personnel, but also to those in the informal sector. Law No. 24/2011 lays out the institutional details of the social security system and mandates the establishment of BPJS Healthcare and BPJS Employment. According to implementing regulations which further specify eligibility criteria, contribution rates, and benefit level, all salaried workers can participate in all programs offered by BPJS Healthcare and BPJS Employment. Non-salaried workers can participate in health insurance scheme, work injury and death benefits, the old-age savings but not the defined benefit pension (JP). Participation in JKP requires participation in all programs and, as such, is not open to non-salaried workers. Social insurance contributions are a percentage of payroll for salaried workers and flat rates for non-salaried workers. Health insurance coverage for poor and vulnerable households is financed through general revenue.

[10] World Bank staff calculations based on BPJS employment administrative data and labor force survey.

[11] World Bank and Asian Development Bank (2021).

2. MACROECONOMIC POLICY FRAMEWORK

2.1. RECENT ECONOMIC DEVELOPMENTS

14. **Indonesia's economy is recovering from the pandemic.** GDP growth rebounded from -2.1 percent in 2020 to 3.7 percent in 2021, supported by public consumption and exports. This came on the back of a counter-cyclical fiscal and monetary response to the pandemic, a positive terms-of-trade shock led by higher commodity prices, and a pick-up in external demand. On the supply side, more than 60 percent of the contribution to growth came from the manufacturing, wholesale and trade, construction, and telecom sectors reflecting growing demand especially in sectors less affected by COVID-19 restrictions. The recovery continues in 2022, where GDP stood at 5.0 percent in Q1, as private consumption and investment growth accelerated, offsetting the moderations in exports and imports growth.

15. **The recovery is coming amid uncertain global conditions including from ongoing tensions in Europe.** On February 24, Russian forces invaded Ukraine, sending commodity prices soaring and increasing volatility in the global financial markets**.** Natural gas prices rose more than 30 percent while Brent crude oil surpassed US$ 100 per barrel. Other commodity prices such as wheat and aluminum followed suit, impacting food security and supply chains. Moreover, global financial volatility shot up with the Cboe Volatility Index (VIX) recording its highest level since 2020 and the spread of medium-term Emerging Markets and Developing Economies (EMDE)s' government bonds widening by 27 basis points during the early days of the conflict.

16. **While Indonesia's direct links to Ukraine and Russia are limited, the country is impacted by global commodity and financial markets.** Indonesia's economy has very limited direct trade, financial and foreign investment exposure to Russia and Ukraine. But it is exposed to global financial and commodity markets; sovereign credit risk has increased slightly, in line with other major emerging markets. Equity inflows have remained stable while coal and palm oil prices (Indonesia's top 2 exports) have soared. However, Indonesia is exposed to the indirect impact as the main trading and economic partners, mainly China and other regional countries, are affected by the crisis. Government policy to contain consumer prices for electricity and transport fuel, mainly through maintaining price controls at the consumer and business level, is increasing contingent liabilities to energy SOEs. Sustaining the subsidies for a protracted period risks increasing fiscal pressures if the contingent liabilities materialize. The government has also imposed a short-lived export ban of palm oil and its derivatives (during the first three weeks of May) with the objective of making cooking oil available for domestic markets, which increased domestic cooking oil supply, although it has had a limited impact on lowering cooking oil prices. Separately, there has also been domestic passthrough of global food price inflation, which could increase poverty. Indonesia has some policy space to respond to limited shocks transmitted through global financial and commodity markets. For instance, external financing needs are moderate, foreign exchange reserves are strong, government debt levels are low and mostly domestic, and the policy rate is positive in real terms while inflation is low.

17. **The response to COVID-19 improved with the vaccine rollout reaching a critical mass, and booster vaccinations starting in January 2022**. By April 2022, 60.4 percent of the population had been fully vaccinated, but there is variation at the provincial level. Among provinces with the highest inoculation rates (i.e., the top quartile of provinces), around 62.4 percent of the population is vaccinated. By contrast, provinces with the lowest inoculation rates (i.e., the bottom quartile) exhibit vaccination rates of only 43 percent. These latter provinces tend to be in more remote and less densely populated, making access to vaccines difficult. The government has started the rollout of booster vaccines and reached

13.4 percent of the population by mid-April. The inoculation rate lags that of peer countries.[12] The Omicron wave has started to subside, and the government is gradually loosening restrictions on international travel.

18. **The external position strengthened due to a positive terms-of-trade shock, maintaining an adequate level of foreign exchange reserves.** The current account recorded a surplus in 2021 (0.3 percent of GDP) on the back of robust commodities exports and improvements in the secondary income balance as foreign grants for COVID-19 support increased (**Error! Reference source not found.**2). External buffers have been adequate to manage external financial p ressures. Foreign reserves averaged around 9-10 months of imports throughout 2021. The real effective exchange rate (REER) has been stable since May 2020.

19. **The government temporarily relaxed the fiscal deficit ceiling (3 percent of GDP) for 2020-2022 to create space for a countercyclical fiscal response.** After peaking at 6.1 percent of GDP in 2020, the fiscal deficit narrowed to 4.6 percent of GDP in 2021. Spending increased strongly with the implementation of a COVID fiscal package focusing on health, social assistance and firm support, amounting to 3.7 and 4.0 percent of GDP in 2020 and 2021, respectively. The wider deficit in 2020 was also driven significantly by falling tax revenues, due to economic contraction, lower commodity prices and temporary tax relief.

20. **The fiscal deficit narrowed in 2021 due to a broad-based rebound in public revenues, despite increased COVID fiscal outlays.** Total revenues increased from 10.7 percent of GDP in 2020 to 11.8 percent in 2021 driven by value-added tax (VAT), tobacco excises, trade taxes and non-tax revenue. Revenues remain below pre-crisis levels of 12.4 percent of GDP in 2019 due to lower corporate and personal income tax revenue. Spending declined from 16.8 percent of GDP in 2020 to 16.4 percent of GDP in 2021. This was underpinned by weakness in social assistance, personnel spending, and transfers to subnational governments, and partially offset by strength in material and capital spending, and energy subsidies. Central government debt reached 40.7 percent of GDP in 2021, still well below the 60 percent ceiling imposed by Law Number 17 of 2003 on State Finance.

Table 2. Key Macroeconomic Indicators 2019-2024

	2019	2020	2021	2022	2023	2024	2025
	Actual		Est.	WB projection			
Real economy							
Real GDP (% change)	5.0	-2.1	3.7	5.1	5.3	5.3	5.3
Consumer Price Inflation (CPI) (year-average, %)	2.8	2.0	1.6	2.7	3.1	3.3	3.3
Demand side (contribution to growth, in percentage points)							
Private Consumption	2.9	-1.5	1.1	2.6	2.7	2.8	2.9
Government Consumption	0.3	0.2	0.3	0.1	0.1	0.3	0.3
Gross Fixed Investment	1.5	-1.6	1.2	1.8	2.0	2.1	2.2
Exports	-0.2	-1.7	4.7	3.4	2.6	2.2	2.2
Imports	1.5	3.1	-3.7	-2.8	-2.3	-2.2	-2.3
Supply side (contribution to growth, in percentage points)							

[12] The group of peer countries used in this section consists of Brazil, China, India, Malaysia, Philippines, Thailand and Vietnam, except when data is not available.

Agriculture	0.5	0.2	0.5	0.2	0.5	0.5	0.5
Industry	1.5	-1.1	1.3	1.7	1.7	1.7	1.7
Services	2.8	-0.6	1.6	3.0	2.9	3.0	2.9
Net Taxes on Production	0.2	-0.5	-0.1	0.1	0.2	0.1	0.2
Fiscal accounts, central government, percent of GDP							
Revenues	12.4	10.7	11.8	12.4	12.1	12.1	12.5
of which Tax Revenue	9.8	8.3	9.1	9.9	9.8	10.0	10.5
Expenditures	14.6	16.8	16.4	16.1	15.1	15.1	15.5
Primary Balance	-0.5	-4.1	-2.6	-1.5	-0.6	-0.5	-0.4
Fiscal Balance	-2.2	-6.1	-4.6	-3.7	-3.0	-3.0	-3.0
Central Government Debt[(a)]	30.2	39.3	40.7	42.9	43.2	43.4	43.8
Balance of Payments, percent of GDP unless indicated otherwise							
Current Account Balance	-2.7	-0.4	0.3	-0.9	-1.4	-1.9	-2.3
Exports, Goods and Services	17.9	16.8	20.8	22.1	21.7	21.7	21.6
Imports, Goods and Services	-18.3	-15.1	-18.4	-20.5	-20.8	-21.2	-21.7
Net Foreign Direct Investment	1.8	1.3	1.4	1.6	1.8	1.9	1.9
Gross Reserves (months of imports of goods and services)	9.7	7.5	7.1	7.5	7.6	7.6	7.2
Memorandum items							
Nominal GDP (IDR trillion)	15,832	15,434	16,971	17,843	19,186	20,557	21,878
Per Capita GDP (US$)	3,877	3,757	3,856	…	…	…	…
Nominal GDP (US$ billion)	1,119	1,058	1,186	…	…	…	…

Note: The fiscal numbers for 2021 are World Bank projections as of December 2021 and are different from preliminary estimates released by the MoF in January 2022 (see Table 4).
Source: Ministry of Finance, BI, World Bank staff projections.

21. **Bank Indonesia (BI) has maintained an accommodative monetary stance while financing the fiscal deficit during the pandemic.** BI has cut its policy rate by 150 basis points since the beginning of the pandemic and injected liquidity into the financial system by relaxing reserve requirements. Nonetheless, given modest inflation outcomes, the real policy interest rate remains high relative to peers. With fiscal financing needs estimated to have increased, BI's share of local currency government debt rose to 26.1 percent at end-2021, up from 9.9 percent at end-2019. Likewise, commercial bank holdings have increased from 22.6 to 34.0 percent over the same period, while the share of non-resident holdings declined from 38.6 to 16.6 percent. BI's primary market purchases of government bonds fell from 3.0 percent of GDP in 2020 to 2.2 percent of GDP in 2021. The authorities are committed to phasing out monetary financing by end-2022.

22. **Bank balance sheets are healthy, corporate vulnerabilities are moderate, but loans-at-risk are elevated.** The Non-Performing Loan (NPL) ratio declined at the end of 2021 to 3.0 percent, slightly lower than peers. The capital adequacy ratio edged up to 25.6 percent in December 2021 and remained well above the Basel regulatory minimum of 10 percent. Provisioning levels relative to NPLs increased markedly to 190 percent in November 2021, which is high by international standards and should be sufficient to absorb a shock to large banks' NPLs. Notwithstanding, the loans at risk (LAR) ratio, defined as the sum of NPLs, restructured loans and special mention loans, increased from 11.6 to 21.6 percent in March 2020-October 2021, although LAR for top ten banks have stabilized since March 2021. This warrants close monitoring since loan forbearance measures have been extended until March 2023 and may temporarily mask the

true extent of bank balance-sheet vulnerabilities. Liquid assets stood at 27.1 percent of deposits and short-term funding in November 2021, up from 24.2 percent half a year ago. This remains lower though than East Asia and the Pacific (EAP) average and peers. Return on assets (ROA), return on equity (ROE) and interest margin to gross income declined from high pre-pandemic levels to 1.9 percent, 10.7 percent, and 4.5 percent in November 2021. Data from listed firms also shows that corporate vulnerability has stabilized after increasing in 2020.

23. Credit to the private sector has increased slightly in early 2021 but remains weak overall. Credit to the private sector expanded by 5.2 percent in December 2021 after contracting in October 2020-May 2021. Despite monetary policy relaxation, credit growth remained well below its pre-crisis level of 8 percent in September 2019 and tracked lower than most peers. Possible causes of continued lackluster credit growth include demand side factors, such as weak economic conditions, as well as supply side factors, such as uncertainty and high borrower risks. However, survey data from the Financial Services Authority (OJK) point to stable household demand for credit.

2.2. MACROECONOMIC OUTLOOK AND DEBT SUSTAINABILITY

24. Growth is expected to recover over the medium-term despite the deteriorating global environment. As pent-up demand is released, and structural reforms move forward, private consumption and investment are expected to anchor the recovery and gradually boost growth to 5.3 percent over the medium term. This compensates for the drag on growth imposed by fiscal consolidation as the deficit returns to 3 percent in 2022-2023 (Table 2). On the supply side, assuming the pandemic is under control, mobility restrictions are gradually lifted, and vaccine rollout coverage improves, contact-intensive services sectors such as trade and hospitality are expected to rebound. Rising commodity prices will also support growth and investment especially in commodity related sectors such as coal and palm oil where Indonesia is a net-exporter. However, those gains will be partially offset by rising oil and food prices from the war in Ukraine, which put a drag on sectors like transport and manufacturing.

25. Inflationary pressures are expected to increase in 2022 with inflation projected to remain slightly below the upper bound of the official target (2-4 percent) (Table 2). The rise in global energy prices is already being partially passed on to consumers. Rising global oil prices also feed into food prices in Indonesia through input costs. The authorities have also indicated plans to raise electricity tariffs over the course of 2022 (and target subsidies better to the poor). Inflation expectations for 2022 have risen from 2.9 percent in January to 3.4 percent in March.[13]

26. Indonesia is vulnerable to tightening external financing conditions. The outlook assumes that global financing conditions will tighten in 2022 given US monetary tightening and global risk aversion towards emerging markets. There could diverging performance across asset classes. First, pressures are likely to be strong on portfolio debt as inflation erodes yields. Second, portfolio equity is expected to remain strong on the back commodity earnings. Third, FDI commitments have been announced in the energy, mining, manufacturing, and pharmaceutical sectors, and more are expected in services, such as tourism, as COVID restrictions abate. External financing needs are expected to increase but remain contained as the current account deficit is projected to remain low (Table 3). A stable Rupiah, adequate official reserves, a positive interest rate differential with the US, and relatively low inflation to date provide Indonesia with some policy space to manage tighter global financial conditions while supporting the economic recovery. An increase in loan financing, including development policy loans, could manage the risk of tightening financial conditions in 2022.

[13] Asia Pacific Consensus Forecast, April 2022.

Table 3. Balance of Payment (BoP) Financing Requirements and Sources (US$, billions)

	2019	2020	2021	2022	2023	2024	2025
	Actual		Est.	WB projection			
Current account deficit	30.3	4.5	-3.3	11.6	18.9	26.5	35.0
Scheduled government debt amortization	10.5	12.3	11.1	11.6	12.4	12.5	12.9
Private sector debt repayment	27.5	23.4	24.4	25.4	27.2	29.1	31.0
Total financing needs	**68.3**	**40.2**	**32.2**	**48.6**	**58.5**	**68.2**	**78.9**
Total financing sources	**68.3**	**40.2**	**32.2**	**48.6**	**58.5**	**68.2**	**78.9**
FDI inflows (net)	20.5	14.1	16.5	19.8	23.5	26.8	29.0
Portfolio inflows (net)	16.0	-0.8	-2.4	16.6	16.7	16.9	17.0
Other investment (net)[(a)]	23.7	11.8	15.3	15.9	17.0	18.3	19.4
Government borrowing (gross)[(b)]	15.7	20.6	20.4	18.8	19.9	22.6	25.3
Securities	10.5	10.9	13.2	10.5	12.9	14.6	16.4
Loans	5.2	9.7	7.2	8.3	7.0	7.9	8.9
Of which WB DPLs	1.0	0.6	1.2	1.7	..	..	..
Other items (net)[(c)]	-3.0	-2.9	-4.0	-0.1	0.0	0.1	0.2
Use of reserves[(d)]	-4.7	-2.6	-13.6	-22.4	-18.7	-16.5	-12.0

Source: BI, World Bank staff projections. Note: (a) Including other equity, trade credits, loans etc. but excludes government and private borrowing and currency swaps. (b) The government estimates funding from donors other than the World Bank (including from the Asian Development Bank, Japan International Cooperation Agency, Australia, Agence Francaise de Développement, KfW etc.) in 2021 at US$ 5.2 billion. (c) Comprising capital account, derivatives, and errors and omissions components; for historical data also includes discrepancy between balance of payments and fiscal data on government borrowing. (d) Use of reserves: '–'denotes an accumulation; '+' denotes a reduction.

27. **The fiscal deficit is expected to narrow to 3.0 percent of GDP by 2023-2024, in line with government commitments, although pressures will remain in light of the effects of global developments (Table 4).** A fiscal adjustment of around 1.6 percent of GDP will be needed to reach the government's target deficit. The macro framework assumes this fiscal consolidation will be achieved through a fairly even split of expenditure cuts and revenue-generating reforms. As a result, gross fiscal financing needs are expected to gradually decline but remain sizeable at an average of 7.0 percent of GDP in 2022-2024 especially given spending pressures arising from the effects of global developments. With foreign exchange (FX)-denominated debt issuances and loans expected to finance a larger share of the deficit, monetary financing is expected to subside**Error! Reference source not found.**. The eventual withdrawal of monetary f inancing will be a welcome development owing to the need to limit moral hazard and the risks of financial repression, but it also has risks given the uncertainty surrounding the current recovery. Moreover, if economic conditions continue to be weak, financing needs could remain elevated longer than expected. While the consolidation will withdraw some domestic demand, this will be compensated through the release of pent-up demand, thus boosting private consumption, as COVID restrictions are eliminated and contact services reopen. It also comes amid planned structural reforms that are expected to boost domestic and foreign investment.

