

# THE LABOR MARKET IMPACTS OF COVID-19 IN FOUR AFRICAN COUNTRIES

(April-October 2020)

Evidence from LSMS-Supported  
High-Frequency Phone Surveys  
on COVID-19

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As part of a global effort led by the World Bank to track the socio-economic impacts of COVID-19, the Living Standards Measurement Study (LSMS) team supports high-frequency phone surveys in Ethiopia, Malawi, Nigeria, and Uganda (among other countries). This brief focuses on the early impacts of COVID-19 on the labor market and their evolution from April to October 2020 using phone surveys in four African countries.

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## SUMMARY OF FINDINGS

- The results from high-frequency phone surveys in Ethiopia, Malawi, Nigeria, and Uganda, collected from April to October 2020, confirm the devastating labor market impacts of the pandemic. These results also shed light on impacts beyond job losses, such as a high share of respondents experiencing reductions in income from different sources.
- The first few months of the pandemic saw the largest impact on labor markets. By May 2020, only four out of ten respondents in Nigeria, six out of ten in Malawi and Uganda and 8 out of 10 in Ethiopia were working. Of all the countries analyzed, job loss due to the COVID-19 pandemic was highest in Nigeria.
- In all countries, urban jobs were hit hardest. In urban Nigeria, 56% of people with jobs before the pandemic stopped working compared to 40% in rural Nigeria. This pattern is followed by Uganda, (29% vs 11%), Ethiopia (12% vs 6%), and Malawi (8% vs 6%).
- The job impacts are heterogenous in all four countries. Compared to men, women experienced more job losses in Ethiopia (10.1% for female respondents vs. 7.9% for male respondents) and in Uganda (19.1% vs 14.6%), but less in Nigeria and Malawi.
- The level of stringency of lockdown measures was different in each country. Among the four countries, lockdown measures have been the least stringent in Malawi (according to the Oxford's Stringency Index), while Malawi also saw the lowest share of respondents losing their job after the outbreak.
- The impact of the pandemic seems to extend beyond the labor effects. Between May and June, approximately 80% of the households in Malawi, Nigeria, and Uganda reported a decrease in their total income after the onset of the COVID-19 outbreak. In Ethiopia, 46% of households reported a decrease in income.
- All the countries experienced an increase in the share of respondents working in the agricultural sector in the months after the COVID-19 outbreak. This change of economic activity could represent a coping mechanism of the households.
- The labor market seems to be recovering for household heads and their spouses in all countries. However, when considering all household members in Nigeria and Malawi, the labor market did not appear to have fully recovered from the shock of the pandemic in October 2020.

## INTRODUCTION

Labor markets have been a key transmission mechanism of the economic effects of COVID-19. Tracking the development of labor markets is therefore paramount to better understand the impacts of the pandemic. Documenting how the crisis disrupts workers, firms, and labor income can make a valuable contribution to designing and targeting policies that help mitigate the impact of the pandemic and its aftermath.

This brief highlights results from the Living Standards Measurement Study (LSMS)-supported High-Frequency Phone Surveys (HFPS), conducted from April to October 2020 in Nigeria, Ethiopia, Malawi, and Uganda. Between these months, six rounds of monthly data collection were conducted in Nigeria and Ethiopia, five in Malawi, and four in Uganda.<sup>1</sup> The high frequency of the data collection was designed to closely follow the evolution of the crisis and subsequent policy responses.

This allows for an assessment of the labor market impacts over time. Each phone survey collected labor information for one respondent per household (as opposed to face-to-face surveys where all household members are considered).

While the brief focuses on the evolution and distribution of the labor market impacts of COVID-19 in these four countries, it also incorporates information on the situation of the respondents before the pandemic. It uses data from the Living Standards Measurement Study - Integrated Surveys on Agriculture (LSMS-ISA) conducted before the pandemic hit, from which the HFPS samples were drawn. More specifically, it uses data from the latest rounds conducted in these LSMS-ISA countries: Ethiopia (2018/19), Malawi (2019/20), Nigeria (2018/19), and Uganda (2019/20).

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<sup>1</sup> Given the social distancing measures implemented by governments to limit the spread of COVID-19, traditional methods of data collection, such as face-to-face (F2F) surveys, have been difficult to implement. Phone surveys are a faster and cheaper alternative to safely eliciting information from individuals, households, firms, and communities; and, therefore, are well-suited for data collection purposes during the COVID-19 pandemic. The downsides are the need to shorten the length of questionnaires, compared to F2F surveys, and for the most part, restrict data collection to only one respondent per household reporting for him or herself.

