Indonesia High-frequency Monitoring of Covid-19 Impacts

June 2021

Please contact Ririn Purnamasari (rpurnamasari@worldbank.org) for queries regarding the Indonesia High-Frequency Monitoring of COVID-19 Impacts on Households, World Bank, 2020-21.
Highlights (I)
Main Breadwinner’s Employment & Income

- Overall recovery in employment observed in July 2020 has continued in March 2021...
  - 85% of breadwinners who had stopped working in May resumed work by March, up from 75% in July
  - But due to churning in and out of work between rounds, the share of breadwinners not working declined only slightly from 11% in July to 10% in March
  - Most common reasons for not working were COVID-19 related furloughs, layoffs, firm closures & business disruptions

- ...with sluggishness in some areas
  - Shares of breadwinners employed in waged work (46%) remained significantly lower than the pre-pandemic level (55%), with very little improvement since July; shares of breadwinners engaged in farm business (15%) remained slightly higher than the pre-pandemic level (12%)
  - Shares of employment in industry and services remained smaller than before the pandemic; agriculture was relatively resilient
  - Recovery was concentrated in manufacturing and among the tertiary educated; for other socioeconomic groups, the shares not working in March did not change significantly since July last year

- 28% of breadwinners working in March had switched jobs during the pandemic, with agriculture a partial buffer

- Shares of breadwinners working with reduced incomes declined since July (from 42% to 38%)
  - Only breadwinners engaged in transport, storage and communication, waged workers, and those resident in DKI Jakarta experienced a significant improvement
  - Reduction in income relative to pre-pandemic levels ranged from 34% to 70% depending on the sector and type of work; yet the magnitudes of reduced income, on average, are slightly smaller than those in July last year

- .. but more than one-third of them are working fewer hours than usual
  - On average, breadwinners now work about 3.8 hours less than their normal weekly working hours prior the pandemic
Food Security

The prevalence of food insecurity stemming from money or other resource constraints remains unchanged since July 2020

- About one-quarter of households are facing food shortages due to lack of money or other resources and eating less than they should; this share is still above pre-pandemic levels
- The bottom 40%, less educated and those outside Java are still significantly worse off than others
- About 6% of households have remained persistently short of food due to resource constraints since May 2020

Health

- Coverage of COVID-19 testing continued to improve, with nearly 20% of the adult population ever tested, of whom 50 per 1,000 people underwent PCR tests
- Access to primary health services continued to recover. Households unable to access needed services declined from about 5% in November to only 3%
- No change since November in willingness to receive the COVID-19 vaccination: Nearly 80% of Indonesians are still willing to receive the vaccine, with diminished differences in acceptance across socioeconomic groups except for women, who are now less likely to accept than men
Highlights (III)

Safety Nets

- Most programs had met their estimated targets in terms of coverage.
- By March 2021, coverage of programs among the bottom 40% households (93%) and those with breadwinners experiencing income shocks (91%) improved since July (89% and 85%, respectively).
- However, many households in the target welfare groups still had not received the social assistance intended for them. As of March 2021, one out of five households in the bottom 40% and/or those experienced income shocks had not received any social assistance since July 2020, potentially due to exclusion errors and implementation challenges.
- More than one-third of program beneficiaries who reported that their monthly basic needs were completely covered by the program benefits and own income prior to the pandemic felt that their needs were only partially met in March 2021.
- A minority of the bottom 40% social assistance recipients (5%) self-assessed that their needs were not met at all; a majority (60%) felt that their needs were only partially met.

Concerns

In March 2021, nearly half of households self-evaluated their welfare as being the same as before the pandemic; just under 30% rated it as worse or much worse off.
Design

**Method:** 7 rounds of panel survey, 20-30 minutes phone interviews of about 4,000 households, every 3-6 weeks for the first 3 rounds and every 3 months for the following rounds

**Sampling Frame:** Sampled households drawn from Urban Perception Survey (2018), Rural Poverty Survey (2019), and Digital Economy Survey (2020) across 40 districts and 35 cities in 27 provinces.