28. **Public spending is projected to gradually decline with the phasing out of the COVID-19 support package, but remain above pre-pandemic levels, due in part to subsidy and social assistance pressures.** Elements of the COVID-19 fiscal package, such as health, social assistance, and firm support, are expected to be phased out as the pandemic comes under control and the economic recovery strengthens.[14] COVID-19 fiscal support has already shrunk to 2.6 percent of

[14] Health and social protection spending under the fiscal package in 2022 are expected to decline by around 40 percent and 10 percent, respectively, compared to their outlays under the package in 2021.

GDP in 2022, down from 4.0 percent of GDP in 2021. Overall, fiscal consolidation efforts will also markedly reduce capital spending in the outlook, returning to pre-COVID levels. Social assistance spending will be maintained above pre-COVID levels to protect the poor and vulnerable, including from the impacts of rising food prices. The projected fiscal impact of the reforms supported by this operation fit within the baseline expenditure envelope: the largest fiscal impact is expected from the initial costs of Prior Action 5 introducing unemployment insurance (0.04 percent of GDP) with recurring costs significantly lower, while the impact of the other reforms fit within their sectoral budget envelopes (see Paragraph 39 for more information). Spending on fuel and electricity subsidies is expected to rise temporarily in 2022, as the government limits pass-through of higher global energy prices through fixed administered retail prices, although small retail price adjustments in April 2022 will decrease fuel subsidy spending somewhat.[15] Interest payments will also increase due to the build-up in public debt (+0.7 percent of GDP in 2023 compared to 2019).

29. **Government revenues are projected to increase due to tax reforms supported in this DPL and stronger commodity prices.** In addition, the government has approved tax law and excise reforms that will be implemented over 2022 to 2025. These reforms are expected to boost government revenues by 0.9 percentage point of GDP, on average, over 2022-2025.[16] This will be complemented by near-term temporary revenue gains from a tax amnesty measure, and a modest permanent uptick in 2024 as tax administration reforms already underway begin to bear fruit. In addition, ongoing strength in global commodity prices, combined with the recent conflict-driven surge, is expected to boost income taxes and non-tax receipts from the resource sector in 2022-2023.[17] The combination of these factors will result in the tax ratio rising above its pre-pandemic (2019) share of GDP of 9.8 percent, throughout most of 2022-2024. Parliament approved a revision of the 2022 budget in May increasing the allocation for the energy subsidies from 0.7 to 1.2 percent of GDP, which is funded largely by increased commodity-related revenue, narrowing its projected fiscal deficit from 4.9 percent to 4.3-4.5 percent of GDP.

Table 4. Baseline Medium-Term Fiscal Framework (Central Government), percentage of GDP

	2019	2020	2021	2022	2023	2024	2025
	Actual		Est.	WB projection			
Revenue	**12.4**	**10.7**	**11.8**	**12.4**	**12.1**	**12.1**	**12.5**
Tax revenue	**9.8**	**8.3**	**9.1**	**9.9**	**9.8**	**10.0**	**10.5**
Income tax	4.9	3.8	4.1	4.5	4.3	4.5	4.5
Sales tax	3.4	2.9	3.2	3.6	3.8	3.8	4.2
Excises	1.1	1.1	1.2	1.3	1.3	1.3	1.4
International trade tax	0.3	0.2	0.4	0.4	0.3	0.3	0.3
Other taxes	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Non-tax receipts	**2.6**	**2.2**	**2.7**	**2.5**	**2.3**	**2.1**	**2.0**
Grants	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Total expenditure	**14.6**	**16.8**	**16.4**	**16.1**	**15.1**	**15.1**	**15.5**
Primary expenditure	**12.8**	**14.8**	**14.4**	**13.9**	**12.7**	**12.7**	**12.9**

[15] The government has been considering reforms to fuel and electricity subsidies that would better target spending on intended beneficiaries via the use of an integrated poverty database. The fiscal impact of subsidy reforms has not been included in the baseline forecasts as reform progress is currently on hold.
[16] The majority of this impact is driven by higher VAT revenues due to a higher standard VAT rate, and higher income taxes due to the reversal of the government's prior decision to cut the standard corporate income tax rate from 22 percent to 20 percent.
[17] Nonetheless, non-tax receipts will fall over 2021-2022 due to a moderation in once-off ad hoc strength in other non-tax items, such as revenues from public service delivery units.

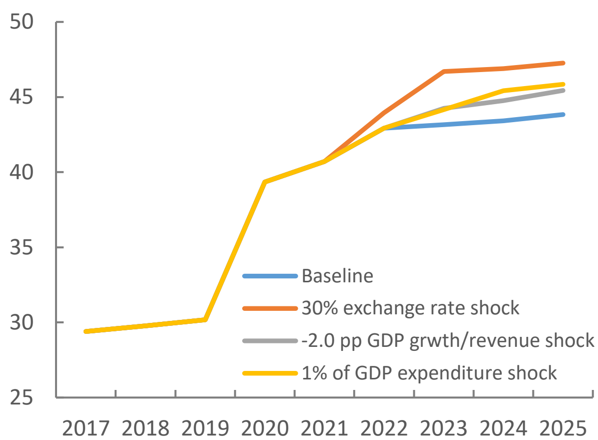
Central government	**7.7**	**9.8**	**9.8**	**8.7**	**7.7**	**7.7**	**7.8**
Personnel	2.4	2.5	2.3	2.3	2.3	2.3	2.3
Material	2.1	2.7	3.1	2.5	2.0	2.1	2.1
Capital	1.1	1.2	1.4	1.2	1.1	1.1	1.2
Subsidy	1.3	1.3	1.4	1.5	1.3	1.2	1.2
Energy	0.9	0.7	0.8	1.0	0.9	0.8	0.8
Non-energy	0.4	0.6	0.6	0.5	0.4	0.4	0.4
Social assistance	0.7	1.3	1.0	1.0	1.0	1.0	1.0
Others	0.1	0.8	0.5	0.1	0.6	0.1	0.1
Transfers to subnational	**5.1**	**4.9**	**4.6**	**5.2**	**5.0**	**5.0**	**5.1**
Interest	**1.7**	**2.0**	**2.0**	**2.2**	**2.4**	**2.5**	**2.6**
Overall fiscal balance	**-2.2**	**-6.1**	**-4.6**	**-3.7**	**-3.0**	**-3.0**	**-3.0**
Primary fiscal balance	-0.5	-4.1	-2.6	-1.5	-0.6	-0.5	-0.4
Net financing	**2.2**	**6.1**	**4.6**	**3.7**	**3.0**	**3.0**	**3.0**
Investment in financial assets	-0.6	-1.8	-0.5	-0.6	-0.2	-0.2	-0.2
Net borrowing	2.8	8.0	5.1	4.3	3.2	3.1	3.1
Net local currency	2.3	6.9	4.4	3.7	2.6	2.4	2.3
o/w BI fiscal financing[(a)]	0.0	3.0	2.2	1.3	0.0	0.0	0.0
Net foreign currency	0.5	1.1	0.7	0.6	0.6	0.7	0.8
Central government debt	30.2	39.3	40.7	42.9	43.2	43.4	43.8
Gross fiscal financing needs	5.9	9.8	8.1	7.2	6.7	7.1	7.5

Note: Estimated data for 2021 based on unaudited data published by MoF. (a) 2022 is based on an August 2021 government announcement.
Source: Ministry of Finance and World Bank staff projections.

30. **The World Bank's Debt Sustainability Analysis (DSA) shows that central government debt would remain overall low and manageable under plausible adverse shocks.** Under the baseline, central government debt is projected to rise over the medium term and stabilize at around 44 percent of GDP in 2025, well below the government debt ceiling (60 percent of GDP). The DSA results show that debt is more vulnerable to a large exchange rate shock but would remain sustainable under plausible scenarios. More specifically, a permanent 30 percent exchange rate depreciation shock in 2023 would increase the debt-to-GDP ratio by 3.4 percentage points relative to the baseline by 2025 (**Error! Reference source not found.**1). An expenditure shock of 1 percent of GDP lasting through 2023 and 2024, to respond to a protracted crisis or a natural disaster for instance, would increase the debt-to-GDP ratio by 2.0 percentage points relative to the baseline. A negative growth shock, subduing GDP growth in 2023 to 3.3 percent from 5.3 percent in the baseline, combined with a proportional revenue decline, would increase the debt-to-GDP ratio by 1.6 percentage point relative to the baseline. The interest-to-revenue ratio is projected to increase from 14.1 to around 21-22 percent over 2019-2025, under all scenarios considered. After rising sharply in 2020 due to exchange rate and GDP shocks, external debt is expected to return to pre-COVID levels as the economy rebounds, gross financing needs fall, and equity inflows gradually rise (**Error! Reference source not found.** and Table 5).

Figure 1. Central government debt is projected to remain overall manageable....

(Percentage of GDP)

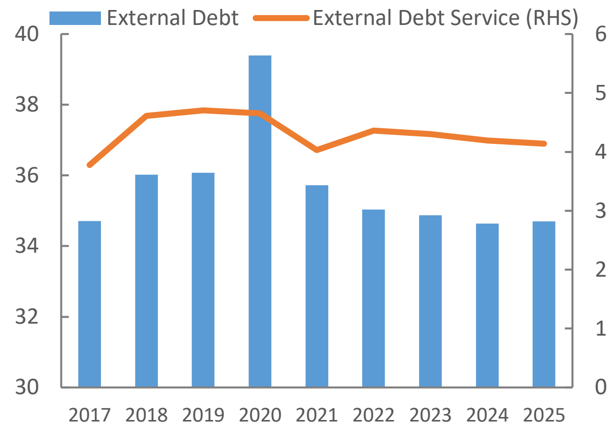


Note: DSA last updated in March 2022

Source: Ministry of Finance, World Bank staff projections

Figure 2. .... while external debt is expected to decline

(Percentage of GDP)



Note: DSA last updated in March 2022

Source: Bank Indonesia, World Bank staff projections

Table 5. External debt composition, end-2021

	USD (billions)	Share of total debt	% of GDP
Monetary authorities	9.0	2.2	0.8
Central government	200.1	48.2	17.6
Banks	33.0	7.9	2.8
Other private	172.9	41.7	14.6

Source: Bank Indonesia

31. **Fiscal risks and contingent liabilities are generally manageable, although they warrant closer monitoring as the pandemic has increased risks.** Exposure to explicit contingent liabilities in the form of loan guarantees to state-owned enterprises (SOEs) amounted to 1.85 percent of GDP as at end-Q4:2021, well below the guarantee ceiling of 6.0 percent of GDP. Non-financial SOE debt (guaranteed and non-guaranteed) increased from 6.3 to 7.1 percent of GDP over 2019-Q1:2021-Q4. These trends warrant monitoring[18] especially as the COVID-19 response package has expanded the level of loan guarantees to private businesses and SOEs. Central government capital injections into SOEs have increased from an average of 0.4 percent of GDP in 2016-2019[19] to an expected 0.9 percent in 2020-2022, partially reflecting a materialization of implicit contingent liabilities. Such capital injections will decline after 2022 as the recovery strengthens. Rising global energy prices could lead to increased energy subsidies, both explicitly through the budget and implicitly as economic prices exceed the administered retail energy prices and the energy SOEs will have to absorb losses. This will increase continent liabilities in the form of future compensation payments to settle these implicit subsidies. Risks from guarantees to public-private partnership (PPP) projects on the other hand are mitigated by the Indonesia Infrastructure Guarantee Fund (IGGF) for guarantee risks. Indonesia is also exposed to fiscal risks from natural disasters. However, the risk is being mitigated through its National Disaster Risk Insurance Strategy.

32. **Risks to the outlook are skewed to the downside, given tightened global financial conditions, fiscal shocks, and**

[18] The government publishes a guarantee analysis each quarter and includes a fiscal risk statement in its budget report.

[19] Pre-COVID SOE injections supported SOE borrowing capacity for infrastructure investments.

spillover impacts from the war in Ukraine. Indonesia's direct exposure to Russia and Ukraine is limited, although increasing energy and food commodity may lead to increased inflation and explicit or implicit food and energy subsidies. The country has policy space to respond to limited shocks transmitted through global financial and commodity markets. For instance, some of the commodity-driven revenue windfalls will go towards subsidizing food products (e.g., cooking oil) and energy products (e.g., electricity and fuels) to weather the impact of the crisis on the poor. Faster-than-expected global monetary tightening and contagion effects from other Emerging Markets which could increase the cost of financing, trigger capital outflows and rupiah depreciation and fuel inflation. The recovery of domestic lending to private sector and the phasing out of monetary financing will lead to more competition for domestic financing between the government and the private sector. A fiscal shock could lead to an increase in short-term financing needs. Moreover, as COVID-19 may become endemic this will make maintaining adequate vaccination and other health measures for a protracted period necessary. If downside risks materialize, notably a terms of trade shock and a deceleration in regional growth, Indonesia's growth could slow to 4.6 percent in 2022 compared to 5.1 percent in the baseline. Moreover, if revenue growth also falls by an equal magnitude, the combined effects would see the fiscal deficit rise slightly to 3.8 percent of GDP in 2022.

33. Exit strategies for macroprudential easing, particularly loan forbearance measures, will need to be carefully designed and the insolvency strengthened to facilitate private sector debt restructuring. Exit from macroprudential easing faces difficult tradeoffs between exiting too early which could increase bankruptcies and exiting too late which could fuel zombification (i.e., unviable firms kept alive by policy support). The Financial Sector Omnibus Law provides an opportunity to address gaps in financial sector depth and stability. The law can help promote legal certainty, clarity, and confidence in the legal frameworks on financial innovation, macro prudential mandates, and supervision. Moreover, completing the revision of the Bankruptcy Law, developing industry-funded resolution mechanisms are important to strengthen the insolvency framework and the crisis preparedness and resolution framework.

34. The macroeconomic policy framework is adequate for the purposes of the proposed operation. Indonesia built a strong track record of prudent macroeconomic and fiscal management over the past decade. The authorities' strategy of monetary policy is appropriate in the current exceptional economic circumstances. A lower policy interest rate is fitting, contingent on the inflation outlook. The policy on financing of the fiscal deficit as a last resort and using market mechanism was necessary and will be phased out gradually. The recent tax reforms, supported by the DPL, show that the authorities are committed to returning to the 3 percent of GDP fiscal deficit ceiling by 2023 and to keeping monetary financing of deficit time-bound (until end of 2022). While the banking sector remains overall stable, it is important to closely monitor the application of loan forbearance measures, maintain adequate loan provisioning, support credit to viable firms and prepare for potential stress. Implementation of the recently approved Tax Harmonization Law and other structural reforms is important to improve growth, fiscal space, and debt sustainability.

3. GOVERNMENT PROGRAM

35. The government's human capital development program and priorities to be supported by this DPL are guided by the RPJMN 2020–2024.[20] In accordance with the directives of the RPJPN 2005–2025, the development goal of the RPJMN 2020–2024 is to realize an independent, advanced, just and prosperous Indonesian society. The RPJMN recognizes that human capital needs to be the main driver to achieve inclusive and equitable development. Accordingly, it aims to improve the quality and competitiveness of Indonesia's human capital – defined as healthy, intelligent, adaptive, innovative, skilled and good-character people – through a series of initiatives in seven areas: (i) population control and

[20] They are also consistent with the government's Human Capital Development Master Plan 2020-2045 currently under preparation, which like the proposed DPL also follows a life cycle approach.

strengthening of demographic governance, (ii) strengthening the implementation of social protection, including social insurance, (iii) improving health services toward universal health coverage, (iv) increasing the coverage of quality education services, (v) fostering the human capital development of children, women and youth, (vi) poverty alleviation, and (vii) increased productivity and competitiveness.

36. **The RPJMN highlights key challenges in health and nutrition service quality and equity and provides actionable policies and targets to address these challenges.** The RPJMN notes that in spite of notable improvements, there are key challenges including the persistently high prevalence of stunting, the continued high prevalence of major communicable diseases including TB, the increased threat posed by NCDs, and the uneven quality of health service partly due to a shortage of health workers outside of urban areas and on islands other than Java and Bali. To address these challenges, the RPJMN defines a number of policy directions including improving maternal, child, family and reproductive health, accelerating anti-stunting interventions, improving control of TB and other communicable diseases, and strengthening the health system and drug and food control efforts. Among more specific goals, targets and initiatives, the RPJMN aims for the better utilization of innovative technologies, emphasizes the importance of cultivating healthy behaviors, and envisages a gradual increase of excise duty on tobacco (while mitigating the impact on tobacco farmers and tobacco industry workers).

37. **In addition, the RPJMN aims for the strengthening of social insurance implementation.** The focus is both on increasing the coverage of social insurance and on broadening the risks the system insures against. To institutionally strengthen SJSN, the RPJMN aims to develop more comprehensive and integrated SJSN programs, such as in particular an unemployment insurance scheme. Other RPJMN policy directions in social protection include the harmonization of the SJSN regulatory framework and the strengthening of coordinated, targeted and adaptive delivery of social assistance. The RPJMN also aims for improved integration of benefits and services for different target groups such as persons with disabilities, including through the preparation of a Masterplan for Persons with Disability.

38. **Among other initiatives, the RPJMN also emphasizes the importance of improving the quality of education.** The RPJMN’s policy directions in increasing the coverage of quality education services include the strengthening of assessments of student learning and of the competencies and professionalism of educators, as well as of the education quality assurance system to reduce disparities in service delivery quality between educational units and regions. Relatedly, based on the RPJMN and the MoECRT's Strategic Plan, the government’s signature education policy reform package ‘Merdeka Belajar’ (‘Freedom to Learn’) seeks systemic and sustainable change in teaching and learning nationwide from early childhood education tertiary education.

