International Labour Organization

Socioeconomic impact of the COVID-19 pandemic in Indonesia

Labour market analysis and policy recommendation

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International Labour Organization (ILO) Country Office for Indonesia and Timor-Leste

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PREFACE

The COVID-19 crisis caused a massive disruption to Indonesia's economy and labour market, with disproportional impacts on vulnerable groups.

To address the issue and in line with its mandate as the United Nations agency for the world of work devoted to advancing social justice and promoting decent work, the International Labour Organization (ILO) commissioned a study on the socio-economic impact of COVID-19 Pandemic in Indonesia.

The ILO Country Office for Indonesia, including the Industry Skills for Inclusive Growth - Phase 2 (INSIGHT-2) Project funded by Government of Japan in full collaboration with the Bureau for Workers' Activities (ACTRAV), the ILO Decent Work Technical Support Team for East and South-East Asia and the Pacific, and the ILO Regional Economic and Social Analysis Unit, supported the study that was undertaken by University of Indonesia.

Using macro data, the study has been finalized and discussed with ILO government constituents including Coordinating Ministry of Economic Affairs, Ministry of National Development Planning/BAPPENAS, Ministry of Manpower and Ministry of Education, Centra Bureau Statistics), Employers (APINDO and KADIN) and Workers Organizations (KSBSI, KSARBUMUSI, KSPSI, KSPI, and KSPN), and other key stakeholders for further endorsement to strengthen productive employment, sector and skills development in Indonesia.

In addition, colleagues from the ILO Country Office for Indonesia, INSIGHT phase II project, ACTRAV, the ILO Decent Work Technical Support Team for East and South-East Asia and the Pacific, and the Regional Economic & Social Analysis Unit of the ILO Regional Office for Asia and the Pacific provided technical input and feedback.

The objective of the study is to better understand the socio-economic impact of the COVID-19 crisis on the labour market, employment, and skills development, and analyse policy responses, gaps, and options for socio-economic recovery.

I would like to extend my gratitude to the University of Indonesia Team (Mr. Padang Wicaksono, Flora Aninditya, Aditya Harin Nugroho, Kitta Aquillah Zebua, Faris Azhari and Muhammad Abdul Rohman). Together with ILO colleagues, Kazutoshi Chatani, Felix Weidenkaff, Phu Huynh, Ravindra C. Samithadasa, Tauvik Muhamad, Dede Shinta Sudono, Tendy Gunawan, and Julia Lusiani for their technical input and comments, and Eka Novitasari, Budi Setiawati and Gita Lingga for getting this study published.

I do hope these findings and policy recommendations capturing the impact of COVID-19 on the Indonesian economy help in addressing the socio-economic impact of the pandemic, particularly on vulnerable groups, the labour market and skills development.

In addition, I hope this study will be useful as a basis for policy dialogue in strengthening productive employment, sector, and skills development, formulating future skills policies and implementation, and ensuring "no one is left behind" in pursuing decent work and inclusive growth for Indonesia.

Michiko Miyamoto

Director – ILO Country Office for Indonesia and Timor Leste

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Glossary

ACTRAV	Bureau for Workers' Activities
ADB	Asian Development Bank
ALMPs	Active Labour Market Policies
APBD	*Anggaran Pendapatan dan Belanja Daerah* / Regional Budget
APBN	*Anggaran Pendapatan dan Belanja Negara*
APINDO	*Asosiasi Pengusaha Indonesia*/ The Indonesian Employers Association
APF	Asia Pacific Fibers
APJII	*Asosiasi Penyelenggara Jasa Internet*
APRISINDO	*Asosiasi Penyelenggara Jasa Internet* Indonesia Association of Indonesian
APSyFi	*Internet Providers Asosiasi Pro Penempatan*
ASEAN	*Association of Southeast Asian Nations* (Perhimpunan Bangsa-Bangsa Asia Tenggara)
BAPPENAS	*Badan Perencanaan Pembangunan Nasional*
BBPLK BI	*Balai Besar Pelatihan Pengembangan Latihan Kerja Bank Indonesia*
BLT	*Bantuan Langsung Tunai*
BLK	*Balai Latihan Kerja*
BOS	*Bantuan Operasional Sekolah*
BPUM	*Balai Produktif Usaha Mikro*
BP2MI	*Badan Perlindungan Pekerja Migran Indonesia*
BPJS-Kesehatan	*Badan Penyelenggara Jaminan Sosial Kesehatan*
BPJS-Ketenagakerjaan	*Badan Penyelenggara Jaminan Sosial Ketenagakerjaan*
BP Jamsostek	*Badan Penyelenggara Jaminan Sosial Ketenagakerjaan*
BPS	*Badan Pusat Statistik*
bps	basic points
ILO	International Labour Organization
JHT	*Jaminan Hari Tua*
JKK	*Jaminan Kecelakaan Kerja*
JKM	*Jaminan Kematian*
JKN	*Jaminan Kesehatan Nasional*
JKP	*Jaminan Kehilangan Pekerjaan*
JP	*Jaminan Pensiun*

KADIN	*Kamar Dagang dan Industri Indonesia*/ The Indonesian Chamber of Commerce and Industry
Cedefop	European Centre Four Development of Vocational Training
EdTech	Educational Technology
TSK	*Tekstil, Sandang dan Kulit*
KSPSI	*Konfederasi Serikat Pekerja Seluruh Indonesia/* The Confederation of All Indonesian Workers' Unions
SPSI	*Serikat Pekerja Seluruh Indonesia*
PDB	*Produk Domestik Bruto*
PDRB	*Produk Domestik Regional Bruto*
TIK	*Teknologi Informasi dan Komunikasi*
Rp.	*Rupiah*
Jabodetabek	*Jakarta, Depok, Bogor, Bekasi, kabupaten Bekasi, Tangerang Selatan, dan kabupaten Tangerang*
JKP	*Jaminan Kehilangan Pekerjaan*
KSARBUMUSI	*Konfederasi Serikat Buruh Muslimin Indonesia*/ The Confederation of Indonesian Muslim Labour Unions
KSPN	*Konfederasi Serikat Pekerja Nasional*/ Confederation of National Workers' Unions
KSPI	Konfedrasi Serikat Pekerja Indonesia
KSBSI	*Konfederasi Serikat Buruh Seluruh Indonesia*
LPS	*Lembaga Penjamin Simpanan*
LPEM	*Lembaga Penyelidikan Ekonomi Masyarakat*
LPK	*Lembaga Pelatihan Kerja*
LSP	*Lembaga Sertifikasi Profesi*
M2	*Jumlah Uang Beredar*
Kemendikbud-ristek	*Kementerian Pendidikan dan kebudayaan, Riset dan Kebudayaan*
Kemkeu	*Kementerian Keuangan*
Kemkes	*Kementerian Kesehatan*
Kemnaker	*Kementerian Ketenagakerjaan*
Kemen PPPA	*Kementerian Pemberdayaan Perempuan dan Perlindungan Anak*
UMKM	*Usaha Mikro, Kecil dan Menengah*/Micro, Small and Medium Enterprises
NEET	Not in Employment, Education, or Training *(Tidak Bekerja, Bersekolah atau Mengikuti Pelatihan)*
LSM	*Lembaga Swadaya Masyarakat*

NPL	Non-Performing Loan *(Pinjaman Macet)*
OECD	Organisation for Economic Co-operation and Development *(Organisasi Kerjasama dan Pembangunan Ekonomi)*
Program PEN	*Program Pemulihan Ekonomi Nasional*
PHRI	*Persatuan Hotel dan Restoran Indonesia*
PMI	*Pekerja Migran Indonesia*
APD	*Alat Perlindungan Diri*
PPKM	*Pemberlakuan Pembatasan Kegiatan Masyarakat*
PSBB	*Pembatasan Sosial Berskala Besar*
Q1	*Kuartal pertama*
Q2	*Kuartal kedua*
Q3	*Kuartal ketiga*
Q4	*Kuartal keempat*
Rt	Effective Reproductive Rate *(Tingkat Reproduksi Efektif)*
SAKERNAS	*Survei Angkatan Kerja Nasional*
SUSENAS	*Survei Sosial Ekonomi Nasional*
Diklat Vokasi	*Pendidikan dan Pelatihan Teknis dan Vokasi*
UNESCO	United Nations Educational, Scientific and Cultural Organization *(Organisasi Pendidikan, Ilmiah dan Budaya Perserikatan Bangsa-Bangsa)*
WHO	World Health Organization *(Organisasi Kesehatan Dunia)*
YoY	*Year on Year*

Executive Summary

The COVID-19 pandemic has had a profound socio-economic and labour market impact on Indonesia. Vulnerable groups have been especially hard hit. This study attempts to examine the socio-economic impact of the COVID-19 pandemic in Indonesia, with a special focus on the sectoral level and Micro, Small- and Medium-sized Enterprises (MSMEs); employment and the labour market; vulnerable groups; skills development; poverty and social mobility; and social protection. While Indonesia has made progress on mitigating the socio-economic impacts of the COVID-19 pandemic, disadvantaged workers suffered the most from, and are still struggling to recover from the pandemic.

To address the main objectives, this study employs both quantitative and qualitative methods based on a combination of extensive desk-based review, in-depth interviews with key stakeholders, and tripartite consultation meetings. These resource persons and interviewees were identified, engaged, and contacted with the invaluable support of ILO Office. To complement the desk-based reviews and virtual in-depth interviews, this study also analyses statistical reports, particularly on social-economic and labour force surveys at the national level for 2018-2021.

This study reveals the following important findings: First, while still struggling to curb daily cases of COVID-19, the Government of Indonesia has taken immediate measures and approved the National Economy Recovery Programme (PEN), through the Indonesian Parliament, to tackle the related problems. PEN supports social assistance for the poor and those who lost their jobs due to the pandemic, and the health sectors and business communities that were also severely hit such as accommodations, restaurants, transportation, and warehousing. Notably, MSMEs, as a significant part of the business community, received IDR 2.4 million each from PEN to survive and cope with the pandemic.

Second, unemployment is highlighted as Statistics Indonesia (BPS) recorded a sharp rise of around 38.6 per cent during the pandemic between August 2019 and August 2020 (National Labour Force Survey). In addition, a consequence of declining working hours in all status and occupational types in all sectors, under-employed and part-time workers increased, particularly in the agriculture (including forestry and fishing); manufacturing; transportation and storage; and education sectors. Moreover, labour underutilization in urban areas was more acute than in rural areas.

Third, there was a growth in informalisation as shown by the shift in the employment status of fresh graduates, from employees to own-account workers and contributing family workers. Consequently, this shift also caused an overall increase in workers without social protection and income security. Women are the most vulnerable group to experience the negative impacts of the pandemic because they are often unpaid as caregivers, work unpaid as a contributing family worker, or take care of children home-schooling during the lockdowns. Informal workers are also more vulnerable during the pandemic as their contracts and working hours are undefined. Informal workers do not have stable incomes and have no financial security from the pandemic's economic shock.

Fourth, while social-physical distancing disrupted education and training, it also promoted innovation in distance learning, arguably a blessing in disguise. Training participants increased during the pandemic. The Pre-Employment Card Programme (Program Pelatihan Kartu Prakerja) contributed to the increase in training participants during the pandemic due to its flexibility and no education required to join.

Fifth, Indonesia has successfully reduced the poverty rate by more than half and improved equality over the last two decades. However, due to the COVID-19 pandemic Indonesia's national poverty level increased and consequently inequality has potentially increased.

Sixth, there are challenges that need to be considered regarding the implementation of JKP, such as: limited participation by temporary workers, integration with JKN (*Jaminan Kesehatan Nasional*, National Health Insurance), the decreasing sum of premium contributions to current schemes, and increasing the JKP participants.

Based on these key findings, a number of important recommendations would increase the capacity of Indonesia to mitigate the socio-economic impact of the COVID-19 pandemic.

First, the government should continue its targeted policy support for enterprises coping with the economic impact of the pandemic to the extent its fiscal capacity allows for economic stimulus.

Second, while employment continues to recover, Indonesian policy makers should pay more attention to the inclusive and quality measures for vulnerable groups such as women who bear a disproportionate burden of the responsibilities for care at home; workers with disabilities; and the young, especially recent graduates (from all levels of education). Investing more in active labour market policies such as skills development and employment services are necessary to support these vulnerable groups.

Third, in coping with the digital transformation and digitisation of the economy, investing further in human capacity development and strengthening the capabilities of MSMEs are indispensable.

Fourth, sectoral-based measures should be taken due to uneven economic recovery across industries. This would enable provinces or municipalities to spur local economic activity. For example, tourism-dependent provinces need sustained support such as domestic travel incentives to attract visitors during any immediate rebound in tourism; and continued income subsidies for MSMEs and workers in the tourism sector. These measures could help tourism-dependent provinces navigate the prolonged and uncertain recovery. The support to sectors may not only focus on hard-hit sectors, but also those that offer employment potential in the short- and medium-term. As for sectors that offer potential employment opportunities, such as the health sector, support can be given through transport subsidies for its workers.

Last, but not least, despite expanding the coverage of JKP to benefit precarious contract workers being urgently required, Indonesia must further accelerate its efforts toward formalization in the coming years as the pandemic has revealed the limitations of its policy responses in reaching and supporting the informal economy.

Chapter 1

Introduction

1.1. Background

Coronavirus 2 (SARS-2) or COVID-19 is a Coronavirus variant first found in Wuhan, China, in December 2019 that spread rapidly until the World Health Organization (WHO) announced a global pandemic on 30 January (*WHO 2020*). By 4 March 2020, 77 countries were reporting cases of COVID-19, and by 29 July 2021 the number of people infected with the virus was 197 million with a 2.1 per cent fatality rate (4.2 million). Moreover, since its spread globally in 2020, the pandemic caused world GDP to shrink 3.2 per cent, even more than the global financial crisis in 2008. The International Monetary Fund (IMF) predicts the global economy will contract by USD22 trillion between 2020-2025 (*IMF 2021*) and declares the COVID-19 economic crisis as the worst since the Great Depression around 1930 (BBC News 2020.

In Indonesia, the Government of Indonesia (GoI) identified the first cases of COVID-19 in Depok, West Java, in March 2020. By 29 July 2021, the number of people infected by the virus was around 3.3 million, with a slightly higher fatality rate than the world (2,7 per cent) (*COVID-19 Task Force 2021*). The social impact of the pandemic was and is still massive. The first month after the GoI identified the first cases, about 50 per cent of consumers reduced their entertainment activities outside (Nielsen 2020). In addition, other social activities such as schooling had to adapt and transition to online learning methods. School closures, social isolation, and economic uncertainties also made for additional risks, including mental health concerns for children and mothers (*UNICEF, UNDP, Prospera, and SMERU 2021*). In terms of the economy, the pandemic brought Indonesia's first recession since the 1998 Asian financial crisis and after a decade of stable economic growth. The combination of education adjustments and recession is predicted to persist for a long time, especially for the young who already have suffered from a year-long school disruption and difficult labour market conditions (*OECD 2021*). Data from the National Labour Force Survey (*Sakernas, 2020*) shows that the pandemic has negatively impacted around 26.59 million working-age Indonesians including 2.56 million identified as newly unemployed and 24.03 million suffering a decrease in working hours. The changing employment profile has led to an increase in the poverty rate and its severity.

As a part of its measures against the pandemic, the GoI broke its 3 per cent maximum deficit regulations in 2020 to provide funding for the PEN (Pemulihan Ekonomi Nasional or National Economic Recovery Programme). Due to its response, Indonesia's policies have successfully made for gradual economic improvement as businesses continued to recover, and the economy recorded growth in Q2 of 2021. In addition, the government's social assistance programmes mitigate a potentially worse outcome (*World Bank 2021a*). However, the road to economic recovery is still bumpy (OECD 2021) and the current health-related policy is providing ambiguous results. It is therefore imperative to have a set of policies that re-balances health and economic interests.

This report is a compilation of current findings of the socio-economic impact of COVID-19 in Indonesia and a discussion of its future direction, with the aim of being an asset in creating better policies against the pandemic. This study uses qualitative and quantitative approaches. The qualitative approach is done through literature reviews and in-depth interviews with business associations, worker unions, and representatives of firms from selected sectors, as well as the tripartite consultations on the draft report. Analysis for the quantitative approach uses National Survey Data (Susenas and Sakernas) for 2018-2021. **Chapter one** presents a brief introduction to the report. **Chapter two** provides data and findings of the pandemic's impact on the Indonesian economy, particularly at the macro, sectoral, and MSME levels. **Chapter three** explains the pandemic's impact on employment, starting with an overview of the changing employment profile and the issues that emerged in the labour market. In **chapter four**, the impacts on specific vulnerable groups, namely the youth, women, informal workers, workers with disabilities, and migrant workers are discussed. Still linked to employment issues, **chapter five** discusses the pandemic's impact on skill development

and focuses on the changes in education and training. **Chapter six** provides data and findings of the pandemic's impacts on poverty, inequality, and social mobility. **Chapter seven** introduces the newest schemes in labour market security and the recent developments in assistance for jobseekers. The **last chapter** concludes the study by revealing important findings and proposes recommendations for policy makers which would increase Indonesia's capacity to mitigate COVID-19 pandemic's socio-economic impact.

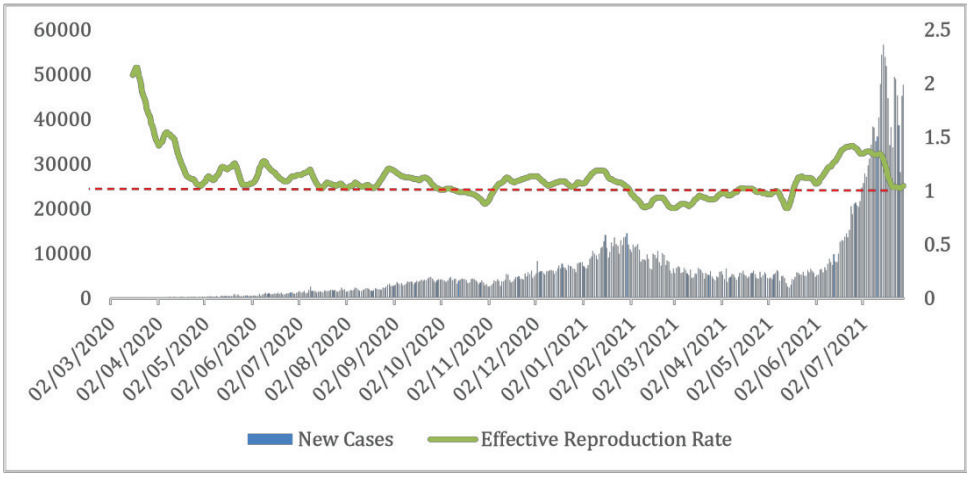
Chapter 2

Impact of COVID-19 Pandemic on The Indonesian Economy

2.1. A Summary of the COVID-19 Pandemic and Government Public Health Responses in Indonesia

Since March 2020, Indonesia has struggled to contain its COVID-19 cases. Although the GoI took to implementing the first Large Scale Social Restriction (Pembatasan Sosial Berskala Besar / PSBB), the number of daily cases reported did not slow down. The cases reported continued to increase before peaking on 15 July 2021, with 56,757 cases, causing the WHO (World Health Organization) to issue a warning in its WHO 64 Situation report and identify Indonesia as Asia's next epicentre of COVID-19 after India (*Jamaluddin and Berlinger 2021*).

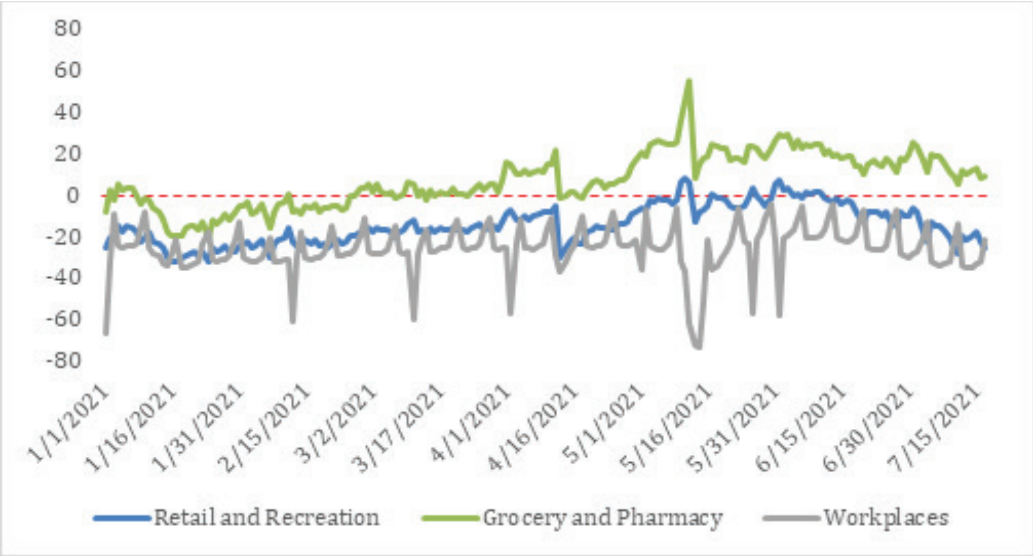
Figure 2.1 COVID-19 Daily Cases and Effective Reproduction Rate



Source: Our World in Data

Though the struggles persist, there were a few times where GoI managed to manage COVID-19 well, as represented less than one (<1) Case Reproductive Rate / Rt (average number of new infections caused by a single infected individual. If the rate is greater than one (>1), the infection can spread in the population. If the rate is less than one (<1), the number of cases in the population will gradually decrease to zero). This first occurred between 14 October and 4 November 2020. The second time was between 2 February and 10 April 2021, and the third between 24 April-17 May 2021. However, due to Eid al-Fitr 2021, Indonesia's COVID-19 reproductive rate was back to the level of more than one (>1), with an increasing trend above one (>1) on 18 May 2021 and peaking at 1.4 on 25 June as mobility increased during that period. This was especially true for the retail, recreation, grocery, and pharmacy businesses, while workplace movement increased more after the Eid al-Fitr holiday (Figure 2.2).

Figure 2.2 Population Mobility to Retail and Recreation, Grocery and Pharmacy and Workplace in 2021 (per cent from baseline)



Source: Google Mobility Report

Since the pandemic's beginning, although GoI has not been devoid of action, more is needed (*Ariawan and Jusril 2020*). Despite its late response at the beginning of the pandemic and its prioritizing of the economy over national health (*Wicaksono 2020*), the government implemented policies in tackling the pandemic. This report organizes and discusses those policies in several categories: contact suppression/social distancing, restriction of movement, National Economic Recovery (PEN) Programme, vaccinations, and other related public health responses.

Contact Suppression/Social Distancing

The Central Government called for social distancing two weeks after the first COVID case was confirmed. A presidential speech urged people to work, worship, and study at home on 16 March 2020 (*Halidi and Putri 2020*), following the WHO's recommendation that people keep two-meters apart as the virus proved to be contagious at the one-meter range (*Yesudhas, Srivastava and Gromiha 2021*). However, this policy is only an early prevention measure. A further announcement by the government summarized this policy into the term Five M (5M): washing hands (*mencuci tangan*), wearing masks (*memakai masker*), staying away from crowds (*menjauhi kerumuman*), and reducing mobility (*mengurangi mobilitas*), as an addition to social distancing (*menjaga jarak*) announced at the pandemic's beginning.

Restriction of Movement

There are several types of restrictions on movement due to COVID-19 around the world. While countries like Italy and Australia strictly restrict their people's movement with total lockdowns, Indonesia, and other countries such as the Philippines apply partial lockdowns to limit the movement of people inside or from outside the country. Indonesia's first policy regarding lockdowns was called PSBB (Large Scale Social Restriction), as regulated under Presidential Decree No. 21 of 2020. It governed people's movement between regions, business operating hours, and school closures from 9 April to 4 June 2020 (Table 2.1). The first PSBB suppressed the number of infections by 50 per cent but proved ineffective in terms of Real Reproductive Rate. The rate was still estimated to be as high as 1.2 when the PSBBs were relaxed although, according to the WHO, the reproductive rate must remain below one (1) for two weeks before it is considered under control. As a result, infection numbers accelerated sharply. By the end of August 2020 and following public holidays that involved spikes in domestic travel, daily reported new cases passed the 3,000 marks for the first time, with daily infections reaching 4,000 by late September and reproductive rates still above one (>1) in all of Indonesia's 34 provinces (*Ariawan and Jusril 2020*). During the Rt's ups and downs, Indonesia implemented a series of PSBB periods with various movement restrictions, aiming to balance health and economic interests.

From 3 July 2021, the GoI has implemented a partial lockdown policy and introduced a new term, namely PPKM (*Pemberlakuan Pembatasan Kegiatan Masyarakat*- Restrictions Toward Community Activities) (Table 2.1). .

The PSBB and PPKM have quite different features. For example, PSBB was applied in Java and several provinces outside Java with high infection rates. Meanwhile, PPKM was initially applied in Java and Bali and was extended to 15 districts outside Java and Bali by 6 July 2021. Another difference is regarding the length of policy implementation. The duration of PSBB was two weeks. Meanwhile, the PPKM period was gradually adjusted as Indonesia took a more careful response to prolonging it. The PPKM extensions were progressively implemented with modifications until all the indicators such as Rt and daily cases are more conducive to opening economic activities. By 26 July, the data showed Indonesia's Rt was 1.0 with a still worrying pace of daily cases (38,679 new cases), despite the start of a decreasing trend.

The GoI also made the complementary policy to restrict the people's movement during holidays, especially Eid al-Fitr, which is always followed by the tradition of gathering with extended family (*mudik*). To reduce the people's mobility during the mudik period, Ministry of Transport Regulation No PM 25 of 2020 Resp. No. 13 of 2021 strictly restricted traveling from a few days before until a few days after Eid al-Fitr. In addition, police roadblocks were set up on the arterial roads of major cities to enforce the regulation. In anticipation of mudik travellers circumventing the restrictions during the 2021 Eid al-Fitr, as happened in 2020, the GoI imposed additional measures to hinder people traveling for a more extended period before and after the holidays (*Ibrahim and Schimtz 2021*). Number of local governments were also committed to closing or applying limitations in some recreation spots to limit the number of visitors, especially during holidays.

Table 2.1 Summary of Movement Restriction Policy in Indonesia

Description	School	Office	Places of Worship	Mall, Groceries, and Markets	Transport and People Movement	COVID Isolation and Others
PSBB I (9 Apr-4 Jun)	Closed and schools moving online	Closed with most offices moving to work from home (WFH) Exception to 11 essential activities	Closed with services moving virtual	Closed except supermarkets, pharmacies, and traditional markets Restaurants only take out	Cars 50% capacity public transport 50% Partial restriction between provinces	Mild symptoms can self-isolate at home. Covid designated hospital and isolation wards set up
PSBB Transition I 5 Jun-13 Sep	No change	50% WFH	50% capacity	Mall open 50% capacity Restaurants open with social distancing	No change and no travel limits between provinces	Continue to expand beds for Covid patients
PSBB II (Emergency Brake) 14 Sep -11 Oct	No change, additional restriction of student gatherings	75% WFH	50% capacity	No change except restaurants now closed and only take outs allowed	No change	Self-Isolation at home is not allowed. All cases must be isolated and designated places (added several hotels). Wearing masks is compulsory with sanctions
PSBB II Transition start 12 Oct but end differently for each region	No change	50% WFH	No change	No change Restaurants allowed open but with social distancing	No change	No change

Description	School	Office	Places of Worship	Mall, Groceries, and Markets	Transport and People Movement	COVID Isolation and Others
PPKM Mikro (Red, Orange, Yellow and Green Zone on RT (Rukun Tetangga – Neighborhood Association level) 5 Jan 2021 - Now	No change	No change	Depending on the zone: Red: Closed with services moving virtual Orange: 50% Capacity Yellow and Green: No Restriction	Restaurant and Mall Open with 50% capacity	Tidak ada perubahan	Depending on the zone: Red, orange, and yellow: mild symptom can self-isolation with strict surveillance and effective contact tracing Green: Periodically do surveillance activities to find suspect
PPKM Level 2-4 3 Jul-now *	No change	At level 4, closed with essential sector 50% WFH and critical sector can fully operate with a strict health protocol at the beginning. Gradually relaxed based on level	At level 4, closed with services moving virtual. Gradually relaxed based on level	Closed except supermarket, pharmacies, and traditional markets with 50% capacities with limited operation time Restaurants only take out (gradually relaxed based on level)	Cars 70% capacity. Movement between districts need to show PCR test 1x24, the First dose of Vaccine Certificate and Letter of assignment except for logistics. Gradually relaxed based on level	No change

Source: (Habir and Wardana 2020) modified by author

National Economic Recovery (PEN) Programme

To support the health sector, in 2020 the government allocated IDR 75 trillion or USD 3.8 billion (13 per cent of the total PEN allocation) for the purchase of medical equipment and supplies such as test kits and ventilators, personal protective equipment (PPE), and incentives for medical workers, including doctors and nurses (*ILO 2020a*). In 2021, the government initially allocated IDR 70 trillion, but due to the delta variant and the spike in COVID-19 infections, the government increased the allocation to IDR 214 trillion (*Indonesia, Ministry of Finance 2021c*). Following this policy, since the beginning of the pandemic, the GoI also covered all the treatment costs for COVID-19 patients (predicted to be about IDR 70 million per person) through the APBN (State Budget) allocations for the Ministry of Health (MoH) (*Agustiyanti 2021*).