**Stratification:**
- Explicit: 5 regions
- Implicit: Sex and education of head of household

Sample distribution of HiFy and Indonesia’s National Socio-Economic Survey (Susenas) is very similar across each stratification of interest, confirming confidence in representativeness of the HiFy sample.
Implementation

Baseline (Round 1)
4,338 respondents
1-17 May 2020
Module: Knowledge/Behavior, Employment, Access to Food/Food Security, Safety Net

Follow-up (Round 3)
4,067 respondents
20 July – 2 August 2020
Module: Knowledge/Behavior, Employment, Food Security, Access to Health, Safety Net

Follow-up (Round 5)
3,686 respondents
11 – 24 March 2021
Module: Food Security, Access to Health, Employment and Income, Safety Net, Concern

Follow-up (Round 2)
4,119 respondents
26 May – 5 June 2020

Follow-up (Round 4)
3,953 respondents
3 – 15 November 2020

Note: The surveys were conducted by SurveyMETER

Indonesia High-frequency Monitoring of Covid-19 Impacts
Response rate

83% of respondents in Round 1 were successfully re-interviewed in Round 2, 3, 4 and 5.

- Where respondents were not interviewed, this was mostly because their phones were unreachable or unanswered.

- Attrition was random: response rates were similar across sex, age, and education of household head, as well as household welfare and region.

- Therefore, attrition bias is not a concern when interpreting changes between rounds.

The analysis presented here is based on 3601 panel households in Rounds 1, 2, 3, 4 and 5.
COVID-19 Indonesia Government Response Stringency Index

First confirmed cases reported
Jabodetabek, some kabupaten/kota: Large Scale Social Restriction (PSBB)

Schools and most offices in DKI closed
Nation wide schools' closures
Economic relief measures started: PKH benefits top-up, Sembako Card expansion and benefits top-up, Bansos Tunai, BLT-village fund, Sembako Banpres, electricity bills reduction and Kartu Pra-Kerja

Grant for micro enterprises
Stopped

Wage subsidy

Internet subsidy for students
Stopped
Breadwinner's Employment and Income
In March 2021, people’s mobility has returned to July 2020 levels

After steadily increasing since June 2020, intensity of mobility started to fluctuate again in the beginning of 2021, potentially reflecting the enforcement of micro-scale public activity restrictions (PPKM)

Source: Google Mobility Data.
The baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3–Feb 6, 2020. The trendline are smoothing using Lowess smoothing method.
While people’s mobility to workplaces in July 2020 and March 2021 is similar, more workplaces are adhering to health protocols than before.
The improvement observed in July has been sustained, but full recovery still has a long way to go.

In March 2021, the share of breadwinners working with reduced incomes declined slightly to 39%, from 42% in July.

However, 8% of those who had been working in July were not working in March, so that the overall decline in breadwinners not working was very small, from 11% to about 10%.

Over the course of the pandemic, 2% of breadwinners persistently stopped working, while around 15% worked continually with reduced incomes.
Economic hardship due to COVID-19 was still the main reason for not working for most breadwinners.

Other reasons included seasonality and casual work arrangements.
Shares of breadwinners engaged in each type of work in March remained relatively the same as in July.

The shares in waged work and non-farm business remained below pre-COVID levels.

Employment dynamics by type of work

- Non-Farm Business
- Farm Business
- Wage workers
- Stopped working

Pre-Outbreak
- 32% Non-Farm Business
- 12% Farm Business
- 55% Wage workers
- 10% Stopped working

R1: 1-17 May 2020
- 24% Non-Farm Business
- 15% Farm Business
- 36% Wage workers
- 25% Stopped working

R3: 20 July – 2 August 2020
- 30% Non-Farm Business
- 15% Farm Business
- 44% Wage workers
- 11% Stopped working

R5: 11-24 March 2021
- 29% Non-Farm Business
- 15% Farm Business
- 46% Wage workers
- 10% Stopped working
Shares of breadwinners’ employment in each sector also remained largely unchanged since July.