39. **While the specific reforms supported by this proposed operation only have a limited impact on expenditure, the realization of the RPJMN’s full human capital development program and priorities would require additional revenue and spending reforms.** Across human capital development priorities, there is scope for improving the efficiency and effectiveness of spending. Thus, for many such priorities the overall level of spending might only need to grow gradually and broadly in line with GDP. For instance, the government already spends about US$ 4 billion annually on nutrition and this quantum is not expected to change significantly. At the same time, some priority sectors will require increased expenditure to meet the objectives of the RPJMN. While taxation measures related to smoking are expected to lead to an increase in revenue, the introduction of unemployment insurance is expected to result in initial costs of US$ 418 million (0.04 percent of GDP) and recurring yearly costs of initially US$ 83 million,[21] and is expected to be within scope of the government’s existing budget envelope (see Paragraph 28). Beyond the scope of the reforms supported by

[21] This recurring amount is the projected government contribution to unemployment insurance, which is supplemented by contributions by employers and employees.

the proposed DPL, spending on education is expected to increase in line with government revenues while the RPJMN also includes a relatively aspirational goal of expanding subsidized death and work injury protection and support for pension and health insurance. World Bank projections indicate that this would require an additional 0.41 percent of GDP if implemented.

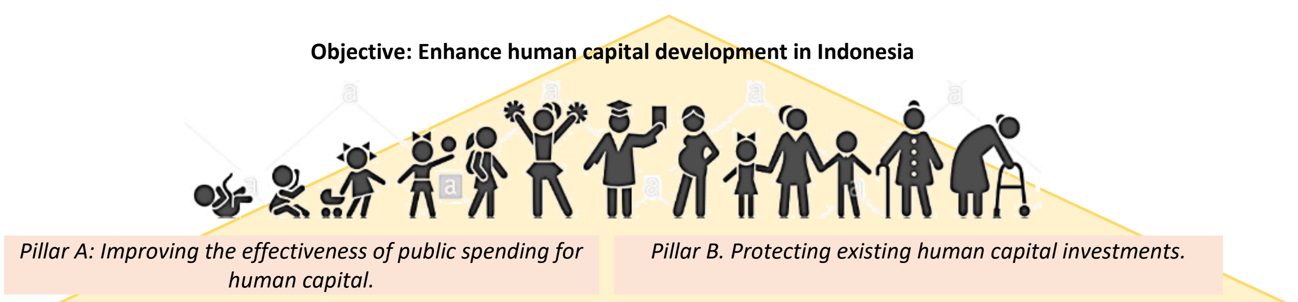
4. PROPOSED OPERATION

4.1. LINK TO GOVERNMENT PROGRAM AND OPERATION DESCRIPTION

40. **The Program Development Objective is to enhance human capital development in Indonesia by (i) improving the effectiveness of public spending for human capital and (ii) protecting existing human capital investments.** The DPL is structured around two pillars. Within the government's larger human capital development reform program as defined by the RPJMN, the DPL supports a select set of high-impact reforms with selectivity based on three filters: (i) consistency with World Bank corporate priorities and government demand, and (ii) alignment with World Bank comparative advantages ('value add') such as consistent track record of policy advice and other ASA, and (iii) complementarity to other World Bank operations and PASAs that support the government's larger human capital development reform program including in areas such as education, social assistance and skills.[22] This DPL is supporting a portion of the overall government program on advancing human capital and selects policy reforms whose implementation timeline is aligned with the DPL's. For this reason, some important policies, like those supporting reforms in the education sector, have not been included in the DPL.

41. **The DPL aims to strengthen reform policies that boost human capital throughout the life cycle**. The interventions supported by the DPL integrate social services that support good health and nutrition during pregnancy, and healthy, well-nourished and stimulated growth during early childhood. They further help ensure that every child arrives to school suitably protected from preventable diseases and with optimum nutrition. Further, by improving income protection, augmenting access to healthcare services and discouraging harmful behaviors, the DPL also addresses several important gaps in human capital protection during adulthood and contributes to better human capital utilization. The actions supported in this DPL complement each other by reinforcing the impact of the reform program on human capital development over the life course.

Figure 3. Conceptual Framework



[22] In the context of the proposed DPL, human capital is defined as the knowledge, skills, and health that people accumulate over their lives. While the DPL is in part motivated by the findings of the Human Capital Index as a quantification of the concept of human capital, it is beyond its scope to improve Indonesia's performance on the Index by the end of the program.

42. **Pillar A of this DPL is about *improving the effectiveness of public spending for human capital:***

- **Prior Action 1** supports the formalization of governance arrangements, institutional roles and mandates of ministries, agencies, districts and villages underpinning the expansion of the anti-stunting program to improve the effectiveness of the government's considerable investments to improve maternal nutrition and decrease childhood stunting across Indonesia.
- **Prior Action 2** supports the institutionalization of a comprehensive, multisectoral and integrated regulatory mechanism for the TB control program that is expected to improve value for money along the entire TB service delivery cascade and accelerate the recovery from the disruption created by COVID-19.
- **Prior Action 3** supports the establishment of a legal and regulatory framework for telemedicine which will improve access to health services particularly for those currently facing challenges, such as the population of rural and remote areas where health outcomes are significantly worse than in urban centers.

43. **Pillar B is about *protecting existing human capital investments.***

- **Prior Action 4** supports taxation measures related to smoking which will incentivize behavior change to reduce smoking and support improvements in long term health outcomes. Reducing household spending on products harmful for health through tobacco taxes can also contribute to poverty reduction, as individuals in the bottom 40 percent of the income distribution are likely to be more price sensitive.
- **Prior Action 5** support the introduction of unemployment insurance based on the mutual obligation principle and provision of cash benefits, training, and jobs-search assistance. Unemployment insurance will support workers and families as working lives get longer and the skills demanded change more rapidly, and as economic and natural disaster shocks become more frequent. It will also reduce negative coping strategies that erode human capital.

44. **Women's empowerment and gender issues are recognized throughout the reforms supported by the DPL as a fundamental condition to boost the human capital of future generations, as well as to leverage untapped potential for increased output and productivity.** The expansion of the anti-stunting strategy across the entire country is expected to increase the percentage of pregnant women taking a minimum of 90 iron supplement tablets during pregnancy from the low baseline value of 38.1 percent in 2018, helping to reduce the wide gender gap manifesting as micronutrient deficiencies and anemia, especially among pregnant women. The nationwide scope of the project, and ensuring that all districts implement on multisectoral nutrition actions for pregnant women, will improve women's access to iron supplement tablets in locations where access is lacking. It is also expected that higher quality and equity of health services will lead to positive impacts on women's sexual and reproductive health outcomes. The introduction of JKP is expected to help smooth consumption among female workers who tend to go in and out of the labor market more frequently than their male counterparts due to parenting or caregiving responsibilities and education may also partially reduce reliance on informal family support and care, the burden of which disproportionally falls on women.

45. **The DPL is fully aligned with the World Bank's goals of eradicating extreme poverty and promoting shared prosperity, and explicitly addresses climate vulnerabilities.** Both pillars speak directly to the twin goals. In addition, the DPL also emphasizes rigorous monitoring and evaluation. This ensures that available resources are more efficiently allocated to where they are most needed and can make optimal impact, hence making human capital interventions more impactful in addressing poverty and promoting shared prosperity. The DPL also directly addresses climate vulnerabilities

and reduces climate risks that threaten Indonesia's human capital development (see Annex 5).[23]

4.2. PRIOR ACTIONS, RESULTS AND ANALYTICAL UNDERPINNINGS

46. Pillar A of this DPL is about Improving the effectiveness of public spending for human capital.

- **Prior Action 1:** To improve nutrition of pregnant women and decrease childhood stunting across Indonesia, the Borrower has introduced a regulation to formalize the governance arrangements, institutional roles and mandates of central ministries and agencies as well as districts and villages underpinning the expansion of the anti-stunting program, as evidenced by Presidential Regulation No. 72/2021.
- **Result Indicators:** (i) Number of districts implementing multisectoral nutrition actions for pregnant women and children under 2 years of age. Baseline: 260 (2020). Target: 514 (2023). (ii) Percentage of pregnant women taking a minimum of 90 iron supplement tablets during pregnancy. Baseline: 38.1 (2018). Target: 50 (2023).

47. Rationale. Indonesia has faced a nutrition crisis. According to the 2018 National Health Survey, 30.8 percent of Indonesian children under 5 years of age were stunted and prior to this survey, Indonesia had witnessed a stagnant stunting rate of over 37 percent in the decade before. Though stunting has declined steadily since then to 24.4 percent now (SSGBI, 2021), it still remains at levels comparable with low-income countries. Micronutrient deficiency issues are also very prevalent, especially with regard to nutrients such as iron and zinc. In 2019, 44 percent of all pregnant women suffered from anemia. These maternal nutrition and childhood stunting issues are most pertinent among some of the most vulnerable population groups, such as low-income households. Childhood stunting has life-long consequences. Interventions that help reduce stunting and micronutrient deficiencies can have very high economic returns, and their targeting to the poorest population groups can be equity-enhancing.

48. To address the nutrition crisis, Indonesia initiated the National Strategy to Accelerate Stunting Reduction (*Stranas* Stunting) in 2017, with the President including it as one of 16 National Priority Projects. The *Stranas* Stunting adopted a multisectoral approach that committed 23 ministries to increase the impact of almost US$4 billion (equivalent) of government spending each year on nutrition-specific and nutrition-sensitive interventions and services. The strategy was designed to address key constraints comprehensively and multisectorally by strengthening the execution and quality of anti-stunting programs across sectors. *Stranas* stunting aims to raise public awareness of stunting, secure nationwide commitments to stunting reduction, and deliver priority nutrition interventions across all levels of government. It increases the nutrition emphasis of sectoral programs by enhancing early childhood education and development services, increasing the nutrition benefits of the flagship food assistance program, and augmenting the scale and intensity of demand-side behavior change communication programs. The World Bank has been a key partner in the government's efforts to develop, implement and formalize the *Stranas* Stunting. World Bank ASA provided analytical underpinnings for the development of *Stranas* Stunting, built on a knowledge base of Indonesian and global lessons, and the formalization and implementation of the strategy has been closely supported by the Investing in Nutrition and Early Years (INEY) PforR and complementary ASA.

[23] Examples of actions that will materially improve climate change adaption include the mitigation of climate-change-induced food security challenges through improved financial and human resources for nutrition, the timelier treatment of climate-change-induced illnesses through telemedicine, and the better management of vulnerabilities to climate-change-induced income shocks through unemployment insurance. With regard to climate change mitigation, net reductions in greenhouse gas emissions are expected from reduced travel to seek healthcare due to telemedicine and a reduction of the significant environmental footprint of cigarette consumption.

49. **COVID-19 and the quick nationwide scale-up of *Stranas* Stunting from 260 districts in 2020 to all 514 districts have necessitated attention to addressing underlying challenges**. In particular, the absence of formal governance arrangements, institutional roles and mandates of the anti-stunting program had contributed to some duplications, inconsistencies and inefficiencies, as well as a reliance on individual champions and periods of uncertainty during personnel transitions, and questions regarding the long-term sustainability of the program.

50. **Stunting and malnutrition in Indonesia have significant gender dimensions**. Maternal health status including prevalence of anemia is a critical determinant of stunting: Maternal health in Indonesia, while improving, stands out as an area where gender inequality continues to affect the life chances of girls and women. Indonesia's maternal mortality ratio (MMR) at 177 deaths per 100,000 live births continues to be one of the highest in the EAP region.[24] Maternal anemia places mothers at increased risk of death during and after childbirth and increases risks of neonatal mortality. Micronutrient supplementation – including iron and folic acid supplementation – for pregnant women reduces the risk of anemia, stunting and other health problems but women's and girls' consumption of these supplements is still lacking in Indonesia. According to the Heath Ministry's 2018 study, only 38.1 percent of pregnant women consumed 90 or more tablets. Women's social and economic status is also important with respect to stunting including women's level of education, influence over household decision-making over resources (including income and food) and economic participation.

51. **A global model[25] shows that stunting will increase as climate change increases, with a greater proportion of the burden falling on rural areas, and larger increases in severe stunting in comparison with moderate stunting in the poverty scenarios**. Another India-specific model[26] illustrates that the odds of a child suffering from stunting increases by 32 percent, wasting by 42 percent, underweight by 45 percent, and anemia by 63 percent if the child belongs to a district where agriculture is categorized as very highly vulnerable to climate change when compared to those districts where agriculture's climate vulnerability was categorized as very low. In sum, this prior action plays a very important part in supporting climate change adaptation of some of the most vulnerable population groups.

52. **Substance.** Prior Action 1 supports the introduction of regulations to formalize governance arrangements, institutional roles and mandates of central ministries and agencies as well as districts and villages underpinning the expansion of Indonesia's anti-stunting program. This implies a reduction of duplications, inconsistencies and inefficiencies, as well as less reliance on individual champions which creates periods of uncertainty during personnel transitions Aspects formally covered in the Presidential Regulation No. 72/2021 include objectives, target groups, coordination arrangements including terms of reference for a Stunting Acceleration Committee with a Steering Sub-Committee led by the Vice President and an Implementation Sub-Committee led by the Head of the National Population and Family Planning Agency, and a monitoring, evaluation framework and reporting framework with detailed provisions including on data collection and sharing arrangements. Primary responsibility for the delivery of most nutrition interventions lies with Indonesia's 514 districts while the central government is tasked with the provision of select inputs as well as capacity development and oversight. Indonesia's 75,000 villages, also play an important role in supporting the reform.

53. **The formalized and nationally-expanded anti-stunting program specifically targets pregnant women and adolescent girls as priority groups, including by supporting food fortification and by scaling up the provision of iron-**

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[24] Countries in the East Asia and Pacific region had an average maternal mortality ratio of 69 deaths per 100,000 live births in 2017.
[25] Lloyd *et al.* (2018).
[26] Mahapatra *et al.* (2021).

folate supplement tablets to pregnant women and adolescent girls, and through setting targets for expanded iron-folate supplement consumption amongst these groups. This will occur through the provision of support to local governments, commitments from district governments nationwide, and a central government commitment to make trained nutrition workers available in each village. In addition, food security and nutrition related actions in the Presidential Regulations No. 72/2021 are particularly important for people and communities who face climate change impact in the form of natural disasters and crop failures, and help in their adaptation to such episodes from the food insecurity and malnutrition they would face otherwise.

54. Expected impact. Through the formalization of the governance arrangements, institutional roles and mandates underpinning the expansion of the anti-stunting program, the reform supported by Prior Action 1 is expected to overcome critical governance, management, and accountability challenges for anti-stunting efforts, through less duplications, inconsistencies and inefficiencies, reduced reliance on individual champions, and greater certainty of the long-term sustainability of the program. The focus on pregnant women and adolescent girls in sectoral interventions at the national level, and as part of the district and village level anti-stunting actions, will help address the gender gap in micronutrient deficiencies including with regard to consumption of iron supplements tables (with the percentage of pregnant women taking a minimum of 90 iron supplement tablets during pregnancy expected to increase from 38.1 percent in 2018 to 50 percent in 2023), reduce the incidence of anemia and more generally improve maternal health, and help reduce the prevalence of undernutrition among children. All 514 districts are expected to implement interventions that will enable households with women and children in the first 1000 days of life to receive a full package of multisectoral services in areas such as maternal, infant and young child nutrition, early childhood care, health, and WASH behaviors. Ultimately, the reforms are expected to contribute to more optimal child linear growth and achievement of the RPJMN target of a stunting prevalence of 14 percent in 2024. The reform is also expected to effectively address climate-induced and climate-amplified undernutrition and stunting.

- **Prior Action 2**: To reduce the health and economic burden of tuberculosis (TB), the Borrower through the MoH has institutionalized a comprehensive and integrated TB control program with formal governance arrangements including a high-level multistakeholder oversight mechanism, specific institutional roles and mandates, and a monitoring and evaluation framework that tracks performance at all levels of the government, as evidenced by Presidential Regulation No. 67/2021.
- **Result Indicator:** Percentage of new and relapse cases diagnosed and treated in the TB control program. Baseline: 42 (2020). Target: 60 (2023).

55. Rationale. In parallel, the prevalence of certain communicable diseases remains high, in particular the very high burden of TB, with stark implications for the Indonesian population's health and for the productive use of its human capital and economic growth. While there is an important case for increased spending on TB, recent World Bank analysis finds that even much higher levels of spending would not allow Indonesia to reach its own TB-related targets without significant improvements in the quality of service delivery along the entire TB service delivery cascade from testing to diagnosis to treatment to follow-up. Even before the COVID-19 pandemic this cascade showed significant gaps with an estimated 28 percent of all active TB cases remaining undiagnosed and only 34 percent successfully treated without a relapse within two years.[27] A lack of high-level attention to this challenge, clarity and accountability for specific institutional roles and mandates beyond the disease control program team, and of a monitoring and evaluation framework established by statute, have previously been key constraints to shorten the time to diagnosis, ensure protocol-based treatment, and verify treatment success. COVID-19 has further aggravated the situation by disrupting access to essential health services, with TB taking the worst hit among all programs. Staff adept at tracking and tracing and lab testing capacity were redeployed to the pandemic, and the situation was worsened by supply disruptions and patients'

[27] Hafez *et al.* (2020)

hesitancy to seek treatment. As a result, between 2019 and 2020 the number of TB notifications decreased by 31 percent.[28] Service disruptions could lead to 270,000 additional active TB infections and 36,000 additional TB-related deaths by the end of 2024.[29]

56. Substance. Prior Action 2 will support the accelerated recovery of the TB control program from the disruption created by the COVID-10 pandemic, through the institutionalization of a comprehensive, multisectoral and integrated regulatory mechanism. This new regulation introduces oversight and governance arrangements at the center of government, including terms of reference for a Steering Committee chaired by the Coordinating Minister for Human Development and Cultural Affairs and including the Coordinating Minister for Political, Legal and Security Affairs and the Coordinating Minister for Economic Affairs to ensure the multisectoral coordination needed for an increased pace of TB control. It also specifies specific institutional roles and mandates including budgetary arrangements as well as a monitoring and evaluation framework that tracks performance at all levels of government and creates accountability at the subnational level. This institutionalization of a comprehensive and integrated regulatory mechanism with these mutually reinforcing features implies a reduction of duplications, inconsistencies and inefficiencies, as well as less reliance on individual champions which creates periods of uncertainty during personnel transitions. It also enables priority attention to service readiness at the subnational level, a key limiting factor to scale-up efforts to reduce the medical and economic burden of TB.