Vaccination

Despite the GoI having announced regulations regarding vaccinations in August 2020 through Presidential Decree No.99 2020, and that the vaccination programme must begin around November 2020, the government officially started the COVID-19 Vaccination Programme on 13 January 2021. In addition, under Presidential Regulation No. 14 of 2021 on The Implementation of The Vaccination Programme, the GoI made vaccinations mandatory. The programme was split into four phases, with healthcare workers receiving the first batch of vaccines, followed by public servants and then other public members. The GoI inoculated a total of 208,265,720 people at the end of 2021. As of 12 August 2021, almost 52 million (15 per cent of the >15-year-old population) Indonesians received their first vaccinations and almost 26 million (13 percent of those over 15) had received their second vaccinations (*EKONID 2021*). The vaccines used in Indonesia vary from the Sinovac (main vaccine), AstraZeneca, Pfizer, and Moderna. At the same time, vaccine shortages and logistical challenges pose threats to the programme, exacerbated by the spread of more transmissible virus mutations worldwide (*World Bank 2021a*).

Other Related Public Health Responses

In the early days of the pandemic, the scarcity of personal protective equipment (PPE) made it hard for many Indonesian medical professionals to oversee the situation. In response, the MoH expedited the application process for the licenses required to domestically produce and distribute specific medical devices and household supplies to deal with COVID-19. It accelerated services of the production and distribution certifications and offered a one-day service for marketing authorization (*Raharja 2020*). The National COVID-19 Task Force has distributed supplies across the provinces assisted by the Indonesian Armed Forces (*Mahendradhata, et al. 2021*). Furthermore, to support the availability of PPE, the Training Centre under the Ministry of Manpower (MoM) was assigned to support the production of PPE and produce about 1.6 million sets by April 2020 (*ANTARA News 2020*).

2.2. Impact of The Pandemic on the Indonesian Economy and Other Sectors

Although COVID-19 has impacted Indonesia in many ways, there were several channels through which the pandemic affected economic activity. These include a sharp, but temporary decline in domestic consumption, declines in tourism and business travel activities, and weaker demand in other sectors through trade and production linkages. Disruptions to supply-side production and trade (which are distinct from demand-side shocks), and on health such as increased disease and mortality, as well as shifts in health care spending (*ADB 2020*), were also affected. These situations reflect a unique combination of voluntary social distancing, steep income losses, weaker consumer confidence, lockdowns needed to slow transmission and allowing health care systems to accommodate rapidly rising caseloads due to the pandemic (*IMF 2020*).

Table 2.2 Real GDP Growth by Expenditure Approach (Percentages)

Description	2020					2021	
	Q1	Q2	Q3	Q4	2020	Q1	Q2
Household Consumption	2.8	-5.5	-4.0	-3.6	-2.6	-2.2	5.9
Non-Profit Organization Consumption	-5.0	-7.8	-1.9	-2.1	-4.3	-4.0	4.1
Government Expenditure	3.8	-6.9	9.8	1.8	1.9	2.3	8.1
Gross Fixed Capital Formation	1.7	-8.6	-6.5	-6.1	-4.9	-0.2	7.5
Export	0.4	-12.0	-11.7	-7.2	-7.7	7.0	31.8
Import	-3.6	-18.3	-23.0	-13.5	-14.7	5.5	31.2
GDP	3.0	-5.3	-3.5	-2.2	-2.1	-0.7	7.1

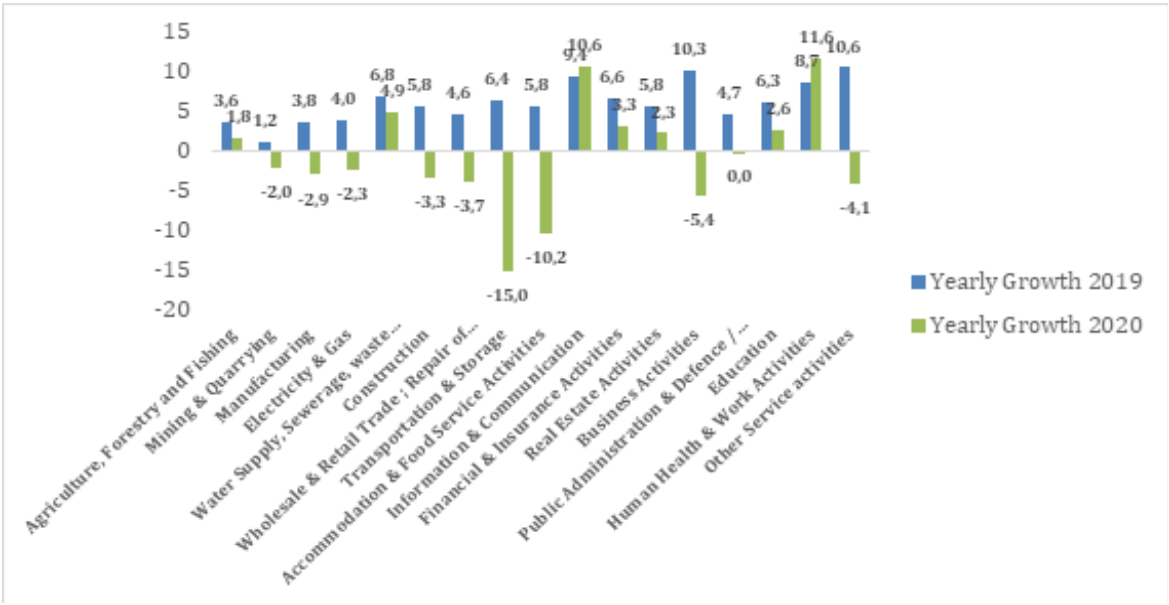
Source: BPS

As mentioned earlier, Indonesia's economy experienced its first recession since the 1998 financial crisis, with year-on-year GDP growth during 2020 contracting by 2.1 per cent and the Q2, Q3, and Q4 GDP contracted 5.3 per cent, 3.5 per cent, and 2.2 per cent respectively (Figure, 2.1). As a result, the recovery speed (the average growth rate between the fourth quarter and the second in 2020) of Indonesia's economy is found to be the lowest among its East Asian and G20 peers[1] with only 1.3 percent (*World Bank 2021a*). In addition, this trend continued in Q1 of 2021 with -0.7 per cent growth, even with the contraction decreasing.

GDP in Indonesia is officially measured by the BPS office with both expenditure and sectoral approaches. With the expenditure approach, GDP is calculated from private consumption (household and non-profit organization consumption), investment, government expenditure, and net exports. Household consumption still dominated GDP composition in 2020 with 57.6 per cent, followed by investment measured by gross fixed capital formation (31.7 per cent), exports (17.2 per cent), and government consumption (9.3 per cent) (*Prakoso, 2021*). In terms of household consumption, the contracting trend could be found in almost all quarters during the pandemic, but the trend kept decreasing with the YoY contraction of 2020 being -2.6 per cent while the Q2, Q3, Q4 YoY decreases were -5.5 per cent, -4.1 per cent, and -3.6 per cent, respectively. For Q1 2021 the decrease was -2.2 per cent (Table 2.2). The contraction is reflected by the decrease in retail sales (-12.0 per cent), import of consumer goods (-10.9 per cent), and wholesale trade of passenger cars and motorcycles (-50.5 per cent and -43.5 per cent) (*Prakoso 2021*). The investment measured by gross fixed capital growth is seen as decreasing by 1.6 per cent, with the most significant contraction being in vehicles (-41.8 per cent) (*Prakoso 2021*). However, Indonesia's economic growth was still partially buffered by growth in net exports (1.1 per cent) and the positive growth of government consumption as a key for the economy (*Nazara 2021*).

1 The 12 peers used by World Bank for benchmarking are East Asian peers (China, Philippines, Thailand, Malaysia, Vietnam), and G20 peers (Argentina, Brazil, India, Mexico, Russia, South Africa, Turkey)

Figure 2.3 Real GDP Growth by Sectors (Percentages)

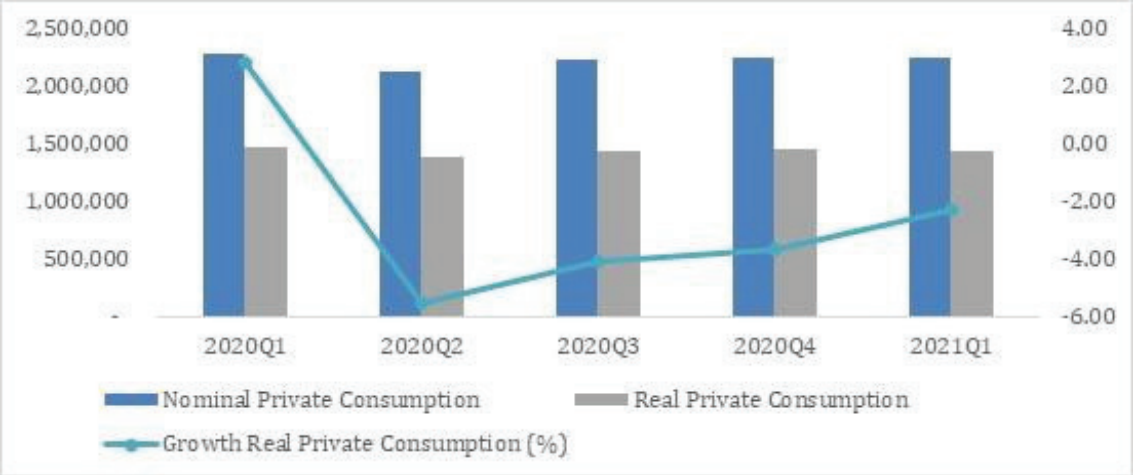


Source: BPS

The economic impact of the pandemic varied greatly between sectors. In 2020, the contractions happened in almost every sector with the contact-intensive sectors being more heavily damaged (*World Bank 2021a*) such as transportation and warehousing (-15.0 per cent) and accommodations and restaurants (-10.2 per cent). These two sectors were heavily impacted due to the nature of the pandemic, which limited human contact and movement. In retail, the decrease in household expenditure made the sector contract by -4.1 per cent in 2020, and the average retail index fell 34.8 points between January and November (Figure 2.5), especially for vehicle related products. Other sectors with negative growth are mining and quarrying (-1.9 per cent), manufacturing (-2.9 per cent), construction (-3.3 per cent), wholesale and retail trade: repair of motor vehicles and motorcycles (-3.7 per cent), public administration and defence (-0.0 per cent) and other service activities (-4.1 per cent) (Figure 2.3).

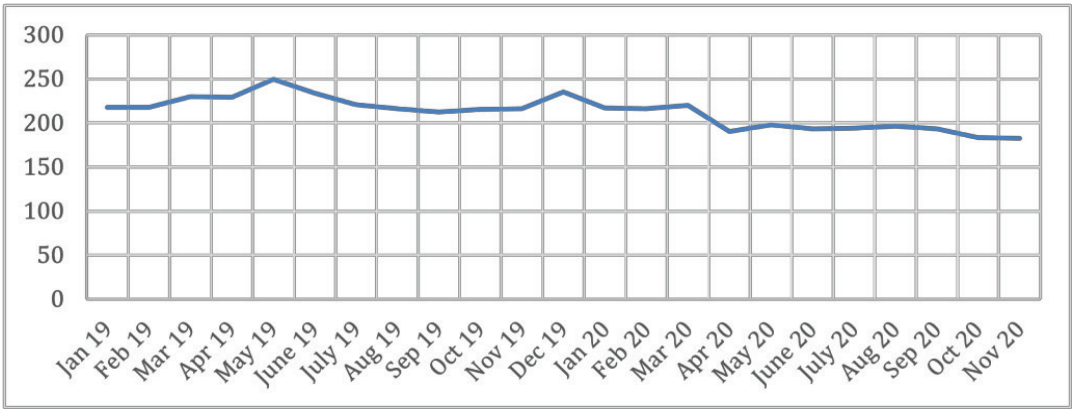
Unlike those sectors, the health services and the communications and information (ICT) sectors recorded double-digit growth with 11.6 per cent and 10.6 per cent respectively in 2020. The health sector's positive trend was due to the intense "war" against the pandemic in this sector. Working-from-home and social distancing restrictions increased Indonesia's reliance on ICT such as mobile phones, which contributed to double-digit growth in that sector year-on-year and had a positive effect on employment in the sector. However, as the sector had less than a five per cent share of GDP, the increase in employment was dwarfed by the contractions in other sectors. Therefore, it benefited the formal sector and more-educated workers (*Sparrow, Dartanto and Hartwig 2020*). Other sectors recording positive growth during 2020 were agriculture, forestry, and fishing (1.7 per cent), water supply, sewerage, waste management and remediation activities (4.9 per cent), finance and insurance (3.2 per cent, real estate (2.3 per cent) and education (2.6 per cent).

Figure 2.4 Indonesia Nominal and Real Private Consumption



Source: BPS

Figure 2.5 Retail Sales Index (Average)



Source: Bank Indonesia

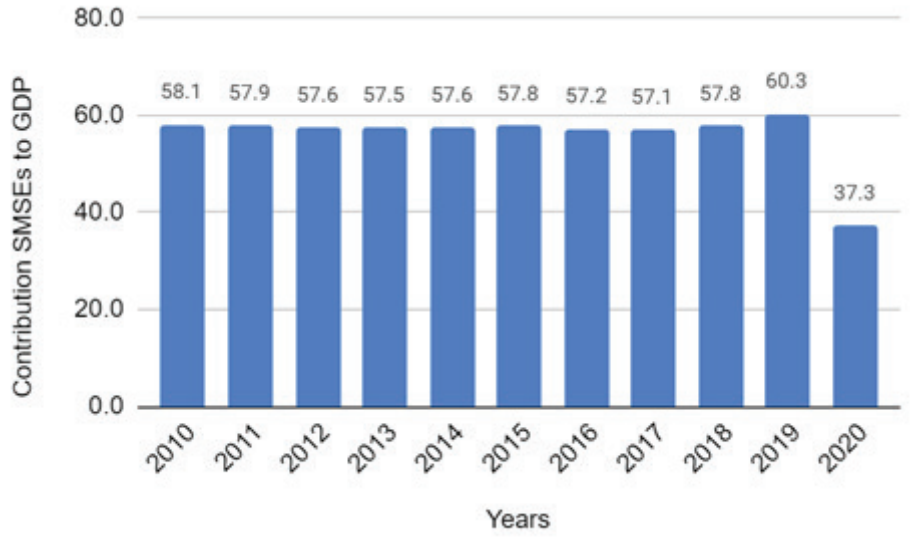
The monetary side of the economy did not see favourable conditions either in 2020. Despite some policies taken to support the banking sector by Bank Indonesia (BI, Indonesia's Central Bank) private sector credit has fallen since the beginning of the pandemic. Commercial bank lending contracted by -3.7 per cent in March 2021 (the slowest pace in over a decade). The slowdown has been broad-based, involving all types of credit, firm sizes, and sectors. Moreover, even higher lending to the government caused the money supply (M2) to accelerate from 9 per cent YoY in April-June 2020 to 12.3 per cent YoY during the second half of 2020, the balance sheet and broad money supply have not expanded markedly. Cuts to reserve requirements also contributed to lowering commercial bank deposits in BI and increasing liquidity in the financial system. But even those indicators are not showing the best possible. The World Bank reverse stress test indicates that Indonesia's banking system would be resilient to a significant Non-Performing Loan (NPL) shock, and that the country's bank's liquidity and profitability have also remained adequate (*World Bank 2021a*).

2.3. Impact on Micro-, Small- and Medium-Sized Enterprises

During the pandemic, WFH regulations and other mobility restrictions impacted MSMEs as they gradually lost income, especially those that relied on contact-intensive daily operations such as visiting shops. The loss of income in the MSME sector made business owners implement cost-efficiency policies by reducing working hours or laying off their employees. The layoffs then created a negative cycle that eventually spread to all MSME sectors, especially food and beverage, tourism, entertainment, etc. As a result, people's purchasing power decreased. To support the SMEs, the

GoI allocated a budget for IDR 2.4 million per MSME under the Bantuan Produktif Usaha Mikro (BPUM) programme. This fund was disbursed for 12 million micro business owners during August-December 2020 (Widiyani 2020). In 2021, BPUM had been disbursed to 12.7 million MSMEs, where each MSME received IDR 1.2 million (*Kompas.com 2021*).

Figure 2.6 Contribution of MSME to GDP, 2010-2020 (percentages)



Source: (Indonesia, Ministry of Cooperatives and SMEs 2021)

Data from the Ministry of Cooperatives and SMEs shows development of MSMEs in the last three years from 2016 to 2018 as relatively stable. Although there was a decrease in 2017, it was not that significant. A significant increase occurred in 2018, caused by many more MSMEs having begun to use digital technology. A report from kominfo.go.id shows 3.79 million MSMEs use online platforms to market their products. This number is equivalent to 8 per cent of the total MSME actors in Indonesia, which is 59.2 million (*Yuliani 2020*).

Table 2.3 Outstanding Micro, Small, and Medium Enterprises (MSMEs) Credits with Commercial Banks (in billions of rupiah) based on MSME Sector

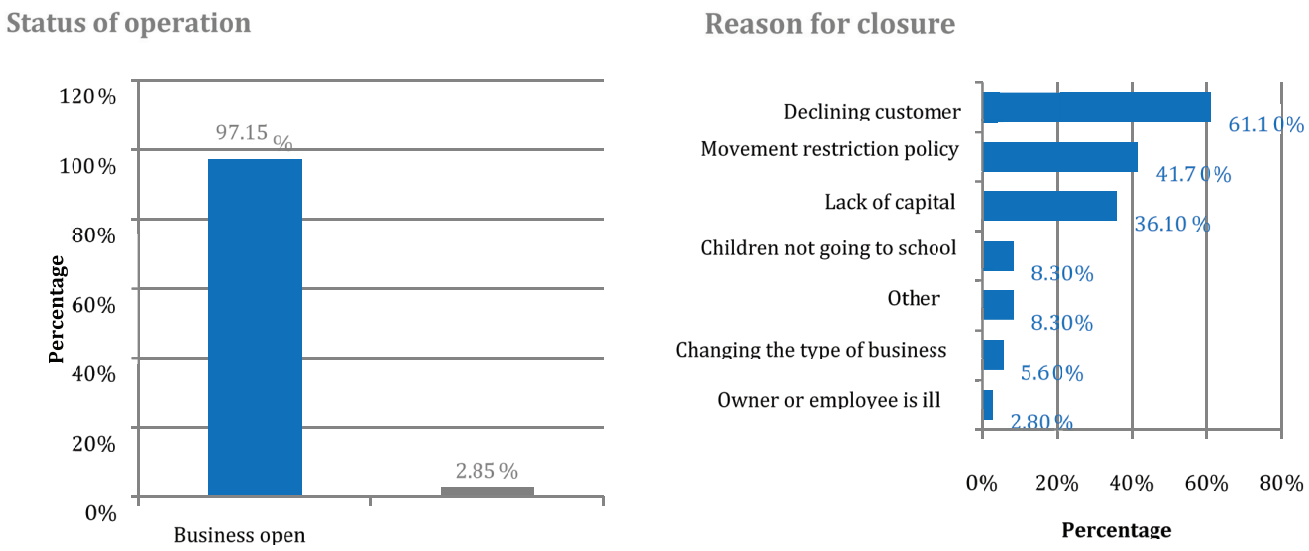
MSME Sector	2019	2020	Growth
Agricultures, Hunting, and Forestry	109,544	130,012	15.7%
Fishery	9,379	11,416	17.8%
Mining and Quarrying	8,544	8,039	-6.3%
Manufacturing	111,401	112,601	1.1%
Electricity, Gas, and Water	6,669	4,039	-65.1%
Construction	72,033	59,164	-21.7%
Wholesale and Retail Trade	548,276	530,653	-3.3%
Accommodation and Food Service Activities	45,137	50,623	10.8%
Transportation, Warehousing, and Communications	44,767	42,710	-4.8%
Financial Intermediaries	17,233	12,167	-41.6%

MSME Sector	2019	2020	Growth
Real Estate, Business Rental, and Company Services / Real Estate, Business, Ownership, and Business Services	58,427	50,702	-15.2%
Government Administration, Defense, and Compulsory Social Security	160	100	-60.0%
Education Services	6,872	7,235	5.0%
Health Services and Social Activities	11,718	10,257	-14.2%
Sociocultural, Entertainment, and other individual services	53,399	54,513	2.0%
Individual services Which Serve Households	3,093	2,875	-7.6%
International Agency and Other Extra Agency International	6	7	14.3%
business activities which are not clearly defined	583	1,219	52.2%

Source: BPS

Based on the table above, the impact of the pandemic shows that there is a decrease in bank financing from several types of MSMEs in Indonesia, namely Mining and Quarrying, Electricity, Gas, and Water, Construction, Wholesale and Retail Trade, Transportation, Warehousing, and Communications, Financial Intermediaries, Real Estate, Business Rental, and Company Services / Real Estate, Business, Ownership, and Business Services, Government Administration, Defense, and Compulsory Social Security, Health Services and Social Activities and Individual services Which Serve Households. In providing credit, financial institutions apply the 5C concept, including 1. Character; 2. Capacity/Cash flow (Capacity/Finance); 3. Capital; 4. Conditions; and 5. Collateral. Then Bank Indonesia added one more concept, namely constraints, that limits a businesses' operations. These six things are difficult for MSME actors to fulfil, especially collateral. .

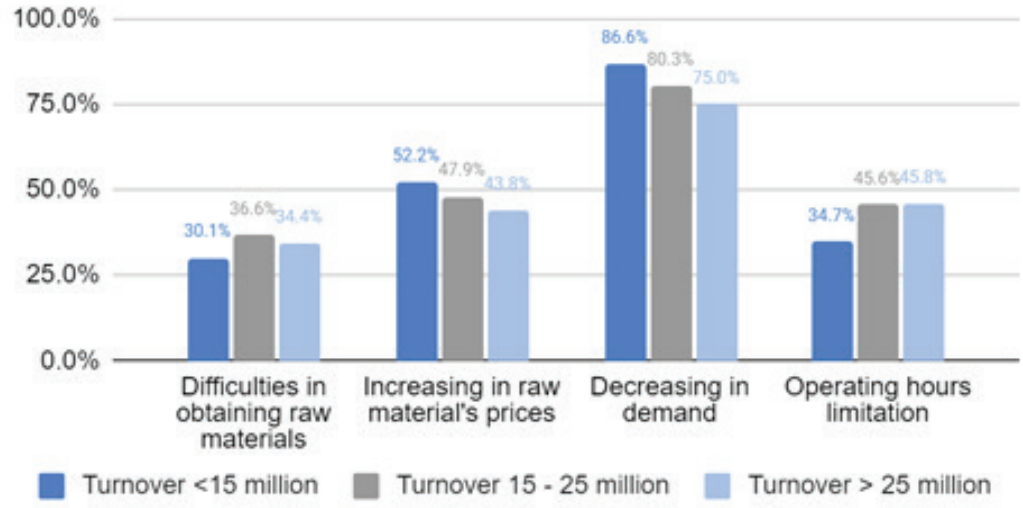
Figure 2.7 Business Operating Status



Source: Survey of Ministry of Cooperatives and SMEs & TNP2K 2021)

Based on a report from the Ministry of Cooperatives and SMEs in collaboration with the National Team for the Acceleration of Poverty Reduction (TNP2K), 2.85 per cent of businesses were closed during the pandemic. Several factors caused this such as the declining number of customers (61.1 per cent), the movement restriction policy (41.7 per cent), lack of capital (36.1 per cent), children not going to school (8.3 per cent), other reasons (8.3 per cent), changing the type of business (5.6 per cent), and that the owner or employee is ill (2.8 per cent). Furthermore, based on the data released by Lembaga Demografi FEB UI in 2020, during the pandemic, 62 per cent to 85 per cent of MSMEs experienced a decrease in transactions. By comparison, 49 per cent to 69 per cent among them were contracting around 50 percent before the pandemic. This condition encouraged the government to provide economic and social assistance to avoid the risk of more businesses closing due to the pandemic. One of the assistance methods provided by the government is the BPUM Programme which helps 97.15 per cent of recipients to run their businesses.

Figure 2.8 Problems in Production Aspect in 2020



Source: (Indonesia, Ministry of Cooperatives and SMEs & TNP2K 2021)

Most MSMEs (about 75 per cent to 86 per cent) admit to having problems with decreasing demand; increasing raw material prices (about 43.8 per cent to 52.2 per cent); difficulties in obtaining raw materials (about 30.1 per cent to 34.4 per cent) and limited operating hours (about 34.7 per cent to 45.8 per cent). This finding is consistent with the LPEM and United Nations Development Programme (UNDP) report, which says nine out of ten MSMEs faced lower demand for their products during the pandemic. Furthermore, around 81 per cent of the MSMEs reported that their businesses face distribution problems during the pandemic. More than 45 per cent of MSMEs had problems obtaining raw materials due to increased prices. In addition, two-thirds of MSMEs took in less revenue during the pandemic, while more than 80 per cent had lower profit margins during COVID, and that more than 53 per cent of MSMEs experienced a decrease in asset value.

One of the strategies adopted by MSMEs is to minimize their expenses by reducing their utility consumption. Another strategy is to adopt online sales. Based on a report by LPEM in collaboration with UNDP, around 44 per cent of MSMEs joined e-commerce channels (Tokopedia, Shopee, etc.) during the pandemic, with 40 per cent of them selling their products through the online marketplace (*UNDP and LPEM, 2021*). For SMEs that use the offline method in sales, as many as 80.1 per cent of MSMEs experienced a decrease in sales, only 4.8 per cent experienced an increase in sales, and 10.6 per cent did not change. Meanwhile, for SMEs that use online methods in their sales, only 59.8 per cent experienced a decrease in sales, 11 per cent experienced an increase in sales, and 16.8 per cent experienced an unchanged sale.

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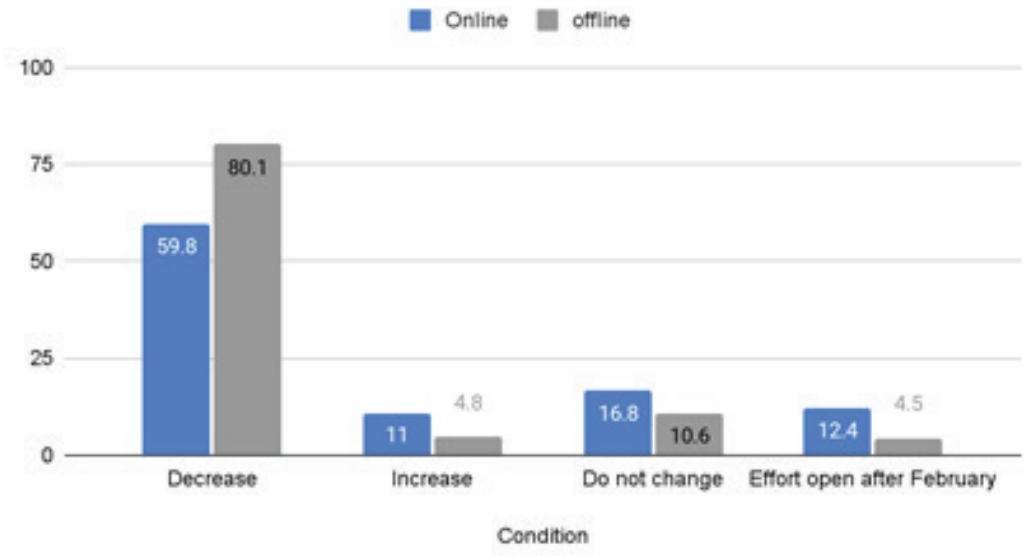
Figure 2.9 Percentage of MSMEs Sales Condition 2020



Source: (Indonesia, Ministry of Cooperatives and SMEs & TNP2K 2021)

2.4. Government Economic and Labour Market Policy Response

Despite the unfortunate recessionary impact of COVID-19 in 2020, the GoI managed to increase expenditures in the form of fiscal policies to minimize GDP contraction, while Bank Indonesia made several policies to support the country's economic recovery. As of August 2021, the government disbursed a total of IDR 1,752 trillion (about 10.3 percent of 2019 GDP) as part of the PEN. Compared to other ASEAN countries, this expenditure ranked 5th in terms of percentage of GDP, tied with Vietnam (Figure 2.10).