Overall, industry and services were still smaller than at the onset of the pandemic, while agriculture was relatively resilient.
The incidence of **stopped working** has been relatively stagnant

In May, the share of breadwinners who stopped working in each type of work remained similar to the share in July last year.

**Stopped working, by pre-COVID-19 type of work (%)**

R1: 1-17 May 2020; R3: 20 July – 2 August 2020; R5: 11-24 March 2021

**Indonesia High-frequency Monitoring of Covid-19 Impacts**

**Round 5** 17
Similarly, the share that stopped working in each sub-sector is relatively unchanged since July, except in manufacturing.
In the past half year, breadwinners with tertiary (or higher) education are returning to work more rapidly than other groups – the incidence of stopped working among them is significantly lower than those with lower education levels.
Fewer households face continued decline in income, relative to pre-pandemic

Between July 2020 and March 2021, the share of breadwinners in wage work and non-farm businesses reporting income reductions relative to pre-pandemic levels declined somewhat

Breadwinners with income reduction relative to pre-pandemic, by type of work (%*)

R1: 1-17 May 2020; R3: 20 July – 2 August 2020; R5: 11-24 March 2021
*Percent of breadwinners working in each type of work and each round
*R1: comparing income in R1 to pre COVID-19; R3: comparing income in R3 to pre COVID-19; R5: comparing income in R5 to pre COVID-19

Indonesia High-frequency Monitoring of Covid-19 Impacts
Positive trends in income reduction were also observed across sectors. However, except in transport, storage and communication, the improvement since July was not statistically significant.

*Percent of breadwinners working in each sector and each round
*R1: comparing income in R1 to pre COVID-19; R3: comparing income in R3 to pre COVID-19; R5: comparing income in R5 to pre COVID-19

R1: 1-17 May 2020; R3: 20 July–2 August 2020; R5: 11-24 March 2021

represent 90% confidence interval
Except in agriculture, the magnitudes of income reduction across sectors in March are slightly smaller than those in July last year.

*Income in the agricultural sector is potentially affected by seasonality, which can't be well captured in HiFi.
Across types of work, reported income reduction ranges between 35% among wage workers and 70% among farm businesses.

*Income in farm business is potentially affected by seasonality, which can't be well captured in HiFy

*Out of breadwinners who reported experiencing reduced income in each category

represent 90% confidence interval
DKI Jakarta has recovered faster since July, leveling its difference in income reduction with other regions

Urban areas generally remain worse off

Breadwinners with reduced income by characteristics (%*)

*Out of all breadwinners working in each category and each round

R1: 1-17 May 2020; R3: 20 July – 2 August 2020; R5: 11-24 March 2021
The pandemic has forced breadwinners to work fewer hours

Although most breadwinners are currently still working, more than one-third of them are working fewer hours than usual.

On average, breadwinners now work around 38 hours per week, or about 3.8 hours less than their normal weekly working hours prior the pandemic.
Amongst those who worked in March 2021, 28% had changed jobs

Job switching was more likely among low skilled workers.

The vast majority of those who changed jobs were wage workers or in the service sector.

Agriculture remained a partial buffer.
Progress in reducing prevalence of shortage of food and eating less due to lack of money or other resources has been sluggish since November. By March-21, there were still 22% of households facing food shortages and 27% of households who reported eating less. Share of households with food shortages and eating less than they should still above pre-pandemic level.

As of March, food shortage due to resource constraints was close to pre-COVID-19 levels in most households, except households in urban areas.
Food shortages due to resource constraints are significantly higher in the bottom 40% than the top 20%, more likely among less educated households, and those outside Java.

Experienced shortage of food because there was not enough money or other resources in the last week (%HH)
Accordingly, the bottom 40% and less educated households, who reside outside Java, are more likely to reduce their food intake.