57. Expected impact. The institutionalization of a comprehensive, multisectoral and integrated regulatory mechanism for the TB control program supported by Prior Action 2 is expected to improve the quality of service delivery along the entire TB service delivery cascade from testing to diagnosis to treatment to follow-up and accelerate the recovery from the disruption created by the COVID-10 pandemic. One key expected outcome will be an increase in the TB treatment coverage ratio which the WHO defines as the percentage of new and relapse TB cases diagnosed and treated in a country's TB control program. A higher TB treatment coverage ratio will be a key pre-condition for achieving the government's ambitious medium-term targets set out in the monitoring and evaluation framework of Presidential Regulation No. 67/2021, which are to reduce the incidence of TB per 100,000 individuals from 301 in 2020 to 65 in 2030 and the mortality rate due to TB per 100,000 population from 36 in 2020 to six in 2030. In turn, an achievement of these targets is expected to lead to a significant increase in the productive use of Indonesia's human capital and the country's economic well-being: Based on a business-as-usual scenario that will see a continuation of pre-pandemic trends, some estimates suggest that TB will cost Indonesia up to US$ 76 billion in 2030 (in 2018 US$). In contrast, if the number of TB deaths in 2030 will be 90 percent lower than in 2015 in line with the Sustainable Development Goals, the cost in 2030 would be reduced by 85 percent.[30]

- **Prior Action 3:** To facilitate improved access to healthcare in remote areas and in emergency situations, the Borrower through the MoH has (i) standardized the practice of telemedicine and (ii) provided detailed regulatory guidelines to be followed by public and private sector entities that provide health services through telemedicine during the Covid-19 pandemic, as evidenced by MoH Decree No. 4829/2021.
- **Result Indicator:** Percentage of households that have ever used telemedicine for their health needs. Baseline: 1 (2019). Target: 8 (2023).

58. Rationale. Key supply-side challenges to improving the equity and quality of health services in Indonesia include a lack of trained medical workers, especially medical doctors and specialists, and this is particularly challenging in remote

[28] WHO (2021a).
[29] Martin-Hughes *et al.* (2022).
[30] Silva *et al.* (2021).

areas of the country where health outcomes are significantly worse than in urban centers. The COVID-19 pandemic has also created demand-side challenges, with mobility restrictions and hesitation to visit health facilities. Extreme weather events and climate change can also disrupt access to health facilities and health services as most rural areas in Indonesia are highly vulnerable to the impacts of climate change. Legal and regulatory hurdles have previously prevented Indonesia from reaping the significant benefits offered by the newly developing field of telemedicine – where it may be possible to achieve significant efficiency gains by utilizing offsite and even offshore human resources, amidst existing in-country shortages and distribution challenges which disproportionately affect the poorer quintiles of the population and those living in rural and remote areas. Not only does Indonesia have a challenge with fewer specialists per unit of population, there is also very large variation in their distribution within the country, that compounds access issues. Despite an internet penetration that exceeds 73 percent,[31] the availability and utilization of telemedicine has been negligible and nowhere near its full potential. Telemedicine can enable, for example, a much greater access to ultrasound scans during pregnancy, especially for some of the most remote and vulnerable population groups, thereby improving neonatal and maternal health outcomes. Likewise, timely interpretation of an echocardiogram, undertaken remotely, can help save lives through timely initiation of treatment for cardiac arrests.

59. **Substance.** Through the support to regulations that facilitate recognition for climate-resilient telemedicine in Indonesia, Prior Action 3 will improve the availability, affordability and increased quality of health services. It will make it possible to tap into professional services that can be provided in different parts of Indonesia, including rural and remote areas. Many ingredients for a successful rollout of telemedicine across the health system already exist – a high internet penetration throughout the country, improving availability of fourth generation (4G) bandwidth in smaller towns and even in villages, and a tech-savvy workforce where many health workers already use smartphones for other mobile apps rolled out in the health sector. Against this backdrop, regulatory reform will increase the availability of telemedicine and help in avoiding service disruptions when climate and other disasters occur, re-enabling access to key health services. This clear regulatory environment that provides the legal basis for the use of telemedicine validates online consultations and digital prescriptions, prescribes mechanisms and modalities for transmission of data for diagnostics and clinical assessments, and lays down the requirements for data privacy. Thus, it encourages investments in the sector and promotes structured growth of the industry. While the relevant Ministry of Health (MoH) Decree No. 4829/2021 was introduced in the context of COVID-19, this decree now provides the legal basis for telemedicine providers to undertake their business in the country, and has led to existing and new operators scaling up their services in more geographies.

60. **Expected impact**. A clear regulatory framework for telemedicine will help in improving access to health services, especially for remote areas. It is expected that with the regulatory framework the percentage of households that have ever used telemedicine for their health needs will increase significantly from a very low baseline of 1 percent in 2019 to 8 percent in 2022. Successive World Bank high-frequency (HiFy) surveys show that benefits from telemedicine are not restricted to those in economic centers. In October 2021, usage rates were between 5 percent and 10 percent in all broad regions: DKI Jakarta, the rest of Java/Bali, and the remainder of Indonesia. While the surveys have some challenges with small sample size and statistical power which warrant continued monitoring of the situation, there are also indications that usage is becoming more widespread. For instance, between 2020 and 2021, there was a disproportionate increase of telemedicine use among those living in rural areas.[32] Expanded and improved telemedicine is also expected to reduce health service disruptions due to extreme weather events and prolonged climate crises and will also improve Indonesia's capacity to support families to cope with unforeseen health shocks that are induced or exacerbated by climate change – such as climate-sensitive communicable diseases; heat stroke and heat exhaustion; and diarrhea, typhoid, and cholera due to increased flooding. In addition, climate mitigation benefits from a net reduction in greenhouse gas emissions in

[31] Indonesian Internet Service Providers Association (2020).
[32] World Bank staff calculations based on HiFy surveys in November 2020 and October 2021.

the health sector are expected from reduced travel to seek healthcare, lower levels of hospitalization due to preventative interventions and the timely provision of care virtually by telemedicine, rather than driving to a health-point or hospital.

61. Pillar B of this DPL is about *Protecting existing human capital investments.*

- **Prior Action 4:** To discourage smoking and use of tobacco, the Borrower through the MOF has: (i) increased the average rate of excise taxes for machine-made cigarettes by at least 12 percentage points; (ii) simplified the tobacco classification for white and *kretek* (clove) cigarettes by reducing the number of tiers from 10 to 8, and (iii) introduced specific taxes on non-combusted tobacco products including e-cigarettes, as evidenced by MOF Regulation No. 192/2021 and MOF Regulation No. 193/2021.
- **Result Indicator:** Percentage of GDP per capita per day required to purchase 20 cigarettes at average retail sales price. Baseline: 11.3 (2019). Target: 13.78 (2023).

62. Rationale. Smoking prevalence in Indonesia remains high and has risen in recent years. An estimated 68.1 percent of adult Indonesian men smoke, the highest rate in the world. Indonesian youth are starting to smoke younger and younger, which is opposite to the trends being seen elsewhere in the world. While smoking among women is low, exposure to second-hand smoke is common, posing health risks to non-smokers. Easy access and low cigarette prices fuel tobacco use. A package of cigarettes in Indonesia can be bought for less than the equivalent of US$ 1, among the lowest in the world. Indonesia's five leading causes of death are all tobacco-related, including ischemic heart disease, cerebrovascular disease, tuberculosis, diabetes, and chronic respiratory diseases.[33] The economic cost of smoking in Indonesia is high. Smoking-attributable health expenditure in Indonesia is estimated at about US$ 1.2 billion per year.[34] The indirect economic costs are estimated to amount to about US$ 6.8 billion.[35] The economic burden of smoking falls hardest on low-income smokers who risk impoverishment due to loss of income and high out-of-pocket payments for the treatment of tobacco-related diseases.

63. Substance. Prior Action 4 will support government action in the area of taxation to discourage smoking to protect human capital. Such action will be needed to reduce smoking prevalence and reduce the health and economic burden of tobacco-related illnesses/non-communicable diseases. More specifically, Prior Action 4 will support an increase in the taxes levied on tobacco products – depending on the precise tax classification tiers, taxes for machine-made cigarettes are increasing from between IDR550 to IDR935 per stick to between IDR600 and IDR1,065 – and the simplification in the number of tiers from the current ten tiers to eight. This will reduce distortions and potential gaming that is possible with the proliferation of tax classification tiers in the current tobacco taxation system, also favoring handmade *kretek* (clove) cigarettes. The revised taxation system will also introduce specific taxes on non-combusted tobacco formulations such as e-cigarettes. Together, these tax reforms will particularly discourage the use of tobacco products by a younger target audience which is known to be more price-sensitive. The reforms supported by Prior Action 4 will also be complemented by further administrative measures such as a double-digit increase in the minimum retail price for almost all types of cigarettes. To contain the use of tobacco even further, Indonesia will also need to consider complementary, non-tax measures including banning advertisements for tobacco products and considering more effective bans on smoking in public places.

64. Expected impact. The 2022 revision in tobacco taxes is uniquely multi-dimensional, and comes on top of steady increases in tobacco taxes in the last two years. The increase in specific cigarette taxes in 2022 has resulted in more than

[33] Institute for Health Metrics and Evaluation (IHME) (2017).
[34] Barber *et al.* (2008).
[35] Kosen (2009).

12 percent increase in machine-made cigarette excise, as well as a more than 12 percent increase in the minimum price of most types of cigarettes, which is expected to reduce consumption (especially initiation of smoking) among price-sensitive segments of the population. As per MoF estimates, the tax increase will[36]significantly reduce affordability of cigarettes and therefore reduce cigarette demand by about 3 percent, bring down child smoking rates from 8.97 percent to 8.83 percent, and yet increase government revenue. Similarly, World Bank simulations show that raising cigarette taxes by an average of 12 percent will increase cigarette prices by an average of 5 percent. While the reform will also reduce gross employment in tobacco manufacturing, the reduction only amounts to 0.43 percent, and these simulations also do not even consider the creation of jobs in other sectors due to the shift in consumers' spending away from tobacco. Also importantly, the simulated total household income loss from reduced employment in the handmade industry will amount to only 0.16 percent of the revenue gain that Indonesia will obtain by increasing cigarette taxes (Rp 10,916 billion in one scenario).[37]

65. Prior Actions 2 to 4 have been informed by an extensive body of World Bank ASA work and close policy dialogue with the government. The ASA work has evaluated the health service delivery challenges in the remote parts of Indonesia, recommendations for and quantitative implications of improving TB control, and the challenges created by the very high (and increasing) consumption of tobacco in the country. The World Bank will continue to undertake relevant ASA work, including to explore telemedicine-driven service delivery innovations to inform the policy directions of the MoH in further improving the access and quality of health services, and thereby health outcomes, in lagging regions of Indonesia.

- **Prior Action 5:** To protect workers' income in the case of unemployment, the Borrower through the MoM has established an unemployment insurance scheme based on mutual obligations principle, establishing procedures and conditions for the provision of cash benefit, job training and job-search support, as evidenced by MoM Regulation No. 15/2021.
- **Result Indicator:** Percentage of eligible salaried employees covered by unemployment insurance. Baseline: 0 (2020). Endline: 52.7 (2022).

66. Rationale. Until recently, Indonesia did not have an unemployment insurance scheme. This left workers unprotected in the case of job loss and meant the JHT defined contributions pension scheme has become a *de facto* severance pay scheme, threatening adequacy of retirement savings. To address this significant challenge, the introduction of an unemployment insurance scheme has been one of the key reform initiatives in the area of social insurance.

67. Substance. Prior Action 5 will support the introduction of JKP unemployment insurance to help workers cope with an increasingly dynamic labor market, while assuring that (i) JKP introduces 'mutual obligations' that require regular job search and reporting to the system by beneficiaries to receive benefits[38] and (ii) the benefits offered under JKP encompass cash, access to labor market information, and access to training, in line with international practices. Key parameters of JKP such as contribution rate and financing are set out in detail in implementing regulations by the Ministry of Manpower and Ministry of Finance[39] that will be reviewed regularly to monitor impacts on employment, equity, and sustainability.

[36] MoF defines affordability as the percentage of GDP per capita per day required to purchase 20 cigarettes at average retail sales price. This is closely aligned with the definition by WHO (2021b). WHO (2021b) also highlights that only nominal tobacco tax increases that make tobacco products less affordable as compared to GDP per capita or a similar yardstick are likely to reduce consumption.
[37] World Bank (2018b).
[38] Mutual obligation requirements are designed to ensure that unemployed people receiving activity tested income support payments are actively looking for work and participating in activities that will help them into employment.
[39] Ministry of Manpower Regulation 15/2021 on Procedures for JKP benefits provision; Ministry of Finance Ministerial Regulation 148/2021 on procedures for allocation, disbursement, utilization and accountability of initial fund and accumulated contribution for JKP.

The provision of training and employment support benefits under JKP will have to be rolled out gradually, in line with increasing capacity to provide services and to monitor compliance, but it is essential that implementing regulations provide the right policy framework early on. These measures are expected to play a role in supporting workers facing increasingly rapid labor market changes, including job losses triggered by the energy transition and climate-induced disasters.

68. **Expected impact.** The introduction of unemployment insurance that includes support for reemployment will help households manage income shocks while minimizing unemployment spells. Within a couple of years, it is expected that about 14 million salaried employees will be registered in BPJS, contribute to JKP and be covered in the event of unemployment. This will represent a coverage of JKP among eligible salaried employees, that is those already registered in BPJS, of 75 percent. The combination of cash, training and employment support services will make it easier to seek opportunities to re-skill and to find new jobs more quickly, thus increasing the productivity of the workforce. The introduction of unemployment insurance will also result in strengthened climate change resilience and adaptation capacity in the face of climate-change induced or other broad-based shocks that result in job losses, increased equity, and more effective and productive deployment of human capital.

Table 6: Development Policy Financing (DPF) Prior Actions and Analytical Underpinnings