There were several programmes included in this package:

(i) support for the health care sector to boost testing and treatment capacity for COVID-19 cases;

(ii) increased benefits and broader coverage of existing social assistance schemes to low-income households such as food aid, conditional cash transfers, and electricity subsidies;

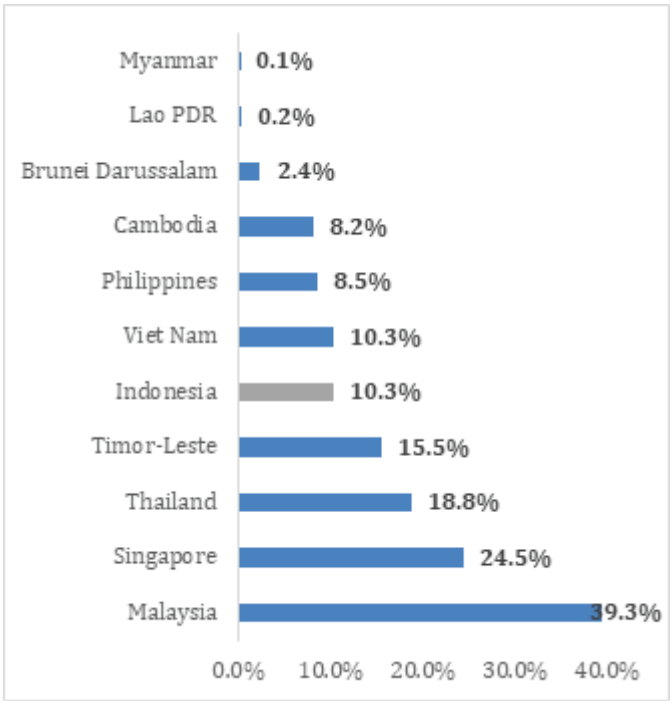
(iii) expanded unemployment benefits, including for workers in the informal sector;

(iv) tax relief, including for the tourism sector and individuals with an income ceiling; and

(v) permanent reductions of the corporate income tax rate from 25 percent to 22 percent in 2020–21, and to 20 percent starting in 2022. The PEN also includes capital injections into state-owned enterprises, interest subsidies, credit guarantees, and loan restructuring funds for micro, small, and medium enterprises (*IMF 2021*). Moreover, specifically for the tourism sector, GoI granted IDR 3.3 trillion in cash transfers to enterprises related to the sector such as hotels, restaurants, travel agencies, and recreation parks (*Indonesia.go.id 2021*). Based on our in-depth interview with the Indonesia Hotel and Restaurant Association (PHRI), the grants were only provided to enterprises with a good tax compliance record.[2]

2 Details for each programme can be found in Annex I.

Figure 2.10 Total COVID-19 Fiscal Policy Response Package in 2020-2021 (Percentage of 2019 GDP)



Source: ADB (Asian Development Bank)

Note: Total policy response package includes fiscal expenditure announcement for i) liquidity support, ii) credit creation, iii) direct long-term lending, iv) equity support, v) Government support to income and revenue, vi) other expenditure without breakdowns as of 30 August 2021

To give more support to the labour market, GoI even expanded its Pre-Employment Card Programme to create a buffer for the increasing number of unemployed and provide more training for the labour force. Initially, this programme was promised to enable general and vocational high school graduates to receive regular or vocational training so that they can enter the world of work (*CNN Indonesia 2019*). However, due to the COVID-19 pandemic, there was a change in the implementation of the Pre-Employment Card Programme, especially in its selection criteria. The Pre-Employment Card Programme was adjusted to help the purchasing power of formal/informal workers and micro-business actors affected by the reduced economic activity due to COVID-19, such as victims of layoffs and those laid off with unpaid leave, or those experiencing decreased income (*Kartu Prakerja n.d.*). The benefits received from the programme per participant total IDR 3.55 million, including: (i) incentives of IDR 600 thousand per month per participant for four months or a total of IDR 2.4 million per participant, (ii) job survey incentives of IDR 50 thousand per survey per participant for three surveys or a total of IDR 150 thousand per participant, and (iii) training costs of a maximum of IDR 1 million per participant (*Indonesia, Ministry of Finance 2021a*). In 2020, about 6.1 million people joined as participants of the programme and about 5.3 million already received those incentives (*Tempo.co 2021a*).

In terms of monetary policy, BI reduced the policy rate by 125 basis points cumulatively in February, March, June, July, and November 2020, and by 25 bps in February 2021, to 3.5 percent. In addition, BI also announced other measures to promote liquidity, including: (i) lowering reserve requirement ratios for banks; (ii) increasing the maximum duration for repurchase agreements (repo) and reverse repo operations (up to 12 months), and introducing daily repo auctions; (iii) increasing the frequency of FX swap auctions for 1, 3, 6 and 12-month tenures from three times per week to daily auctions; and (iv) increasing the size of the main weekly refinancing operations as needed.

The GoI, through a Presidential decree, expanded BI's authority to maintain the stability of the financial system during the pandemic by facilitating BI liquidity assistance for banks, allowing BI to purchase government bonds in the primary market, and financing the deposit insurance agency (LPS) for bank solvency problems. The scheme, implemented in 2020, covered (i) BI's purchases of government bonds with coupons at the BI's policy rate to finance priority spending on public goods such as health and social protection; (ii) BI transfers to the budget that subsidized the budgetary interest cost of spending to support firms; and (iii) BI as a buyer of last resort for long-term local-currency bonds to finance other spending. In addition, BI also took measures to strengthen further financial deepening, access to financial services, and monetary operations, including facilitating collaboration between the banking industry and fintech companies, supporting digital payments in various sectors, and introducing Sharia-compliant instruments *(IMF 2020)*.

Chapter 3

Labour Market Impact of COVID-19 Pandemic

3.1 Overview of the Pandemic's Impact on the Labour Market

The COVID-19 led to negative trends in Indonesia labour market. The shock in labour market can be seen in the National Labour Force Survey (Sakernas) August 2019-2020 which depicted the contraction in employment, the rising number of labour under-utilization, the decreasing number of hours of work, and the decreasing number of wage and income. These conditions were inevitable due to the lockdown and containment measures enacted in the early of pandemic (the first COVID-19 case was officially announced in March 2020).

The negative trend in Indonesia labour market was predicted in early in the pandemic (*Reuters 2020*). In June 2020, Indonesia's Minister of Planning (Bappenas) explained in a parliamentary hearing that the unemployment rate in 2020 was higher than the 2019 rate. It went from 5.28 per cent in 2019 to 8.1 per cent - 9.2 per cent in 2020. The minister also explained that the unemployment trend in 2021 will remain the same as 2020 at an estimated 7.7 per cent to 9.1 per cent. In addition, the labour situation is at risk due to the massive loss in working hours between March 30 and June 6, and the expected 3.8 per cent drop in GDP in Q2 of 2020. The next part of this chapter assesses the impact of COVID-19 on employment in August 2019-2020 with indicators.

The labour market impact in Indonesia has mirrored broader trends in the region. Employment in the Southeast Asia region has been severely impacted by the COVID-19 pandemic. Based on the latest ILO estimates, working hours contracted by 7.9 per cent in 2020 and 7.3 per cent in 2021, relative to the fourth quarter 2019.[3] The decrease in working hours is the equivalent of 22.2 million full-time job losses in 2020 and 20.5 million in 2021.[4] Although the region is projected to see some rebound in 2022, working hours are not expected to recover to pre-pandemic levels by the end of the year.

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3.2. Employment

The crisis of COVID-19 caused a negative trend in the employment condition. The employment data in August 2019-20 exhibits the stagnation on employed persons, the most impacted sector of work, the movement of formal to informal job, and the increase in unemployment.[5] These findings further will be discussed in this subchapter.

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3 ILO, ILOSTAT Database.

4 Based on a 48-hour working week.

5 All the data shown in this chapter are from the Sakernas from various years. Sakernas data uses ILO recommendations on labour survey in the publication of "Surveys of Economically Active Population, Employment, Unemployment, and Under-employment: An ILO Manual on Concept and Methods" in 1992. This publication provides the Standard Labour Force Concept for basic definitions, and ILFS adopts the concept for population, economically active population, currently active population (labour force), population not currently active, time reference, and one-hour criteria (BPS 2020c, 93) (ICLS 2013).

Table 3.1 Indonesia Labour Market Indicators, August 2019-20

Indicator	August 2019	August 2020	Growth
Population	267,357,295	270,043,414	1.0%
Working Age Population, ages 15+	197,911,777	203,972,460	3.1%
Currently Active Population (Labour Force)	133,560,880	138,221,938	3.5%
Employment	126,515,119	128,454,184	1.5%
Unemployment	7,045,761	9,767,754	38.6%
Not Economically Active (Outside the Labour Force	64,350,897	65,750,522	2.2%

Source: Authors calculation from Sakernas August 2019-2020

A further breakdown for the labour supply in Table 3.1 shows the labour force increasing by 4.7 million from August 2019 with 133.6 million to August 2020 with 138.2 million. The increase in the new labour force is followed by the increase in the number of employments at 126.5 million in August 2019 and 128.4 in August 2020 (1.5 per cent increase). On the other hand, unemployment also increased with 2.7 million or 38.6 per cent between August 2019 and 2020). Due to the unemployment increase, the new labour force has been facing three challenges that cause lower employment and low job quality in entering the labour market in COVID-19 era (*Dzulfikar 2020*). First, high barriers to entering the job market because the new labour force compete with fellow new entrants and compete with workers who get laid off during the pandemic. Second, the pandemic constrains companies from investing in human capital which has consequently reduced worker productivity. Third, worsening labour conditions appear because the recession has caused fewer job opportunities. It causes job seekers that potentially have to accept jobs with a lower salary, overqualifications, vulnerable contracts, and informal arrangements.

While the trends in August 2019-2020 showed poor progress, statistic publication between February 2020 and February 2021 also confirms an increase in unemployment during the COVID-19 pandemic (BPS 2021a). Between February 2020 and February 2021, the number of unemployed increased by 26.3 per cent from 6.9 million to 8.7 million. The crisis also reduced the labour force by 0.3 per cent or 0.4 million, or from 140.2 million to 139.8 million, between February 2020 and February 2021. Further comparisons or interpretation of the data in the August to February publications in this chapter should be made with caution because of the different sample sizes between survey rounds and due to seasonality.

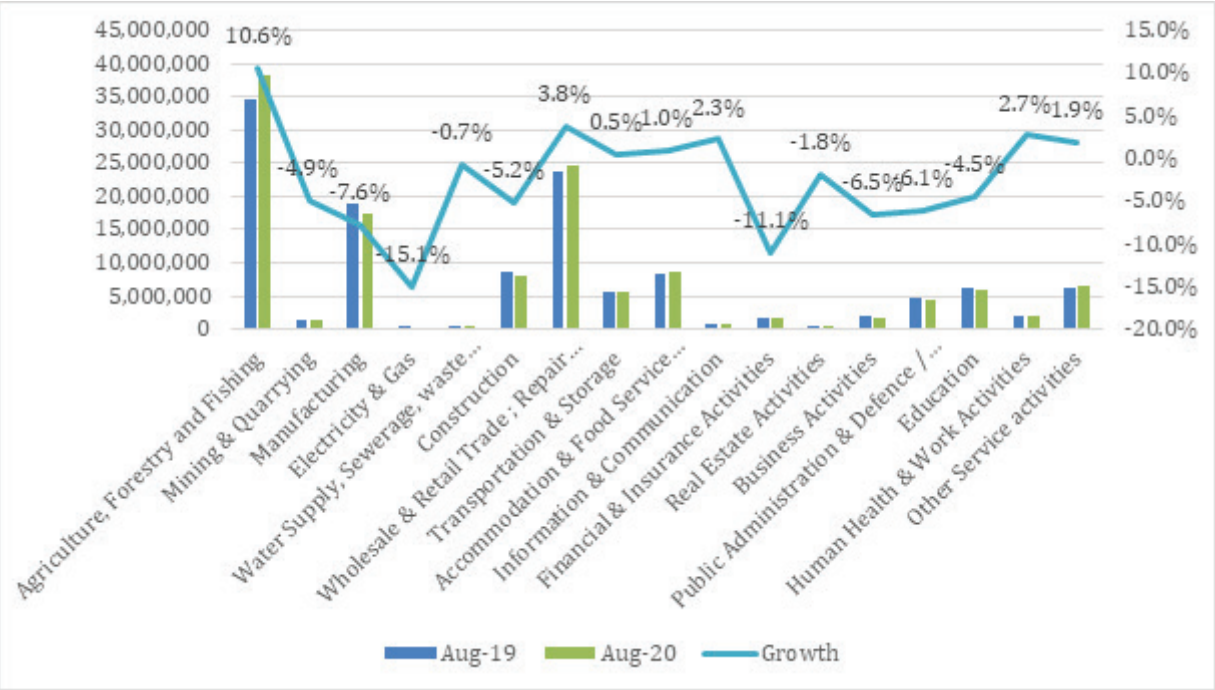
Table 3.2 Employment by Sex, August 2019-20

Sex/Gender	August 2019	August 2020	Growth	Change
Male	77,766,374	77,755,026	-0.0%	-11,348
Female	48,748,745	50,699,158	4.0%	1,950,413

Source: Authors calculation from Sakernas August 2019-2020

Further assessment of the employment data suggests the gap between male and female remained a problem in August 2019-20 (see table 3.2). Female employment increased by 1.9 million (4.0 per cent) from 48.7 million in August 2019 to 50.7 million in August 2020. In contrast, male employment slightly decreased 0.01 million in August 2019 from 77.8 million to 77.7 in August 2020. The employment gap between men and female in August 2019 and August 2020 persists. Data shows female employment contributed 38.5 per cent to total employment in August 2019 and 39.5 per cent in August 2020.

Figure 3.1 Employment Growth by Sectors, August 2019-20



Source: Authors calculation from Sakernas August 2019-2020

Labour market demand is changing due to the pandemic. The growth of employment suggests that during the COVID-19 period important sectors tend to create more jobs than others (see figure 3.1). The labour force in sectors involving food production such as agriculture, forestry, fishing, wholesale and retail trade, and accommodation and food service increased. Other essential sectors related to human health and ICT also showed positive growth in their labour force. The two sectors have become increasingly important and vital in the COVID-19 era. The health care sector depends on those cases of COVID-19 in need of care. The latter sector is vital because intense and increased use of technology in pandemic era.

Table 3.3 Employment Elasticity of Selected Sectors in 2020

Sector	Growth		Employment Elasticity
	Employment	GDP	
Agriculture, Forestry and Fishing	10.6	1.8	6.0
Manufacturing	-7.6	-2.9	2.6
Transportation and Storage	0.5	-15.0	0.0
Accommodation and Food Service Activities	1.0	-10.2	-0.1
Information and Communication	2.3	10.6	0.2

Source: Authors calculation from BPS and Sakernas 2020

Note: Employment elasticity shows the employment opportunities generated from a given change in economic growth. It is calculated from the percentage change of employment as a result from 1 percentage point change in economic growth.

Data on employment elasticity indicates that during 2019 and 2020, some sectors absorbed more employees, and other sectors show the reverse (see table 3.3). The negative elasticities are found in transportation and storage, and accommodation and food service activities – sectors that contribute to tourism. For example, accommodation and food service activities have -0.1 elasticity, which means in every 1 per cent increase in Gross Value Added (GVA), there is a 0.1 per cent decrease in employment or otherwise. In contrast, the agriculture, forestry, and fishing sector have 6.0 elasticity which means for every 1 per cent GDP increase, there is a 6.0 per cent employment increase.

Regarding the stagnation of employment growth, this is common given most sectors (10 out of 17) had negative labour trends such as electricity and gas with a -15.1 per cent decrease, financial and insurance activities down -11.1 per cent, and manufacturing decreased -7.6 per cent (see figure 3.1). But in terms of absolute number of employed persons, the sectors contracting the most were manufacturing with 1.4 million, construction with 0.4 million, and public administration and defence /compulsory social security with 0.30 million.

Table 3.4 The Percentage of Employment in the Sub-Sector of Manufacturing, 2019-20

Manufacturing Sub Sectors	2019	2020	Growth
Manufacture of food products	25.1%	27.5%	2.4%
Manufacture of beverages	2.0%	2.3%	0.3%
Manufacture of tobacco products	2.3%	2.4%	0.1%
Manufacture of textiles	6.7%	6.3%	-0.4%
Manufacture of wearing apparel	14.0%	13.3%	-0.7%
Manufacture of leather and related products	4.6%	3.8%	-0.8%
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	9.0%	9.3%	0.3%
Manufacture of paper and paper products	1.5%	1.4%	-0.1%
Printing and reproduction of recorded media	1.8%	1.6%	-0.2%
Manufacture of coke and refined petroleum products	0.3%	0.2%	-0.1%
Manufacture of chemicals and chemical products	2.1%	1.9%	-0.2%
Manufacture of pharmaceuticals, medicinal chemical, and botanical products	0.9%	0.7%	-0.1%
Manufacture of rubber and plastics products	3.2%	3.2%	0.1%
Manufacture of other non-metallic mineral products	6.9%	6.3%	-0.5%
Manufacture of basic metals	1.3%	1.4%	0.1%
Manufacture of fabricated metal products, except machinery and equipment	3.6%	3.5%	-0.2%
Manufacture of computer, electronic and optical products	0.9%	0.9%	-0.1%
Manufacture of electrical equipment	1.1%	1.0%	-0.1%
Manufacture of machinery and equipment n.e.c.	1.1%	1.0%	-0.1%

Manufacturing Sub Sectors	2019	2020	Pertumbuhan
Manufacture of motor vehicles, trailers, and semi-trailers	1.2%	1.2%	0.0%
Manufacture of other transport equipment	1.3%	1.2%	-0.2%
Manufacture of furniture	4.2%	4.3%	0.0%
Other manufacturing	3.8%	4.1%	0.3%
Repair and installation of machinery and equipment	1.0%	1.3%	0.2%

Source: (BPS 2021b)

Further assessment in sub manufacture sector shows the decline in employment becoming majority in August 2019 and August 2020 (see table 3.4). The three highest sub sector of manufacture that having negative growth are Manufacture of leather and related products (-0.8 per cent), Manufacture of wearing apparel (-0.7), and Manufacture of other non-metallic mineral products (-0.5 per cent). In contrast, the three manufacturing sub sectors with positive growth are food products (2.42 per cent), other manufacturing (0.28 per cent), and beverages (0.26 per cent). The manufacture of food product has pronounced increase with 2.4 per cent comparing to other nine sub manufacture that grow below 1 per cent (1 per cent in rounding form). It indicates that sub manufacture of food product turns out to be important in the crisis.

The employment contraction in several manufacturing sub-sectors is considered as part of COVID-19's impact. To begin with, the demand for manufactured products was shrinking due to the closure of malls and markets in the early stage of the pandemic. In the footwear industry (categorized as manufacture of leather and related products sub-manufacture), closures caused a massive layoff in April-June 2020 when local buyers decided to cancel or hold their orders (in depth interview with Indonesian Footwear Association (APRISINDO)). The downstream closure in the textile industry also had brought negative multiplier effects in the textile upstream industry as lower demand caused a reduction in production (in depth interview with textile firm Asia Pacific Fiber (APF)). The demand contraction followed by the layoff is confirmed by the Indonesia Textile, Garment, and Leather Labour Union (TSK SPSI) through an in-depth interview. The April-July 2020 became massive lay-off periods from their members as the Textile, Garment, and Leather companies had decreasing especially from overseas order. Both domestic and international demand decrease affected the number of labours early in the pandemic.

In addition, the decrease in manufacturing was related to the COVID-19 restriction measures. In the textile industry (in depth interview with Indonesian Association of Fibre and Filament Yarn Producers (APSyFI)), companies exercised employee shifts to comply with the maximum number of persons allowed per operation. In consequence, companies did not fully utilize all their workers during the pandemic, except companies categorized as critical industries, such as PPE producers, which had permission to fully operate. Companies also stopped employing temporary workers early on during the pandemic and only continued to employ them when the COVID-19 restrictions were eased. Another supply issue is the increase of freight costs that became a global supply chain issue as restrictions were implemented in other countries. In the footwear industry, raw material availability also became a problem early on during the pandemic. Because raw material orders were not fulfilled production was stopped and therefore that caused a decrease in demand for workers (*in depth interview with APRISINDO*).

While most sectors are experiencing negative growth in employment (see figure 3.1), several sectors are seeing positive growth, with the highest percentage increase are agriculture, forestry, and fishing (10.6 per cent), wholesale and retail trade; repair of motor vehicles and motorcycles (3.8 per cent), and human health and work activities (2.7 per cent). Meanwhile, the biggest nominal increase in employment was in in agriculture, forestry, and fishing with 3.64 million labourers, wholesale, and retail trade: repair of motor vehicles and Motorcycles with 0.1 million, and other service activities with 0.1 million labours.

The noticeable sector with the highest increase in employment is the agriculture, forestry, and fishing sector. The agriculture sector might be considered as a sector that serves as an escape from lost jobs during the pandemic. The number one reason farmers left agriculture for other sectors before the pandemic is insufficient income to meet their daily needs comparison, farmers earned IDR 55,503 per day and construction workers made IDR 89,737 per day in June 2020 (*Iswara 2020*). Jakarta's minimum wage is IDR 3.9 million per month or IDR 160,000 per day (three times

more than farmers earn). After the pandemic began, the job situation changed, with most sectors having a slump in earnings. This forced many workers to switch to agriculture, especially those with enough resources to start farming.

The most highly impacted sectors are linked to aspects of health. COVID-19 had different consequences for various sectors (*Donthu and Gustafsson 2020*). The sectors that are connected to healthcare are the most active with its endless tasks, long working days, and demand for many more workers to fulfil the needs of COVID-19 medical care. One of the challenges of these sectors is to solve the shortage of workers sometimes worsens when COVID-19 cases increase.

The opposite conditions are being faced in the leisure sectors that require their customers to be physically present, such as hospitality, tourism, and entertainment. Demand for these sectors decreased because of the increased health risk of spreading the COVID-19 virus and government regulations that restricted travel and public gatherings. Although these sectors are gradually opening following new health protocols and easing regulations from the government, they still cannot operate normally as before the pandemic. The immediate impact of the decreasing demand is a high increase in unemployment.

The pandemic's impact on gender employment per sector reveals some sectors affecting one gender more than the other. Data in Table 3.5 suggests sectors that are resilient or vulnerable during COVID-19. For example, the agriculture, forestry, and fishing sector has been resilient with an employment increase of 14.2 per cent for women workers, and 8.6 per cent for men. On the other hand, employees in the electricity and gas sector are vulnerable following of the decrease -12.8 per cent in women workers and -15.4 per cent in men.

Table 3.5 Employment growth by sector and sex, August 2019-20

Sector	Female employment	Male employment
Agriculture, Forestry and Fishing	14.2%	8.6%
Mining and Quarrying	-5.9%	-4.8%
Manufacturing	-5.9%	-9.0%
Electricity and Gas	-12.8%	-15.4%
Water Supply, Sewerage, waste management and Remediation Activities	-0.9%	-0.6%
Construction	-15.2%	-4.9%
Wholesale and Retail Trade; Repair of Motor Vehicle and Motorcycle	7.7%	0.1%
Transportation and Storage	-12.1%	1.2%
Accommodation and Food Service Activities	3.1%	-1.9%
Information and Communication	10.7%	-1.6%
Financial and Insurance Activities	-8.2%	-12.7%
Real Estate Activities	16.5%	-7.4%
Business Activities	0.1%	-8.4%
Public Administration and Defence / Compulsory Social Security	-4.2%	-6.8%
Education	-3.4%	-6.3%
Human Health and Work Activities	3.6%	1.0%
Other Service activities	-3.1%	7.7%

Source: Authors calculation from Sakernas August 2019-2020

The accommodation and food service activities sector, Information and Communications, real estate, and business activities saw growth among women workers, but negative growth among men between August 2019 to August 2020. In contrast, the transportation and storage sector and other service activities saw growth among men but negative among women workers. These data can be an early signal of a setback in achieving gender equality in the workplace as a result of the pandemic.

Formal and Informal Workers

BPS uses two main employment categories to differentiate between formal and informal jobs. Formal jobs are those where the employee assists their employer as a permanent worker, or jobs where the individuals are paid by their employer (as an employee). Informal jobs are those where the employer is assisted by a temporary worker/unpaid worker, a casual agricultural or non-agricultural worker, or an unpaid/contributing family worker (*BPS 2020c, 48*). The decreasing number of formal workers and the increasing number of informal workers shows a change in job profiles or mobility. A comparison between the formal and informal sectors reflects the severity of job losses per sector by subtracting the formal labour to informal labour change. It also reflects the shifts in the quality of employment (see table 3.5).

Table 3.6 Number of Formal and Informal Workers based on Sector

Sektor	Formal			Informal		
	Aug. 2019	Aug. 2020	Growth	Aug. 2019	Aug. 2020	Growth
Agriculture, Forestry and Fishing	4,346,898	4,368,059	0.5%	30,254,703	33,856,312	11.9%
Mining and Quarrying	916,325	789,125	-13.9%	506,801	563,111	11.1%
Manufacturing	12,361,638	10,698,254	-13.5%	6,591,351	6,784,595	2.9%
Electricity and Gas	321,196	262,181	-18.4%	36,153	41,370	14.4%
Water Supply, Sewerage, waste management and Remediation Activities	245,232	237,259	-3.3%	249,270	253,725	1.8%
Construction	4,377,931	3,438,172	-21.5%	4,138,568	4,628,325	11.8%
Wholesale and Retail Trade; Repair of Motor Vehicle and Motorcycle	8,176,756	7,387,081	-9.7%	15,642,725	17,315,614	10.7%
Transportation and Storage	2,274,173	2,400,088	5.5%	3,297,568	3,191,853	-3.2%
Accommodation and Food Service Activities	2,732,541	2,232,434	-18.3%	5,733,159	6,311,360	10.1%
Information and Communication	639,286	641,139	0.3%	274,067	292,134	6.6%
Financial and Insurance Activities	1,707,002	1,502,637	-12.0%	48,411	55,290	14.2%
Real Estate Activities	312,903	238,356	-23.8%	88,617	155,309	75.3%
Business Activities	1,503,267	1,374,076	-8.6%	421,557	422,679	0.3%
Public Administration and Defence / Compulsory Social Security	4,873,689	4,569,946	-6.2%			
Education	6,113,532	5,720,359	-6.4%	206,774	308,251	49.1%

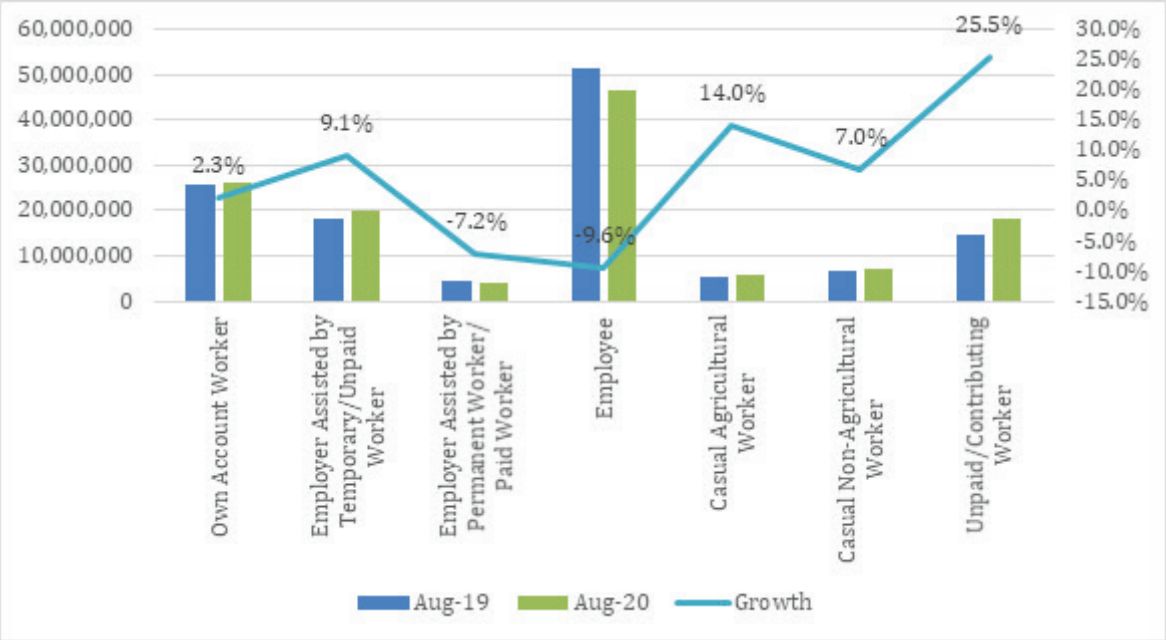
Sektor	Formal			Informal		
	Aug. 2019	Aug. 2020	Growth	Aug. 2019	Aug. 2020	Growth
Human Health and Work Activities	1,789,700	1,812,799	1.3%	165,648	192,723	16.3%
Other Service activities	3,464,171	3,099,884	-10.5%	2,841,436	3,309,684	16.5%

Source: Authors calculation from Sakernas August 2019-2020

Most sectors experienced a decrease in formal jobs (13 out of 17). The sectors with highest contractions are real estate, construction, and electricity and gas at around -23.8 per cent, -21.5 per cent and -18.4 per cent, respectively. On the other side, informal jobs increased in all sectors except the transportation and storage sector with -3.2 per cent growth. The sectors with the highest increase are real estate with 75.3 per cent growth, education (49.1 per cent), and human health and work (16.3 per cent). Meanwhile, the growth in actual worker numbers in informal jobs has the agriculture sector with the highest increase at 3.6 million, followed by wholesale and retail trade; repair of motor vehicles and motorcycles with 1.6 million, and the accommodation and food service activities sector with an 0.6 million increases.