Also, eating less is more likely among households experiencing income shocks, suggesting an affordability issue.
Underlying a steady prevalence of affordability-related food shortage overall, there is high churn.

Note:
Improved: often -> sometimes -> seldom -> never
Worsened: never -> seldom -> sometimes -> often

Indonesia High-frequency Monitoring of Covid-19 Impacts
Health 04
Coverage of COVID-19 testing is improving

By March 2021, nearly 20% of the adult population reported that they have been tested for COVID-19. This is 50% higher than the share in July.

Among those who were tested, 4.96%* - or equivalent with almost 50 adults per 1,000 population - were PCR tested.

*The 90% CI: 3.7-6.7
Note: Based on administrative data from the Ministry of Health as of March 31, 2021, 8,490,864 people (about 46 people per 1,000 adults) were tested using PCR. However, since PCR test is a rare incidence, the estimate may not be generalized to represent the population.
Disruption in access to Primary Health Services has continued to decrease

As of March 2021, only 3% of households who needed primary healthcare were not able to access it, decreased from 5% in November 2020.

Unable to access health services in the last month when in need (% HH in need*)

- Immunization: R3: 22%; R4: 14%; R5: 15%
- Tuberculosis treatment: R3: 1%; R4: 1%; R5: 1%
- Pre-natal care: R3: 5%; R4: 3%; R5: 6%
- Family planning: R4: 13%; R5: 16%
- Hypertension treatment: R4: 16%; R5: 14%
- Diabetes treatment: R4: 5%; R5: 6%


*HH in need for

represent 90% confidence interval
Acceptance of COVID-19 Vaccine remains high

By March 2021, vaccine acceptance among adult Indonesians stayed around **80%**, no change since November 2020.

70% of those who say no to vaccination (10%) or are unsure about getting it (11%) cited concerns about side effects, safety and effectiveness as the main reasons – unlike the main reason reported in Round 4, i.e. against vaccination in general.
Women are more likely to say no or be unsure about vaccination.

This is different from the situation in November last year when those who said no to vaccination were more likely among higher educated people, residing in urban areas, and primarily in DKI Jakarta.
Safety Nets 05
Most programs have reached their estimated target coverage

Potentially due to implementation challenges, within each program, however, the share of households receiving the program fluctuates across rounds
The number of vulnerable households who have ever received programs since the onset of the pandemic continued to increase...

By March 2021, nearly **90%** of households in the bottom 40% and/or those experienced income shocks reported have ever received **at least one social assistance programs since the onset of the pandemic.**

The share rose slightly to about **93%** after accounting for electricity subsidy and loan deferment programs

The increase in coverage may reflect the introduction of new schemes in the past quarters.

*including sembako, PKH, BLT, cash for work, kartu prakerja, wage subsidy, grant for micro enterprises*
.. however, many households in the target groups still did not receive the benefits intended for them.

While the share of households benefiting from each program was higher within the target groups, still many households in the target groups did not receive the assistance intended for them, potentially due to exclusion errors.

---

Note: Percent of HH in each welfare group, based on those who have ever received program since the onset of the pandemic. PKH is restricted to HH with school-age members (<18 y.o.) and/or reported receiving PKH to approximate eligibility.

Solid red bar represent the incidence among intended group of recipients.

represent 90% confidence interval.
A significant share of vulnerable households reported not receiving any programs since July 2020

Despite massive coverage, about 12% of households in the bottom 40% and/or those experienced income shocks had not received any relief measures in the past 8 months.

Considering only social assistance programs, one in five vulnerable households had not received any.

More than half of these vulnerable households reported had never received any programs since the onset of the pandemic (exclusion errors), while the other half reported receiving only prior July 2020.