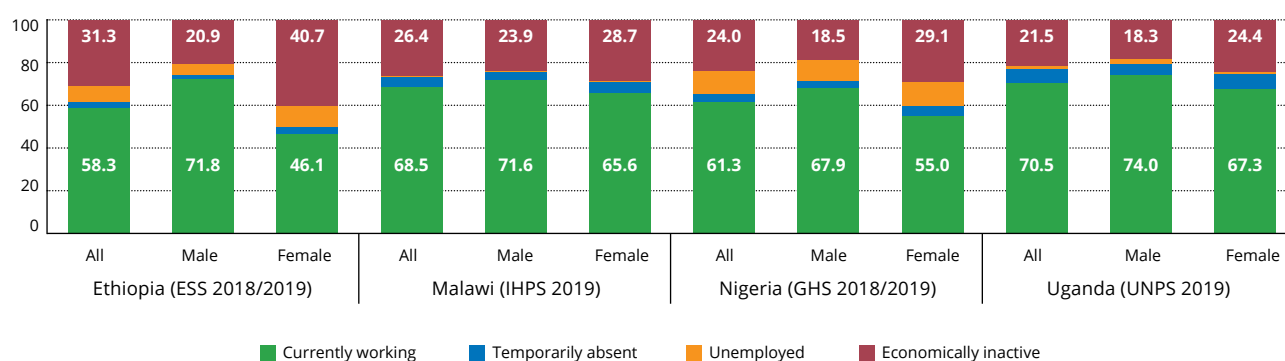
## LABOR CONDITIONS BEFORE THE COVID-19 PANDEMIC

Prior to the onset of the pandemic, between 58% and 70% of the population were working; the share being highest in Uganda and lowest in Ethiopia. In all four countries, women were less likely to be economically active than men (**Figure 1**), with the gender difference wider in Nigeria and Ethiopia. Ethiopia has the highest share of the economically inactive population with 31.3%, which is driven by the fact that four out of ten women do not participate in the labor force (**Figure 1**).

In all four countries, a large share of the active population is employed in the agricultural sector. Before the pandemic, Nigeria had the most diverse workforce, with four out of ten respondents working in the agricultural sector, and two out of ten in the commerce sector. In Ethiopia, seven out of ten respondents worked in agriculture (**Figure 2**).

**Figure 1. Economically active and inactive population by sex**

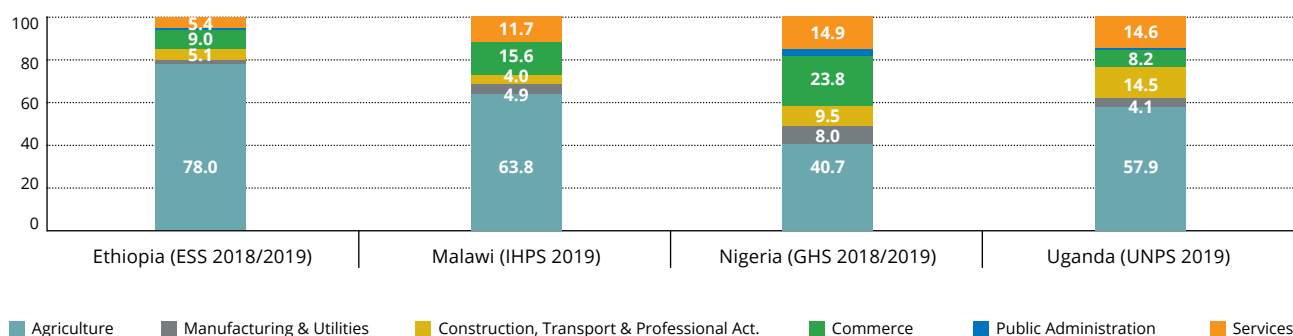
(% of population 15-64 years old)



Source: Own calculations based on pre-covid19 surveys.

**Figure 2. Working respondents by economic sector**

(% of population 15-64 years old currently working)



Source: Own calculations based on pre-covid19 surveys.