The data also indicates the top three sectors with the highest decrease in the number of workers in formal jobs and an increase in informal jobs. First, the manufacturing sector lost 1.5 million workers. Second, the construction sector lost 0.5 million. Third, the education sector lost 0.3 million workers. The August 2019 and August 2020 data also indicates a strong impact on formal jobs and informal jobs (see table 3.4). Formal jobs experienced negative growth. Employers assisted by Permanent Workers/ Paid Workers decreased -7.2 per cent, or in real numbers equal to 0.3 million workers. Meanwhile, employee status growth was -9.6 per cent or a 4.9 million worker decrease.

Figure 3.2 Employment by Main Status, August 2019-20



Source: Authors calculation from Sakernas August 2019-2020

On the other hand, the negative job growth is offset by the increase in employment status other than in formal jobs. BPS calls the rest informal jobs. The employment status growth is in Own Account Workers at 2.3 per cent or an 0.6 million increase; Employer Assisted by Temporary/Unpaid Workers at 9.1 per cent or a 1.7 million increase; Casual Agricultural Workers with a 14.0 per cent or 0.7 million increases; Casual Non-Agricultural Workers with a 7.0 per cent or 0.5 million increases; and Unpaid/Contributing Workers with a 25.5 per cent or 3.7 million increases. By total labour force in real numbers, formal jobs decreased by 5.2 million workers and informal jobs increased by 7.2 million. ***It is clear that there is a movement of workers from the formal to the informal employment during the pandemic***.

A shifting trend from formal to informal jobs also is shown by formal and informal employment based on sex. Both female and male employment had similar trends that showed a decrease in formal jobs and an increase in informal jobs. Among females, formal jobs contracted -4.2 per cent (0.1 million) from 23.7 million in August 2019 to 22.7 million in August 2020. Women in informal jobs rose 11.8 per cent (2.9 million) from 25 million in August 2019 to 27.9 million in August 2020. Formal jobs for men had an even greater negative trend with a -8.6 (3.6 million) decrease from 41.6 million in August 2019 to 38.0 million in August 2020. As opposed to the trend in formal jobs, male informal jobs increased 9.9 per cent (3.6 million) from 36.2 million in August 2019 to 39.7 million in August 2020. See table 3.6.

Table 3.7 Formal and Informal Employment by Sex, August 2019-20

Sector	August 2019		August 2020		Growth per cent	Change (absolute)
	Total	Per cent	Total	Per cent		
Formal						
Female	23,738,106	36.3%	22,741,703	37.4%	-4.2%	-996,403
Male	41,590,787	63.7%	38,010,389	62.6%	-8.6%	-3,580,398
Informal						
Female	25,010,639	40.9%	27,957,455	41.3%	11.8%	2,946,816
Male	36,175,587	59.1%	39,744,637	58.7%	9.9%	3,569,050

Source: Authors calculation from Sakernas August 2019-2020

Although female employment had a smaller decrease in formal employment and a significant increase in informal jobs, the proportion of the number in formal and informal jobs still conveys existing inequalities. From total formal employment, females contributed 36.3 per cent in August 2019 and 37.4 per cent in August 2020. In contrast, male formal employment contributed 63.7 per cent (a 27.3 per cent difference to females) in August 2019, and 62.6 per cent (a 25.1 per cent difference to females) in August 2020. Otherwise, female informal employment contributed to 40.9 per cent in August 2019 and 41.3 per cent in August 2020. Compared to females, male informal employment contributed 59.1 per cent (an 18.2 per cent difference to females) in August 2019 and 58.7 per cent (a 17.4 per cent difference to females) in August 2020.

Unemployment

Unemployment became the statistics highlight in August 2019-20, with unemployment increasing 38.6 per cent (or 2.7 million people). This change is substantial compared to the previous year's increase which was only 0.6 per cent. Although both urban and rural unemployment rose, the urban area was the most affected. Table 3.8 shows the unemployment rate change in August 2019-20 by Urban Rural Classification. Urban area unemployment increased 47.0 per cent or equal to a 2.2 million person increase: or 4.7 million unemployed in August 2019 and 6.8 million in August 2020. Meanwhile, the growth of unemployment in rural areas was 22.3 per cent or equal to 0.53 million people: or 2.38 million in August 2019 and 2.9 million in August 2020. By size, the increase of unemployment in rural areas is about a quarter of the increase in urban areas.

Table 3.8 Unemployment Based on Urban Rural Classification, August 2019-20

Unemployment	August 2019		August 2020		Growth	Change
	Total	Rate	Total	Rate	per cent	absolute
Urban Area	4,661,948	6.3	6,853,491	9.0	47.0%	2,191,543
Rural Area	2,383,813	3.9	2,914,263	4.7	22.3%	530,450
Total	7,045,761	5.2	9,767,754	7.1	38.6%	2,721,993

Source: Authors calculation from Sakernas August 2019-2020

At the national level, the gap between male and female unemployment increased, with higher rise in male unemployment than female unemployment (see table 3.9). Both female and male unemployment has been impacted by increasing growth in August 2019-20. Female unemployment basically trended better with a 30.2 per cent increase (0.8 million) as opposed to the increase in male unemployment at 43.8 per cent, (1.9 million) in August 2019-20. Female unemployment increased from 2.7 million to 3.5 million in August 2019-20, while male unemployment experienced bigger increase from 4.3 million to 6.7 million during the same period. The percentage of unemployed were 61.8 per cent for men and 38.2 per cent for women in August 2019. Meanwhile, the percentage of unemployed were 64.2 per cent for men and 35.8 per cent for women in August 2020.

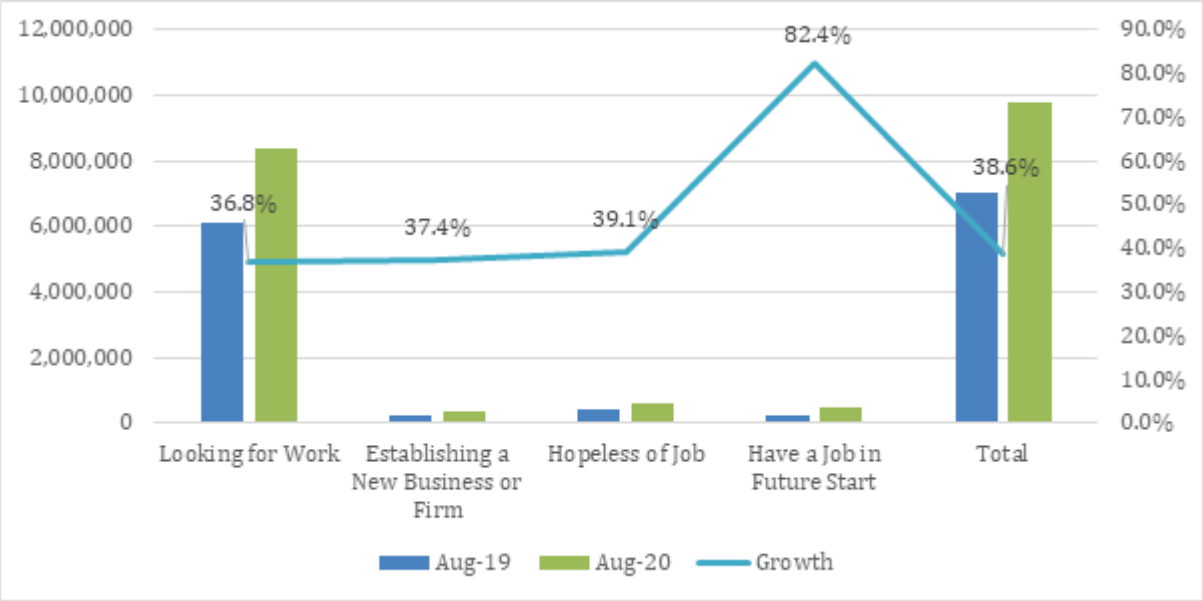
Table 3.9 Unemployment by Sex, August 2019-20

Sex	August 2019		August 2020		Change	Change
	Total	Percentage distribution	Total	Percentage distribution	per cent	absolute
Male	4,357,752	61.8%	6,268,364	64.2%	43.8%	1,910,612
Female	2,688,009	38.2%	3,499,390	35.8%	30.2%	811,381

Source: Authors calculation from Sakernas August 2019-2020

Unemployment by category in August 2019-20 indicates people “looking for work” as the category most hit by the pandemic (see figure 3.3). Those looking for work increased from 6.1 million in August 2019 to 8.3 million in August 2020 (36.8 per cent growth). The highest increase was experienced by those in the “have a job in the future start” category with an 82.4 per cent increase, but the absolute number increased 0.2 million, far less than the number of “looking for work” category which increased at 2.2 million. The data in figure 3.3 emphasizes the problem for people in getting a job because many people are still looking for work or already have a job in the future.

Figure 3.3 Unemployment by Category, August 2019-20



Source: (BPS 2019) (BPS 2020c)

Hopelessness in finding a job is an important category to address because it shows a reluctance to even look for one. A hopeless person will continue to be unemployed if they are not motivated to find a job. The data shows discouraged jobseekers increased in August 2019-20 by 39.1 per cent (169,302). By location, the urban areas were the most affected with a 51.9 per cent growth and 129,992 increase. The number changed from 250,346 people in August 2019 to 380,338 in August 2020. Meanwhile, the rural area increased 21.5 per cent with 39,310 more people as hopeless of jobs. This number changes from 182,684 in August 2019 to 221,994 in August 2020.

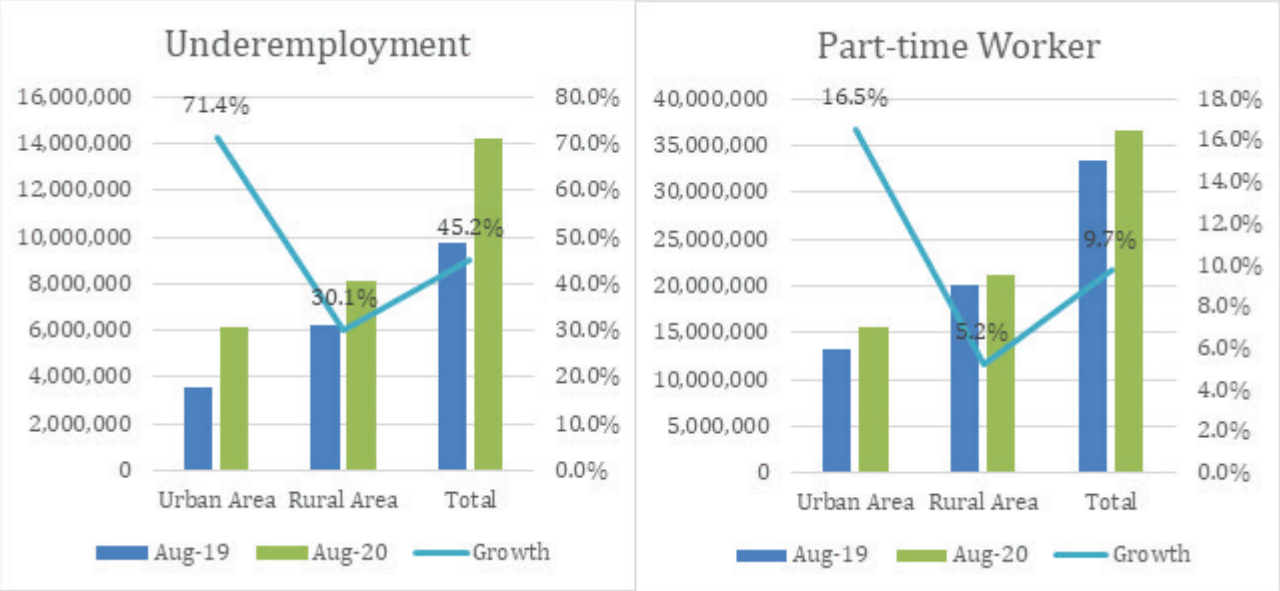
3.3. Labour Under-Utilization

The weakening of industry caused by the COVID-19 pandemic also brought on a rise in labour underutilization. To further understand the impact, this part will assess where the labour changes are located. This section emphasizes labour assessment according to geography, industrial classification, and main occupation. The change of numbers in the assessments shows the impact of COVID-19 labour under-utilization.

Under-employment

BPS defines under-employment working less than 35 hours a week. In its statistical implementation, BPS also categorizes under-employment as involuntary under-employment and voluntary under-employment. The former is someone who works under 35 hours a week and is still looking for a job. The latter is a part-time worker who works less than 35 hours a week but is not looking for a job.

Figure 3.4. Under-employment by Urban Rural Classification, August 2019-20



Source: Authors calculation from Sakernas August 2019-2020

Based on Sakernas in August 2019-20, nationally the number of under-employed and part-time workers are increased (see figure 3.4). Under-employment increased the most with a 45.2 per cent rise or 4.4 million people increase, compared to part-time workers with a 9.7 per cent rise or 3.2 million people. Geographically, under-employment and part-time workers in urban areas was more affected than in rural areas. Under-employment in urban areas rose 71.4 per cent with a 2.5 million people increase. Meanwhile under-employment in rural areas rose 30.1 per cent or 1.9 million people increase. Part-time workers in urban areas grew 16.5 per cent with a 2.2 million increase and Part-time workers in rural areas grew 5.2 per cent with a 1.0 million increase.

The under-employment and part-time worker data point out tremendous inequality between male and female workers in August 2019-20. Under-employed female workers decreased by -19.5 per cent (20 thousand) from 130 thousand in August 2019 to 110 thousand in August 2020. In contrast, male workers soared with a 51.6 per cent increase (3.1 million) from 6.1 million in August 2019 to 9.2 million in August 2020. By comparison, female workers constituted 2.2 per cent under-employment in August 2019 and 1.2 per cent in August 2020. Male workers continue to be the main contributor to under-employment, at 97.8 per cent of the under-employed total (a 95.5 per cent difference to females) in August 2019 and 98.8 per cent of total under-employment (97.6 per cent difference to females) in August 2020.

Table 3.10 Under-Employment and Part-Time Worker by Sex, August 2019-20

Sektor	August 2019		August 2020		Change	Change
	Total	per cent	Total	per cent	per cent	absolute
Under-employed						
Female	139,050	2.2%	111,906	1.2%	-19.5%	-27,144
Male	6,099,077	97.8%	9,247,032	98.8%	51.6%	3,147,955
Part-time worker						
Female	204,133	1.3%	153,666	0.9%	-24.7%	-50,467
Male	15,461,045	98.7%	17,395,659	99.1%	12.5%	1,934,614

Source: Authors calculation from Sakernas August 2019-2020

The COVID-19 also has impacted the under-employment and part-time workers number in industry sectors in August 2019-20 (see table 3.11). In under-employment, the top three sectors that grew significantly are real estate with a 150.4 per cent increase, financial and insurance activities at 94.0 per cent, and the business activities sector with a 77.3 per cent increase. However, in terms of absolute number of employments, the most impacted sectors in under-employment are the agriculture, forestry, and fishing sectors with a 1.6 million increase, wholesale and retail trade, motor vehicle and motorcycle repair sector with a 0.6 million increase, and the manufacturing sector with a 0.6 million increase.

Part-time workers grew in August 2019-20. The financial and insurance activities sector saw a 79.5 per cent increase; public administration and defence/compulsory social security 51.7 per cent, and education increased by 38.1 per cent. By real number change, the sectors affected by the pandemic are the agriculture, forestry, and fishing sector with a 1.3 million increases, the education sector with a 0.9 million increase, and public administration and defence/compulsory social security sector with an increase of 0.4 million.

Although the percentage change data in under-employment and part-time workers has various sectors being impacted, the change in absolute numbers suggests some industry sectors heavily impacted than others (see table 3.11). The agriculture, forestry and fishing sector become the biggest contributors in the increase of under-employment and part-time workers. Meanwhile wholesale and retail, motor vehicle and motorcycle repair sector, and manufacturing sector place as second and third biggest increase in under-employment nominal change in August 2019-20. According to the absolute change in part-time workers, the wholesale and retail, motor vehicle and motorcycle repair, and manufacturing sector place in fourth and third biggest increase.

Table 3.11: Underemployment by sector

Sectors	Underemployment			Part-time Worker		
	August 19	August 20	Growth	August 19	August 20	Growth
Agriculture, Forestry and Fishing	4,831,926	6,409,159	32.6%	16,055,737	17,354,116	8.1%
Mining & Quarrying	94,786	135,512	43.0%	506,801	563,111	11.1%
Manufacturing	850,354	1,446,257	70.1%	3,509,045	3,826,008	9.0%
Electricity & Gas	10,867	12,306	13.2%	37,078	39,376	6.2%
Water Supply, Sewerage, waste management and Remediation Activities	38,970	46,567	19.5%	105,495	108,685	3.0%
Construction	491,935	607,951	23.6%	601,120	517,173	-14.0%
Wholesale & Retail Trade; Repair of Motor Vehicle and Motorcycle	1,159,686	1,801,286	55.3%	4,799,337	5,001,205	4.2%
Transportation & Storage	416,911	664,512	59.4%	745,405	761,220	2.1%
Accommodation & Food Service Activities	387,875	667,567	72.1%	1,733,173	1,774,320	2.4%
Information & Communication	44,828	66,899	49.2%	123,866	132,918	7.3%
Financial & Insurance Activities	23,754	46,075	94.0%	123,218	221,174	79.5%
Real Estate Activities	11,007	27,563	150.4%	95,250	119,787	25.8%
Business Activities	100,972	179,067	77.3%	286,665	340,053	18.6%

Sectors	Underemployment			Part-time Worker		
	August 19	August 20	Growth	August 19	August 20	Growth
Public Administration & Defence / Compulsory Social Security	143,977	219,352	52.4%	707,965	1,073,891	51.7%
Education	473,170	767,689	62.2%	2,291,826	3,164,489	38.1%
Human Health & Work Activities	62,594	96,246	53.8%	282,220	377,444	33.7%
Other Service activities	648,291	1,022,702	57.8%	1,754,671	1,692,634	-3.5%

Source: Authors calculation from Sakernas August 2019-2020

Table 3.12 Underemployment by Main Occupation (KBJI 2000), August 2019-20

Main Occupations	Underemployment			Part-time Worker		
	August 19	August 20	Change	August 19	August 20	Change
Managers, Senior Officials, and legislators	98,189	136,541	39.1%	723,834	745,626	3.0%
Professionals	522,583	787,495	50.7%	2,458,343	3,260,318	32.6%
Technicians and Associate Professionals	151,245	224,879	48.7%	501,466	683,102	36.2%
Clerical Support Workers	140,982	298,062	111.4%	633,713	1,156,736	82.5%
Services and Sales Workers	1,511,339	2,557,424	69.2%	6,508,398	6,983,697	7.3%
Skilled Agricultural, Forestry and Fishery Workers	3,476,121	4,428,314	27.4%	13,238,105	13,979,772	5.6%
Craft and Related Trades Workers	830,067	1,345,807	62.1%	3,086,269	2,997,065	-2.9%
Plant and Machine Operators and Assemblers	474,357	711,043	49.9%	955,138	1,033,596	8.2%
Elementary Occupation	2,586,786	3,725,934	44.0%	5,331,770	5,835,231	9.4%

Source: Authors calculation from Sakernas August 2019-2020

Another assessment in underemployment and part-time workers indicates the main occupations affected by COVID-19 (see table 3.12). More dispersed trend is found in percentage change in August 2019-20. The main occupations that increased the most for under-employment workers were clerical support (111.4 per cent), services and sales (69.2 per cent) and craft and related trades (62.1 per cent). For part-time workers, the highest increase was in clerical support (82.5 per cent), technicians and associate professionals (36.2 per cent), and professionals (32.6 per cent).

On the other hand, the absolute number change in main occupation data of underemployment and part-time worker tend to reveal more consistent trend. The managers, senior officials, and legislators is the least main occupation category than others category that increase in both underemployment and part-time worker. The managers, senior officials, and legislator's category increases with 38,352 people in under-employment while that category also increases to 21.792 people in part-time workers in August 2019-20. In reverse, elementary occupation category is noticed as the biggest contributor in underemployment and part-time workers increase in August 2019 and August 2020. Elementary occupation category increases with 1,139,148 people in under-employment while elementary occupation increases to 503,461 people in part-time workers in August 2019-20.

3.4 Hours of Work

BPS defines hours of work as total amount of hours worked during the survey reference week. The calculation of working hours is made by excluding official meal hour and other causes of absent for employee who work on regular basis (formal job). But the calculation includes any overtime hour. Other method of calculation starts from preparation, depart, and go back to house for street vendors (informal job). This section will focus on the changes in working hours in August 2019-20 as a result of the pandemic.

The trends in total employment based on work hours indicates that people who work above 40 hours a week tended to decrease (except 55-59 hours category), while those who work below 40 hours increased (see table 3.12). Based on growth, people whose hours decreased the most were those who worked 65-69 hours per week (-31.1 per cent), 50-54 hours (-27.1 per cent), and 60-64 hours (-17.7 per cent). By absolute number change, the highest decrease was for those who work 45-49 hours. In more detail: those who worked 45-49 hours per week decreased by 3.3 million workers; those who worked 40-44 hours, declined by 2.6 million; and those who worked 50-54 hours decreased by 1.6 million.

On the other hand, there was an increase in hours for those who worked below 40 hours per week. The biggest changes by growth in order are: 1-4 hours of work saw a 50.4 per cent increase, 5-9 hours of work 39.8 per cent, and 0 hours a 33.4 per cent increase. The biggest change in real numbers: those who worked 20-24 hours of work increased about 2.2 million, 10-14 hours increased 1.8 million, and those with 5-9 hours of work rose 1.4 million.

Table 3.13 Number of Workers by Hours of Work, August 2019-20

Hour	August 2019	August 2020	Change	
			Absolute	Per cent
0	2,930,314	3,907,999	977,685	33.4%
1-4	1,025,858	1,542,665	516,807	50.4%
5-9	3,568,598	4,988,217	1,419,619	39.8%
10-14	6,047,278	7,902,684	1,855,406	30.7%
15-19	5,672,662	6,940,214	1,267,552	22.3%
20-24	9,763,808	11,943,269	2,179,461	22.3%
25-29	7,251,140	8,565,678	1,314,538	18.1%
30-34	8,412,235	9,040,403	628,168	7.5%
35-39	11,922,261	12,344,670	422,409	3.5%
40-44	21,223,059	18,636,844	-2,586,215	-12.2%
45-49	21,504,957	18,244,326	-3,260,631	-15.2%
50-54	5,996,776	4,369,666	-1,627,110	-27.1%
55-59	6,758,293	7,513,321	755,028	11.2%
60-64	5,304,254	4,367,319	-936,935	-17.7%
65-69	1,301,547	897,040	-404,507	-31.1%
70-74	3,835,532	3,745,470	-90,062	-2.3%
>74	3,996,547	3,504,399	-492,148	-12.3%

Source: Authors calculation from Sakernas August 2019-2020

Under sectoral analysis, the average working hours in all the job classifications decreased. The biggest decline was in education (-20.9 per cent), real estate (-12.2 per cent), and other service activities (8.3 per cent). In absolute numbers, the biggest decrease in working hours was in the education sector with a decrease of -6.9 hours, real estate with -4.7 hours, and transportation and storage at -3.5 hours.

Table 3.14 Average of Weekly Working Hours by Sector, August 2019-20

Sector	August 2019	August 2020	Change	
			Per cent	Absolute
Agriculture, Forestry and Fishing	28.9	28.5	-1.4%	-0.4
Mining & Quarrying	43.7	41.2	-5.7%	-2.5
Manufacturing	40.3	37.2	-7.7%	-3.1
Electricity & Gas	42.4	41.6	-1.9%	-0.8
Water Supply, Sewerage, waste management and Remediation Activities	39.7	38	-4.3%	-1.7
Construction	44	42.7	-3.0%	-1.2
Wholesale & Retail Trade; Repair of Motor Vehicles and Motorcycles	44.9	43.7	-2.7%	-1.2
Transportation & Storage	45.6	42.1	-7.7%	-3.5
Accommodation & Food Service Activities	44.8	42.5	-5.1%	-2.3
Information & Communication	45.1	43.4	-3.8%	-1.7
Financial & Insurance Activities	43.1	40.4	-6.3%	-2.6
Real Estate Activities	38.5	33.8	-12.2%	-4.7
Business Activities	42.2	38.9	-7.8%	-3.3
Public Administration & Defence / Compulsory Social Security	39.7	37.1	-6.5%	-2.6
Education	33	26.1	-20.9%	-6.9
Human Health & Work Activities	40.4	38.4	-5.0%	-2
Other Service activities	38.4	35.2	-8.3%	-3.2

Source: Authors calculation from Sakernas August 2019-2020

The decrease in average working hours was inevitable because of the mobility restriction policies by the government to contain the spread of COVID-19 In education sector, the fall of working hours is consequence of school and university closure in March 2020. The operational of educational institution moved to online platform to minimize the spread of pandemic. Meanwhile, Large Scale Social Restriction (PSBB) has consequence to other sectors working hours drop. For non-essential sectors, working from home remain the main option to continue to operate. For example, real estate sector was not categorized as essential and consequently cannot be fully operated. Although there were essential sectors which have operational permission, the health protocol adjustment in workplace is compulsory such as social distancing protocol or maximum people in workplace that curb the number of workers in workplace. The government also banned the operational of transportation sector such as bus, train, and airplane in April to May 2020. This measure was important to contain the spread of the pandemic toward Eid al-Fitr celebration which the tradition brought people to go to their hometown.

The biggest decline in working hours by employment status and growth are employees with a -11.1 per cent decrease, own account workers at -7.7 per cent and employer Assisted by Permanent Worker/ Paid Worker with a -6.5 per cent decrease (see table 3.14). Similarly, the real number of working hours decreased are -4.8 hours, -2.9 hours, and -2.7 hours. The result confirms that formal jobs (Employee and Employer Assisted by Permanent Worker/ Paid Worker) were heavily impacted by the pandemic. 3.6.

Table 3.15 Average of Working Hours by Employment Status, August 2019-20

Employment Status	August 2019	August 2020	Change	
			Per cent	Absolute
Own Account Worker	37.7	34.8	-7.7%	-2.9
Employer Assisted by Temporary/ Unpaid Worker	36.7	34.9	-4.9%	-1.8
Employer Assisted by Permanent Worker/ Paid Worker	41.8	39.1	-6.5%	-2.7
Employee	43.1	38.3	-11.1%	-4.8
Casual Agricultural Worker	33.5	32.7	-2.4%	-0.8
Casual Non-Agricultural Worker	40.5	39.3	-3.0%	-1.2
Unpaid/Contributing Worker	26,3	26,4	0,4%	0,1

Source: Sakernas 2019 dan 2020

3.5 Wages and Income

BPS defines wages and income as net wage/salary. The data is collected by deducting compulsory contribution, income tax, and so on. Based on monthly income, the pandemic caused average incomes for workers to decrease nationally from IDR 2.286.743 to IDR 2.104.805. This section assesses average wages at the provincial level and sectors by job classification for further assessment. The most notable decreases in average wage were in Bali and Bangka Belitung. Bali had the biggest decrease at -19.9 per cent or an IDR -501,514 cut in wages. Bangka Belitung followed with a -16.9 per cent decrease, or an IDR -433,775 wage decrease (see table 3.16).