Prior Actions	Analytical Underpinnings
Pillar A: Improving the effectiveness of public spending for human capital	
Prior Action 1: To improve nutrition of pregnant women and decrease childhood stunting across Indonesia, the Borrower has introduced a regulation to formalize the governance arrangements, institutional roles and mandates of central ministries and agencies as well as districts and villages underpinning the expansion of the anti-stunting program, as evidenced by Presidential Regulation No. 72/2021.	‘Upgraded. Indonesia Economic Quarterly’ (World Bank 2017) highlighted the disconnect between Indonesia’s multitude of programs targeting the early years on the one hand and the widespread gaps and inequities in stunting levels, on the other. The report also highlighted the long-term implications of stunting for adult height, cognitive ability, and labor market outcomes. The report recommended coordinated action across government, including: securing political commitment at the highest level; establishing and formalizing a national priority program to coordinate existing initiatives; using fiscal transfer instruments to direct more district and village spending toward early childhood interventions; and aligning incentives across stakeholders. The flagship report ‘Aiming High: Indonesia's Ambition to Reduce Stunting’ (World Bank 2018a) similarly focused on the actions required to reduce stunting across Indonesia. These include specific actions from the central government to districts and villages, such as: elicit commitments of district governments to finance and implement priority programs for stunting reductions; introducing a results-based fiscal transfer to districts for stunting reduction; and developing a national monitoring and evaluation system. Both reports highlight the importance of formalizing the governance arrangements, institutional roles and mandates as the anti-stunting program is gradually rolled out these actions across all districts of Indonesia.
Prior Action 2: To reduce the health and economic burden of tuberculosis (TB), the Borrower through the MoH has institutionalized a comprehensive and integrated TB control program with formal governance arrangements including a high-level multistakeholder oversight mechanism, specific institutional roles and mandates, and a	‘Tuberculosis in Indonesia: Endemic Projections and Opportunities to Accelerate’ (Hafez et al. 2020) uses the Optima TB mathematical optimization model to determine which resource allocation will have the maximum impact and which gaps in the TB treatment cascade offer the greatest scope for improvement. The report finds that controlling TB in Indonesia will require not only that the government spends more on TB (with an annual funding gap of US$ 83 million) but also that it spends it better. Without systemic changes in TB service delivery, even a four-fold increase in funding would still leave an achievement gap of 40 percent for TB incidence and of 28 percent for TB-related deaths relative to targets – due

monitoring and evaluation framework that tracks performance at all levels of the government, as evidenced by Presidential Regulation No. 67/2021.	to inefficiencies in program implementation. In addition, 'Impacts of COVID-19-Related Service Disruptions on TB Incidence and Deaths in Indonesia, Kyrgyzstan, Malawi, Mozambique, and Peru: Implications for National TB Responses' (Martin-Hughes et al. 2022) highlights the importance of catch-up interventions as well as of proactively maintaining TB service availability under a range of scenarios.
Prior Action 3: To facilitate improved access to healthcare in remote areas and in emergency situations, the Borrower through the MoH has (i) standardized the practice of telemedicine and (ii) provided detailed regulatory guidelines to be followed by public and private sector entities that provide health services through telemedicine during the Covid-19 pandemic, as evidenced by MoH Decree No. 4829/2021.	The regional disparities in health outcomes were highlighted in the health chapter of the World Bank's Public Expenditure Review (World Bank 2020c). 'Towards Inclusive Economic Growth. Indonesia Economic Quarterly' (World Bank 2018c) argued that effective policies that promote inclusive growth, such as enhancing the connectivity of remote areas, will both reduce inequality and promote growth, and improvements in supply-side readiness and quality of services across health facilities will improve health outcomes in remote areas. The persistently low and unevenly distributed quantity and quality of health services in Indonesia has also been limiting the effective availability of health services, as documented in the 'Indonesia Health Financing System Assessment' (Pinto *et al.* 2016). A recent World Bank policy brief on 'Health Services Trade and the COVID-19 Pandemic' (Gilson *et al.* 2020) also noted that restrictions to telemedicine such as administrative restrictions and privacy protection limit the provision of these services, and can be a significant constraint. The policy brief also adds that a sound legal framework for telemedicine is key to supporting the free flow of data, protect privacy and security, and overall provide a trusted environment for digital exchanges.
Pillar B: Protecting existing human capital investments	
Prior Action 4: To discourage smoking and use of tobacco, the Borrower through the MoF has: (i) increased the average rate of excise taxes for machine-made cigarettes by at least 12 percentage points; (ii) simplified the tobacco classification for white and *kretek* (clove) cigarettes by reducing the number of tiers from 10 to 8, and (iii) introduced specific taxes on non-combusted tobacco products including e-cigarettes, as evidenced by MoF Regulation No. 192/2021 and MoF Regulation No. 193/2021.	An extensive body of work by the World Bank highlights the magnitude of the impact of tobacco consumption on health outcomes in Indonesia, including 'The Economics of Tobacco Employment and Taxation in Indonesia' (World Bank 2018b), and how raising tobacco taxes would create favorable distribution effects and reduce tobacco consumption without a major impact on employment, such as 'Distributional Effects of Tobacco Taxation: Evidence from White and Clove Cigarettes in Indonesia' (Fuchs and Del Carmen 2018), in addition to a series of studies on the economics of tobacco farming, glove farming and *kretek* rolling in Indonesia, for instance World Bank (2018b). In addition, research including 'Cigarette Affordability in Indonesia: 2002-2017.' (Zheng *et al.* 2018) shows that Indonesia has one of the world's lowest cigarette prices and is also seeing an increasing number of adult and child smokers, for which raising tobacco taxes and simplification of the tiers within the current tobacco taxation system would be important.
Prior Action 5: To protect workers' income in the case of unemployment, the Borrower through the MoM has established an unemployment insurance scheme based on mutual obligations principle establishing procedures and conditions for the provision of cash benefit, job training and job-search support, as evidenced by MOM Regulation No. 15/2021.	'Investing in People: Social Protection for Indonesia's 2045 Vision' (World Bank 2020d) recommends the introduction of a modern unemployment benefit system. The report highlights how international experiences shows the importance of ensuring a modern, comprehensive approach that relies on the mutual obligation principle to link unemployment benefit reception to a centrally administered model of job search support to improve the quality of labor market matches. As also argued by World Bank (2020), providing more predictable income and transition support to workers facing unemployment spells will continue to increase in importance, as the nature of work evolves with automation and changes in labor demand.

4.3. LINK TO COUNTRY PARTNERSHIP FRAMEWORK (CPF), OTHER BANK OPERATIONS AND THE WORLD BANK GROUP STRATEGY

69. **The proposed DPL is fully aligned with the World Bank Country Partnership Framework for Indonesia for Fiscal Year 21–Fiscal Year 25 (FY21 - FY25).**[40] The proposed DPL directly contributes to the third CPF engagement area on nurturing human capital and its specific objectives strengthen quality and equity in nutrition and health and strengthen inclusiveness and responsiveness of social and worker protection.

70. **The proposed DPL builds on lessons learned from previous Development Policy Operations (DPOs), both in Indonesia and internationally.** For example, both the Rwanda First Programmatic Human Capital for Inclusive Growth DPF (P171554) and Madagascar's Investing in Human Capital DPF (P168697) had prior actions related to stunting reduction and social protection. The experience in Madagascar showed the importance of complementarity ASA work, and of collaborating with other donors. Other DPLs in Indonesia, namely the Fiscal Reform Development Policy Loans series from 2016 to 2019, demonstrated the importance of closely linking prior actions to the achievement of the PDO. The Implementation Completion and Results Report of this DPL also noted the importance of ASA and TA activities to support achievement of the objectives, and that the design of DPLs should rest on a vision and strategy that reflects high-impact priorities. Finally, it was noted that reforms that support existing government efforts and are evidence-based are more likely to succeed.

71. **Taking advantage of the window of opportunity presented by the government's strong human capital reform program with several meaningful one-off policy actions that achieve results with a direct impact on the ground, the proposed DPL is designed as a stand-alone operation.** While a programmatic operation was considered a decision was taken to pursue a standalone DPL at the request of the government. Accordingly, the proposed DPL as a standalone operation supports meaningful policy actions with a direct impact on the ground and is supported by a portfolio of sectoral operations/PASAs that will continue to provide implementation support in the medium term. Examples of a direct impact on the ground include the expansion of anti-stunting interventions across Indonesia of Prior Action 1 which includes governance arrangements, institutional roles and mandates of central ministries and agencies as well as districts and villages that secure the meaningful implementation of this policy action. Similarly, Prior Action 3 supports both the standardization of the practice of telemedicine and the provision of a detailed regulatory framework for practical implementation while Prior Action 5 encompasses both the establishment of the unemployment insurance scheme and the issuance of procedures for the provision of cash benefits, training and job-search support.

72. **The sustainability of all policy actions supported by this DPL and the government's broader reform policies is further fostered by current and pipeline World Bank operations and PASAs in health, nutrition and social protection.** Sustainability of Prior Action 1 is fostered through the Investing in Nutrition and Early Years Program for Results (PforR) (P164686) and the Support for Strengthening Multisectoral Responses to Nutrition (P163590) PASA. The PforR supports an integrated approach to intersectoral coordination and governance of Indonesia's nutrition policies. A pipeline Strengthening National Tuberculosis Response operation (P178517) will support Prior Action 3 by improving the coverage and quality of TB interventions while for Prior Action 3 a pipeline operation on Innovations in Health Service Delivery will build upon the telemedicine regulations and enable improved access to health services in the remote parts of Indonesia. Analytical and advisory engagements will support Prior Action 4 and continued progress with tobacco tax reform. For Prior Action 5, analytics and advisory work to support unemployment insurance strengthening, including an evaluation of the initial implementation of JKP, is planned within the Social Protection Reform PASA (P177341).

[40] World Bank (2021d).

73. The DPL complements other Bank operations and PASAs that support the government's larger human capital development reform program as defined by the RPJMN. The larger human capital development reform program in particular includes (i) education where the government has embarked on an ambitious reform agenda in areas such as teacher hiring, teacher training and student assessment and which the Bank has supported through a series of PASAs[41] and where the Realizing Education's Promise (P168076) Investment Project Financing (IPF) has been contributing to improving the management of primary and secondary education services under the Ministry of Religious Affairs, (iii) the broader social insurance agenda, including high-profile measures to accelerate the coverage expansion of employment social insurance such as Presidential Instruction No. 2/2021 which the Bank has supported through a series of PASAs, (ii) social assistance which is particularly important for those poor and vulnerable that remain outside of the formal sector, and where complementary support is provided by the Social Assistance Reform Program PforR (P160665) which supports the coverage expansion of Indonesia's flagship conditional cash transfer program (*Program Keluarga Harapan*) and the strengthening of the social registry and delivery systems, and (iii) skills development where the pipeline Indonesia Skills Project (P166693) will include activities to strengthen the labor market information system and services, also needed for effective implementation of the JKP.[42]

4.4. CONSULTATIONS AND COLLABORATION WITH DEVELOPMENT PARTNERS

74. The government has conducted in-depth consultations with internal stakeholders on the reform program. Given the number of government agencies involved in the reform program and the related coordination challenges, in-depth consultations on the proposed DPL and its matrix of reforms have been undertaken with both high-level decision makers and technical experts from all relevant ministries and agencies. The Coordinating Ministry of Human Development and Culture (Kemenko PMK) was selected as the executing agency for the proposed DPL given its function to coordinate, synchronize and control relevant government policies – as for instance evidenced by the government's Human Capital Development Master Plan 2020-2045 under preparation, which like the proposed DPL also follows a life cycle approach. As executing agency, Kemenko PMK will take on a leading role in the monitoring and accountability of the reform program supported by the proposed DPL. Given the MoF's central role within the government and key interest in crucial aspects of the reform program such as those related to excise taxes, the World Bank has also closely coordinated all aspects of the proposed DPL with this Ministry.

75. The government has conducted extensive consultations on the reform program with external stakeholders. Given the variety of stakeholders involved in the reform program supported by the proposed DPL, there have not been dedicated consultations with external stakeholder on the proposed DPL. Instead, there have been consultations both on Indonesia's human capital development strategies and different aspects of the reform program that have involved relevant stakeholders such as communities, workers and employers, and their representatives. For instance, in formulating the regulation on unemployment regulations, the MoM consulted workers, employers, and the general public. Oftentimes, focus group discussions and other public and semi-public for a were organized before the draft

[41] The World Bank has supported the design of both new assessments for teachers and students as well as the underpinning analysis. Through the *Supporting Twelve Years of Quality Education for All* PASA (P157380), global knowledge on the importance, the political economy and the implementation of student assessment and teacher selection reforms were shared with the government. Workshops on the technical design of national student assessments supported MoECRT to create the new exams through the *Learning for Human Capital Development* PASA (P174815). The broader reform package 'Merdeka Belajar' brings together major improvements to the teacher selection and student assessment objectives advocated in the flagship report 'The Promise of Education in Indonesia' (World Bank 2020e).

[42] Other complementary ongoing and pipeline operations include the Investment and Trade Reforms DPL (P172439), the Supporting Primary Healthcare Reform (P164277) PforR, the Emergency Response to COVID-19 (P173843) PforR, and the Financial Sector Reform DPL Series. The proposed third operation of the Financial Sector Reform DPL Series (P173233), planned for Q2FY23, is expected to incentivize contributions to and disincentivize withdrawals from pension and old-age savings, which will strengthen workers' income protection.

regulations were published. Consultations with external stakeholders have confirmed a broad support towards the objectives of the different lines of reform.

76. **The proposed DPL also draws on consultations conducted by the World Bank with various stakeholders including relevant development partners.** The proposed DPL is a key activity in the World Bank CPF for FY21–FY25 as part of the CPF's Engagement Area 3: Nurturing Human Capital. As such, it has undergone several rounds of consultations between September 2020 and March 2021 with a wide set of stakeholders, including from government, academia, civil society, the private sector, as well as development partners. These consultations are summarized in Annex 8 of the CPF. The annex highlights that '[v]irtually all stakeholders strongly supported the proposed CPF's focus on nurturing human capital for a modern economy. The support includes ensuring equity and quality of services in the health sector, addressing stunting, […].' The World Bank is also regularly consulting and engaging with private sector, civil society and community representatives as part of the implementation of several PASAs complementing and informing the proposed DPL.

77. **The reform program supported by the proposed DPL complements initiatives by key development partners, in particular the Asian Development Bank (ADB) and the Japan International Cooperation Agency (JICA).** Several rounds of consultations with the ADB have demonstrated strong alignment in the support of the Government of Indonesia's Reform Program. In particular, the ADB's Boosting Productivity through Human Capital Development Program policy-based loan supports a series of complementary reforms in the broader human capital space, and also two reform initiatives also supported by this DPL, namely to the improvement of nutrition outcomes during the early years and the establishment of an unemployment insurance scheme. In both cases, great care was taken to assure that the policy advice and support from the World Bank and ADB was consistent and focused on different or complementary aspects of the reform program. Consultations were also organized with the JICA as a key development partner active in the human capital space in Indonesia both as part of the annual JICA-World Bank Deep dive and at the country level.

5. OTHER DESIGN AND APPRAISAL ISSUES

5.1. POVERTY AND SOCIAL IMPACT

78. **As the reform program focuses on strengthening human capital, a central driver of sustainable growth and poverty reduction, the program's overall poverty and social impact is expected to be positive.** Reforms under both Pillar A and Pillar B play interlocking, complementary roles to improve human capital and increase productivity, empowering beneficiaries in the long run to participate in labor markets that are increasingly demanding workers with higher levels of human capital.

79. **By reducing inequality in early childhood experiences at, before, or immediately after birth, Prior Action 1 contributes to lowering inequality in ability, achievement, health, and adult success.[43]** Investments in the earliest years of childhood contribute most to elimination of extreme poverty, promotion of shared prosperity, and creation of human capital needed for economies to diversify and grow. Indonesians whose growth was stunted in childhood are shorter as young adults, exhibit lower cognitive function and spend fewer years in school.[44] Lower adult stature and cognitive ability

[43] Heckman (2007). Analyses of the long-term impact of early childhood interventions in the United States have quantified the long-term benefits of targeted investments early in life (Garcia *et al.* 2016). Cognitive ability in early childhood has been shown to influence labor market outcomes in adult life (Case and Paxson 2008). Small-scale studies in Guatemala (Stith *et al.* 2003), South Africa (Liddell and Rae 2001), and Jamaica (Walker *et al.* 2005) show that children with low levels of cognitive development in early childhood do poorly in school.
[44] Giles *et al.* (2017) and Perkins *et al.* (2016).

are in turn linked to lower earnings. Since rollout of Indonesia's *Stranas* Stunting, which Prior Action 1 further aims to support through formalizing the governance arrangements, institutional roles and mandates, the stunting rate declined by as much as 6.4 percentage points from 30.8 percent in 2018 to 24.4 percent in 2021.[45] By directly addressing the causes of stunting and mitigating the impact of adverse early environments that create inequalities in children's skills and abilities, Prior Action 1 helps shape productivity in the early years when the brain develops rapidly to build the foundation of cognitive and social skills that drive education and success in later life. The prior action will further interventions being implemented under the Investing in Nutrition and Early Years (P164686) project. The planning and delivery of these activities are informed by measures to enhance participation of Indigenous Peoples, as well as of vulnerable and or marginalized groups. Indeed, early childhood programs in rural Indonesia that included health and nutrition interventions have shown sustained positive impacts on child development, especially for children from more disadvantaged backgrounds.[46] Over time, this can contribute to higher economic productivity and lower social costs, reducing financial outlays.[47]

80. Prior Action 1 would also contribute to improving health outcomes among girls and women. Indonesia's high maternal mortality goes hand in hand with low use and quality of essential maternal and child health services.[48] Poor maternal diets impact growth of the fetus, increasing a child's risk of being born with low birth weight and developing chronic malnutrition. Other risks for poor health stem from social factors. Child malnutrition is linked to early marriage and adolescent pregnancy.[49] Prior Action 1 contributes to addressing each of these issues by: (i) improving the delivery of nutrition-specific interventions targeting maternal health; (ii) supporting incorporation of women's empowerment programs in *Stranas* Stunting's list of priority nutrition-sensitive interventions; (iii) improving men's participation in community nutrition counseling; and (iv) targeting early marriage and adolescent pregnancy.

81. Prior Action 2 is expected to further contribute to reducing socio-economic gaps in health outcomes. A recent joint monitoring report by the WHO and the Indonesian Ministry of Health notes that while TB can affect anyone, most patients in Indonesia are poor. In addition, the report notes that while absolute numbers are highest in urban areas and Java and Bali, in relative terms TB incidence and mortality are highest in the outer islands and remote provinces such as Papua and West Papua.[50] In spite of huge successes in the roll-out of JKN and overall reduction of out-of-pocket medical expenditures, TB also continues to impose a significant economic burden on affected households, especially among the poor, which further compounds access and adherence barriers. The incidence of catastrophic total costs in all TB-affected households is estimated at 36 percent, and at 43 percent among poor households.[51] Against this backdrop, the institutionalization of a comprehensive and integrated TB control program and concomitant improvements in service readiness at the subnational level are expected to primarily lessen the medical and economic burden of TB for those currently facing challenges in accessing TB services. That is, it is expected to primarily benefit the poor and those living in remote areas and outer islands.

82. Prior Action 3 fosters reductions in socioeconomic gaps in health outcomes. Access to health services is lower among the poor than among the non-poor, with the gap largest in rural Java-Bali.[52] Prior Action 3 contributes to improving

[45] MoH (2021).
[46] Brinkman *et al.* (2017). Evidence from around the globe also shows that high-quality early childhood programs, through their impacts on future learning, health, and ultimately income, can have large economic returns, especially for children from socially disadvantaged groups.
[47] Almond and Currie (2011), Cunha *et al.* (2006), Engle *et al.* (2011), Behrman and Urzua (2013), and Britto *et al.* (2013).
[48] Yap *et al.* (2017).
[49] Fall *et al.* (2015) and WHO, UNICEF, UNFPA, World Bank Group, and UNDP (2019).
[50] WHO and Ministry of Health (2020).
[51] *Fuady et al.* (2018).
[52] World Bank staff calculations using SUSENAS March 2020. Nationally, 41 percent of rural poor did not access outpatient healthcare in March 2020 when sick compared to 45 percent of those neither poor nor vulnerable. The gap rose to 7 percent in the rural Java-Bali region.

access to health services for all, including continuity of services during emergencies[53], by supporting expansion of telemedicine, which can play an important role in improving access to services among the underserved.[54] Use of online or phone consultations has remained extremely low in Indonesia, even during the COVID-19 pandemic, in part due to lack of trust in telemedicine.[55] The improved regulatory framework supported by Prior Action 3 would help address this.