## EARLY IMPACTS OF THE COVID-19 PANDEMIC – APRIL TO JUNE 2020

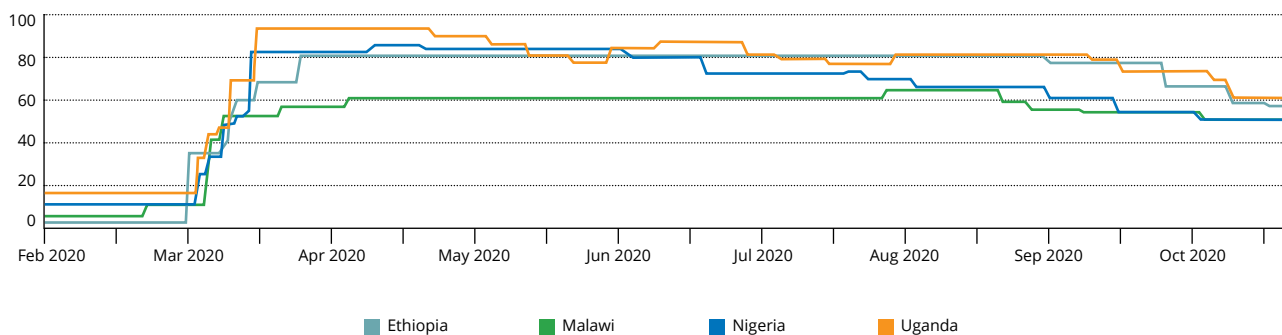
After the COVID-19 outbreak, lockdown measures were implemented to curb contagion and these measures varied by country. The Oxford's COVID-19 Government Response Stringency Index<sup>2</sup> helps to keep track of different measures implemented by each country in a systematic way. The global stringency index documents government responses to the pandemic since mid-January 2020. It is a composite measure based on nine response indicators, including school closures, workplace closures and travel bans, rescaled to a value from 0 to 100 (100 = strictest)<sup>3,4</sup>.

Malawi's lockdown measures have been the least stringent of all these countries (Thomas, et al., 2020). This country also experienced the lowest share of respondents that lost their job after the outbreak (conditional on holding a job before COVID-19 outbreak).

It can be observed that all countries had implemented lockdown measures by the end of March. However, the levels of stringency varied across countries, with Malawi having the least stringent measures, as the government merely suggested that people stay home but did not implement a full lockdown, and public transportation was still running as usual throughout 2020. Uganda had the strictest measures, while Nigeria started with stringent measures, but gradually relaxed those over time.

**Figure 3.** Oxford's COVID-19 Government Response Stringency Index

(Index, where 100 means that the lockdown measures are the strictest)



Source: Our World in Data

<sup>2</sup> The COVID-19 Government Response Stringency Index is calculated by the Oxford COVID-19 Government Response Tracker (OxCGRT), that collects publicly available information on 20 indicators of policies responses that governments have taken to respond to the pandemic such as school closures and travel restrictions. It includes information of 180 countries. See more here: <https://www.bsg.ox.ac.uk/research/research-projects/covid-19-government-response-tracker>

<sup>3</sup> The nine indicators included are the following: (1) school closings, (2) workplaces closings, (3) cancelling public events, (4) Restrictions on gatherings, (5) closing of public transport, (6) stay at home requirements, (7) restrictions on internal movement, (8) international travel controls, and (9) presence of public information campaigns. More details about the methodology can be found here: <https://www.bsg.ox.ac.uk/sites/default/files/2020-12/BSG-WP-2020-032-v10.pdf>

<sup>4</sup> Thomas, H., Angrist, N., Cameron-Blake, E., Hallas, L., Kira, B., Majumdar, S., . . . Webster, S. (2020). *Variation in Government Responses to COVID-19*. Blavatnik School of Government. Retrieved from <https://www.bsg.ox.ac.uk/research/research-projects/coronavirus-government-response-tracker>

**The first round of each HFPS shows that a significant share of respondents lost their jobs for reasons related to COVID-19.**

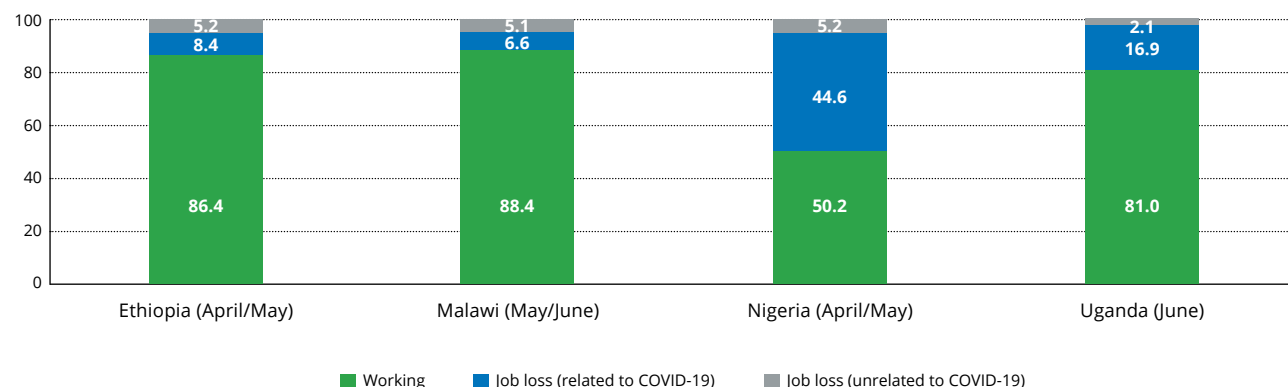
In Nigeria, 44.6% of the respondents that were working before the outbreak reported that they lost their job for reasons related to the pandemic, while in Uganda, this share was 16.9%, in Ethiopia 8.4%, and in Malawi 6.6% (See **Figure 4**).