The decrease in wages in Bali and Bangka Belitung are reflected in the macroeconomic performance of each province. In Bali, the Gross Regional Domestic Product (GRDP) contracted by -7.2 per cent from Q1 to Q2 of 2020 and in Q3 it contracted even more at -11.0 per cent (*BPS 2020b*). Bali's economy is dominated by the accommodation and food service activities sector (17.3 per cent contribution). By GRDP, the accommodation and food service activities sector experienced a negative trend starting from Q3 of 2020 with -5.86 per cent growth, in Q4 2020 0.8 per cent, Q1 2021 -15.1 per cent, and Q2 of 2021 -25.0 per cent growth. At the same time, transportation and storage had similar negative trends starting from Q3 of 2020 with -5.1 per cent growth, Q4 of 2020 with -0.2 per cent, Q1 of 2020 -13.2 per cent, and Q2 2020 with -33.7 per cent growth. Both sectors are part of the tourism sector, which trended negative during the pandemic.

Bangka Belitung's GRDP also trended negative at -2.4 per cent from Q1 to Q2 2020 (*BPS 2020a*). The sectors that were hit the most were transportation and storage at a rate of -29.1 per cent from Q1 to Q2 and other services sectors at -19.4 per cent from Q1 to Q2. The remaining sectors also trended negative except agriculture, forestry, and fishing; public administration and defence/compulsory social security; and the information and communication sector.

Women experienced a contraction of average income, but less than for men. Female workers' average income decreased IDR 133.816 or 6.8 per cent, while male workers' decreased IDR -249.433 or -9.3 per cent in August 2019-20 (see table 3.16). However, male income is still greater than female income at more than IDR 0.7 million in August 2019 and IDR 0.6 in August 2020.

Table 3.16 Average of Income by Sex, August 2019-20

Sex	August 2019	August 2020	Change	
			Per cent	Absolute
Male	2,684,473	2,435,040	-9.3%	-249,433
Female	1,971,738	1,837,922	-6.8%	-133,816

Source: Authors calculation from Sakernas August 2019-2020

Based on average worker income by sector, the biggest decrease occurred in Accommodation and Food Service Activities (-16.8 per cent) and Transportation and Storage (-16.5 per cent). In terms of actual numbers, the most impacted sectors were Transportation and Storage (IDR -413,184) and Accommodation and Food Service Activities (IDR -339,758). In Bali and Bangka Belitung, both sectors contributed the most to the decrease in GRDP.

Table 3.17 Average Wage by Provinces, August 2019-20

Province	August 2019	August 2020	Change	
			Per cent	Absolute
Aceh	2,070,883	2,030,183	-2.0%	-40,700
Sumatera Utara	2,027,281	1,925,345	-5.0%	-101,936
Sumatera Barat	2,145,025	2,018,304	-5.9%	-126,721
Riau	2,394,105	2,235,408	-6.6%	-158,697
Jambi	2,100,278	1,915,769	-8.8%	-184,509
Sumatera Selatan	1,916,940	1,712,797	-10.6%	-204,143
Bengkulu	1,985,667	1,869,312	-5.9%	-116,355
Lampung	1,808,956	1,714,591	-5.2%	-94,365
Bangka-Belitung	2,567,050	2,133,275	-16.9%	-433,775
Kepulauan Riau	3,091,338	2,930,728	-5.2%	-160,610
DKI Jakarta	4,091,384	3,738,806	-8.6%	-352,578
Jawa Barat	2,547,875	2,303,737	-9.6%	-244,138
Jawa Tengah	1,885,723	1,733,707	-8.1%	-152,016
DIY	1,969,609	1,865,396	-5.3%	-104,213
Jawa Timur	2,028,559	1,882,442	-7.2%	-146,117
Banten	3,239,995	2,940,038	-9.3%	-299,957
Bali	2,517,774	2,016,260	-19.9%	-501,514
Nusa Tenggara Barat	1,942,953	1,767,172	-9.0%	-175,781

Province	August 2019	August 2020	Change	
			Per cent	Absolute
Nusa Tenggara Timur	1,628,962	1,540,387	-5.4%	-88,575
Kalimantan Barat	2,108,104	1,968,039	-6.6%	-140,065
Kalimantan Tengah	2,629,275	2,444,629	-7.0%	-184,646
Kalimantan Selatan	2,401,446	2,161,850	-10.0%	-239,596
Kalimantan Timur	3,422,522	3,152,932	-7.9%	-269,590
Kalimantan Utara	3,142,359	2,995,100	-4.7%	-147,259
Sulawesi Utara	2,583,946	2,326,778	-10.0%	-257,168
Sulawesi Tengah	2,026,603	1,886,417	-6.9%	-140,186
Sulawesi Selatan	2,279,733	2,089,406	-8.3%	-190,327
Sulawesi Tenggara	2,147,155	2,011,045	-6.3%	-136,110
Gorontalo	1,980,176	1,776,192	-10.3%	-203,984
Sulawesi Barat	1,772,970	1,659,249	-6.4%	-113,721
Maluku	2,158,059	1,964,142	-9.0%	-193,917
Maluku Utara	2,301,649	2,206,972	-4.1%	-94,677
Papua Barat	2,942,267	2,821,978	-4.1%	-120,289
Papua	3,087,332	2,816,753	-8.8%	-270,579

Source: Authors calculation from Sakernas August 2019-2020

Chapter 4

Impact of COVID-19 Pandemic on Vulnerable Groups

The COVID-19 pandemic has been challenging for young people, especially fresh graduates, as they must struggle more to find a job. Even before the pandemic, young people around the world were finding it hard to get work. One of the reasons behind this problem is because the fast-changing landscape of work has significantly expanded the set of skills needed for young workers or fresh graduates to be employable. Other factors include educational qualifications and experience. Employment vacancies nowadays require soft skills such as problem-solving, critical thinking, communications and teamwork, leadership, and a strong work ethic (*Manuson 2020*). The rise of digital technology is another reason for the reshaping of skills in demand by employees. Those young people with minimum education and knowledge of particular technologies are less likely to find a job in the industry 4.0. According to ILO Global Employment Trends for Youth 2020, Global Evidence shows that global evidence that the risk of automation is highest in jobs held by young people. Moreover, young people both in developed and developing country are at the highest risk of automation, but low- and middle-income countries are much more at the higher risk. One of the factors of this risk is because entry-level jobs held by young people tend to have a greater proportion of automatable tasks (*ILO 2020c*).

The decline in employment among the younger generation was far greater than among adults in most countries. Data from 58 countries during Q2 of 2020 reveals that young people, particularly young women, have borne the brunt of the COVID-19 pandemic (*ILO 2021a*). In middle-income countries like Indonesia, the employment losses amongst the young were around double those of adults. The reasons are the lockdown regulation and the suspension of hiring by firms, the COVID-19 pandemic has also exacerbated the youth employment situation as young people been laid off or furloughed, and their working hours have been reduced (*Rahman and Fatah 2021*). The lockdown impacting firms and leading them to reduce working hours and lay off workers, with youth often being the first to let go. In addition, in the face of an extensive reduction in the availability of job vacancies, more young people decided to remain in, or re-enter, education than would otherwise be the case (*ILO 2020d*).

4.1 Youth and NEET

The impact of the COVID-19 pandemic on youth employment can be classified into three disruptions. *First*, there were disruptions in the form of reduced working hours and income. *Second*, there were disruptions in education and training. *Third*, the transition from school to work and moving between jobs was disrupted by the recession. These three disruptions caused by COVID-19 had a significant impact on the youth labour market in middle-income countries like Indonesia (*ILO and ADB 2020*).

Reduced working hours and income are the types of job disruption experienced by Indonesia's youth. The lockdown regulations such as PSBB have resulted in unprecedented reductions of working hours and a large number of workers on furlough. The data on reduced working hours and reduced income experienced by Indonesia's youth because of the pandemic is not specifically portrayed by BPS. However, the change in youth employability is reflected in the Youth Unemployment Rate from 2019 to 2020 (Table 4.1). Because of the limited data sourced about 2021, we need to be cautious in presenting and interpreting the 2021 data. Nevertheless, we can compare and see that from 2019, when the pandemic had yet to hit Indonesia, the youth unemployment rate increased in 2020. According to sex, the

youth unemployment rate for male was increased from 2019 to 2020 (18.4 per cent compared to 20.8). The youth unemployment rate for female was also increased from 2019 to 2020 (19.0 per cent to 20.0). The youth unemployment rate in urban areas was also increased in 2020 (20.3 per cent to 23.8 per cent), while in rural areas the rate decreased (16.5 per cent to 15.9 per cent).

Table 4.1 Youth Unemployment Rate 2019 -20 (percentages)

Category	2019	2020
Sex		
Male	18.38%	20.83%
Female	18.99%	19.95%
Types of Area		
Urban	20.25%	23.83%
Rural	16.46%	15.94%

Source: BPS, Sakernas August 2020

Disruptions to education and training because of COVID-19 were significant in the learning and teaching process. Many countries were forced to implement either fully online or a hybrid system of learning (a mixture of face-to-face and distance learning). This condition also pointed out the unequal access to digital technologies, especially in countries like Indonesia, with high gaps between students in urban areas and those in rural or remote areas. Furthermore, the disruption in their access to education and employment opportunities due to the economic downturn will put the young generation on a much more volatile trajectory when looking for and maintaining quality jobs and income (*OECD 2020*). In addition, there is also an impact on the mental health of younger people due to online schooling and training.

According to a U-Report survey conducted from August to September of 2020 with over 535 young people (64 per cent female) from around the country, 38 per cent reported that they fear not being able to keep up with online classes, while 36 per cent are anxious about going back to school due to their fear of COVID-19 infection. A survey in September with over 1,000 respondents (71 per cent female) showed that 55 per cent are afraid to tell others about their own mental health, and 24 per cent are concerned with the stigma associated with taking medication (*Tsunokake 2020*). One form of disruption on the mental health of younger people is loneliness. Young people were already at a high risk of loneliness before the pandemic, but as the pandemic in Indonesia worsened and containment measures continuing to limit in-person social interaction, those living alone are experiencing loneliness due to isolation.

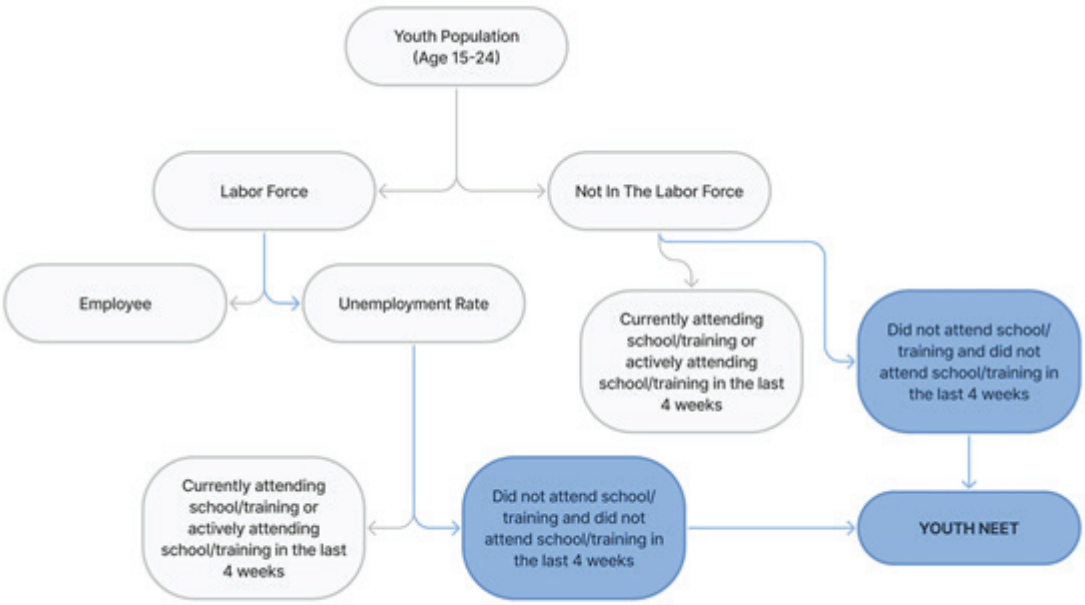
Youth, especially fresh graduates, are experiencing significant difficulties in the transition from school to work because of the pandemic. New graduates may find themselves competing for jobs with adults who are more experienced and may have lost their jobs during the crisis (*ILO and ADB 2020*). Youth unemployment is one of Indonesia's problems, as Indonesia's population increases, the growth of the younger generations engenders supply-side pressure in the labour market.

During the crisis and early recovery phase, workplace closures and limited job opportunities forced young people to seek income through informal employment and/or non-standard forms of work. From the BPS data in 2019 to 2020, fresh graduates with the employment status of employees declined (-27 per cent) from 2019 to 2020. Meanwhile, there was a massive increase in new graduates with an employment status of an own-account worker (86 per cent) and unpaid/contributing family worker (99 per cent) from 2019 to 2020. This demonstrates a shift in the employment status of the fresh graduates during the COVID-19 pandemic. The own-account worker and unpaid/contributing family worker are considered more vulnerable compared to other employment categories because they do not have stable incomes or employment protection such as health insurance.

The Term NEET that stands for Not in Employment, Education, or Training, refers to young people (age 15-24) who are not engaged in the mentioned activities (See Figure 4.1). The NEET concept is associated with the potential to address a broad array of vulnerabilities among the youth such as unemployment, early school dropout and labour market

discouragement. The younger generations are expected to be the agents of change that can continue and improve many things regarding the country's leadership. The NEET phenomenon in Indonesia occurred because of their lack of involvement in social activities, accessibility to information, and the ability to read and write (*Pattinasarany 2019*).

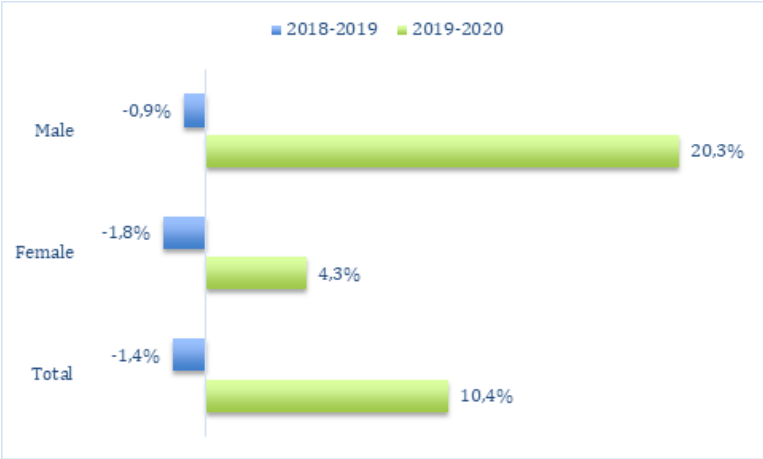
Figure 4.1 Youth NEET Classification



Source: (Indonesia, Ministry of Manpower 2020c)

Youth NEET population decreased from 10.2 million to 10.1 million (-1.4 per cent) in 2018-2019 (Figure 4.2). However, in 2019-2020 the youth NEET population increased from 10.1 million to 11.1 million (10.4 per cent). Data shows that the most significant growth is male NEET in 2019-2020 from 3.9 million to 4.6 million (20.3 per cent). Meanwhile, female NEET in 2019-2020 also increased but not significant from 6.2 million to 6.5 million (4.3 per cent). Although the growth of male NEET from 2019 to 2020 was higher than female, the population of NEET by sex is still dominated by female NEET. The COVID-19 pandemic, which hit Indonesia in early 2020, is one of the reasons why there was significant growth in the youth NEET population, both male and female NEET.

Figure 4.2 Growth of Youth NEET 2018-20



Source: Author's calculation from Sakernas 2018, 2019 and 2020

4.2. Women

Women are in a much more vulnerable position during the COVID-19 pandemic because they were at a disadvantage in the job market even before the pandemic due to pre-existing gender inequalities (*Madgavkar, et al. 2020*). Before the pandemic in 2019, at least 11 million households had a female head, equivalent to 15 per cent of total households in Indonesia. In addition, 2.5 million female-headed households have children at primary school age. This means these women must juggle earning money for their families by assisting their children during distance learning (*Samudra and Setyonaluri 2020*). According to BPS data from 2019 to 2020, there was an increase in unemployed women (30 per cent) when the pandemic happened. Most women are exposed to the risks of a pandemic especially regarding unemployment, but the impact is different for different age groups (Table 4.2).

Table 4.2 Women Unemployment Rate based on Age Groups 2018-20

Age Group	Year		
	2018	2019	2020
15-19	25.8%	26.0%	20.8%
20-24	35.5%	34.4%	29.7%
25-29	13.9%	14.9%	15.3%
30-34	7.5%	7.3%	8.1%
35-39	6.3%	4.7%	6.5%
40-44	3.8%	4.5%	5.5%
45-49	3.2%	3.3%	5.1%
50-54	1.9%	2.4%	3.7%
55-59	1.1%	1.4%	2.8%
60-64	0.5%	0.6%	1.1%
65+	0.5%	0.6%	1.4%

Source: Perhitungan penulis dari Sakernas 2018, 2019 dan 2020

Several factors influenced the increase in women's unemployment in Indonesia, especially during the pandemic. The pandemic also hit older persons as their waning physical abilities limit their participation in the labour market and makes them more vulnerable than other age groups. Even more vulnerable are the older women, and those living in rural areas. This is because more older women tend to live alone than older men, older women tend to be poorer than older men, and older women tend to suffer from more disabilities than older men (*Pardede and Adioetomo 2021*).

Women in Indonesia are more frequent users of public transport than men, because many women do not own vehicles (*Samudra and Setyonaluri 2020*). This exposes them to a greater risk of infection when restrictions ease and commuting returns to normal. The pandemic affected women the most compared to other groups because they are more burdened than men, especially with the lockdown policy. Indonesian women are taking on additional responsibilities during the pandemic and were three times more likely to care for their children than the fathers. In 71.5% of the households, mothers are the primary care givers and who support their children with remote learning or home-schooling activities, compared with 22 per cent of households who said the father took care of that (*UNICEF, UNDP, Prospera, and SMERU 2021*). Half of these women were also engaged in paying jobs to support their families and were struggling to find a balance between work and their additional responsibilities.

The pandemic has exposed the vulnerability of women to economic shocks, especially those working in disaster and climate-sensitive sectors such as tourism and agriculture and deepened the pre-existing gender inequalities from decades before (*The Jakarta Post 2020*). Women, specifically those who work in the informal sector, are the most affected by the pandemic. There is a lack of government effort to pay more attention to female workers, especially during this pandemic (from an in-depth interview with a representative from the Confederation of All Indonesian Trade Unions (KSBSI)). Women in the informal sector are the most unseen because they are struggling to survive with incomes that were limited even prior to the pandemic. There is no specific policy that addresses the issues that directly impact women, especially regarding employment. For example, the women who work in the agriculture sector. According to Sana Ullaili of Kinasih Women's Solidarity, an NGO in Yogyakarta focused on empowerment for women in food security and land rights, female farmers are disproportionately impacted because their role is to manage their husband's income (*Oktavianti 2021*). Women working on farms are often forced to accept additional jobs to feed their families.

There are initiatives from the female communities to empower women during the pandemic, especially with regard to employment. Pelangi Nusantara (Pelanusa) an MSME based in Malang, East Java, is an example. Pelanusa's employees are mostly women, ranging from teenagers who became mothers at the age of 17, and many women from around the city that cannot work to support their daily lives because they do not have the skills. Noor Suryanti, the owner of Pelanusa, saw this problem and chose to become a socio-preneur in the hope of creating an impact that would spread throughout different communities and help women to gain expertise and experience. Pelanusa experienced a decline in their revenue by 30 per cent to 50 per cent compared to the previous year before the pandemic hit, they cope with the pandemic using several strategies. First, they shifted to producing things that would be useful during the pandemic such as masks and other personal protective equipment that kept their production active. Second, they transformed their marketing approaches by using social media platforms such as Facebook and Instagram, and online marketplaces like Lazada and Tokopedia. Third, they collaborated with millennials to help expand their market. The company targeted young people by selling a Do-It-Yourself or DIY package that received a positive response from the market. Fourth, Pelanusa sustained their empowering activities, which had to be adjusted occasionally. Monitoring the company's employees now can only be performed via WhatsApp, while training is done using Zoom to prevent the spread of COVID-19 (*LPEM FEB UI 2020*).

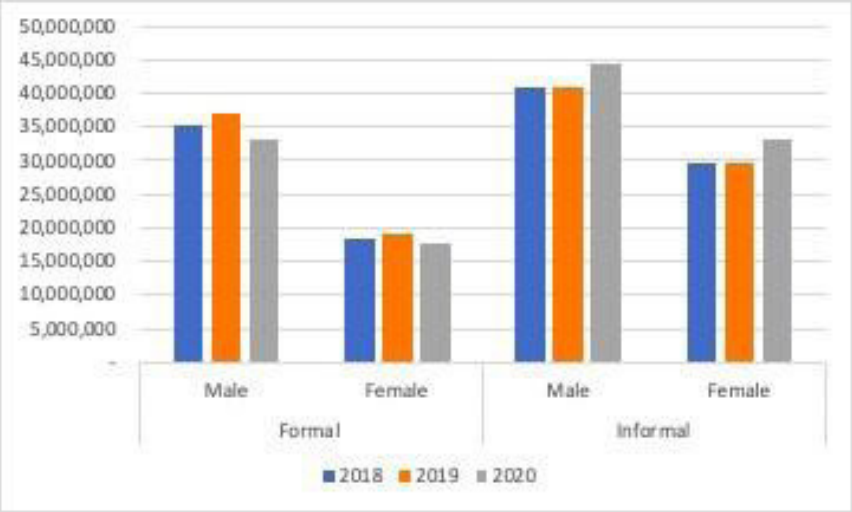
The Government of Indonesia (GoI) through the Ministry of Women Empowerment and Child Protection (MoWECP) is responding to the socio-economic impact of COVID-19 on women, children, people with disabilities, and the elderly using strategies and comprehensive approaches. MoWECP enacted a movement called #BERJARAK that aims to protect vulnerable groups from COVID-19. This movement has two intervention focuses that include prevention and treatment. Regarding prevention, steps are being taken to prevent the spread and transmission of the virus, including the preparation and distribution of educational materials through socialization in print, electronic and social media. According to Bintang Puspayoga, the Minister of Women's Empowerment and Child Protection, the main target locations for distributing this material are places filled with groups of women and children, such as traditional markets, women's prisons, Youth Correctional Facility, children's homes, nursing homes, and others (*Indonesia, Ministry of Women Empowerment and Child Protection 2020*).

4.3 Informal Workers

The COVID-19 pandemic is affecting Indonesian informal workers in four ways (*Octavia 2020*). First, loss of income. Strict physical distancing and lockdown regulations (PSBB) immediately halted daily activities and led to the closure of businesses, schools, and public places especially in urban areas across Indonesia. This led to informal workers who work as own-account operators, including those who have set up their own micro-enterprises and those who are self-employed, facing a loss of income due to PSBB. Second, uncertain work prospects. Informal workers in Indonesia lack unemployment benefits and social protections, and oftentimes do not have access to healthcare. They may be terminated by their employer leaving them with little to no protection. Third, there is not enough social assistance. The pandemic has raised fundamental questions about the extent of their reach and effectiveness of distribution efforts. Due to the heterogeneity of the informal sector, many informal workers earned just enough before the pandemic not to be able to benefit from programmes that target households with little to no earning potential. Fourth, migration and mobility. A substantial proportion of those working in the urban informal sector are economic migrants who moved due to a lack of employment opportunities in their hometown. The pandemic situation was exacerbated when these informal workers were unable to pay rent after losing their incomes, putting them at further risk of losing their shelter in urban areas where they work.

The status of workers as formal or informal affects the ways they adapted to the crisis and the intervention policy approach for mitigating unemployment. Those in the informal sector can be much more flexible than formal workers in switching jobs depending on the economic situation (*Pitoyo 2007*). However, they are much more at risk during the pandemic because they do not have certainty in contracts and working hours. They are more negatively affected by the economic crisis because they do not have stable incomes or financial guarantees in the event of income loss. These reasons make it important to discuss the protection of informal workers in Indonesia, especially during the pandemic, considering the high population of informal workers. Both male and female informal workers are higher in number compared to formal workers (Figure 4.3).

Figure 4.3 Formal and Informal Workers by Sex from 2018-20 (million)



Source: Author's calculation from Sakernas 2018, 2019 and 2020

During the pandemic, there have been two points of view about the roles of the informal economy. First, is the optimistic view that sees the informal economy surviving in the crisis, given the flexibility of the informal sector in receiving capital and human resources that can provide a great opportunity for the community to look for income. As a result, many of the formal workers turn to informal work as an alternative survival strategy.

Second, is the pessimistic view that sees the ongoing informal economy continue to suffer losses and informal workers as vulnerable during the crisis. This view tends to be seen from an employment perspective. Informal economic activities do not have a clear market competition mechanism, so the dynamics are more unpredictable compared to formal sectors. This certainly impacts the vulnerability of informal workers as they are likely to suffer income loss due to the increase in formal workers entering the informal sector (*Pitoyo, Aditya and Amri 2020*).

The reduction of social and business activities to prevent the spread of COVID-19 in Indonesia is causing various economic sectors to contract, resulting in a number of workers being furloughed or even laid off. Informal workers are among the most affected by the pandemic as many have also lost their jobs. The National Economic Recovery programme designed to mitigate the impact of the pandemic-induced crisis targets only the formal sector. There needs to be a crisis mitigation policy or programme that targets workers in the informal sector (*Rahman, Kusuma and Arfyanto 2020*).

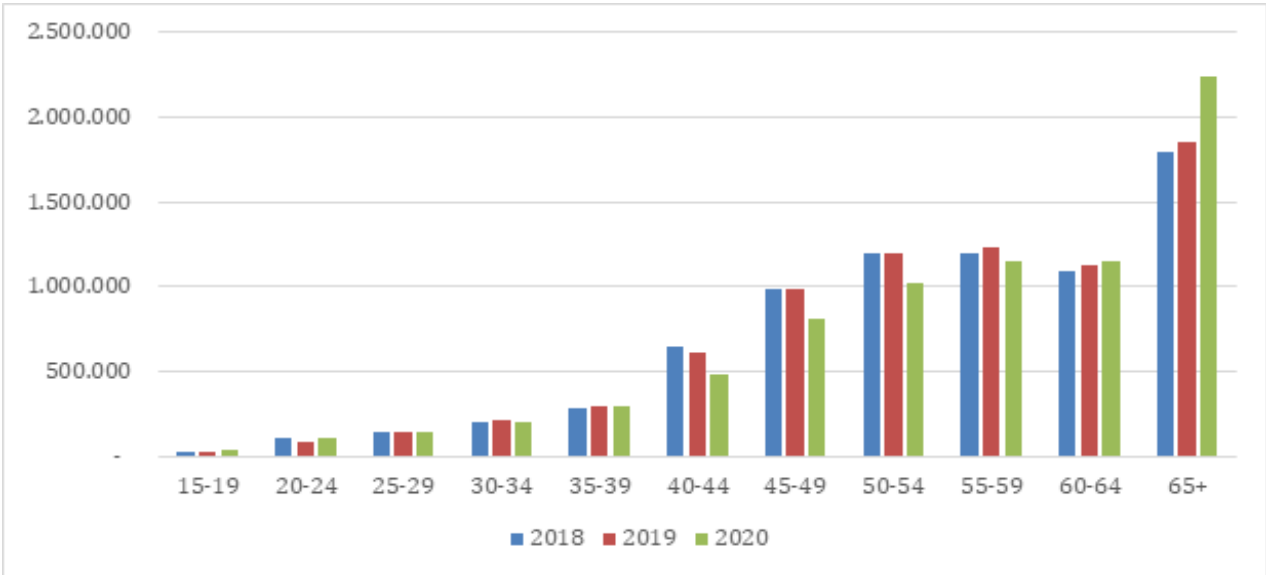
4.4 Workers with Disabilities

The definition of Persons with Disabilities (PWD) are people who experience difficulties or disorders at a slight/moderate or severe level, and it might affect a wide range of functional areas: mobility, vision, hearing, communication, psychosocial function limitations, etc. (*MoM, 2020*). Disabilities can occur at any time of life, from birth to old age, and can be caused by many factors from poor nutrition to violence and poor health care. In addition, if people with functional difficulties live in an unaccommodating environment, they can be limited in their ability to participate in the economic and social lives of their communities: at work, at school, marriage, or civic engagement, as well as religious and leisure activities (*Adioetomo, Mont and Irwanto 2014*).