83. **Successive World Bank HiFy surveys show that benefits from telemedicine are not restricted to well-off households in economic centers.** In October 2021, usage rates were between 5 percent and 10 percent in all broad regions: DKI Jakarta, the rest of Java/Bali, and the remainder of Indonesia. While the surveys have some challenges with small sample size and statistical power which warrant continued monitoring of the situation, there are also indications that usage is becoming more widespread. For instance, while the top 20 households in terms of income were relatively most likely to use telemedicine services in 2020, in 2021 there was a big jump among the middle 40 with usage increasing from 8 percent to 13 percent. Between November 2020 and 2021, there was also a disproportionate increase among women and those living in rural areas with those groups accounting for bulk of the newer users.[56]

84. **Prior Action 4 supporting a decrease in smoking could also have positive poverty and social impacts.** A decrease in smoking is expected to reduce the health and economic burden of tobacco-related illnesses and non-communicable diseases that disproportionately impact the poor and vulnerable. For one of the countries with the highest prevalence of adult smoking in the world, Indonesia's current burden of taxes on tobacco is lower than elsewhere and not sufficient to reduce its consumption.[57] Increased taxes are therefore expected to translate into significant additional revenues for the government even with lowered consumption, and will offer additional public health benefits for the poor, including by delaying start of smoking among adolescents particularly from the more price-sensitive poor and vulnerable households. The burden of higher taxes is likely to fall more heavily on the vulnerable and aspiring middle class segments of the Indonesian population; however, the expected revenue generated would be large enough to compensate for losses if channeled to the poor and vulnerable. Even in the absence of such direct redistributive policies the reform is expected to have positive impacts on the poor since the health benefits will accrue mainly to the poor if they reduce consumption the most: Simulations of direct and indirect effects of tax increases show that for white cigarettes, the overall income effect is expected to be positive for all income groups, while for *kretek* cigarettes the overall effect depends on the price elasticity of demand. If this is assumed to be relatively high, then there will again be income gains across all groups. Income gains for the first two deciles are expected for all but the very lowest elasticities.[58]

85. **Net decreases likely beyond the lifetime of the operation in tobacco production could have a negative impact on workers in the tobacco value chains,[59] but this impact is not expected to be significant.** World Bank simulations show that raising cigarette taxes by an average of 12 percent will reduce gross employment in tobacco manufacturing by only 0.43 percent. This is partly due to the fact that tax increases are significantly stronger for machine-made cigarettes which account for the bulk of consumption, whereas employment is concentrated in the production of hand-rolled cigarettes These simulations do not even consider compensatory measures like the stipulation that a significant share of the

[53] In July 2020, after the COVID-19 pandemic hit, just over one in five Indonesian households were unable to access health services when needed (World Bank 2020a).
[54] World Bank (2021c).
[55] Between November 2020 and October 2021, there was little change in the share of households using phone or online consultations when they needed health services (7 to 9 percent) (World Bank, 2021a). Thirteen percent of these households reported lack of trust in the quality or reliability of the services or had concerns about security of personal data.
[56] World Bank staff calculations based on HiFy surveys in November 2020 and October 2021.
[57] Tiwari *et al.* (2020).
[58] Fuchs and Del Carmen (2018).
[59] World Bank (2018c).

revenue from the excise tax on tobacco products is to be used for supporting tobacco producers and their communities.[60] They also do not consider the creation of jobs in other sectors due to the shift in consumers' spending away from tobacco.

86. Prior Action 4 will contribute to reducing Indonesia's gender gap in premature deaths. In 2016, only 2.5 percent of Indonesian women smoked compared to 68.1 percent of adult men.[61] Indonesia's leading causes of death were all tobacco-related[62], with the high tobacco use placing men at a disproportionately high risk of premature deaths due to non-communicable diseases (NCDs) compared to women.[63] As such, by reducing smoking, Prior Action 4 is expected to reduce the male disadvantage in premature mortality from NCDs.

87. Prior Action 5 is expected to reduce vulnerability to poverty by cushioning impacts of employment shocks. Nationally, about one in three Indonesians was vulnerable to falling into poverty due to idiosyncratic shocks[64] in 2019, underscoring the need for the introduction of mechanisms such as unemployment insurance that mitigate the risk of falling into poverty. Financing of the unemployment insurance will take place through a combination of contributions by employers and employees and funding by the general budget. Employers' and employees' contributions will be reallocated from other existing social insurances so there will be no additional monetary burden or 'tax wedge' for employers or employees. The introduction of unemployment insurance is expected to be within scope of the government's existing budget envelope. However, effects on employment, equity and fiscal sustainability will require close monitoring and potentially a rejigging of key parameters after the first few years. In fact, the implementing regulation mandates regular reviews and potential adjustment of parameters. The World Bank is supporting this mandate through ASA.

88. While social insurance coverage is low among the poorest segments of the population, many low-income workers are expected to benefit from the introduction of unemployment insurance. While Indonesia's social insurance system offers *de jure* protection to all workers, *de facto* coverage among informal workers remains low. Nevertheless, it is worth noting that, in 2019, around 45 percent of the salaried workers enrolled in BPJS were earning less than the national average wage, which is currently around 1.5 times the national poverty line[65] – an income level nearly indistinguishable from the consumption level of the poor. These workers will now be protected and eligible to benefit from unemployment insurance. As noted above, in addition to complementary efforts to strengthen non-contributory social assistance for the poorest, the Government of Indonesia is also committed to eventually cover all Indonesians with social insurance, including both formal and informal workers. While implementation challenges have hampered efforts to expand social insurance coverage, the high-profile Presidential Instruction No. 2/2021 and subsidiary regulations are

[60] World Bank (2018b). The simulation results imply a total of 2,914 job losses, most of which in the hand-rolled *kretek* sector (2,245). The study concluded that the revenue generated could easily compensate those who would stand to lose their jobs.
[61] *Ibid*.
[62] They include ischemic heart disease, cerebrovascular disease, tuberculosis, diabetes, and chronic respiratory diseases (Institute for Health Metrics and Evaluation (IHME) 2017).
[63] WHO (2018).
[64] Idiosyncratic shocks are experienced by a household independent of what is experienced by other households in the community, and include events such as employment loss, having an accident, or being a victim of a crime.
[65] BPJS (2019).

expected to accelerate coverage expansion, especially among lower income and informal non-salaried workers.[66, 67]

5.2. ENVIRONMENTAL, FORESTS, AND OTHER NATURAL RESOURCE ASPECTS

89. **The policies supported by this DPL are not likely to result in significant effects on Indonesia's environment, forests, and other natural resources.** The expected policy-induced changes in human behavior supported by this DPL are not expected to lead to significant changes in the quantity or quality of environmental resources of a magnitude, duration or intensity to have non-negligible effects on ecosystems or human welfare.

90. **Any effects on environmental, forest and natural resource aspects are expected to be negligible, and if any, positive environmental effects are expected.** Pillar A is not expected to have any significant effects on environmental resources. Pillar B will support decreasing smoking, and may therefore decrease the demand for production of tobacco over the long-term, leading to changes in the allocation of lands for these crops. As tobacco production is harmful to soils and often uses large amounts of pesticides relative to other crops,[68] any decrease in production is expected to have positive environmental effects. Possible net decreases likely beyond the lifetime of the operation in tobacco production could have a negative impact on workers in the tobacco value chains. But any such impact would likely be gradual, and other commercial or food crops could take tobacco's place. Tobacco excise tax revenue-sharing with local governments will enhance the positive environmental effects of the tax increase by providing support for tobacco farmers to shift to other crops, in the forms of raw materials, production guarantees, price subsidies, seeds, and fertilizers. Displaced tobacco farm and factory workers will be assisted with skills training and cash transfers that will mitigate negative effects on them. In 2021, 15 percent of the revenue-sharing funds were to be dedicated to helping farmers. For 2022, a flexible arrangement is allowed: 50 percent of the funds are allocated to public welfare which individual regions may further allocate between the health sector and cash or in-kind assistance to farmers.[69]

5.3. PFM, DISBURSEMENT AND AUDITING ASPECTS

91. **The Public Financial Management (PFM) system in Indonesia has shown significant improvements over time.** The latest Public Expenditure and Financial Accountability (PEFA) report (2017) concludes that Indonesia has established a strong legal and regulatory framework that aligns with most international standards on PFM. Overall, the average PEFA performance score is slightly below 'B', which is above the basic level of performance broadly consistent with good international practices. Out of 31 PEFA performance indicators, 9 received 'A' score, although the effectiveness of the PFM systems in place and the monitoring of performance can still be strengthened. The rollout of the financial management information system, together with the implementation of strict cash consolidation management rules, a well-defined treasury management system at the central government level, consistency between the accounting and

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[66] Presidential Instruction No. 2/2021 stipulates a series of mandates addressed to ministries, local governments, and social security implementing agencies designed to address the regulatory disharmony and bottlenecks faced by each entity in the sector under their purview. Mandates include, for example, budget allocations for the provision of the employers' share of social security contributions by local governments, data matching provisions, intensified outreach to improve participation by non-salaried workers, linkages with business licensing or credit provision, and rigorous compliance monitoring. The mandates detailed in the Presidential Instruction are then carried out through a rich set of implementing regulations. To date, five Ministerial Regulations, four Ministerial-level Decrees and 15 Ministerial-level Circulars have been issued and more are expected.

[67] Indonesia also has a relatively strong national identification (ID) system, and the government, with the support of a pipeline World Bank Project on Digital ID (P175218), is working on addressing the remaining coverage disparities in eastern provinces and among disadvantaged groups which may hamper access to services and key government and business functions.

[68] WHO (2017).

[69] Minister of Finance (2021).

budgetary classifications, and the convergence of national accounting with international standards, has created a solid platform for automation and integration of PFM processes for the improved quality of financial reporting and oversight.

92. There are weaknesses related efficiency and accountability of budget implementation. These are areas where reform efforts are taking place, but where these efforts have yet to realize full performance. Among the most important of these ongoing efforts are: (i) improving budget credibility by strengthening the budget forecast, integrating planning and budgeting with resource allocation consistent with government priorities; (ii) improving the system capacity to deliver infrastructure outcomes by harmonizing the selection, implementation and monitoring of capital expenditure with formal guidelines and oversight, efficient management of public assets, as well as consolidation and monitoring of public procurement operations; (iii) the inclusion of the budget of performance information in the budget document, linking resource planning in the most appropriate manner for better service delivery; (iv) promoting effective reporting of subnational budget execution; and (iv) strengthening internal audit and external audit, and control measures.

93. The Government of Indonesia has made great strides during the last two decades towards strengthening the country's public procurement system. The public procurement is currently governed by the Government Procurement Regulation No.16/2018 through Presidential Regulation (Perpres 16/2018) as amended through Government Procurement Regulation No.12/2021. The Government Procurement Regulation introduces some important features in the following areas: (i) increasing quality of procurement planning; (ii) promoting transparent, open and competitive procurement; (iii) strengthening the institution and human resource capacity; (iv) developing procurement e-marketplace; (v) using ITC technology and electronic transaction; (vi) promoting use of local content and national standards; (vii) increasing the opportunities for the Micro and SMEs; (viii) promoting the use of research and creative industries; and (ix) implementation of sustainable procurement. The National Public Procurement Agency (LKPP) has also issued implementing regulations (PerLem LKPP) in 2018, which were amended in 2021. The other important reform achievement is the establishment of the e-procurement system. All procurement activities carried out by ministries/institutions/local government are required to mandatory use e-procurement system (Sistem Pengadaan Secara Elektronik, SPSE) to ensure more transparency and efficiency of the public procurement process. The e-GP system is regularly reviewed and updated by the National Public Procurement Agency (LKPP) and the latest version is SPSE ver 4.5 launched in 2021 with some additional improvements in the system. The Government Procurement Regulation has also reinforced the institutional setup by requiring that the Ministers/Heads of Institutions/Heads of Local Government must establish a Procurement Work Unit (Unit Kerja Pengadaan Barang/Jasa) (UKPBJ) who is responsible for carrying out the procurement activities at Ministries/Institutions/Local Governments.

94. A comprehensive assessment of the Indonesia public procurement system using the revised Methodology for Assessing Procurement Systems (MAPS) is being jointly conducted by the National Public Procurement Agency (LKPP), the Word Bank, and ADB. The assessment recommendations and action plan are expected to help the government prioritize the reform activities needed to enhance the effectiveness of the public procurement system in supporting government policy objectives, improve the efficiency in public services delivery particularly in emergency situations like the COVID-19 pandemic, and increase the public trust while achieving value for money with high transparency and good governance. The MAPS assessment was launched in October 2019 and is expected to be completed by June 2022 with the delivery of the assessment report including recommendations for future reform activities.

95. The *Badan Pemeriksa Keuangan* (BPK), Indonesia's Supreme Audit Institution (SAI), has a mandate to conduct financial audits of all central government entities, as well as local government agencies. BPK expressed an unqualified opinion in the last two years on central government financial reports. The audit reports include audit reviews of: (i) the internal control system; (ii) compliance with laws and regulations; and (iii) the status of follow-up audit findings and recommendations. Besides government entities, BPK conducts audits on Bank Indonesia, State Own Enterprises and other entities that manage state finances. BPK audits include financial audits, performance audits and audits for special purposes.

96. **BPK audit reports on the central government's financial statements are submitted to parliament within two months after the issuance of the unaudited financial statements.** Audit reports regarding line ministries are submitted semi-annually, three months after the end of the semester, together with a summary semi-annual summary of audit reports or *Ikhtisar Hasil Pemeriksaan Sesmester* (*IHPS*). Article 21 in Law No. 15/2004 on State Financial Oversight requires parliament to review the follow-up of BPK's audit reports through hearings with the relevant ministries. The role of reviewing the follow-up of BPK's audit reports is distributed among the relevant parliamentary commissions, which conduct scrutiny and discussions on the audit reports as part of their regular hearings scheduled with the counterpart ministries. The depth of each hearing may differ depending on the urgency of the issues raised in the audit report and the capacity of each commission.

97. **The Public Expenditure and Financial Accountability (PEFA) assessment also demonstrates that Indonesia shows good performance on indicators about comprehensiveness and transparency of PFM.** The 'A' score for PI-9 on Public Access to Fiscal Information shows that the fiscal transparency is at the highest standard, as information on government budget is made available to the public in printed form through press releases, advertorials for media or through the MoF website. However, one element of public access to fiscal information which needs to improve is to ensure full and timely access to the BPK's audit reports, including publication of full reports on the BPK's website. A good step was taken in 2015 with the establishment of the Information and Communication Center (PIK) where public can obtain audit reports upon request. Summaries of audit reports are also included in the BPK's biannual semester reports. This is still part of ongoing reform in BPK to fulfill the requirement for the SAIs to have their reports easily accessible and publicly available.

98. **BI's financial statements have received a clean audit opinion.** Bank Indonesia is consistently able to maintain its financial management starting from planning, implementation, monitoring and control until evaluation is governed. As a result, BPK has expressed an unqualified (clean) opinion on the latest financial statements of BI for FY 2020, which means BI has maintained clean opinion for 18 consecutive years. Several DPLs/DPFs, including the Third Fiscal Reform DPL, the First Financial Sector Reform DPF, and the Covid Supplemental Financial Sector DPLs were disbursed successfully in 2019 and 2020.

99. **The loan disbursement will follow the standard Bank procedures for DPLs.** The loan amount, once it becomes effective and subject to (i) successful completion of the Program and (ii) adequacy of the macroeconomic framework, will be disbursed into a foreign currency account of the Borrower at Bank Indonesia that forms part of Indonesia's official foreign exchange reserves. The equivalent rupiah amount will immediately be transferred to the General Operational Treasury account of the borrower that is used to finance budget expenditures, as the loan is intended to be used to support the general government budget. This arrangement has been followed for recent DPLs including the Indonesia First Financial Sector Reform Development Policy Financing (P170940). The borrower, within 30 days[70], will provide to the Bank a written confirmation that this transfer has been completed, and provide to the Bank any other relevant information relating to these matters, including the exchange rate of the conversion from US dollars to rupiah, that the Bank may reasonably request. Disbursements of the loan will not be linked to any specific purchases and no procurement requirements have to be satisfied, except that the borrower is required to comply with the standard negative list of excluded items that may not be financed with Bank loan proceeds, as defined in the General Conditions for IBRD Financing: Development Policy Financing dated December 14 2018 (Revised on August 1, 2020, December 21, 2020, April

[70] Similar certification letter issued by the borrower on December 16th, 2021 for the ongoing Indonesia Investment and Trade Reforms DPL (P172439/IBRD 9244).

1, 2021, and January 1, 2022) (General Conditions). If any portion of the loan is used to finance ineligible expenditures as so defined in the General Conditions, the Bank has the right to require the government to promptly, upon notice from IBRD, refund the amount equal to such payment to the Bank. Amounts refunded to the Bank will be cancelled from the loan. Project is expected to close on June 30, 2023.