**In all countries, urban areas experienced higher job losses related to COVID-19**

than rural areas. Nigeria, being the most urbanized country of the four (with 51.2% of its population concentrated in urban areas), was the most affected, 56% of urban workers employed before the pandemic lost their job compared to 40% of workers in rural areas. Uganda and Ethiopia follow the same pattern of job loss (29% and 12% urban vs. 11% and 6% rural, respectively). Malawi is the least urbanized country (with 17.2% of the population living in urban areas), and it experienced the lowest share of job loss.<sup>5</sup>

**Figure 4. Working situation after COVID-19 outbreak**

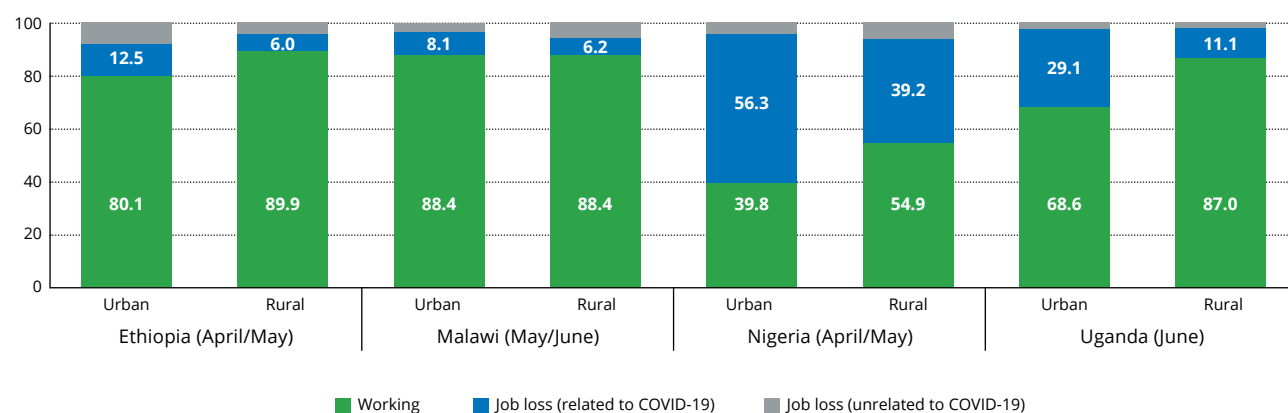
(% of respondents holding a job before COVID-19 outbreak)



Source: Own calculations based on HFPS surveys.

**Figure 5. Working situation after COVID-19 outbreak, urban and rural**

(% of respondents working or holding a job before COVID-19 outbreak)



Source: Own calculations based on HFPS surveys.

<sup>5</sup> World Bank Indicators (2021). <https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS>

Compared to men, women experienced more job losses in Ethiopia (10.1% for female respondents vs. 7.9% for male respondents) and Uganda (19.1% vs 14.6%), but less in Nigeria (39.5% vs 46.0%) and Malawi (6.0% vs 6.9%). It is important to note that these HFPS surveys represent one respondent per household, with about 30 percent of respondents being female across the countries.<sup>6</sup>

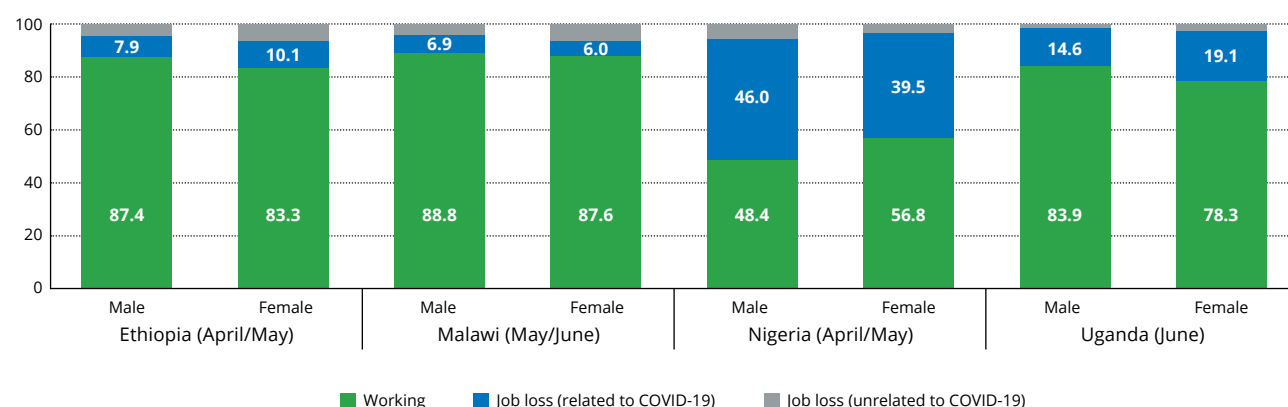
Among respondents who kept working in a wage job, a significant fraction reported not working as usual (i.e., temporarily not working or working fewer hours). This impact of the pandemic was also stronger