Majority of PWD does not work, even if they are working, most of PWD works in informal sector with low wages. This happens because of a multidimensional condition, in which PWD are more likely to have lower education, fewer formal education qualifications, lower training, less likely to be unemployed, to be paid less if they are employed, and have less access to public service than persons with no disabilities (*Halimatussadiah, Agriva and Nuryakin 2014*). Many PWD still face considerable barriers to participating in society. The need to improve living conditions and the participation of persons with disabilities in a better and more inclusive environment must be recognised. In terms of giving persons with disabilities opportunities to work, the government, public and private sector, as well as civil society, need to ensure that various legal and social barriers to employing people with disabilities are removed. PWD have a right to work, live independently, and receive opportunities for personal development (*Better Work Indonesia 2013*).

Due to the COVID-19 pandemic, PWD are more likely to become unemployed compared to people with no disabilities. Employers prefer to dismiss workers with disabilities, who have historically been regarded as costly due to their association with the accommodation for certain types of disability care (*Siregar, Moeis and Anky 2021*). This highlights the challenges that has been experienced by PWD during the pandemic era regarding the employment issues. Moreover, PWD are more vulnerable than persons with no disabilities to experience severe health issues associated with COVID-19, because of the comorbidities that increased the risk of COVID-19 complications.

Figure 4.3. Persons with Disabilities (PWD) according to age group in 2018-2020[14]



Source: Author's calculation from Sakernas 2018, 2019 and 2020

Workers according to BPS refers to persons who worked for pay or assisted others in obtaining pay or profit for the duration at least one hour during the survey week, including unpaid worker who helped conduct an economic activity. The growth of workers with disabilities in Indonesia by age group from 2018 to 2020 shows people aged 65+ with disabilities returning to the labour market (up to 21 per cent or 388,566) from 2019 to 2020 (Figure 4.4). The elderly who works in Indonesia do so just to fulfil their basic needs (*TNP2K and SMERU Research Institute 2020*). This is evidenced by the higher proportion of working elderly, even in those groups with disabilities. The working elderly in Indonesia are at risk economically because of economic fluctuations, especially during the COVID-19 pandemic.

PWD who work in the informal sector, work under poor conditions and irregularly, making them vulnerable to income shocks during a crisis (*Cardno 2021*). Ninety-seven per cent of PWD in Indonesia currently do not have access to regular social protection benefits. There are some efforts made by organizations or communities of people with disabilities to tackle the socioeconomic problems caused by the pandemic including by reducing its economic impact on society's most vulnerable groups. One example is the Sehati Sukoharjo Community Group that set up a COVID-19 information centre and raised funds to donate basic daily supplies and disinfectants to the elderly, disabled people living in poverty, and other high-risk groups. Sehati identified at least 3,500 people with disabilities, the elderly, and otherwise vulnerable in the city of Sukoharjo, that needed aid and access to information, health care, and other services (*Sehati Sukoharjo 2020*).

4.5 Migrant Workers

Indonesia is a major migrant-sending country, with overseas workers remitting some 1 per cent of total GDP each year (*OCHA and RCO 2020*). Since the start of the COVID-19 pandemic outbreak and as of 20 April 2020, more than 120,000 Indonesian migrant workers have returned to Indonesia from other countries through official channels, according to the National Board for the Protection of Indonesian Migrant Workers (BP2MI). The actual number of returnees is higher due to the unknown number of migrant workers who have returned through irregular means. Indonesian migrant workers have been significantly impacted economically, with many reporting that they were forced to return without their full salaries being paid by their employers, according to case records taken at government transit shelters (*OCHA and RCO 2020*).

International bodies under the United Nations have confirmed that migrant workers are among the most vulnerable groups in this time of global crisis. COVID-19 knows no national borders so cooperation among countries, especially in a regional framework, is necessary. Migrant workers are one of the most affected groups by the pandemic, especially those who work in the home care, health, and public service sectors, and so are vulnerable to direct disease transmission. In addition, because of their mobility, migrant workers are prone to stigmatization as carriers of the COVID-19 virus. Migrant workers are also susceptible to discrimination at the health and other public service centres in their placement countries (*Susilo 2020*).

There have been 1.87 million Indonesian Migrant Workers (PMI) placed since 2014. Based on the development trend in Table 4.3, the placement of PMI since 2014 has continued to decline, especially in 2020. As we know, in 2020 the pandemic occurred worldwide, which caused the PMI placement process to almost stop. As a result, placements in 2020 decreased by 73.67 per cent when compared to 2014. Based on a publication by BP2MI in 2020, the number of PMI placed in 2020 was 113,173 people.

Table 4.3 Placement of Indonesian Migrant Workers 2014-20

Year	Placement of PMI
2014	429,874
2015	275,737
2016	234,451
2017	262,899
2018	283,640
2019	269,879
2020	113,173
Total	**1,869,653**

Source: Perencanaan dan Pengembangan Ketenagakerjaan, 2021

Migrant workers in the region, men, and women, are striving to protect their livelihoods and their health through the crisis, but many are disproportionately affected by COVID-19 and its impact on their income and health. In their placement countries, 32 per cent of the employed respondents said they faced employment challenges and abuses related to COVID-19, including cases of violence or harassment and abuses indicating forced labour. During the pandemic, there have been many issues regarding migrant worker employment, either locally or internationally. Migrant workers in destination countries reported the following specific problems, namely: contract termination or threats of being compelled to work against their will; being required to take unpaid leave/sick leave; the inability to not work during lockdowns; reduced working days and pay, or uncertainty of their next paycheck; threats, harassment, or violence from an employer; passports or other legal documents being held by an employer (*ILO 2020b*).

Chapter 5

Impact of COVID-19 Pandemic on Skills Development

The pandemic of COVID-19 has shifted many parts of social life. Not only it affects the health sector of countries, but also the labour and education systems around the world. The rapid transmission of COVID-19 forced public spaces to be closed and meetings held virtually, including for educational and training institutions, which may affect the skills development and future of skilled workers. Additionally, not everyone has equal access or the ability to utilize digital technology and the Internet, especially among the youth in a developing country.

5.1. Disrupted Education and Training

In the global debates, Technical and Vocational Education and Training (TVET) is steadily gaining popularity and has also become a government priority for the national development roadmap. TVET is becoming an efficient way to improve human capital through education. Number empirical reviews suggest that TVET has a positive wage and employment effect (*Vandenberg and Laranjo 2020*). Thus, in Southeast Asia, both the Association of Southeast Asian Nations (ASEAN) and the Southeast Asian Ministers of Education Organisation (SEAMEO) have set TVET as a priority agenda (*Paryono 2017*).

The COVID 19 pandemic and its measures for physical distancing have disrupted education and training but is also driving innovation in distance learning. In 2020, ILO, UNESCO, and World Bank surveyed the effect of COVID-19 on mostly TVET providers. Around 90 per cent of respondents reported complete closure of TVET centres in their country, and virtually all the respondents (98 per cent) reported a disruption of work-based learning. Assessment activities were also halted, with over three-quarters of respondents reporting postponement of certification exams. This issue is very concerning, as disrupted learning can discourage and lead to dropouts with long-term social and economic consequences. Without remediation measures, this can create a "COVID-19 generation" of workers with lower earnings and lower quality jobs over their lifetime (*Hoftijzer, Levin and Weber 2021*).

There are effects of COVID 19 on TVET (ILO 2021b), such as:

- Closure of TVET provider: The limitations on social interaction obliged some TVET providers to close. A partial closure limited to specific regions was more commonly reported by respondents in Asia and the Pacific,
- The obstacles in providing TVET: Despite many TVETs having shifted to virtual education, TVET providers and learners were not prepared for this abrupt transition to remote learning. The sudden shift of training modalities to distance learning and inconsistencies in access to distance learning modules can deepen inequalities among learners in terms of access to and quality of training. This is caused by a lack of general technological infrastructure: electricity, Internet, connectivity, and devices; a lack of quality pedagogy from staff; and financial constraints

- Disruption in the delivery of apprenticeships and other practical skills training: class sizes were drastically reduced and communication with students was significantly affected. This is a huge obstacle to practical skills training. The pandemic also affected access to the materials required for practice and training purposes
- Disruption in assessment and certification: Assessments and certifications were halted due to pandemic

The disruption of TVET may lead to serious long-term consequences and erase the progress that has been made in improving access to and quality of TVET programmes. For example, declining access to and affordability of TVET programmes; difficulties with TVET student engagement and quality assurance; the increased opportunity cost of completing TVET programmes; and lower motivation among teachers and students. The pandemic also caused a rise in the dropout rate as the uncertainty regarding the end of the school year, and entry into the labour market, has been a cause of anxiety and confusion among students and affects their willingness to continue learning.

However, at the same time, TVET may play a crucial role in the different stages of the COVID-19 crisis: (i) in the coping phase, when schools and many businesses are closed and the health emergency is at its peak; (ii) in the intermediate phase, when schools and businesses gradually reopen; and (iii) during the recovery period, when opportunities open up to re-imagine, reset and redo workforce training (*World Bank 2020*).

TVET may be necessary to develop important skills needed to mitigate the impacts of the COVID-19 pandemic in several ways:

- **Coping**: The pandemic has emphasized the crucial importance of many practical service sector jobs. These essential workers include, inter alia, health care professionals, child and eldercare workers, grocery store employees, logistics workers, and ICT support staff. TVET institutions are well placed to mitigate these issues by providing reskilling for those in heavily affected sectors and upskilling workers to meet changing demands. By conducting short term skills training
- **Managing continuity**: Promote learning recovery as schools and businesses gradually reopen, although heightened levels of insecurity in jobs and income persist.
- **Improving and Accelerating Progress**: Build on innovative policy responses and lessons learned during the first two phases and build back better programmes

In Indonesia, this pandemic may also be a way to accelerate e-learning mechanisms. Digital learning can provide better access to vocational training for people of Indonesia from Sabang to Merauke. Digital learning programmes could be developed into online and offline learning programmes and into a blended learning programme, combining online or offline distance learning and face-to-face/practical learning mechanisms. However, the main challenge faced by TVET in Indonesia is a skills mismatch. Skills provided by TVET do not match the skills demanded by the industry. To address this issue, a strategic partnership between TVET and the industry is vital.

In 2019, Ministry of Finance released a regulation under Finance Ministry Decree No. 128/PMK/010/2019 on “super tax deduction” up to 200 per cent for companies involved in vocational training. The Decree encourages companies to be involved in the sector skills council/ forum to develop competency standards, vocational training curriculums, and quality apprenticeships. In addition, if it is required, a skills development fund can be developed to ensure programme continuity.

5.2. Impact on Skills Demands and Skills Mismatches

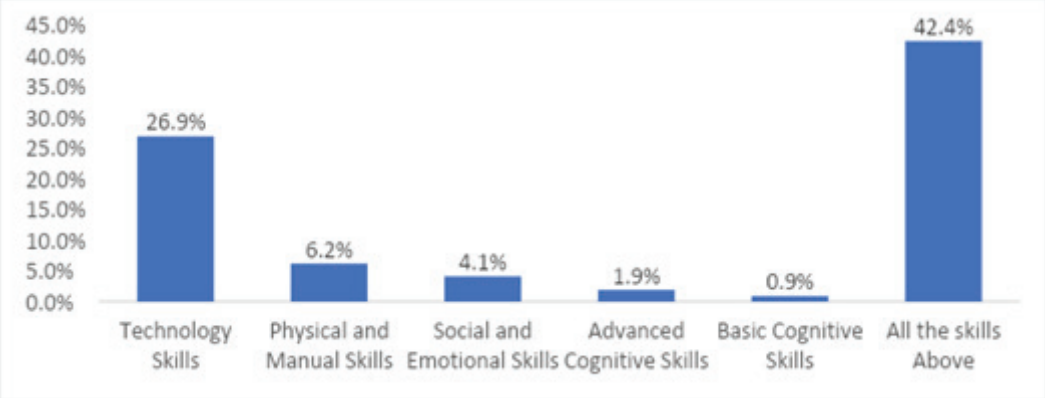
The COVID-19 pandemic has brought unprecedented changes, especially in labour market demand. In general, the demand for labour is influenced by a firm’s various combined factors of production. One of these factors is product demand shift. In normal times, the rise of demand in a firm’s product increases the demand for workers. But in the COVID-19 era, the demand for products has changed. First, the purchasing power of consumers is not as strong as before. Second, there is a barrier related to production. Some sectors must limit their production to comply with social restriction rules and minimize mobility to contain COVID-19. These barriers affect labour demand because companies need to reduce their labour force to prevent further loss. This bleak condition will continue, especially in non-essential sectors until game-changer plans such as vaccines are fully implemented.

Due to the current COVID-19 conditions, statistical data in chapter III indicates the changes in labour by industry sector from August 2019 to August 2020. Only seven of 17 job classifications have growth and positive changes in absolute number. These increases are related to skills demand because labourers who change work sectors must prepare skills

related to the new sectors of work. Number of sectors have their characteristics of skills to support labour's work performance.

By positive growth sectors, there is the agriculture, forestry, and fishing sector (10.6 per cent), wholesale and retail trade; repair of motor vehicle and motorcycle sector (3.8 per cent), and human health and work activities sector (2.7 per cent). Meanwhile, the biggest labour increase in real numbers by sector are agriculture, forestry, and fishing (3.6 million people), manufacturing (0.9 million), and other service activities (0.1 million). This information should open opportunities for skill development institutions to provide training that is related to those sectors. For example, a skill development institution can provide farm management for the agriculture, forestry, and fishing sector. In addition, those sectors can also sharpen the job market to screen job seekers by what background that they need the most.

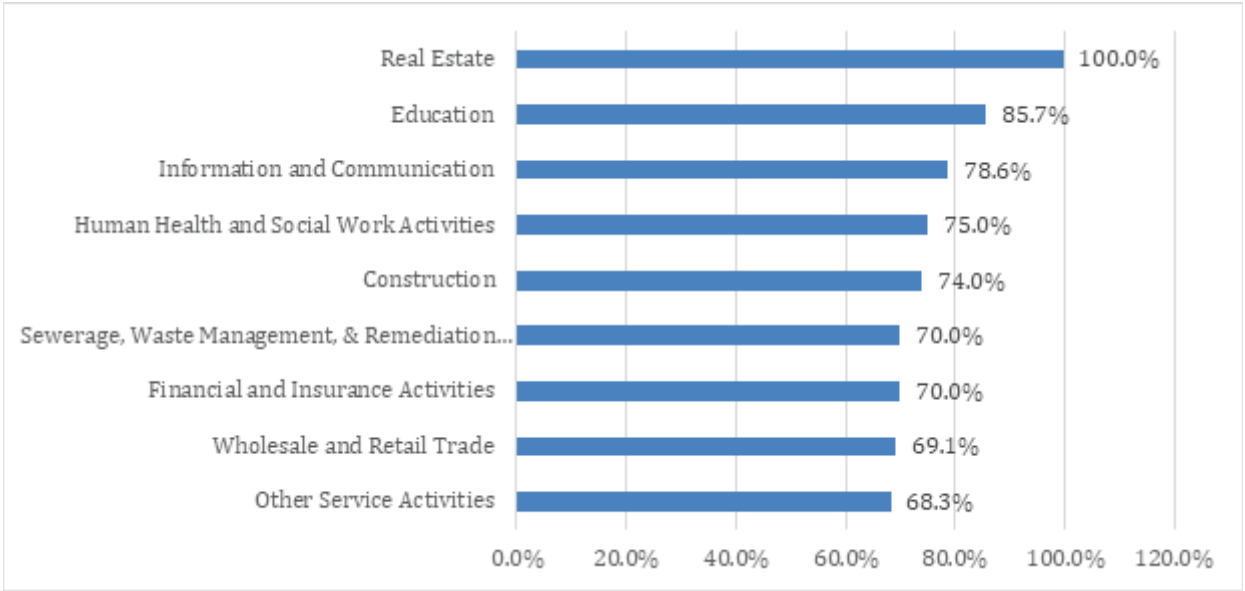
Figure 5.1 Skills on Demand After Pandemic, August 2020



Source: (Indonesia, Ministry of Manpower 2020a)

Another survey also shows the skills in demand in August 2020 in context, with skills more needed than others. Figure 5.1 is the result of the Ministry of Manpower survey by 1,105 firm respondents who are listed on the Firm Annual Compulsory Report. Although 42.4 per cent of the respondents preferred workers to have all the skills listed in the options, technology skills are the most in demand by 26.9 per cent of the respondents. Physical and manual skills are at 6.2 per cent, and social and emotional skills at 4.1 per cent.

Figure 5.2: Technology in Demand by Job Sector



Source: (Indonesia, Ministry of Manpower 2020a)

Figure 5.2 shows a deeper assessment by the Ministry of Manpower of the technology in demand by job sector. The survey shows nine job sectors that are more than 60 per cent in need of technology skills. The real estate sector has the highest score with 100 per cent need of technology skills, followed by the education sector with 85.7 per cent, and information and communication with 78.6 per cent. Those sectors are heavily impacted by COVID-19 in various measures. The real estate sector cannot be fully operational because it is not categorized as essential. The impact is that real estate companies must rely on people working from home and provide online services for their customers. The education, and information and communication sectors also use digital technology as a medium to operate.

Pandemic era signifies the role of digital technology than in the pre-pandemic era. Firms in the time of the widespread social and mobility restriction policy see the digital infrastructure such as video conferencing (online meeting) as the available option to adapt with health crisis. Even the post-pandemic life indicates the digital skill in high demand as the result of digital transformation that become trend now days. Firms already invest on digital infrastructure to develop company apps, digital systems, and data science for more effective and efficient operation. Therefore, the digital technology skill that cover digital transformation effort will be in demand.

Besides number of stand-out sectors and the rise in demand for technology skills, Indonesia's labour condition during the pandemic is in worrying form given the rise of unemployment for some educational backgrounds group. The tendency is the lower the level of education, the higher the unemployment rate, except for the no schooling and diploma levels. The biggest growth in unemployment is at the primary school level with a 64.6 per cent increase in August 2019-2020, with 0.5 million workers. But, by actual numbers, the biggest change is at the senior high school level with 1.3 million workers (a combination of general high school (0.7 million workers) and vocational high school (0.6 million workers) (Sakernas).

The data on unemployment by education level also reveal senior high school level graduate at risk to be unemployed in August 2019-2020. By absolute number statistics, that group has the most increase between that year with 1.3 million (a combination of general high school (0.7 million workers) and vocational high school (0.6 million workers) (Sakernas). The number is relatively big considering the increase in Diploma and university level unemployed which constitute a total of 0.3 million increase and primary school level with 0.5 million increases.

To understand more about the relationship between education level and employment, skill mismatch might need further analysis. Skill mismatch refers to when a worker's education level is different than that which is required by the job (*Samudra 2021*). It consists of three classifications. First, overqualification (O) is when a worker's education is higher than the job requirement. Second, underqualified (U) is when a worker's education level is lower than the job requirement. Third, is when a worker's education level matches the job requirement.

Table 5.1 Skill Mismatch, August 2019-20

Indicator	Overall Skill Mismatch		Female Skill Mismatch		Male Skill Mismatch	
	Aug 2019	Aug 2020	Aug 2019	Aug 2020	Aug 2019	Aug 2020
Overqualified	8.2%	9.0%	7.0%	7.6%	8.9%	9.9%
Matched	43.7%	43.7%	42.2%	42.4%	44.7%	44.5%
Underqualified	48.2%	47.3%	50.8%	50.0%	46.5%	45.6%

Source: (Samudra 2021)

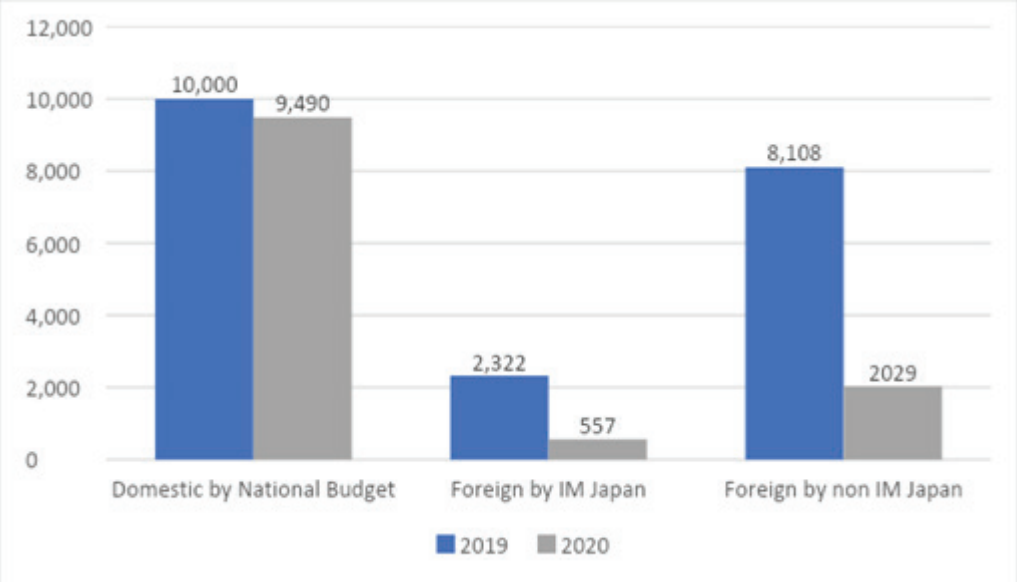
Skill mismatch in Indonesia remained a challenge before and during the Covid-19 pandemic with an increase of overqualified workers and a decrease of underqualified. Table 5.1 shows the result of skill mismatch in August 2019-2020 by Lembaga Demografi UI. The study indicates that more people with higher educations have lower education level jobs or are related to lower skills. The overqualified increased from 8.2 per cent in August 2019 to 9.0 per cent in August 2020. The female mismatched overqualified worker was at 7 per cent in August 2019 and 7.6 per cent in August 2020 and for males the skill mismatch rate was 8.9 per cent in August 2019 and 9.9 per cent in August 2020. The increase in overqualified mismatches reveals an oversupply of higher education job seekers which makes them accept lower education jobs.

The overall matched worker between August 2019 is the same as August 2020 by 43.7 per cent. By sex, male matched workers decreased from 44.7 per cent in August 2020 to 44.5 per cent in August 2020. By contrast, female matched workers increased from 42.2 per cent in August 2019 to 42.4 per cent in August 2020.

The underqualified over-skill from August 2019 to August 2020 decreased from 48.2 per cent to 47.3 per cent. This indicates the decrease of jobs for lower education levels because there is no increase in matched work. That means lower education levels cannot access jobs that match their education with their job requirements. Lower educated workers tend to become unemployed to a large degree at 1.1 per cent of the total workers.

The GoI has tried to bridge the gap between low educational levels and access to jobs through internship and apprenticeship programmes under the Ministry of Manpower. The programmes involve multiple stakeholders and are available domestically and overseas. First, the domestic internships and apprenticeships channel the participants to domestic firms throughout Indonesia. All the financing for the programme is provided from the national budget. Second, a foreign internship and apprenticeship programme called 'IM Japan,' opens the opportunity to intern at Japanese firms. This is a partnership programme on labour issues between the Indonesian and the Japanese governments. Third, a non-IM Japan is an internship and apprenticeship programme that relies on Sending Organizations, or training institutions, to channel the interns overseas. That training institution has a partnership or memorandum of understanding (MoU) with internship and apprenticeships providers in Japan, called the Accepting Organizations (*Wirawan, et al. 2021, 148*).

Figure 5.3 Indonesia Internship and Apprenticeships in 2019-20



Source: (Indonesia, Ministry of Manpower 2020b) (Wirawan, et al. 2021)

Figure 5.3 shows Indonesia's trends in internship and apprenticeships in 2019-20. In domestic internship and apprenticeships by the national budget, the participants decreased from 10,000 in 2019 to 9,490 in 2020. Meanwhile, the big decline of participants occurred in foreign internships and apprenticeships. In foreign internship and apprenticeships by IM Japan, the decrease was from 2,322 in 2019 to 557 in 2020. In foreign internship and apprenticeships by non-IM Japan, the decrease was from 8,108 in 2019 to 2,029 in 2020. The significant decline is because of the cancellation of internships and apprenticeships from April to December 2020 due to lockdown policies in Japan. The only internship and apprenticeship participants that were sent to Japan in 2020 were in the first quarter (*Wirawan, et al. 2021, 143*).

With regard to skill demand by industry sector, sectors have adjusted solve the skill problems of their workers. For example, the hotel industry was forced to make their operations more efficient after reducing its work force due to the pandemic. The problem created the need for some skills to operate a hotel with fewer workers. The hotels decided to train their workers to have multitasked positions, as is common outside Indonesia. Rather than having a worker focus on one task, for example a doorperson just opening doors, he or she is trained for another task as well, which makes the hotel operate more efficiently than before (in depth interview with Indonesian Association of Hotel and Restaurant (PHRI)).

Other industries tend to keep their workers because it costs more to replace them. For example, the textile industry has workers who specialize in heavy machines. Social restriction policies are forcing the textile industry to reduce production and reduce working hours. Instead of decreasing their workers to fit production requirements, the industry finds it costlier to find new workers and train them from the start. The industry also kept their workers because of

their optimism that they would be operating at full capacity in the near future (in depth interview with Indonesian Association of Fibre and Filament Yarn Producers (APSyFI)).

5.3. Education and Training in the New Normal

Education and training institutions faced a big challenge early in the COVID-19 pandemic. The ILO, World Bank, and UNESCO survey of Skills Development in the Time of COVID-19 suggests most countries did not have an emergency strategy to mitigate the impact of the pandemic (*ILO 2021b*). The survey asks the respondents whether their organization had strategies or not to face a health crisis like COVID-19 before. Only 15 per cent of respondents said they had full strategies; 25 per cent had partial strategies; 41 per cent had no strategies; and 16 per cent answered, "I don't know".

In further context of the survey, the strategy to contain COVID-19 pandemic refers to two approaches. First, the most reported strategy to face a health crisis like COVID-19 is to take measures to prevent the spread of the virus such as imposing health protocols and training participants to apply social distancing, handwashing and wearing a face mask. Second, the pre-existing strategy to face a health crisis like COVID-19 supports training participants by providing materials and practices through remote or distance learning. The policy response about education and training was in place when the survey was taken from 15 April to 15 May 2020. The remote learning approach was significant because most countries implemented a closure of education offline and promoted online learning.

Regarding education and training in the new normal, Indonesia has shown positive trends in training participants early in the pandemic. Several adaptations of strategies were used to contain COVID-19's impact on education and training, which will be explained later in this section. Table 5.2 shows the increase of training in working people and unemployment in August 2019-2020. All the data from Table 5.2 is from the Indonesia Labour Force Survey which was processed by the data centre of the Ministry of Manpower.

Table 5.2 Working People and Unemployment Who Have Attended Training, August 2019-20

Working People	Aug 2019	Aug 2020	Change	Growth
Overall				
Working People Who Have Attended Training	12,058,537	16,913,667	4,855,130	40.3%
Unemployed Who Have Attended Training	662,685	1,481,218	818,533	123.5%
Urban Areas				
Working People Who Have Attended Training	8,312,758	11,529,282	3,216,524	38.7%
Unemployed Who Have Attending Training	477,069	1,125,025	647,956	135.8%
Rural Area				
Working People Who Have Attended Training	3,745,779	5,384,385	1,638,606	43.7%
Unemployed Who Have Attended Training	185,616	356,193	170,577	91.9%

Source: (Indonesia, Ministry of Manpower 2020b, Indonesia, Ministry of Manpower 2020c)

Table 5.3 shows the increase of training participation that occurred in all indicators in the table. Overall, working people who have attended training increased 40.3 per cent or by 4.8 million people. The unemployed who have also attended training increased 123.5 per cent or 0.8 million. By area, working people who attended training in urban areas increased 38.7 per cent or by 3.2 million people. Working people who attended training in rural areas increased 43.7 per cent or 1.6 million people. The unemployed who attended training in urban areas also increased 135.8 per cent or by 3.2 million people. Those unemployed and attending training in rural areas increased 91.9 per cent or 0.2 million.

The statistical report in Table 5.3 indicates a training programme with a significant impact because it is not affected by COVID-19. In early 2020, the GoI provided a training programme called Pre-employment Card. This programme aimed to reduce the skills gap in Indonesia's labour force and complete other training programmes running that year. In the early plan before the pandemic hit, the Pre-Employment Card Programme worked to provide training funds and incentives for completing the training. After the pandemic, the Pre-employment Card changed the goals as part of the safety net policy in Indonesia. The programme not only offered skills training but also provided financial assistance for finishing the training (the amount of financial assistance is bigger than pre-employment card incentives in pre-pandemic plan).