*Note: SA includes sembako, PKH, BLT, cash for work, kartu prakerja, wage subsidy, and grant for micro enterprises. Other relief measures includes electricity bills reduction and loan deferment.
There are indications of implementation challenges..
As of mid-March, about 26% of PKH beneficiaries reported have not yet received the transfers during the period of January-March 2021, while 26% of Sembako Card beneficiaries and 11% of electricity subsidy beneficiaries have not received the benefits in February/March.
Households in the bottom 40% who have not received any government assistance were mostly in urban areas, outside DKI Jakarta, and higher educated households.
Less than half of program beneficiaries self-assessed the benefits of current programs as adequate

55% of pre-pandemic program beneficiaries felt that the benefits and own income were covering most or all of their monthly basic needs prior to the pandemic.

In March 2021, only 40% of those who received benefits reported the same level of adequacy.

Subjective Assessment on Programs’ Adequacy

Before Pandemic, using your own resources and all government assistance your household received, was your household able to cover your monthly basic needs? (% of HH received PKH or Sembako pre-pandemic)

Using your own resources and all government assistance your household received, in the last three months, was your household able to cover your monthly basic needs? (% of HH received any programs since July 2020)
More than one-third of beneficiaries who reported their monthly basic needs were completely covered prior to the pandemic felt that their needs were only partially met in March 2021.

Such deterioration is higher among households experiencing income shocks.

\*PKH and Sembako Card

---

**Note:**
**Deterioration of adequacy** includes all instances where respondent rated adequacy of assistance lower than pre-pandemic.
Households in the bottom 40% are more likely to report that their monthly basic needs are not covered.
Concerns 06
Nearly half the households self-evaluated their current welfare the same as pre-pandemic

Just under 30% of households rated their welfare as worse or much worse off than prior to the pandemic

Those who experienced food shortages or income shocks were more likely to report being worse off than pre-pandemic.
A very small minority of households expected to not be able to make mortgage payments, or pay rent and utility bills.

- Paying Mortgage 1%
- Renting House 9%
Terima Kasih
Employment

Focusing the trajectory of recovery in March 2021 relative to July last year, most breadwinners continued working with stable/rising income.

However, the share of breadwinner successfully returned to work has been offset by that of stopped working since July 2020.
In Round 5, the state of eating less across households’ characteristics remains the same as in Round 4

- **By sex of HH’s head**: Male vs. Female
- **By welfare status**: Bottom 40% vs. Middle 40% vs. Top 20%
- **By urban/rural**: Rural vs. Urban
- **By region**: DKI Jakarta vs. Java-Non Jakarta vs. Outside Java

R1: 1-17 May 2020  
R2: 26 May – 5 June 2020  
R3: 20 July – 2 August 2020  
R4: 3–15 November 2020  
R5: 11–24 March 2021
Since May 2020, about 9% of households remained persistently eating less than should. Meanwhile 13% of households experienced worsening eating less from Round 1 to Round 5.

Note:
Improved: often -> sometimes -> seldom -> never
Worsened: never -> seldom -> sometimes -> often

R1: 1-17 May 2020; R2: 26 May – 5 June 2020
R3: 20 July – 2 August 2020; R4: 3 – 15 November 2020;
R5: 11-24 March 2021
 Hungry but did not eat

The share of households experienced hunger but did not eat increased.

The prevalence is more likely outside Java and in the bottom 40%.

Hungry but did not eat because there was not enough money or other resources in the last month (%HH)

Level of Severity

- Often
- Sometimes
- Seldom

represent 90% confidence interval

Indonesia High-frequency Monitoring of Covid-19 Impacts

Round 5
Went without eating for a whole day because there was not enough money or other resources in the last month (%HH)

In March, the prevalence of households that skipped eating a whole day was higher than that in November.
Unable to eat nutritious food

About a quarter of households reported missing out on nutritious food.

This affects more households with low education, in the bottom 40%, and those in outside Java.
Safety Nets

About 93% of households in the bottom 40% and/or experiencing income shocks reported receiving at least one social assistance programs or other relief measures since the onset of the pandemic.

*Including sembako, PKH, BLT, electricity bills reduction, loan deferment, cash for work, kartu prakerja, wage subsidy (BPJISKetenagakerjaan), grant for micro enterprises.