in Nigeria, where 16.6% of respondents who worked in April/May reported having a wage job as their main occupation, but 7.4% reported that they were not working as usual. In the other countries, a larger fraction of workers reported having a wage job in the first round, while the fraction not working as usual was smaller: 3.6% in Ethiopia, 4.7% in Malawi, and 3.6% in Uganda (see Figure 7).

In addition to the effect on the labor market through job loss, there are other factors that may affect households' income such as reduced business activity or a decrease in working hours.

Figure 6. Working situation last week, by gender

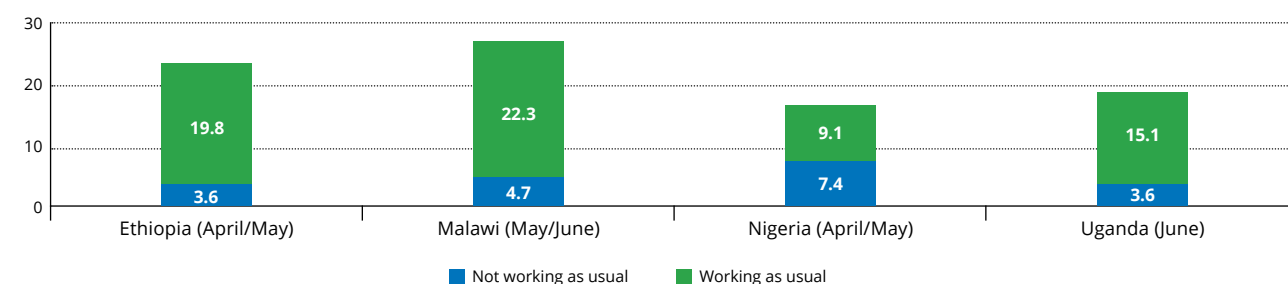
(% of respondents working or holding a job before COVID-19 outbreak)



Source: Own calculations based on HFPS surveys.

Figure 7. Wage workers

(as % of respondents working)



Source: Own calculations based on HFPS surveys.