5.4. MONITORING, EVALUATION AND ACCOUNTABILITY

100. Progress on the results indicators will be monitored and evaluated by the Borrower. The Kemenko PMK will be the executing agency for the proposed DPL. As executing agency, the Kemenko PMK will take the overall responsibility for monitoring and evaluation, while coordinating relevant activities with the other ministries involved in the agenda and reporting to the World Bank. Given its function to coordinate, synchronize and control relevant government policies, Kemenko PMK is comparatively well prepared to obtain and share data on the agreed results indicators. Other ministries involved in this DPL will include the MoH and the MoM, as well as the MoF. While, with the exception of the MoF, these ministries have limited experience in implementing DPLs with the World Bank, each of them has the monitoring capacity to track the result indicators. Accordingly, the proposed DPL will rely on the existing systems of each of the ministries to monitor the progress of the corresponding results indicators. The World Bank team will provide close support to ensure the monitoring takes place in a way that will facilitate timely reporting on the indicators. This will be important for indicators that lie outside the standard government reporting, such as the coverage of unemployment insurance among eligible salaried employees, which can only be obtained by analyzing administrative data.[71]

101. Grievance Redress. Communities and individuals who believe that they are adversely affected by specific country policies supported as prior actions or tranche release conditions under a World Bank Development Policy Operation may submit complaints to the responsible country authorities, appropriate local/national grievance redress mechanisms, or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address pertinent concerns. Affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service, please visit *http://www.worldbank.org/GRS*. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

6. SUMMARY OF RISKS AND MITIGATION

102. The overall risk rating for the proposed DPL is substantial, with three main sources of risk. The three main sources of risk rated as substantial after mitigation are (i) the macroeconomic risk, (ii) the institutional capacity for implementation and sustainability, and (iii) the stakeholder risk. The potential benefits of the proposed DPL outweigh the residual risks and warrant the World Bank's assistance.

103. The macroeconomic risk is substantial. First, while Indonesia's direct exposure to Russia and Ukraine is limited, increasing energy and food prices may lead to increased inflation and explicit or implicit food and energy subsidies. It has policy space to respond to limited shocks transmitted through global financial and commodity markets. Second, there is

[71] The World Bank team will also work closely with relevant public entities. For instance, social security agencies in Indonesia are public legal entities reporting to the President. The MoF, the MoM, the National Social Security Council, and the Financial Services Authority are supervisory entities monitoring SJSN implementation while the Kemenko PMK is in charge of overall coordinating, monitoring, and evaluating its implementation.

a risk is that global shocks, as the global recovery is uneven, will affect Indonesia's macroeconomic stability. Indonesia's monetary financing arrangement could become less viable if global financial conditions tighten. Recent tax reforms will support Indonesia's return to the 3 percent of GDP fiscal deficit rule in the most growth-friendly way. Third, a marked deterioration of COVID-19 conditions might not only further threaten human capital gains, but might also limit the government's fiscal space and lead to insufficient investments in areas critical for the success of the proposed DPL. This risk is partially mitigated by the government's strong commitment to human capital development. In addition, the proposed DPL contributes to mitigating this risk by supporting actions that will improve the effectiveness of existing human capital spending and deploying human capital more effectively.

104. The risks around institutional capacity is rated as substantial as well. The proposed DPL involves several line ministries and agencies, some of them with limited experience with DPLs and capacity constraints. The resulting institutional capacity are being mitigated by close dialogue between the World Bank and the government. Throughout the preparation of the proposed DPL, the government and the World Bank have had substantive discussions around the implementation requirements for each action, to ensure that expectations regarding capacity and timing are realistic. In addition, the implementation of the reforms supported by the DPL will require strong collaboration among a number of implementing agencies. The influence of the Kemenko PMK as the executive agency on some of the implementing agencies may be limited. Therefore, the continuation of a solid policy dialogue with each counterpart will be required to ensure full alignment to achieve the program. Indonesia's decentralized context poses further risks especially for actions in areas such as nutrition where subnational governments are leading service delivery or where there is joint implementation by the central government and subnational governments. All actions supported by the DPL have been carefully selected to be within the jurisdiction of the central government, and the DPL also explicitly supports reforms that address challenges for accountability and monitoring in the decentralized context. Finally, the proposed reforms require intense technical work for completion and sustainability of results. The proposed DPL mitigates this risk by providing in-kind technical support to each implementing agency.

105. The stakeholder risk is substantial given the challenges in ensuring broad buy-in for the reforms within Indonesia. While the government has conducted in-depth consultations with internal and external stakeholders on the reform program and these consultations have confirmed a broad support towards the objectives of the different lines of reform, there is some stakeholder risk regarding the sustainability of the reform program supported by this DPL due to concerns by interest groups in particular regarding Prior Action 4 (such as by the tobacco industry) and Prior Action 5 (such as by some labor unions). Some stakeholders have also criticized certain aspects of the government's larger reform program under the Omnibus Law on Job Creation, such as for instance with regard to minimum wage setting and severance pay. While this DPL does not support any aspects of the larger reform program of the Omnibus Law that have been particularly singled out for criticism or any regulations that were passed following a Constitutional Court decision on the Omnibus Law and may thus be under heightened legal uncertainty, there is nevertheless some legal uncertainty following the Constitutional Court decision. In particular, Prior Action 5 may be affected as the relevant regulation refers to the Omnibus Law. Even though this regulation was passed before the Constitutional Court decision and thus its validity may not be immediately impacted by the Court decision within the 2-year grace period set by the Court, its continued validity will nevertheless rely on the government addressing the Court's concerns regarding the 'omnibus' form of legislation. To mitigate these stakeholder risks, the World Bank will provide technical support to the government throughout the reform implementation phase, monitor closely developments regarding the government's follow-up action to the Constitutional Court decision, and continue to disseminate evidence underlying the reform program supported by this DPL with a wider group of stakeholders. The World Bank will also continue to regularly consult and engage with private sector, civil society and community representatives as part of the implementation of several PASAs complementing and informing the proposed DPL.

Table 7: Summary Risk Ratings

Risk Categories	Rating
1. Political and Governance	Moderate
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Moderate
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Moderate
7. Environment and Social	Low
8. Stakeholders	Substantial
9. Other	
Overall	Substantial

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ANNEX 1: POLICY AND RESULTS MATRIX

Prior Actions		Results		
Prior Actions	**Lead Counterparts**	**Indicator Name**	**Baseline**	**Target**
Pillar A: Improving the effectiveness of public spending for human capital				
Prior Action 1: To improve nutrition of pregnant women and decrease childhood stunting across Indonesia, the Borrower has introduced a regulation to formalize the governance arrangements of central ministries and agencies as well as districts and villages, institutional roles and mandates underpinning the expansion of the anti-stunting program, as evidenced by Presidential Regulation No. 72/2021.	Secretariat of the Vice-President, BKKBN and MoH	Number of districts implementing multisectoral nutrition actions for pregnant women and children under 2 years of age	260 (2020)	514 (2023)
		Percentage of pregnant women taking a minimum of 90 iron supplement tablets during pregnancy	38.1 (2018)	50 (2023)
Prior Action 2: To reduce the health and economic burden of tuberculosis (TB), the Borrower through the MoH has institutionalized a comprehensive and integrated TB control program with formal governance arrangements including a high-level multistakeholder oversight mechanism, specific institutional roles and mandates, and a monitoring and evaluation framework that tracks performance at all levels of the government, as evidenced by Presidential Regulation No. 67/2021.	MoH	Percentage of new and relapse cases diagnosed and treated in the TB control program	42 (2020)	60 (2023)
Prior Action 3: To facilitate improved access to healthcare in remote areas and in emergency situations, the Borrower through the MoH has (i) standardized the practice of telemedicine and (ii) provided detailed regulatory guidelines to be followed by public and private sector entities	MoH	Percentage of households that have ever used telemedicine for their	1 (2019)	8 (2023)

Prior Actions		Results		
that provide health services through telemedicine during the Covid-19 pandemic, as evidenced by MoH Decree No. 4829/2021.		health needs		
Pillar B: Protecting existing human capital investments				
Prior Action 4: To discourage smoking and use of tobacco, the Borrower through the MoF has: (i) increased the average rate of excise taxes for machine-made cigarettes by at least 12 percentage points; (ii) simplified the tobacco classification for white and *kretek* (clove) cigarettes by reducing the number of tiers from 10 to 8, and (iii) introduced specific taxes on non-combusted tobacco products including e-cigarettes, as evidenced by MoF Regulation No. 192/2021 and MoF Regulation No. 193/2021.	MoF	Percentage of GDP per capita per day required to purchase 20 cigarettes at average retail sales price	11.3 (2019)	13.78 (2022)
Prior Action 5: To protect workers' income in the case of unemployment, the Borrower through the MoM has established an unemployment insurance scheme based on mutual obligations principle establishing procedures and conditions for the provision of cash benefit, job training and job-search support, as evidenced by MoM Regulation No. 15/2021.	MoM	Percentage of eligible salaried employees covered by unemployment insurance	0 (2020)	52.7 (2022)

ANNEX 2: FUND RELATIONS ANNEX

IMF Executive Board Concludes 2022 Article IV Consultation with Indonesia

March 22, 2022

Washington, DC: The Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation [1] with Indonesia.

As elsewhere, the COVID-19 pandemic has led to tragic loss of life and triggered a major economic downturn in Indonesia. The authorities have responded with a bold and comprehensive, and well-coordinated policy package that has successfully maintained economic and financial stability. With the recovery underway, they have begun to withdraw the exceptional support measures. Nevertheless, the pandemic has caused scarring and reinforced the need to tackle longstanding challenges, including a low revenue intake and shallow financial markets.

The Indonesian economy is recovering at a brisk pace. The Delta variant surge slowed the economic recovery in mid-2021, but growth picked up in the fourth quarter and is expected to strengthen over 2022−23. IMF staff project GDP growth at 5.4 percent for 2022 and 6.0 percent in 2023, supported by favorable global commodity prices, easing restrictions on activity, continued policy support, and rising mobility and confidence as the vaccination program expands into more remote areas. Inflation has remained lower than in other emerging and advanced economies, allowing Bank Indonesia (BI) to support the recovery through accommodative policies, and is expected to rise gradually within the inflation target range in 2022. The outlook is improving but the balance of risks remains tilted to the downside.

Executive Board Assessment [2]

Executive Directors agreed with the thrust of the staff appraisal. They commended the authorities for maintaining macroeconomic and financial stability despite the severe impact of the COVID-19 pandemic, helped by substantial policy buffers accumulated over years of strong macroeconomic performance. While the outlook is improving, the balance of risks remains tilted to the downside. As the recovery takes hold, Directors considered that it would be appropriate to gradually phase out the exceptional policy support deployed during the pandemic and encouraged the authorities to press ahead with structural reforms.

Directors agreed that the authorities' gradual withdrawal of fiscal policy support would be appropriate. They noted that restoring the pre-pandemic 3 percent of GDP budget deficit ceiling in 2023 will bolster the credibility and sustainability of the fiscal framework. Directors supported the authorities' plans to develop a medium-term revenue strategy to finance high priority spending critical to achieving Indonesia's development goals. Savings from energy subsidy reforms could also be used to strengthen the social safety net.

Directors noted that monetary policy has remained appropriately accommodative to support the recovery. They welcomed the authorities' commitment to stay ahead of the curve and urged them to closely monitor developments to ensure that inflation and inflation expectations remain well anchored. While the temporary deployment of additional policy tools has helped to successfully contain bouts of market volatility, Directors encouraged the authorities to end central bank primary market purchases and allow the policy rate to provide a clearer signal of the monetary stance. They also highlighted the role of exchange rate flexibility in absorbing shocks.

Directors noted that the Indonesian financial sector remains stable, and that intensive supervision is necessary while crisis-related regulatory relief is in place. They welcomed the authorities' efforts to promote financial deepening and inclusion, including through an extensive digitalization agenda and measures to reduce information asymmetries, through credit information sharing, which should support the recovery of credit markets.

Directors commended the Indonesian authorities for their ambitious structural reform agenda. They encouraged the authorities to maintain the momentum with labor and financial market reforms aimed at increasing investment, boosting growth, and mitigating the scarring effects of the pandemic. Improvements to education, women's labor force participation, and governance frameworks can also support medium-term growth.

Directors welcomed the authorities' efforts to tackle climate change and took positive notes of their recent climate change mitigation measures. They encouraged the authorities to undertake further reforms, including on energy subsidies, measures on carbon pricing and the emission trading system, and fostering a green financial market.

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[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.
[2] At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.IMF.org/external/np/sec/misc/qualifiers.htm .

Indonesia: Selected Economic Indicators

	2018	2019	2020	2021	2022	2023
				Est.	Proj.	Proj.
Real GDP (percent change)	5.2	5.0	-2.1	3.7	5.4	6.0
Domestic demand	6.3	4.0	-3.8	2.9	4.7	6.1
Of which:						
Private consumption 1/	5.1	5.2	-2.7	2.0	4.9	5.9
Government consumption	4.8	3.3	2.0	4.2	4.7	4.0
Gross fixed investment	7.9	4.5	-5.0	3.8	5.2	7.1
Change in stocks	0.4	-0.6	-0.7	0.1	-0.2	0.0
Net exports 2/	-1.0	1.4	1.4	1.0	0.9	0.3
Saving and investment (in percent of GDP)						
Gross investment 3/	34.6	33.8	32.4	31.5	31.0	31.3
Gross national saving	31.6	31.1	31.9	31.9	31.0	29.8

Prices (12-month percent change)						
Consumer prices (end period)	3.2	2.6	1.7	1.9	3.5	3.2
Consumer prices (period average)	3.3	2.8	2.0	1.6	2.9	3.3
Public finances (in percent of GDP)						
General government revenue	14.9	14.2	12.5	13.6	13.2	13.2
General government expenditure	16.6	16.4	18.6	18.2	17.1	16.2
Of which : Energy subsidies	1.0	0.9	0.7	0.8	0.9	0.7
General government balance	-1.8	-2.2	-6.1	-4.6	-4.0	-3.0
Primary balance	0.0	-0.5	-4.1	-2.6	-1.3	-0.5
General government debt	30.4	30.6	39.8	42.8	42.9	42.9
Money and credit (12-month percent change; end of period)						
Rupiah M2	6.3	6.5	12.5	13.9	8.4	9.0
Base money	0.2	2.9	0.4	19.3	8.8	4.7
Claims on private sector	10.3	5.8	-0.4	6.1	9.2	9.7
One-month interbank rate (period average)	6.3	6.5	4.5	3.6	…	…
Balance of payments (in billions of U.S. dollars, unless otherwise indicated)						
Current account balance	-30.6	-30.3	-4.5	4.7	-0.8	-20.6
In percent of GDP	-2.9	-2.7	-0.4	0.4	-0.1	-1.5
Trade balance	-0.2	3.5	28.2	43.9	43.3	25.9
Of which : Oil and gas (net)	-11.4	-10.3	-5.4	-9.7	-6.7	-11.5
Inward direct investment	20.6	23.9	18.5	20.2	22.1	24.5
Overall balance	-7.1	4.7	2.6	9.0	14.2	10.8
Terms of trade, percent change (excluding oil)	0.8	-2.3	-5.6	8.9	2.9	-2.8
Gross reserves						
In billions of U.S. dollars (end period)	120.7	129.2	135.9	144.9	159.1	169.9
In months of prospective imports of goods and services	7.1	9.7	7.9	7.4	7.3	7.1
As a percent of short-term debt 4/	201	204	209	213	224	226

Total external debt 5/						
In billions of U.S. dollars	375.4	403.6	417.0	436.8	454.4	488.1
In percent of GDP	36.0	36.0	39.3	36.8	35.4	34.8
Exchange rate						
Rupiah per U.S. dollar (period average)	14,235	14,152	14,529	14,297	…	…
Rupiah per U.S. dollar (end of period)	14,390	13,866	14,050	14,253	…	…
Memorandum items:						
Jakarta Stock Exchange (12-month percentage change, composite index)	-2.5	1.7	-5.1	10.1	…	…
Oil production (thousands of barrels per day)	810	805	806	803	800	797
Nominal GDP (in trillions of rupiah)	14,839	15,833	15,438	16,971	18,471	20,220
Sources: Data provided by the Indonesian authorities; and IMF staff estimates and projections.						
1/ Includes NPISH consumption.						
2/ Contribution to GDP growth (percentage points).						
3/ Includes changes in stocks.						
4/ Short-term debt on a remaining maturity basis.						
5/ Public and private external debt.						