The Pre-employment Card in 2020 accepted 6.0 million people from the 43.8 million enrolled in the programme (*Indonesia, Coordinating Ministry for Economic Affairs 2021*). The programme accepted participants gradually with a batch total of 11 enrolments from April to November 2020. The 6.0 million participants are in line with the number increase in working people who have attended training (4.8 million) and the unemployed who have attended training (0.8 million). This is reasonable because those categories match the requirements of the Pre-employment Card. For working people, the Pre-employment Card prioritizes employees affected by COVID-19 and opens a way for employees who need skills improvement. For the unemployed, the Pre-employment Card is open for jobseekers and people who get laid off. The participants in the Pre-employment Card receive one million rupiah for training courses, 2.4 million rupiah in incentives (0.6 million over four months), and 150 thousand rupiah in survey incentives (50 thousand rupiah for three surveys).

The results in Table 5.3 indicates a further effect of COVID-19 on working people and the unemployed. By actual number, the increase in employees who received training was 4.8 million. The increase in the unemployed who attended training is far smaller than those who were employed (0.8 million), but the growth is high with a 123.5 per cent increase. The training facilities faced difficulties accommodating the 5.6 million increases in participants, especially with COVID-19 forcing the cancelation of in-person training. The Pre-employment Card provided flexibility through online learning, and it also attracted more participants because of its incentives. For some of those employed, the incentives were helpful as they had to accept a reduction in their monthly income because their workplace could not fully be operated or closed.

Related to flexibility, the Pre-employment Card depends on online training. The whole Pre-employment Card ecosystem offers digital services with on-demand applications in enrolment, visual cards, online training, and e-wallets. The training curriculum itself is the result of private partnership where multiple online platforms compete to provide the best training to participants. The top seven training platforms in 2020 were Skill Academy, Baking World, Kelas.com, PT Yureka Edukasi Cipta, Luarsekolah, Global Edukasi Talenta, and Badr Interactive, but Pre-employment Card participants have the freedom to choose the training course that suits their needs. For example, the top five training courses selected in 2020 were sales and marketing, lifestyle, foreign language, food and beverage, and management.

Table 5.3 Pre-employment Card Participant by Education Background, 2020

Education	Sex			Total
	Male	Female	Undefined	
No Schooling	2,173	1,540	-	3,713
Primary school	296,187	220,012	8	516,207
Junior High School	390,457	283,361	5	673,823
Senior High School	1,999,798	1,436,559	27	3,436,384
Diploma I and II	46,473	37,611	1	84,085
Diploma III	107,163	156,044	4	263,211
Bachelor's degree	458,847	531,712	9	990,568
Master's degree	9,653	9,796	-	19,449
Doctorate Degree	132	102	-	234
Total	3,310,883	2,676,737	54	5,987,674

Source: Wirawan, et al (2021)

Another factor that makes the Pre-employment Card attract more participants is that there is no education qualification needed to join. Of the number of Pre-employment Card participants, the largest level of education group to join was senior high school, with 3.43 million (Table 5.3). The second largest participant group is the bachelor's degree level with 0.99 million participants. The third largest participant group is junior high school level with 0.67 million. The table shows that the Pre-employment Card opens opportunities to lower education groups, especially at primary school and no schooling levels.

The Pre-employment Card not only increased training participants, but also improve others aspect of employment (*Kartu Prakerja 2021*). The Pre-employment Card supports job seekers by providing certification, increasing employment, and more successful job searches. The programme also contributes to higher incomes by eight per cent, higher self-employment by 12 per cent, and higher entrepreneurship by 30 per cent. In addition to the employment aspect, food security for programme participants increased by six per cent and the use of e-wallets ownership by 53 per cent.

Parallel to the Pre-Employment Card Programme, the Ministry of Manpower's Training Centre, Balai Latihan Kerja (BLK), continues to operate during the pandemic with some adaptations and adjustments by creating courses in response to COVID-19. The programme trains BLK participants to learn skills related to producing goods which are in demand during the pandemic. BLK provides training to produce face masks, PPE, hand sanitizer, disinfectant, etc. The final products from the centre are distributed to hospitals, police stations, COVID-19 centres, traditional markets, and other places where they are needed (*Indonesia, Ministry of Manpower 2020a*).

The programme is run by 23 BLK staffers and has produced 11,760 trainees (Table 5.4). The biggest contributor of trainees to the programme is BBPLK (Balai Besar Pengembangan Latihan Kerja) Bandung with 11,472, followed by BLK Padang with 1,536. The largest group of trainee graduates by skill are from the mask production course with 4,372, and the cooking course with 2,792 trainees.

The Ministry of Manpower in 2020 refocused number of training courses in response to COVID-19. Courses that needed more than 240 hours and a physical presence such as training for automotive, welding, electrical, air conditioning, refrigeration technicians, etc., were replaced. These adjustments were made to support the government's efforts to contain COVID-19.

Regarding operations, according to an in-depth interview with the Ministry of Manpower Directorate General of Vocational Training, BLK did not have any technical guidance to run their training early on in the pandemic. Gradually, BLK developed some guidance through trial and error and created a partnership with Satuan Tugas COVID-19, a national task force to tackle COVID-19 related to permission organizing the training. The training was fluid in terms of running or stopping due to COVID-19 conditions in the BLK location.

The BLK wanted to train job seekers according to the skills in demand. The solution was a blend of training composed of 50 per cent online theory and 50 per cent practical training at BLK. The instructors hold an online session for theory with a test at the end of the session. After finishing the theory section, trainee practice in the BLK centre after permission to open from COVID-19 Task Force. BLK's capacity has decreased since the pandemic as it must conduct all training in compliance with health protocols.

Table 5.4 The Output of BLK Response COVID-19 Programme in 2020

Training Centre	Mask	PPE	Face shield	Cooking	Hand Sanitizer/Disinfectant	Sink	Coffin	Disinfectant room	Total
BBPLK Bandung	752	48	96	-	448	128	-	-	11.472
BBPLK Bekasi	-	-	-	80	-	144	-	-	224
BBPLK Serang	48	48	64	-	-	96	-	-	256
BBPLK Medan	352	176	-	128	48	48	-	-	752
BBPLK Semarang	224	144	-	48	16	96	-	-	528
BLK Banda Aceh	176	-	-	176	96	64	-	-	512
BLK Surakarta	256	208	128	336	48	272	-	-	1.248

Training Centre	Mask	PPE	Face shield	Cook-ing	Hand Sani-tizer/Disin-fectant	Sink	Coffin	Disinfectant room	Total
BLK Ternate	112	80	48	80	64	112	-	-	496
BLK Padang	944	-	-	528	-	32	32	-	1.536
BLK Samarinda	160	128	-	-	-	144	-	-	432
BLK Sorong	160	48	112	-	-	80	-	-	400
BLK Makassar	128	96	16	16	-	112	-	16	384
BLK Kendari	160	-	-	144	-	128	-	-	432
BLK Ambon	96	64	-	64	-	64	-	-	288
BLK Lombok Timur	160	-	16	672	80	112	-	-	1.040
BLK Bantaeng	48	32	32	32	32	32	-	-	208
BLK Lembang	-	-	-	400	48	80	-	-	528
BLK Sidoarjo	96	32	64	-	-	80	-	-	272
BLK Banyuwangi	48	-	-	-	-	-	-	-	48
BLK Belitung	48	-	16	48	16	-	-	-	128
BLK Pangkep	64	-	-	-	-	32	-	-	96
BBPP	100	-	-	-	100	-	-	-	200
BPP Kendari	240	-	-	40	-	-	-	-	280
Total	**4.372**	**1.104**	**592**	**2.792**	**996**	**1.856**	**32**	**16**	**11.760**

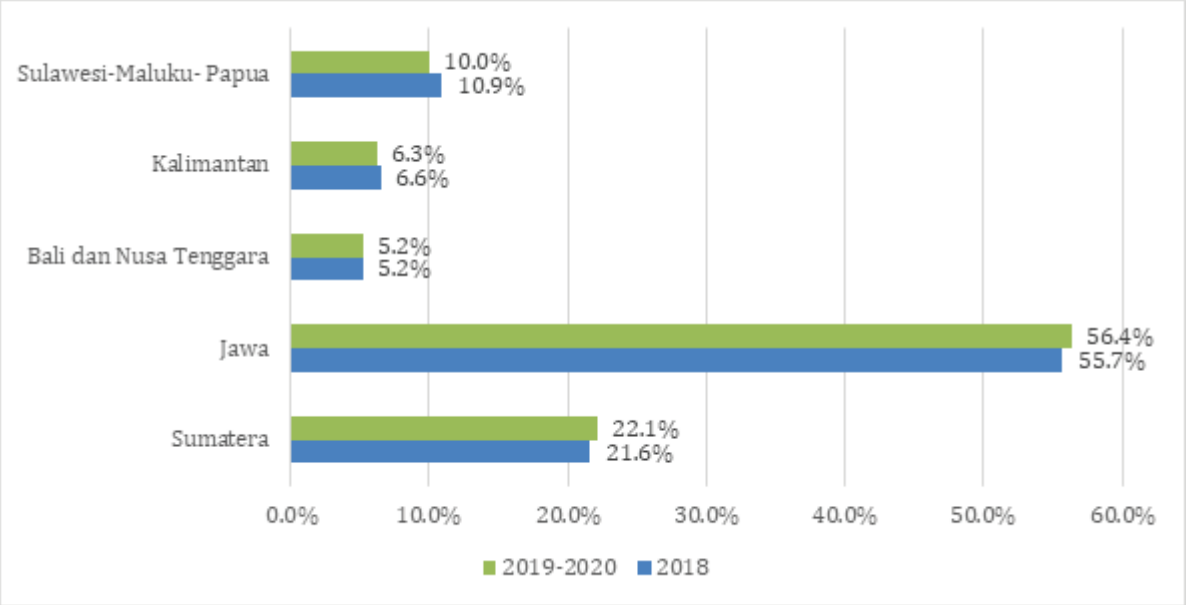
Source : (Wirawan, et al, 2021, 84)

5.4. Digital Divide in Indonesia

The rise of online education and training in Indonesia implies a demand for digital infrastructure and digital capacity among learners and instructor. In Indonesia, Internet users are trending up. According to a survey from the Association of Indonesian Internet Providers (APJII) and the Indonesia Survey Centre, the number of Internet users in Indonesia grew more in 2019 and second quarters of 2020, than in 2018. This growth can be categorized by Internet penetration (percentage between Internet users and population) and the increase of Internet users.

In Internet penetration, the 2018 survey shows 64.8 per cent of 264,2 million Indonesians accessed the Internet. That number increased by 8.9 per cent from 2019 to the second quarter of 2020 to 73.7 per cent of the 266.9 million Indonesians. The total increase in Internet users from 2018 to 2019 and the second quarter of 2020 was 25.5 million users. This shows a change of Internet users in 2018 at 171,2 million to 196,7 million in 2019 and the second quarter of 2020.

Figure 5.4 Internet Penetration by Region, 2018-2020



Source: (APJII 2020)

Although Indonesia's Internet users are increasing, Internet penetration per province indicates the growth of the Internet between 2018 and 2019 to second quarter 2020 as concentrated in Jawa and Sumatera. By total population of those who accessed the Internet in Indonesia, the Jawa region increased from 55,7 per cent to 56,4 per cent, while Sumatera increased from 21.6 per cent to 22.1 per cent (see Figure 5.4). One region that has had the same growth is Bali and Nusa Tenggara, which remained the same with 5.2 per cent of the total population who accessed the Internet in Indonesia. The Kalimantan, Sulawesi, Maluku, and Papua regions decreased in number. Kalimantan went from 6.6 per cent to 6.3 per cent, and the Sulawesi, Maluku and Papua regions changed from 10.9 per cent to 10 per cent.

Table 5.5 Pre-employment Card Distribution by Province, 2020

Provinces	Recipients Pre-employment Card (nominal)	Total National Pre-employment Card Recipient (percent)	Total Population in 2020
Aceh	133,943	2,2%	2.0%
Sumatera Utara	267,702	4,5%	5.5%
Sumatera Barat	135,254	2,3%	2.1%
Riau	151,264	2,5%	2.6%
Jambi	91,663	1,5%	1.3%
Sumatera Selatan	166,820	2,8%	3.2%
Bengkulu	77,533	1,3%	0.7%
Lampung	131,430	2,2%	3.2%
Bangka-Belitung	61,086	1,0%	0.5%
Kepulauan Riau	89,885	1,5%	0.9%
Total in Sumatera	**1,306,580**	**21,8%**	**22.0%**

Provinces	Recipients Pre-employment Card (nominal)	Total National Pre-employment Card Recipient (percent)	Total Population in 2020
DKI Jakarta	613,556	10,2%	3.9%
Jawa Barat	876,154	14,6%	18.4%
Jawa Tengah	507,340	8,5%	12.9%
D I Yogyakarta	105,826	1,8%	1.5%
Jawa Timur	707,085	11,8%	14.8%
Banten	294,408	4,9%	4.8%
Total in Jawa	**3,104,369**	**51,8%**	**56.2%**
Bali	122,403	2,0%	1.6%
Nusa Tenggara Barat	112,810	1,9%	1.9%
Nusa Tenggara Timur	84,024	1,4%	2.0%
Total in Bali and Nusa Tenggara	**319,237**	**5,3%**	**5.6%**
Kalimantan Barat	106,490	1,8%	1.9%
Kalimantan Tengah	91,032	1,5%	1.0%
Kalimantan Selatan	146,381	2,4%	1.6%
Kalimantan Timur	120,767	2,0%	1.4%
Kalimantan Utara	31,748	0,5%	0.3%
Total in Kalimantan	**496,418**	**8,3%**	**6.1%**
Sulawesi Utara	90,162	1,5%	0.9%
Sulawesi Tengah	77,407	1,3%	1.1%
Sulawesi Selatan	255,920	4,3%	3.3%
Sulawesi Tenggara	91,528	1,5%	1.0%
Gorontalo	67,066	1,1%	0.4%
Sulawesi Barat	72,899	1,2%	0.5%
Maluku	63,945	1,1%	0.7%
Maluku Utara	18,252	0,3%	0.5%
Papua Barat	8,489	0,1%	0.4%
Papua	15,402	0,3%	1.3%
Total in Sulawesi, Maluku and Papua	**761,070**	**12,7%**	**10.1%**
Total	**5,987,674**	**100,0%**	**100%**

Source: Wirawan, et al (2021)

The Pre-employment Card recipients per province suggests the distribution of Internet use in Indonesia is located mainly in Jawa and Sumatera (see Table 5.6). For context, the Pre-Employment Card Programme requires the Internet to access its courses and most participants (70 per cent) are young, between 18-35 years old (*Indonesia, Coordinating Ministry for Economic Affairs 2021*). Therefore, comparing ratio data geographically in Pre-Employment Card Programme and Indonesia population hint at uneven Internet access conditions across regions in Indonesia, especially among the young.

The largest group of participants in the Pre-employment Card is from Jawa with 51.8 per cent portion or 3.1 million people who joining the programme. The ratio in Pre-employment programme from Java has similar number with the ratio of Java population in 2020 (56.2 per cent from total Indonesia population). Although there are a few points gap between per cent of participant and per cent of population, the data indicates Java population have no problem to access programme within online platform.

Sumatera is the second largest region for Pre-employment Card participants by contributing to 21.8 per cent of the total participants or 1.3 million people who joining programme. The ratio in Pre-employment programme from Sumatera has similar number with the ratio of Sumatera population in 2020 (22 per cent from total Indonesia population). This finding also emphasizes Sumatera population can access the programme that require internet.

In contrast, ratio data comparison between participation in Pre-employment Card and population affirm some regions struggling in internet access than others. The provinces in Maluku Utara, Papua Barat, and Papua have low participation in Pre-employment Card which contribute to 0.3 per cent, 0.1 per cent and 0.3 per cent of Pre-employment Card participants, respectively. In comparison, the 2020 population ratio in Maluku Utara, Papua Barat, and Papua are 0.5 per cent, 0.4 per cent, and 1.3 per cent sequentially. Those provinces have Pre-employment Card participation below the population ratio and remain the province with under 1 per cent participation in Pre-employment Card (Kalimantan Utara followed 0,5 per cent participation but with higher ration then per cent population). This could be a warning especially for those provinces to develop more inclusive digital infrastructure and digital capacity.

Despite the Internet disparity between Indonesia's regions, there has been improvement in digital access. Almost every province in Indonesia has seen an increase in the number of households accessing the Internet and owning cellular phones (Figure 5.6) by an average of 4.9 per cent. The top three biggest increases between the percentage in 2019 and the percentage in 2020 are Maluku Utara (8.8 per cent), Sumatera Selatan (8.4 per cent per cent), and Maluku (7.3 per cent). The provinces that have had the least growth by percentage in 2019-2020 are DKI Jakarta (-0.1 per cent), Banten (1.8 per cent) and DIY (2.1 per cent). By total, households accessing the Internet increased from 73.8 per cent (52,582,736) in 2019 to 78.2 per cent (56,788,514) in 2020.

Table 5.6 Percentage of Households Accessing the Internet and Owning Cellular Phone(s), 2019-20

Province	Population in 2019	Population in 2019	Internet In 2019	Internet In 2020	Handphone in 2019	Handphone in 2020
Aceh	1,291,142	1,325,194	65.2%	72.0%	90.1%	92.3%
Sumatera Utara	3,550,010	3,616,856	68.9%	74.1%	92.6%	93.2%
Sumatera Barat	1,326,379	1,344,397	69.7%	74.6%	92.3%	93.3%
Riau	1,723,754	1,796,649	76.0%	80.6%	96.1%	96.4%
Jambi	956,531	965,931	70.8%	75.6%	92.2%	92.6%
Sumatera Selatan	2,136,725	2,172,212	66.4%	74.9%	91.8%	92.8%
Bengkulu	527,208	546,545	67.4%	71.7%	91.1%	91.0%
Lampung	2,245,339	2,266,356	68.7%	74.1%	92.0%	92.2%
Bangka-Belitung	402,784	410,818	74.8%	78.4%	93.6%	93.9%
Kepulauan Riau	598,052	625,431	88.0%	91.2%	97.9%	98.4%

Province	Population in 2019	Population in 2019	Internet In 2019	Internet In 2020	Handphone in 2019	Handphone in 2020
DKI Jakarta	2,994,196	3,066,775	93.3%	93.%	97.4%	96.8%
Jawa Barat	13,766,393	13,974,605	77.5%	82.2%	89.2%	90.1%
Jawa Tengah	9,531,317	9,657,337	75.2%	79.7%	88.4%	88.8%
DIY	1,177,403	1,190,581	83.7%	85.8%	91.2%	91.1%
Jawa Timur	11,209,971	11,347,545	73.2%	77.2%	88.6%	88.6%
Banten	3,241,723	3,299,796	82.3%	84.1%	92.3%	92.9%
Bali	1,161,479	1,176,964	79.6%	85.7%	93.1%	94.3%
Nusa Tenggara Barat	1,432,443	1,483,321	65.3%	69.5%	89.0%	88.7%
Nusa Tenggara Timur	1,195,835	1,231,414	49.9%	56.9%	83.8%	84.9%
Kalimantan Barat	1,226,395	1,269,425	64.7%	70.5%	89.4%	89.5%
Kalimantan Tengah	718,062	747,789	71.9%	76.6%	93.4%	94.5%
Kalimantan Selatan	1,187,283	1,196,050	74.4%	78.7%	92.2%	92.5%
Kalimantan Timur	959.754	1.005.464	84,2%	86,9%	97,0%	97,4%
Kalimantan Utara	176.653	182.612	80,8%	86,6%	96,5%	98,0%
Sulawesi Utara	651.810	670.107	74,1%	78,5%	92,7%	93,6%
Sulawesi Tengah	752.638	775.795	61,7%	68,7%	88,2%	88,7%
Sulawesi Selatan	2.114.305	2.154.809	72,6%	77,2%	94,0%	94,2%
Sulawesi Tenggara	631.142	651.029	71,3%	75,9%	93,4%	93,9%
Gorontalo	301.896	308.709	72,7%	77,0%	92,0%	92,0%
Sulawesi Barat	331.245	334.953	59,1%	66,0%	87,8%	88,2%
Maluku	381.651	395.063	58,6%	65,9%	89,6%	89,8%
Maluku Utara	272.927	286.278	53,6%	62,4%	86,4%	90,0%
Papua Barat	219.713	228.571	66,8%	72,8%	91,0%	92,1%
Papua	886.729	919.840	31,3%	35,3%	54,9%	60,0%

Source: Authors calculation from Susenas 2019-20

Although the number of households accessing the Internet has increased significantly, households owning a cellular phone has only grown at an average of 0.8 per cent in 2019-20. The highest increase was Papua with 5.1 per cent, followed by Maluku Utara with a 3.6 per cent increase from 2019 to 2020. However, several provinces such as DKI Jakarta (-0.6), Nusa Tenggara Barat (-0.3), DIY (-0.2), and Bengkulu (-0.1) had negative growth by percentage in 2019 and in 2020.

In regard to connectivity in education, digital infrastructure remains the main barrier to accessing education for young students. A Ministry of Education and Culture (MoEC) and Ministry of Religious Affairs (MoRA) survey discovered that 2.4 per cent of teachers and principals could not run their Learning from Home programmes in March 2020 because of a lack of supporting devices and Internet learning connectivity. The remaining 97.6 per cent of schools in Indonesia were able to operate learning from home programmes, (*UNICEF 2021*).

According to an in-depth interview with the chairperson of APJII, there are challenges to online learning in Indonesia. First, the Internet needed to support online learning remains stable in big cities but needs improvement in other regions. Indonesia has unique geographical challenges in developing its Internet infrastructure such as its isolated islands and mountainous regions. It will need more investment from communications operators, especially phone-based, to set up the infrastructure to reach the country's remote areas. However, the incentive to do so as the small population of out-of-the-way areas impacts the return on investment. This is worrying for remote populations because the lack of Internet causes low development of online schools and negatively impacts the local economy.

Second, the rise of online learning implies an increasing demand for gadgets to receive learning materials from teachers and do homework. Parents may also need a gadget for work. This is a hurdle for students from low-income families wanting to access online learning.

Chapter 6

Impact of COVID-19 Pandemic on Economic Inequality and Social Mobility

Economic inequality and social mobility in many countries have been affected by the COVID-19 pandemic including in Indonesia, especially its poverty levels and income distribution. The GoI responded to this urgent situation by enacting several regulations and policies that were aimed at reducing the spread of COVID-19. However, the long-term impact of these actions such PSBB and PPKM must also be considered. All the restrictions on activities clearly affect not only people's income, but also access to education and health services.

This chapter will review the long-term impact these restrictions have on poverty, income distribution, and social mobility in Indonesia by comparing the conditions before COVID-19 between 2019 and 2020 and analyse the rural and urban areas with their different spatial dimensions in mind. This chapter also discusses how low-income households cope with the income losses caused by the pandemic, and resultant reduction in their access to education and health services.

6.1. Poverty

The definition of poverty is the inability to meet basic needs, which are economically measured by income or expenditure. The United Nations defined poverty with malnutrition, illiteracy, poor health, inadequate clothing and housing, and lack of access to electricity (*Adji, et al. 2020*). A measurement of poverty that is widely used in developing countries is absolute poverty, which compares household income or expenditure with the poverty line. Since 2002, the poverty rate calculation carried out annually by Statistics Indonesia (BPS) uses a household consumption module survey through the National Socio-Economic Survey (Susenas). The poverty line consists of two components, the Food Poverty Line, and the Non-Food Poverty Line. People who have an average monthly per capita expenditure below the poverty line are categorized as poor.

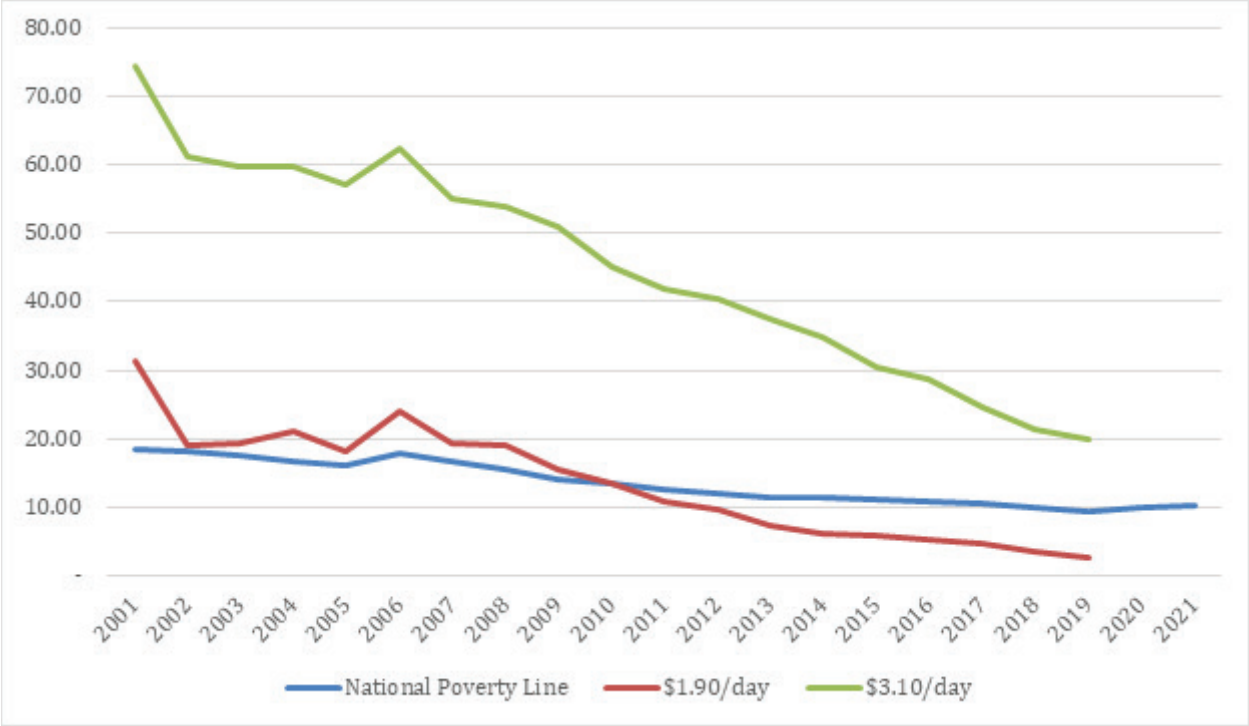
According to BPS, the Food Poverty Line is the value of spending on minimum food consumption, equivalent to 2,100 kilocalories per capita per day. Basic food needs are represented by 52 types of commodities (whole grains, tubers, fish, meat, eggs, milk, vegetables, nuts, fruits, oils, and fats, etc.). The Non-Food Poverty Line is the minimum expenditure for housing, clothing, education, and health. Non-food basic needs are represented by 51 items in urban areas and 47 items in rural areas.

Indonesia has successfully reduced the poverty rate by more than half in the last two decades. However, because of the COVID-19 pandemic, that trend has reversed. BPS reports COVID-19 has turned back three years of poverty reduction (*World Bank 2021b*). The rise of staple prices such as rice, cigarettes, poultry, instant noodles, and the high rate of job losses has played a large role in the rising rate of poverty (*Akhlas 2020*). In response to the shock impact

on national poverty, the GoI implemented an emergency fiscal package, supported the health sector, and provided a social assistance safety net. Several government policies to mitigate poverty during the pandemic include short-term assistance in the form of necessities to 1.9 million neighbourhoods or Rukun Tetangga (RT) in the DKI Jakarta, Depok, Bogor, Bekasi, Bekasi district, Tangerang Selatan, and Tangerang district (Jabodetabek) area. Social assistance in cash was also provided outside Jabodetabek, electricity and employee salary subsidies for four months and medium-term programmes in the form of village fund Direct Cash Assistance (BLT), Pre-employment Cards for training and incentives, and micro- and small- business cash transfers. These policies aim to reduce the rate of poverty increases and maintain people's consumption levels at a decent living standard in the midst of the pandemic (*Indonesia, Ministry of Finance 2021b*).

The rate of poverty reduction in Indonesia before the COVID-19 pandemic, specifically from 2016 to 2019, was the lowest in the previous two decades, decreasing an average of 1 per cent each year. The poverty headcount between 1996 to 2016 fluctuated considerably because of the near poor population's sensitivity to the effects of economic turmoil. In subsequent years, poverty decreased slower, as the poverty headcount reached 10.6 per cent in 2017. Due to the COVID-19 pandemic, the National Poverty Line has increased from 9.4 per cent in 2019 to 9.8 per cent in 2020, and 10.1 per cent in 2021 (Figure 6.1).

Figure 6.1 The Poverty Headcount Trend in Indonesia 2001-21



Source: Susenas 2001-21

Data shows that poverty in Indonesia (Table 6.1) shown as the Poverty Gap Index (the measure of the average expenditure gap of each poor population against the poverty line, the higher the index value, the further the average population expenditure is from the Poverty Line) in rural areas is higher than in urban. This demonstrates that average expenditures in rural households are much further from the poverty line than urban households, even with their higher purchasing power. Similarly, the Poverty Severity Index (an overview of the distribution of expenditure among the poor that shows that the higher the index value, the higher the disparity of expenditure among the poor) in rural areas is also higher than in urban areas. This demonstrates that inequality among the poor is sharper in rural areas than urban ones.