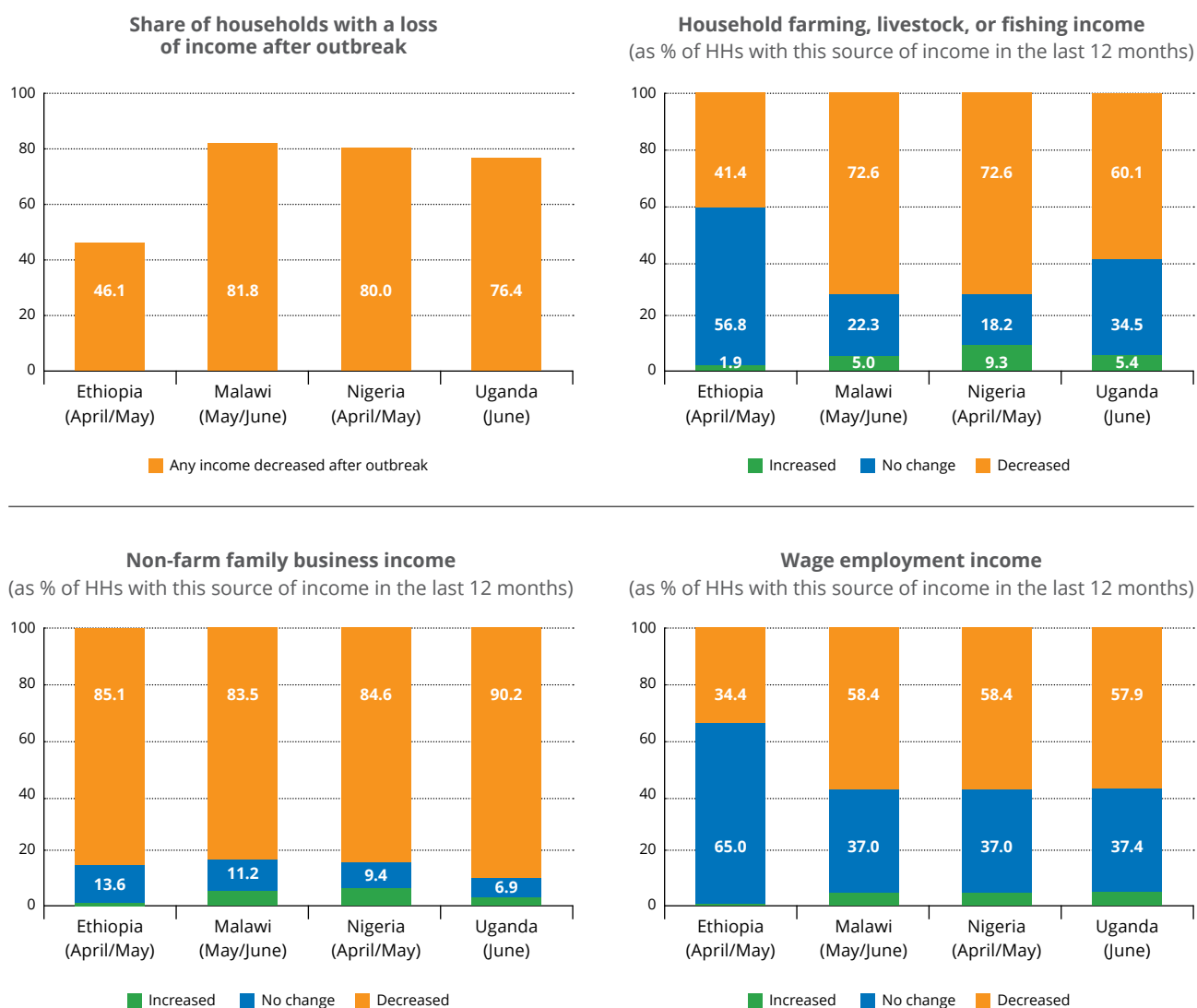
<sup>6</sup> More specifically: 25% of the respondents in Nigeria are female, while this number is 28% in Ethiopia, 40% in Malawi, and 49% in Uganda

During the first round, the respondents were asked about changes on income from different sources, compared to the income that they received in the previous year, to avoid a seasonality effect.

**During the first round, approximately 80% of the households in Malawi, Nigeria, and Uganda reported a decrease in their total income following the COVID-19 outbreak.** In Ethiopia, 46% of households reported income loss (Figure 8). This could reflect that before the pandemic 78% of

the working population in Ethiopia was concentrated in agriculture, a sector that was affected relatively less compared to the commerce and services sectors. The share of households that experienced a reduction in farming income was also greater in Nigeria, Malawi, and Uganda, compared to Ethiopia. The same trend is reported for the share of households with a reduction in wage income. However, the share of households that experienced a decrease in non-farming family businesses surpassed 80% in all the countries analyzed.

**Figure 8.** Changes in income after outbreak



Source: Own calculations based on HFPS surveys.



## THE EVOLUTION OF THE COVID-19 PANDEMIC – APRIL TO OCTOBER 2020

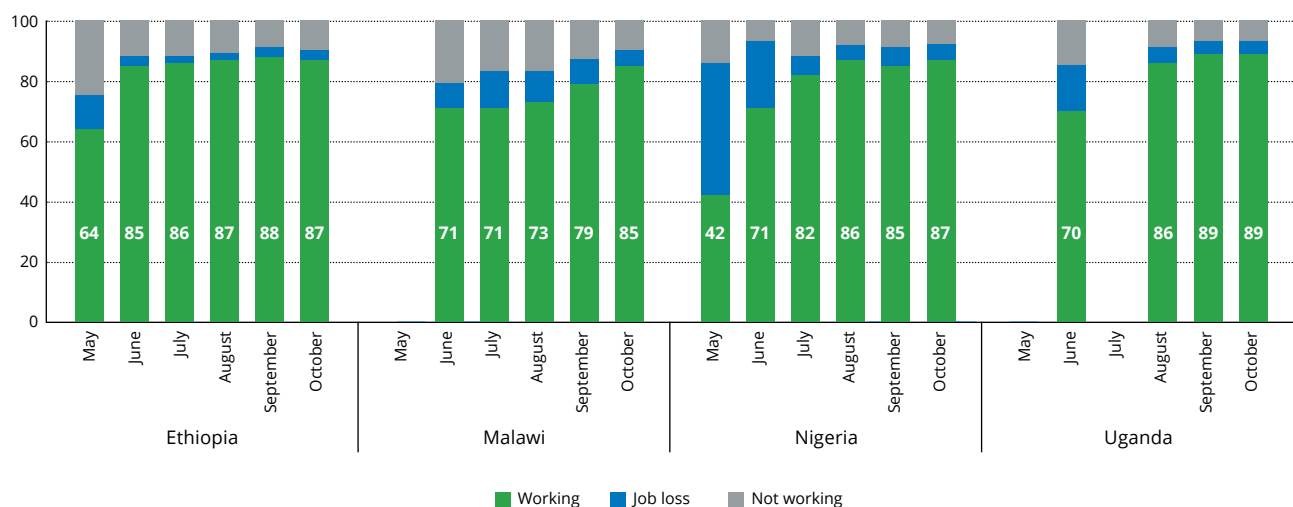
**Following the early impacts of the pandemic, the working situation of the respondents has gradually recovered.** By May 2020, only four out of ten respondents in Nigeria were working, and a similar share lost their job right around that time. By October 2020, the labor market had recovered, with 87% of all respondents back in the active labor force. In Ethiopia, 64% of respondents were working in May, and 87% in October. In Malawi, the share of