ANNEX 3: LETTER OF DEVELOPMENT POLICY

MINISTER OF FINANCE
OF THE REPUBLIC OF INDONESIA

Number : S-443/MK.08/2022 20 May 2022

Mr. David Malpass
President
World Bank

Subject : Indonesia Human Capital Development Policy Loan - Letter of Development Policy

Dear Mr. Malpass,

1. The Government of Indonesia has placed a particular emphasis on reforms to protect and increase human capital. In the Government's view these are crucial to support the country's economic recovery and its transformation into a more sophisticated and prosperous economy. One of the priorities of the National Medium-Term Development Plan (RPJMN) 2020-2024 is the quality and competitiveness of Indonesia's human resources, which links closely to the Human Capital Development Master Plan 2020-2045, currently under preparation. The purpose of this Letter of Development Policy is to provide an overview of the Government's reform agenda with regard to enhancing human capital development by improving the effectiveness of public spending for human capital and protecting existing human capital investments.
2. On behalf of the Government of Indonesia, we would like to express our appreciation for the technical assistance provided by International Bank for Reconstruction and Development (the "World Bank") to reforms in the health, nutrition and social sectors recently (especially those required as a result of the COVID-19 pandemic) and over prior decades. We would like to request the support of the World Bank in the form of the Indonesia Human Capital Development Policy Loan.
3. In recent years, Indonesia has significantly advanced the human capital agenda. We have reduced stunting, expanded health coverage and student enrolment in education. The period from 2010 to 2019 saw robust economic growth, job growth and poverty reduction. The poverty headcount ratio at the national poverty line fell from 13.3 percent in 2010 to 9.4 percent in 2019. In parallel, Indonesia's performance in the World Bank's Human Capital Index (HCI) steadily improved, with the overall HCI value increasing from 0.50 to 0.54 from 2010 to 2020.
4. Despite these gains, the country faces challenges in terms of an elevated stunting rate, high prevalence of smoking and both communicable and non-communicable diseases, and social insurance systems requiring improvement and expansion in order to achieve Indonesia's inclusive growth and poverty reduction agenda. While recent efforts to address stunting have led to impressive progress, Indonesia can further accelerate its performance by focusing on additional interventions, such as the expansion of improved quality of frontline services across the entire country. In addition, because of weaknesses in the social insurance system some

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workers are not yet sufficiently protected against income deprivation during unemployment or old age.

5. The COVID-19 pandemic has put recent human capital gains at risk and increased the urgency to both invest better and protect better. The pandemic has negatively affected households' consumption and ability to invest in human capital. Human capital development will be critical in facilitating Indonesia's structural transformation during what will likely be the endemic phase of COVID-19. There is a real and urgent need for coordinated interventions in nutrition, health, and social protection.

6. Recognizing the urgency and importance of reforms in the human capital sector, the Government has undertaken an ambitious human capital reform program. The reform program includes five crucial reforms that follow the development goal of the RPJMN 2020–2024, which is to realize an independent, advanced, just and prosperous Indonesian society through accelerated development in various fields by emphasizing the building of a solid economic structure based on competitive advantage in various regions supported by quality and competitive human capital. The RPJMN recognizes that human capital needs to be the main driver to achieve inclusive and equitable development. Accordingly, it aims to improve the quality and competitiveness of Indonesia's human capital – defined as healthy, intelligent, adaptive, innovative, skilled and good-character people – through a series of initiatives, including improving health services toward universal health coverage and strengthening the implementation of social protection, including social insurance.

7. The first reform supported by this Human Capital Development Policy Loan supports the formalization of the governance arrangements, institutional roles and mandates of central ministries and agencies as well as districts and villages underpinning the roll-out of the anti-stunting program across the entire country, as directed by Presidential Regulation No. 72/2021. The expanded anti-stunting program specifically targets pregnant women and adolescent girls as priority groups, including by supporting food fortification and by scaling up the provision of iron-folate supplement tablets (*tablet tambah darah*) to pregnant women and adolescent girls.

8. The second reform, through Presidential Regulation No. 67/2021 institutionalizes a comprehensive and integrated tuberculosis (TB) control program with formal governance arrangements, specific institutional roles and mandates, and a monitoring and evaluation framework that tracks performance at all levels of government. This is expected to reduce the health and economic burden of TB and mitigate the severe disruptions created by the COVID-19 pandemic.

9. The third reform facilitates improved access to healthcare services in remote areas and in emergency situations by issuing telemedicine regulations that standardize the practice and provide for the detailed regulatory framework to be followed by public and private sector entities that provide health services through telemedicine during the COVID-19 pandemic (Ministry of Health (MoH) Decree No. 4829/2021). This clear regulatory framework for telemedicine is expected to help improve access to health services, especially for remote areas as well as provide a viable modality for resilient provision for health services.

10. The fourth reform, through MoF Regulation No. 192/2021 and MoF Regulation No. 193/2021, increases taxation to discourage smoking and reduce the health and economic burden of tobacco-related illnesses. The revised taxation regime will also increase taxes on newer formulations such as e-cigarettes, discouraging their use by a younger audience.

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11. The fifth reform supports the introduction of the 'Jaminan Kehilangan Pekerjaan' (JKP) ('Job Loss Guarantee Program') to help workers cope with an increasingly dynamic labor market. JKP, through MoM Regulation No. 15/2021 introduces "mutual obligations" principle that requires regular job searches and reporting to the system by beneficiaries to receive the benefits while in turn beneficiaries are offered support in the form of financial support, access to labor market information, and access to training, in line with international practices.
12. The Government is firmly committed to the reform programs that are supported by this Human Capital Development Policy Loan in order to protect human capital and improve the effectiveness of human capital spending. The Government believes these reforms will help accelerate the recovery from the COVID-19 pandemic and eventually the transition of the economy to high-income status.
13. The Government hopes the World Bank can allocate its resources to finance, monitor and evaluate the implementation of these reforms in cooperation with the Government. The evaluation results will be an input for the next reform agenda. In this regard, the World Bank would be welcome to provide advice on the proposed areas for the next set of reforms.
14. The Government greatly values the support provided by the World Bank over the years to help finance Indonesia's development priorities and the provision of technical assistance that is helping us to identify issues and further the ambitious human capital reform programs. We look forward to your continued engagement and support in the coming years.

Minister of Finance

Ditandatangani secara elektronik
Sri Mulyani Indrawati

Cc:
1. Coordinating Minister for Human Development and Culture
2. Director General of Budget Financing and Risk Management, Ministry of Finance

ANNEX 4: ENVIRONMENT AND POVERTY/SOCIAL ANALYSIS TABLE

Prior Actions	Significant positive or negative environment effects	Significant poverty, social or distributional effects positive or negative
Pillar A: Improving the effectiveness of public spending for human capital		
Prior Action 1	No	Yes, positive
Prior Action 2	No	Yes, positive
Prior Action 3	No	Yes, positive
Pillar B: Protecting existing human capital investments		
Prior Action 4	Yes, positive	Yes, positive (if price elasticity of demand is sufficiently high)
Prior Action 5	No	Yes, positive

ANNEX 5: CLIMATE CO-BENEFITS

1. **Climate change is projected to significantly impact temperatures and precipitation in Indonesia, accompanied by rising sea levels. Indonesia is the world's largest archipelagic state, consisting of more than 17,500 islands with over 81,000 kilometers of coastline.** The country's islands are home to an extremely varied geography, topography, and climate, ranging from sea and coastal systems to peat swamps and montane forests. Estimates suggest that between 2010 and 2017 Indonesia's mean annual temperature was typically around 0.8°C above the 1951 to 1980 baseline. Since 1960, hot days have increased by 88 per annum.[72] Projections for annual average temperature rise for Indonesia fall within the range of 0.8°C to 1.4°C by the 2050s and up to 3.4°C by the 2080s, with even higher rates of warming projected for inland regions. Projections also suggest a rise of ambient temperatures from approximately 26.5°C toward 29°C to 30°C, significantly increasing the frequency of days with temperatures of at least 30°C.[73] Projected precipitation trends show likely increase in rainfall for western islands, a reduction in rainfall for the southern island, and an increase in intensity for extreme rainfall event.

2. **Indonesia is highly vulnerable to climate change impacts, including extreme events such as floods and droughts, and long-term changes from sea level rise, shifts in rainfall patterns and increasing temperature.** High population density in hazard prone areas coupled with strong dependence on natural resource base make Indonesia vulnerable to the projected climate variability and climate change. These impacts will be felt across multiple sectors and regions. Indonesia is ranked in the top-third of countries in terms of natural hazard risk (59th out of 191) by the 2019 Index for Risk Management (INFORM).[74] In particular, it has high exposure to flooding, (ranked 17th): Indonesia has one of the largest global populations inhabiting low elevation coastal zones, with around 18 percent of its population inhabiting such areas. Population growth and development trends could increase the absolute size of this population to around 62 million people by 2030.[75] Without adaptation, the total population likely to be exposed to permanent flooding due to sea level rises by the end of the century is high, at more than 4 million.[76] Indonesia is similarly highly exposed to tropical cyclones and positioned as one of the most vulnerable countries to extreme heatwaves. Climate change projections also point to more frequent and severe droughts and subsequently more forest fires.[77]

3. **By 2100, the impacts of climate change could cost between 2.5 and 7 percent of Indonesia's Gross Domestic Product (GDP), with the poorest bearing the brunt of this burden.[78]** A growing body of research documents the vulnerability of different sectors and regions of Indonesia to climate and disaster risk. In many cases fundamental aspects of multidimensional deprivation remain at the heart of climate and disaster vulnerability. As well as familiar issues such as undiversified income, drivers of vulnerability to climate change include low levels of access to good-quality healthcare facilities.[79] Other reasons why climate change will disproportionately affect the poorest groups in society include that heavy manual labor jobs are commonly among the lowest paid whilst also being most at risk of productivity losses due to heat stress. Poorer farmers and communities are also least able to afford local water storage, irrigation infrastructure, and technologies for adaptation, but they often cultivate lands most vulnerable to drought and anomalous weather

[72] World Bank Group and Asian Development Bank (2021).
[73] *Ibid.*
[74] European Commission (2019).
[75] Neumann *et al*. (2015).
[76] UK Met Office (2014).
[77] Lestari *et al.* (2014).
[78] Orecchia *et al.* (2016).
[79] Boer *et al.* (2019).

events. Partly due to gaps in the social insurance system, poorer households in Indonesia are much less likely to take adaptive measures and plan for longer-term horizons than wealthier households, making them more exposed to environmental shocks and disaster.[80]

4. **Climate change and increasingly common and severe weather events threaten Indonesia's human capital progress by endangering food security, public health, and economic livelihoods.** A lack of fruit and vegetables in diets and health complications caused by increasing prevalence of people undernourished and underweight have been identified as two key risk factors for excess, climate-related deaths. In the case of Indonesia, there could be approximately 35.1 such deaths per million population linked to lack of food availability by mid-century under the most extreme projected scenario.[81] Moreover, several climate-sensitive communicable diseases are present in Indonesia, including dengue, Japanese encephalitis, malaria, and typhus. Other health issues such as heat stroke and heat exhaustion are projected to become more prevalent due to more prolonged exposure to extreme heat, and more extreme heat is also projected to exacerbate pre-existing chronic conditions. Further climate-change related health risks bound to worsen include worsened water quality due to increased flooding, elevating the risk of diarrhea, typhoid, and cholera. In addition, the links between increased droughts, fires, and heat associated with climate change will have implications on local air quality and public health. Finally, climate change also increases the likelihood and severity of shocks that will affect households' wellbeing due to sudden job and income losses, necessitating reinforced risk management strategies including strengthened unemployment insurance and other social insurance.

Prior Actions	Adaptation actions	Mitigation actions
Pillar A: Improving the effectiveness of public spending for human capital		
Prior Action 1: To improve nutrition of pregnant women and decrease childhood stunting across Indonesia, the Borrower has introduced a regulation to formalize the governance arrangements, institutional roles and mandates of central ministries and agencies as well as districts and villages underpinning the expansion of the anti-stunting program, as evidenced by Presidential Regulation No. 72/2021.	Vulnerability Context: Stunting may be exacerbated in Indonesia by climate impacts. For example, recent research has found a link between climate change-induced monsoon delays and stunting in Indonesia.[82] Climate change can also induce food security challenges and malnutrition, such as through crop failures and reduced access to markets. This particularly impacts pregnant women and children who have much higher needs for nutrition due to children's active growth phase. In addition, pregnant	

[80] World Bank and Asian Development Bank (2021).
[81] Springmann *et al.* (2016).
[82] Thiede and Gray (2020). A global model by Llyod *et al.* (2018) shows that stunting will increase as climate change increases, with a greater proportion of the burden falling on rural areas, and larger increases in severe stunting in comparison with moderate stunting in the poverty scenarios.

	women and children have a more limited ability to cope with such climate-change-induced vulnerability due to their age, social status and the interaction with other vulnerabilities. Intent to address identified vulnerabilities: Nutrition financing and multisectoral district and village actions can help timely information, resilience, and remedial action. The formalization and expansion of the anti-stunting program across Indonesia will help vulnerable groups increase their climate resilience by preventing malnutrition and stunting risks due to extreme weather events and/or help vulnerable communities better cope with extreme weather events and its impacts on food security. Particularly significant impacts are expected for pregnant women and children. Explicit link between identified climate change risks and specific project activities: Nutrition financing and multisectoral district and village actions by formalizing and expanding the anti-stunting program across Indonesia will be able to effectively address climate induced and climate amplified undernutrition and stunting..	
Prior Action 2: To reduce the health and economic burden of tuberculosis (TB), the Borrower through the MoH has institutionalized a comprehensive and integrated TB control program with formal governance arrangements including a high-level multistakeholder oversight mechanism, specific institutional		

roles and mandates, and a monitoring and evaluation framework that tracks performance at all levels of the government, as evidenced by Presidential Regulation No. 67/2021.		
Prior Action 3: To facilitate improved access to healthcare in remote areas and in emergency situations, the Borrower through the MoH has (i) standardized the practice of telemedicine and (ii) provided detailed regulatory guidelines to be followed by public and private sector entities that provide health services through telemedicine during the Covid-19 pandemic, as evidenced by MoH Decree No. 4829/2021.	Vulnerability Context: Services in remote areas for climate change induced illnesses are limited or often not available. This limits Indonesia's capacity to support families to cope with unforeseen health shocks that are induced or exacerbated by climate change – such as climate-sensitive communicable diseases; heat stroke and heat exhaustion; and diarrhea, typhoid, and cholera due to increased flooding. Climate change also increases the likelihood and severity of disasters and extreme weather events which can disrupt access to health services. Intent to address identified vulnerabilities: Telemedicine will help provide better services to address climate-related diseases, and avoid service disruptions when climate disasters occur and affect access to key health infrastructure. This will increase Indonesia's climate resilience and help communities with better adaptation to climate change. Explicit link between identified climate change risks and specific project activities: Adaptation through timely treatment of climate change induced illnesses through telemedicine. Also helping adaptation to health service	Vulnerability context: Health care activities are an important source of greenhouse gas emissions. Hospitalizations and other health care interventions result in greenhouse gas emissions in Indonesia as do the incineration of medical waste[83], and travel to seek healthcare (especially from rural and remote areas to urban centers) travel to seek healthcare (especially from rural and remote areas to urban centers) Intent to address identified vulnerabilities: Telemedicine can reduce net greenhouse gas emissions due to lower levels of climate-intensive hospitalization, less medical waste, and less travel to seek healthcare. Explicit link between identified climate change risks and specific project activities: Climate mitigation benefits from a net reduction in greenhouse gas emissions in the health sector are expected from reduced travel to seek healthcare, lower levels of hospitalization due to preventative interventions and the timely provision of care virtually by telemedicine, rather than driving to a health-point or hospital.

[83] WHO (2015).

	disruptions created by climate-change-induced disasters and severe weather events, through re-enabling access to key health services.	
Pillar B: Protecting existing human capital investments		
Prior Action 4: To discourage smoking and use of tobacco, the Borrower through the MoF has: (i) increased the average rate of excise taxes for machine-made cigarettes by at least 12 percentage points; (ii) simplified the tobacco classification for white and *kretek* (clove) cigarettes by reducing the number of tiers from 10 to 8, and (iii) introduced specific taxes on non-combusted tobacco products including e-cigarettes, as evidenced by MoF Regulation No. 192/2021 and MoF Regulation No. 193/2021.		Vulnerability context: Cigarette smoking has significant environmental impacts in terms of water footprint, greenhouse gas emissions and fossil fuel depletion. Intent to address identified vulnerabilities: Reduced cigarette consumption can directly and indirectly mitigate climate change through reduced water footprint, reduced greenhouse gas emissions and reduced fossil fuel depletion. Explicit link between identified climate change risks and specific project activities: MoF estimates indicate that a 12 percent increase of the average taxation on tobacco products will reduce consumption and production of cigarettes by 3 from a baseline of 320 billion cigarettes. An assessment of tobacco's global environmental footprint across its entire value chain published in 2018 documents a climate change contribution of 14 g CO2 equivalent for a typical cigarette.[84] Accordingly, a simulated reduction of tobacco consumption from a base of 320 billion in 2020 by 3 percent following an increase in the average rate of taxation on tobacco products by at 12 percent is expected to result in a reduction in greenhouse gas emissions of at least 134.4 kt CO2 equiv. per year.
Prior Action 5: To protect workers' income in the case of unemployment, the Borrower through the MoM has established an unemployment insurance	Vulnerability Context: Lack of sources of diversified income and limited mechanisms to protect incomes in the face of job loss are key sources of vulnerability to	

[84] Zafeiridou *et al.* (2018).

scheme based on mutual obligations principle establishing procedures and conditions for the provision of cash benefit, job training and job-search support, as evidenced by MoM Regulation No. 15/2021.	which climate change contributes significantly. As a result, many households in Indonesia are limited in their capacity to take mitigative and adaptive measures and plan for longer-term horizons, making them more exposed to climate-induced shocks and weather disasters. Intent to address identified vulnerabilities: Mitigating income shocks in the face of job losses can help households smooth consumption and increase their resilience to climate change. Knowing in advance that support will be available also makes it possible for individuals to make longer-term horizon investments, and choices that can further increase their capacity – and the capacity of other household members – to mitigate and adapt to climate-related shocks in the future. Explicit link between identified climate change risks and specific project activities: Climate change is increasing the frequency of severe weather-related events that can disrupt economic activity and livelihoods. The introduction of unemployment insurance is a crucial measure to help manage vulnerability to such income shocks.	

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