Table 6.1 Poverty Gap and Poverty Severity in Indonesia (percentages)

Year	Poverty Gap			Poverty Severity		
	Urban	Rural	National	Urban	Rural	National
2007	2.2	3.8	3.0	0.6	1.1	0.8
2012	1.4	2.4	1.9	0.4	0.6	0.5
2017	1.2	2.5	1.8	0.3	0.7	0.5
2020	1.1	2.2	1.6	0.3	0.6	0.4

Source: Susenas 2007, 2012, 2017, and 2020

Table 6.2 Poverty Rate in Indonesia by Selected Characteristics 2019-20 (percentages)

Age Group	2019			2020		
	Female	Male	Total	Female	Male	Total
<9	12.6	12.7	12.6	13.1	13.0	13.1
9-14	11.5	11.6	11.6	12.2	12.2	12.2
15-19	9.1	9.1	9.1	9.3	9.5	9.4
20-29	8.4	7.2	7.8	8.7	7.6	8.2
30-49	8.2	7.9	8.0	8.6	8.5	8.6
50-65	8.2	7.2	7.7	8.1	7.3	7.7
>65	13.6	12.2	12.9	13.5	12.3	12.9
Region Rural	13.1	12.6	12.9	13.1	12.5	12.8
Urban	6.8	6.6	6.7	7.4	7.4	7.4
Total	9.6	9.2	9.4	10.0	9.6	9.8

Source: Susenas 2019-20

Indonesia's Poverty Rate overall increased from 2019 to 2020 (9.4 per cent to 9.8 per cent). The poverty rate in both sexes increased 0.4 per cent from 2019 to 2020. However, the poverty rate for female is higher than male in 2020 (10.0 per cent compared to 9.6 per cent). The economic fallout from COVID-19 is affecting people of all ages, but the largest increase in poverty from 2019 to 2020 is found among children aged <15, which makes them the most affected by the pandemic. The data shows the poverty rate of older children is slightly different from 2019 to 2020, but the pandemic's impact might be socially larger for women. Note that Susenas 2020 was conducted in March, when the pandemic has just started in Indonesia. The recent disaggregated data on Susenas 2021 might show a different impact. Meanwhile, urban poverty increased from 6.7 per cent to 7.4 per cent. While the increase in the rural poverty rate is a bit different, this circumstance shows that the pandemic has had more influence on urban areas. This is because of the stricter health protocols in urban areas that limited worker mobility.

6.2 Income Distribution

The socio-economic impact of the COVID-19 pandemic in Indonesia also includes income-losses due to regulations that limit income security for workers. Thus, while most income groups are adversely affected by the pandemic, lower-income deciles and those with lower skills may end up being disproportionately hurt. Indeed, there is already evidence of such affects, raising the prospect of a persistent increase in inequality in the absence of forceful policy intervention (*Fuceri, et al. 2021*).

Inequalities between the rich and poor in Indonesia were a serious issue long before the COVID-19 pandemic. However, the containment policies to flatten the epidemiologic curve during the pandemic may also be making the economy worse (*Brata, et al. 2021*). The interaction between the pandemic and existing inequalities most likely will lead to future inequalities but magnified in different ways according to the types of regions that the COVID-19 pandemic has hit.

According to the World Bank (2016) there are four main drivers of inequality in Indonesia that affect both current and future generations. First, economic inequalities of income, wealth and consumption, and access to education and public services. Poorer children often have an unfair start in life, undermining their ability to succeed later. At least one-third of inequality is due to factors outside an individual's control. Second, unequal access to high quality jobs. Employers are increasingly demanding more skilled workers, at the same time there are few training opportunities for those who leave school without the skills they need. The labour market is divided between high-skilled workers who receive increasing wages, and the rest of the workforce that has not had the opportunity to develop enough skills and is trapped in low-productivity, informal, and low-wage jobs. Third, high wealth concentration. Only a minority of Indonesians are benefitting from owning financial assets, which are sometimes acquired through corruption, this drives inequality higher both today and in the future. Fourth, low resilience in a household's ability to earn and save, as well as invest in health and education. Socio-economic shocks are becoming increasingly more common, and they disproportionately affect poor and vulnerable households, which can prevent them from climbing up the economic ladder. The differences in wealth accumulation and other inequalities also affect access to health services and education, which in turn affects the potential earning of household members, especially in COVID-19 pandemic-hit Indonesia. Populations can be categorized into five groups based on their average expenditure as compared to the poverty line. These five categories are the "very poor," "poor, "near poor," "vulnerable poor," and the "non-poor." The "very poor" group consists of those whose per capita expenditure per month is below 0.8 times the poverty line, the "poor" are those whose per capita expenditure is above the very poor group and below the poverty line. Meanwhile, persons whose per capita expenditure are above poverty line and below 1.2 times poverty line are categorized as "near poor." The "vulnerable poor" are those whose per capita expenditure is between 1.2 times poverty lines and 1.6 times the poverty line. Lastly, the "non-poor" are those whose per capita expenditure is above 1.6 times the poverty line. The population distribution by poverty status in Indonesia (Table 6.3) shows that the near poor increased (7.9 per cent to 8.2 per cent, followed by the increase of the vulnerable poor (18.2 per cent to 18.7 per cent) from 2019 to 2020, due to the COVID-19 pandemic.

Table 6.3 Population Distribution by Poverty Status in Indonesia (percentages)

Period		Very poor	Poor	Near Poor	Vulnerable Poor	Non-Poor
2011	March	4.4	8.1	11.3	18.8	57.4
2015	March	4.2	7.1	10.3	17.9	60.5
2019	March	4.7	7.6	7.9	18.2	61.6
2020	March	4.6	7.4	8.2	18.7	61.0

Source: (Aninditya and Srikandi 2018); author's calculation from Susenas 2019-20

6.3. Social Mobility and Long-term Impact

There is a direct and linear relationship between a country's income inequality and its social mobility score on the Global Social Mobility Index provided by The World Economic Forum (2020). This index provides a new, holistic assessment of 82 global economies according to their performance on five key dimensions of social mobility distributed over 10 pillars including: health; education (access, quality and equity, lifelong learning); technology; employment (opportunities, wages, conditions); and social protection and inclusive institutions. Social mobility helps make for equally shared opportunities in life, regardless of socio-economic background, gender, origin, and other factors. Low social mobility entrenches historical inequalities and higher-income inequalities fuel lower social mobility. Enhancing social mobility can convert this cycle into one that positively benefits broader economic growth.

Indonesia is ranked 67th of 82 countries according to The Global Social Mobility Index 2020 rankings. Indonesia's low social mobility negatively impacts economic growth, inequality, and social cohesion. Globalization has increased inequality within countries by transferring low-skilled jobs in high-productivity sectors from high-income economies to lower-income ones, and penalized workers in specific locations and jobs. Technology has also impacted inequality by reducing demand for low-skilled jobs and rewarding high-skilled jobs disproportionately (*World Economic Forum, 2020*). These are some reasons why Indonesia is ranked low in the index, in addition because the COVID-19 pandemic has affected Indonesia's education, health, and work pillars the most, which has made for an extensive and complicated challenge for the GoI (see Chapter 3 for COVID-19's impact on labour/employment).

To prevent the spread of COVID-19, the GoI limited the movement its citizens by enacting regulations and restrictions that limit the mobility and gatherings of people in public places. While it has been proven to reduce the spread of COVID-19, the restrictions on activities affect not only people's income, but also the education and health sectors. PSBB and PPKM in Indonesia are major challenges to the education sector as people are unable to have their classes in school and are forced to learn from lectures online. Additional educational challenges in Indonesia include technological inequality between schools in city and rural area; limited competence of teachers in the use of learning technology; limited resources for educational technology such as the Internet and data quotas; no integrated teacher-student-parent relationships in online learning (*Indonesia, Ministry of Education and Culture 2020*).

In response to the challenge of school closures, the Ministry of Religion and the Ministry of Education and Culture (MoEC) provide training and support in various forms for teachers to use online learning platforms. The Ministry of Religion modified its e-learning application, which was initially designed to support classroom learning and organize online learning. The platform allows for teachers to upload learning materials and assignments, and for students to submit their learning outcomes. These features are currently being developed further. The MoEC has established partnerships with educational technology (EdTech) companies to provide free access to online learning platforms; and telecommunications operators to provide free Internet quotas that teachers and students can use. MoEC also moved swiftly to launch an educational television programme – Learning from Home – a major learning resource for students without access to the Internet (an estimated 95 per cent have access to television). The government is also providing schools with books and electronic worksheets and has authorized the use of School Operational Assistance (BOS) funds to print and distribute them. MoEC also announced that schools may choose to adopt a simplified emergency curriculum (*Gupta and Khairina 2020*).

During the pandemic, Indonesia's health sector was one of the most affected, especially the unequal access to the health system. Given the significant spread of COVID-19, marked by the number of cases and deaths that increased and spread across the country, President Joko Widodo issued Presidential Decree 11/2020 establishing COVID-19 as a public health emergency. The decree outlined government funds from the budgets of Anggaran Pendapatan dan Belanja Daerah (APBN) and Anggaran Pendapatan dan Belanja Negara (APBD) for COVID-19 patients (BPJS Kesehatan 2020). At the same time the GoI issued Presidential Regulation Number 64/2020 concerning the Second Amendment to Presidential Regulation Number 82 /2018 about health insurance. The regulation is the legal basis for the government to increase of the Social Security Administrator for Health (BPJS Kesehatan) contribution or health premium, to maintain the sustainability of BPJS Kesehatan funding. However, the regulation may also reduce social mobility, especially for poor households. BPS data indicate that the poor rely heavily on government subsidies to access BPJS health services (*Lidwina 2021*).

The government is focused on short-term recovery and does not have a clear strategy to address the medium- and long-term implications of the COVID-19 pandemic in Indonesia (*Sparrow, Dartanto and Hartwig 2020*). The response to the pandemic relies on public compliance to public health measures. There is a clear lack of emphasis on reducing the rate of infection through effective testing, tracing and enforcing social distancing and mobility restrictions. From the education, health, and work or employment sectors, and many other responses toward these issues, Indonesia still finds itself struggling to contain case numbers that have been rising faster than in many neighbouring countries. The GoI

and Indonesian citizens must work together to battle the COVID-19 pandemic, with policies and regulations from the GoI that aim to increase social mobility, and the country's economic development. Indonesian citizens must also follow strict preventive measures or health protocols such as wearing a face mask, frequently washing hands, and physical distancing to prevent the spread of the COVID-19.

Chapter 7

Enhancing Labour Market Security

The COVID-19 pandemic has given rise to Indonesia's economic downturn, causing higher unemployment among other problems. To mitigate the sudden shock of the pandemic, the Social Security Agency for Employment (BPJamsostek – previously known as BPJS Ketenagakerjaan) built a new protection scheme specifically targeted to those unemployed due to work termination, by providing unemployment benefit a temporary income, providing job search assistance and vocational training, through Job Loss Security / Jaminan Kehilangan Pekerjaan (JKP).

Based on a study by Di Maggio and Kermani (2016), unemployment benefit programmes increase consumption, which is helpful to the economy during the economic shock and reduced the poverty rate compared to those without unemployment benefits. Also, unemployment benefits pool the risk of unemployment across different actors (e.g., workers, employers, and the government). Unlike severance payments which solely burden an employer's financial capacity and liquidity, JKP benefits are also generally predictable and mitigated as they are guaranteed by the government and by employee saving contributions (*Bista and Carter 2017*).

7.1 Income Security in Case of Job Loss

Previously, BPJamsostek issued various income protections for employees: Old Age Protection / Jaminan Hari Tua (JHT), Pension Security / Jaminan Pensiun (JP), Death Security / Jaminan Kematian (JKM), and Employment Injury Security / Jaminan Kesehatan Kerja (JKK). These insurances are outside of the severance payments that employers need to make after a worker's termination. Before JKP was issued, terminated employees (PHK) had the right to severance pay which was paid solely by employers. The current regulation also allows employees to claim JHT funds before pension age, even though that counters the aim of JHT, which is to save for retirement. Based on the BPJamsostek report, more than 90% of JHT participants claim their JHT pension funds, mostly around one to five million rupiah, before retirement. This indicates excessive early claims (*Sumarjono 2020*) and a burden on the system. Around 45% of those who claim their JHT funds are aged around 20- to 29-years-old. This data indicates that the JHT fund is used as a bailout by laid off employees. Thus, it is necessary to have a new scheme that is specifically targeted for laid off employees.

Based on Law of the Republic of Indonesia No. 11 of 2020 on job creation (Cipta Kerja) article 82, the GoI added one scheme of Job Loss Security (JKP) to the five National Social Security Systems (SJSN): JHT, JP, JKM, JKK, and Jaminan Kesehatan (health insurance). JKP covers workers/labourers who are laid off in the form of cash benefits andaccess to job market information and job training. JKP aims to have workers meet the necessities of a decent life after losing their job, and while also attempting to find another (*BPJamsostek 2021a*). JKP is expected to be implemented in February 2022 (*BPJamsostek 2021b*).

The legal bases for the JKP programme are:

a. Article 5 paragraph (2) of the Constitution Republic of Indonesia Year 1945

b. Law of the Republic of Indonesia No. 11 of 2020 concerning Job Creation (State Gazette of the Republic of Indonesia Year 2020 Number 245, Supplement State Gazette of the Republic of Indonesia Number 6573), implement the provisions of Article 82 number 2 in Article 46A paragraph (3), Article 46D paragraph (4) and Article 46E paragraph (2)

c. Government Regulation of the Republic of Indonesia Number 37 of 2021 about implementation of the insurance programme for laid off workers

Employers (PK) or enterprises (BU) must complete their asset turnover data to participate in the JKP programme. Turnover Asset Data is required as the basis in determining a company's scale for JKP eligibility, which is classified into two types of participation. Large scale PK/BU must participate in five social Programmes (JKK, JKM, JHT, JP and JKN) while PK/BU withthe micro/small scale must participate in at least four programmes (JKK, JKM, JHT, JKN).

JKP / UI and JHT cover both types of workers under different contracts, namely the contract-based workers (PKWTT), and permanent employees (PKWT). Table 7.1 shows the difference between JKP, JHT, and severance payments.

Table 7.1 Scheme Comparison of JKP, JHT, and Severance Payment

Period	JKP / UI	JHT	Severance Payment[6]
Coverage	Wage-earning workers in business entities (PKWTT and PKWT)	PKWT and PKWTT other than state officials	PKWTT (while PKWT get compensation fund)
		Eligibility	
Employment contribution	Contribution period of at least 12 months in 24 months, paying contributions for 6 consecutive months prior to termination of employment.	-	*Uang Pesangon (UP)*: no minimum contribution. Payment depends on the working periods. *Uang Penghargaan Masa Kerja (UPMK)*: min 3 years of working period *Uang Penggantian Hak (UPH)*: no minimum contribution.
Participation on social security	Large and medium enterprise: JKN, JKK, JHT, JP, and JKM Small and micro enterprise: JKN, JKK, JHT, JKM		
Reason for termination	Voluntary and involuntary	Voluntary and involuntary	Involuntary

6 There are three types of severance payment: Uang Pesangon (UP), Uang Penggantian Hak (UPH), and Uang Penghargaan Masa Kerja (UPMK). The payment is regulated by Law of Manpower No.13 of 2003 article 156. Uang Pesangon (UP) is payment equivalent with the monthly salary received and is given according to the year of service. Uang Penggantian Hak (UPH) is right-based payment that equals with transportation costs, yearly leave, and other payment to replace expenses such as on housing, medical treatment. Uang Penghargaan Masa Kerja (UPMK) is appreciation payment that is given based on the duration of service.

Period	JKP / UI	JHT	Severance Payment
		Benefit	
Replacement rate	45% of monthly wage in first 3 months, and 25% for the remaining 3 months (upper bound IDR 5 million)	Paid at once at the age of 56 / permanent total disability / death Can be taken in part before 56 years min. 10 years working period; max 10% (preparation for pension) or 30% (housing)	According to years of service; maximum of 9 months of salary (working period 8 years or more) for UP and maximum of 10 months of salary (working period 24 years or more) for UPMK.
Benefit duration	Max 6 months	One time	One time
Financing	employee, employer (recomposition from JKK and JKM premium), government	Employee and employer	Employer
Complementary measures	Job search assistance and vocational training		

Source: Presidential Decree 37/2021, 46/2016, 35/2021, Law of Manpower No.13 of 2003

Based on Table 1, we can see the JKP programme has a different scheme compared to JHT and severance payment as it aims for PHK. The JKP programme helps to break the negative impact of increasing unemployment by compensating for lost earnings and in some countries, assisting unemployment to get new jobs as well. Compared to JKP, severance payments are not determined by the possibility of future joblessness. In Indonesia, those who voluntarily resign will also not receive a full severance payment. Severance payments are therefore a much less reliable and effective instrument than JKP in protecting workers against the financial impact of job losses (*Asenjo and Pignatti 2019*).

According to JKP coverage policy, all wage-earning workers, both PKWT (employees with a contract agreement) and PKWTT (formal and informal workers), have the right to apply for JKP if they meet the minimum contribution criteria and participate in certain government social security insurance programmes. However, since it requires some other social security contribution, JKP may be restricted to only allow formal workers (*Asenjo and Pignatti 2019*). JKP also requires 12 months of employment contributions to prevent system abuse (such as leaving a job as soon as possible) and guarantee fiscal sustainability. Asenjo and Pignatti (2019) also pointed out that majority of countries also require a minimum 12 months of contribution before employees can claim JKP. In JHT, if a worker has reached 56 years/ permanent total disability/death, JHT funds can be claimed directly. JHT can be partially claimed before pension age (56) only once after workers have worked at least 10 years.

With regard to benefits, JKP set a replacement rate of 45 per cent in the first three months and 25 per cent for the remaining three months. This replacement rate follows ILO convention no.102 but is lower than most other countries (50-60 per cent range. They also set upper limits to avoid unnecessarily generous disbursements to those who already have an advantage in the labour market. The benefit duration is six months and varies greatly across countries, with emerging economies set at an average of 6.8 months (*Asenjo and Pignatti 2019*). For financing, JKP pools the risk of unemployment between employee, employer, and the government. This scheme is different from JHT and other social employment insurance as the government makes contributions.

In terms of the Active Measures, JKP not only provides a temporary income, but also assists in job searching as well as training, which is different than other social insurance programmes. Based on Presidential Decree 37/2021, assisting in job searching programmes includes providing information about job vacancies and job guidance (self-assessment and career counselling). The decree however does not explain vocational training clearly, but states that vocational training will be based on competence and be conducted through training Centres or Lembaga Pelatihan Kerja (LPK) which is run by the GoI. Private institution, or companies may collaborate as well as through Lembaga Sertifikasi Profesi

(LSP). However, in a short time period those unemployed may not be able to take a reskilling programme (*Lokadata 2021*) and the government may be limited to ensuring only that there is enough information about the quality of different training providers (*Almeida, Behrman and Robalino 2012*).In In terms of Sustainability and Evaluation, the first and most obvious measure of JKP's sustainability depends on the willingness and capacity of contributors to provide a particular and predictable level of funding. However, sustainability in any country ultimately depends on national consensus and priorities, all of which may be subject to change over time (*Carter, Bedard and Bista 2013*). To evaluate the JKP programme and keep track of the participants, PP 37/2021 requires a participant to reports no later than seven days after receiving work, and to report no later than seven days after completing training through the employment information system. However, there is no mention of sanctions if the participant does not comply.

In addition to the existing plan of JKP, during COVID 19, the government has provided several social assistance programmes, in the form of food assistance, cash transfers, electricity subsidies, wage subsidies for temporary workers, cash transfers for micro- and medium-size enterprises, Internet packages for civil workers, as well as assistance related to employment. The government provided a working competency development and entrepreneurship programme in the form of financial assistance aimed at job seekers, workers affected by layoffs, or workers who need competency improvement including micro- and small business actors (*Indonesia, Coordinating Ministry for Economic Affairs 2021*).

7.2. Integrated Assistance to Jobseekers

In the middle of the pandemic, most governments have prioritized labour supply policies, including unemployment benefits, training, and placement assistance (*De La Flor, et al. 2021*). A report published by ILO conclude that a combination of unemployment cash benefits and policies to support re-employment are the most effective mechanism to protect the unemployed and their families against poverty, while helping them to find employment quickly (*Carter, Bedard and Bista 2013*). Studies about the importance of unemployment insurance shows that JKP may become an automatic stabilizer, but with attention needed to how generous the programme is (*Di Maggio and Kermani 2016*). Empirical evidence also shows that vocational training programmes provide sustained and effective gains in the long term. On the behavioural side, long term unemployment can lead to permanent alienation and detachment from the labour market, increasing risks of material deprivation, poverty, and social exclusion (*Cedefop 2018*).

However, there are some challenges that need to be considered regarding implementation of JKP. First, participation in JKP may be limited because there are many outsource workers and contract employees who have not applied for other social security insurance (as required to receive JKP) (*Pratama 2021b*). In terms of JKP participant coverage, currently there are 48.64 million participants, meaning coverage is at 54% (only 8.42 per cent of which includes non-wage workers (BPU), while the rest are formal workers). This becomes a challenge when more and more non-wage workers become participants of BPJamsosten.Third, how to integrate JKP with JKN (Jaminan Kesehatan Nasional-National Health Insurance). Fourth, the amount of contributions to JKK and JKM has decreased because it is divided into JKP. Therefore, it is a new challenge for the board of directors to remain able to serve both JKK and JKM participants (*Pratama 2021a*). Fifth, how to accelerate its participants so that more people can benefit from JKP, because JKP was created as an incentive for participants, especially in the middle of COVID-19 (*CNN Indonesia 2021*). Lastly, improving service speed and capacity. Currently, the average claim processing time is 5-10 days.

JKP schemes are specific to each country depending on circumstances, unemployment features, labour market characteristics, existing provisions, and so on. There is a need to have a clear idea of what should be achieved by adopting a JKP scheme, accompanied by a realistic view of the limits of such an instrument. No unemployment benefit scheme, however well designed, and even if accompanied by active labour market policies (ALMPs), can solve all the unemployment problems of a country. The main objective of a JKP scheme should be kept as simple and straightforward as possible: namely, to provide temporary and partial income replacement (*Carter, Bedard and Bista 2013*).

Chapter 8

Conclusions and Policy Recommendations

This concluding chapter uses the main findings from previous chapters analysing the socio-economic impact of the COVID-19 pandemic in Indonesia, to propose some strategic policy recommendations and pave the way for mitigating the impact on employment.

The report has revealed some key findings. ***First***, while struggling to curb daily cases of Covid-19, the Government of Indonesia took immediate measures such as the parliament-approved National Economy Recovery Programmes (PEN), to tackle the problems. The PEN is designed to support the health sector and business communities that were most severely hit by the pandemic such as accommodations and restaurants, transportation, and warehousing, and provide social assistance for the poor or those who lost their jobs due to pandemic. It is worth noting that 12 million MSMEs received IDR 2.4 million each during 2020, while in 2021, 12.7 million MSMEs received IDR 1.2 million each.

Second, the unemployment issue should be highlighted as Statistics Indonesia (BPS) recorded a sharp rise of around 38.6 per cent during the pandemic between August 2019 and August 2020 (National Labour Force Survey). Furthermore, as a consequence of declining working hours in all status and occupational types in all sectors, under-employed and part-time workers increased, particularly in the agriculture (including forestry and fishing); manufacturing; transportation and storage; and education sectors. Moreover, labour underutilization in urban areas was more affected than the rural. Although the pandemic had a greater impact on labour intensive sectors, it also had an impact on other sectors such as banking. Further analysis is needed to map the impact of the pandemic on these other sectors, so that we have a more complete picture.

Third, there was a shift in the employment status during the pandemic from employee to own-account worker and unpaid/contributing family worker. This caused them to lose their employment protections such as health insurance and their stable income. Women are included as vulnerable group as many women work as unpaid workers due to their respective roles such as mother, family worker, and caregiver.

Informal workers are also more vulnerable to the pandemic due to the uncertainty of their working hours and agreements. Consequently, the income of these workers became even more unstable, with a loss of financial security due to the pandemic's economic shock.

Fourth, arguably a blessing in disguise, COVID-19 disrupted education and training, but also drove innovations in remote learning as a consequence of measures such as social-physical distancing. The Pre-Employment Card Programme (Program Pelatihan Kartu Prakerja, among others, contributed to the rise of participants during the pandemic due to its flexibility and not requiring a certain education level to join the training.

Fifth, Indonesia successfully reduced its poverty rate by more than half and improved equality over the last two decades. However, the pandemic has caused an increase in national poverty and consequently the potential for increased inequality.

Sixth, there are some challenges that need to be considered regarding the implementation of JKP such as: limited participation of outsource workers and contracted employees; integration with Jaminan Kesehatan Nasional (JKN)/ National Health Insurance; the decreasing amount of premium contributions to current schemes; and ways to accelerate JKP participants.

Based on the key findings of the report, policymakers may wish to consider policy initiatives which would increase Indonesia's capacity to mitigate the socio-economic impact of COVID-19, particularly on disadvantaged groups of workers, and foster a recovery that is job-rich, inclusive, and human-centred.

While some signs of early recovery are apparent, the economy is still operating below its capacity and essential sectors have not fully recovered. Further, the pace of recovery varies across economic sectors and geographic areas. The ability of enterprises to absorb the impact of the pandemic and take advantage of the recovery differ. The government should continue its policy of targeted support and economic stimulus to the extent its fiscal capacity allows. Since PEN also supports social assistance for the poor, it is important to strengthen the mechanism and implementation of social assistance distribution. First, ensure that the target recipients are in accordance with the community in need. Second, ensure that the benefits of social assistance programmes are commensurate with the lost income. Third, distribute social assistance programmes on time or provided when needed. Fourth, strengthen assistance for individuals, households or business units affected by the pandemic, so they can return to work or run their businesses again.

As the recovery continues, the economy will add hours of work and generate jobs. Those who lost jobs and took refuge in the informal economy during the pandemic may go back to formal jobs. In the process of jobs recovery, policy makers should pay attention to quality and inclusiveness. Women who bear a disproportionate burden of responsibilities at home, for instance, may not be the first ones able to take on new job opportunities as long as their children continue online education at home. Similarly, workers with disabilities may find jobs elusive because of persistent discrimination against them. An inclusive recovery calls for reinforcement of policies and actions towards gender equality and fighting against discrimination. The labour market prospects for young people, especially school graduates of 2021 and 2020, have been severely impacted and require support for skills development and for their transitions to a first or new productive and decent employment opportunity, and in preparing for a changing world of work. Measures to support these vulnerable groups should also include investing more in active labour market policies such as skills development and employment services. In addition, to ensure that workers have social security, job security, and can maintain their purchasing power, further discussion on wage policy among relevant stakeholders is needed. In addition, diversification of skills through reskilling, upskilling, and learning new skills, needs to be introduced to workers so they can adapt to changes in the labour market and increase their chances of entering the labour market and finding jobs.

The digital transformation of the economy has increased during the pandemic, thereby gaining economic efficiency, and enhancing overall productivity. Although shifting traditional face-to-face delivery of education and skills training to cyber space has been a considerable challenge, Indonesia may wish to invest further in digital skills development and digital infrastructure. In addition, e-commerce has expanded in a significant manner and this trend is likely to continue beyond the pandemic. Strengthening digital capabilities of MSMEs appears indispensable so they are not left behind.

The pandemic underscored the importance of reliable mechanisms to support the unemployed, especially income protection in cases of job loss. The establishment of JKP has provided an additional layer of protection against unemployment. In the coming years, however, policy makers may wish to consider expanding the coverage of JKP to benefit workers on precarious contracts.

The uneven economic recovery across industries highlights the need to take a sectoral approach that can help spur local economic activity. Tourism-dependent provinces, for example, will need sustained support given the tenuous prospects for an immediate rebound in international tourism. Underpinned by strengthened local health systems and established safety and health protocols for travellers, travel incentives that can attract domestic visitors in the short term, in addition to continued income support for tourism MSMEs and workers, could help tourism-dependent provinces navigate the prolonged and uncertain recovery.

In the recovery phase and beyond, Indonesia must accelerate efforts towards formalization. The COVID crisis has made evident the limits of policy responses to reach and support the informal sector. To this end, enhancing the statistical information base on informality is one key step towards boosting enterprise registration and expanding social protection to informal workers.

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International Labour Organization

ILO Jakarta Office
Menara Thamrin Building 22nd Floor
Jl. M. H. Thamrin Kav. 3
Jakarta 10250

www.ilo.org/jakarta