respondents working was 71% in June and rose to 85% in October, while in Uganda this indicator went from 70% in June to 89% in October (See **Figure 9**).<sup>7</sup> However, it is important to keep in mind that changes in the working situation may be caused by seasonal fluctuations unrelated to COVID-19.

**The duration of joblessness between April and October 2020 also varies by country, reflecting some level of instability in the labor markets.** In Nigeria, only 28.2% of respondents in the panel remained working during all rounds, while 36.8% stopped working during one round

**Figure 9.** Distribution of respondents

(% of respondents by country and month)



Note: Months that are left blank are months when no data was collected. The share of respondents classified in the category “job loss” refers to the ones that were working in the previous round but stopped working during the round presented in the figure. In the case of the first round, the working situation is compared to mid-March 2020.

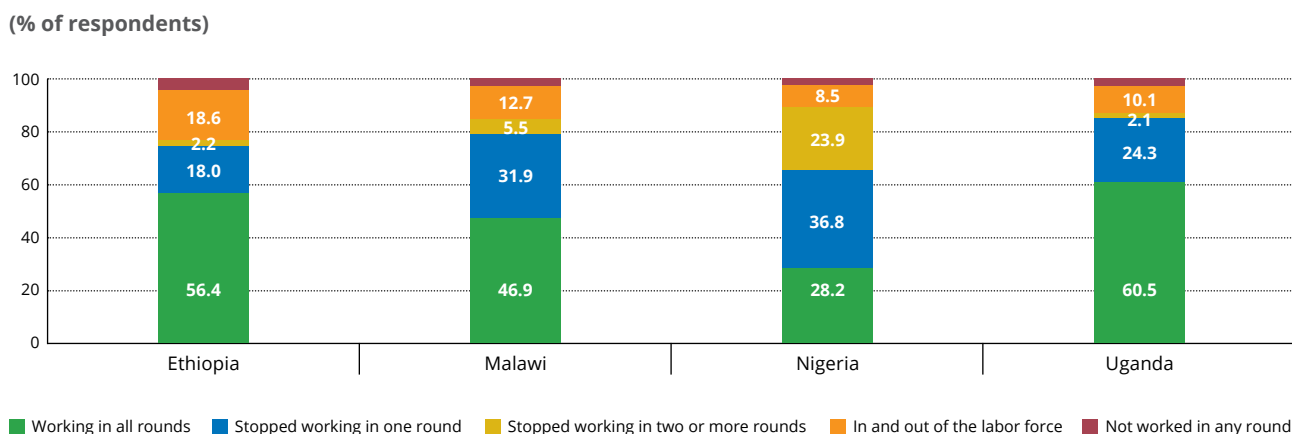
Source: Own calculations based on HFPS surveys.

<sup>7</sup> The figures in this section includes only the respondents that participated on HFPS in all the rounds from May to October. It includes 1,451 respondents in Nigeria for 6 rounds, 2,219 respondents in Ethiopia for 6 rounds, 1,108 respondents in Malawi for 5 rounds, and 1,669 respondents in Uganda for 4 rounds.

and 23.9% during two or more rounds (see **Figure 10**). In Malawi slightly less than half of the respondents was working during all rounds (46.9%), 31.9% stopped working in one round, and only 5.5% stopped working in two or more rounds. In Ethiopia most of the respondents were working in all rounds (56.4%), 18.0% stopped working for one round, and 18.6% were in and out of the labor force. In Uganda, 60.5% of respondents were working during all the rounds and only 2.1% stopped working for two or more rounds.

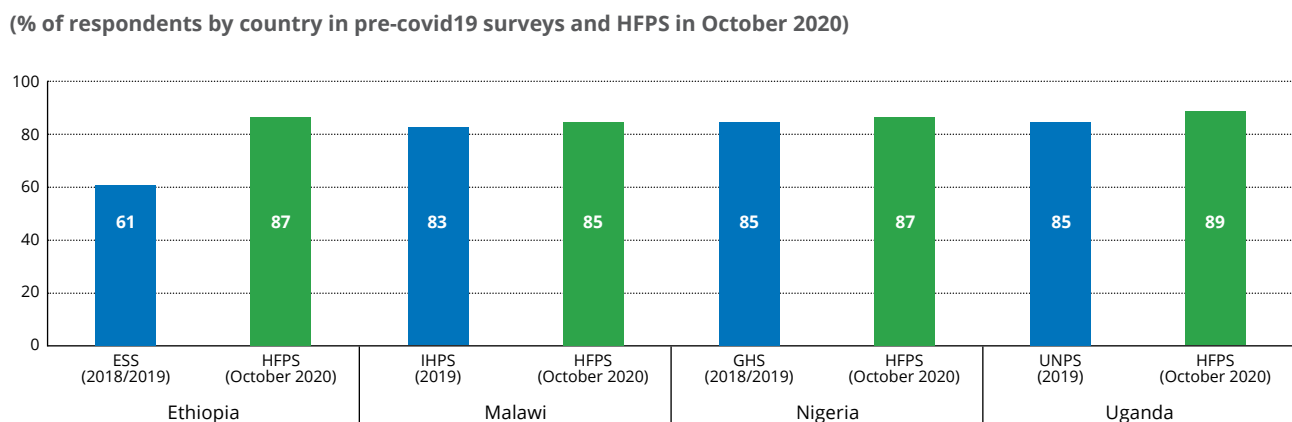
**As of October 2020, the share of respondents with a job reached its pre-pandemic level in all countries.** **Figure 11** shows the working situation of respondents at two different points in time, during the pre-COVID-19 survey and in October 2020. It should be highlighted that the pre-COVID-19 survey was collected in different months than the HFPS, and thus this indicator may also capture seasonal fluctuations unrelated to COVID-19.

**Figure 10. Respondents by labor status in HFPS**



Source: Own calculations based on HFPS surveys.

**Figure 11. Working respondents**



Note: This figure includes only the respondents that participated on HFPS in all the rounds from May to October.

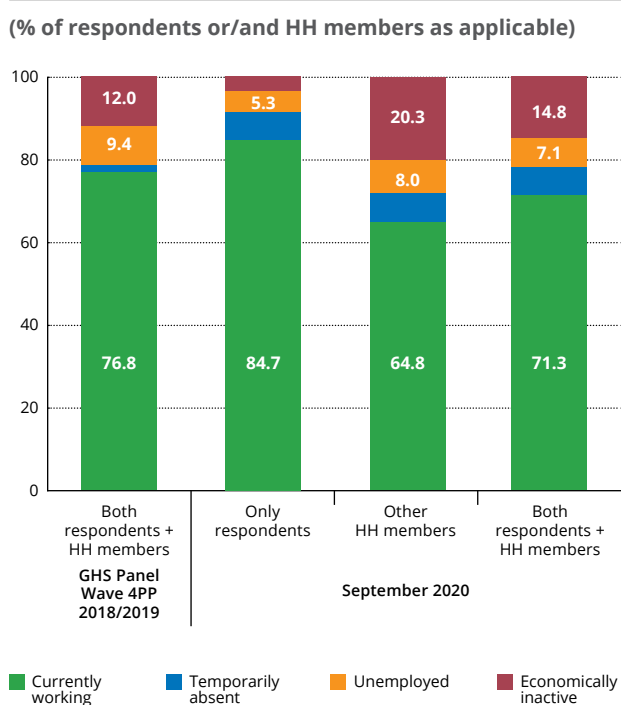
Source: Own calculations based on pre-covid19 and HFPS surveys.

## DATA ON ALL WORKING-AGE ADULTS – SPECIAL CASE OF NIGERIA AND MALAWI

Data for up to 6 household members (15-64 years old) was collected in September 2020 for Nigeria, and in October 2020 for Malawi, in addition to the data collected for the main respondents. Collecting data for more household members allows for a broader analysis when looking at differences in the labor market characteristics, such as gender and education. Since the main survey respondents tend to be household heads (predominantly male and older) and thus differ in important ways from the overall population of working-age adults, they may not fully reflect the employment situation for the working-age population.

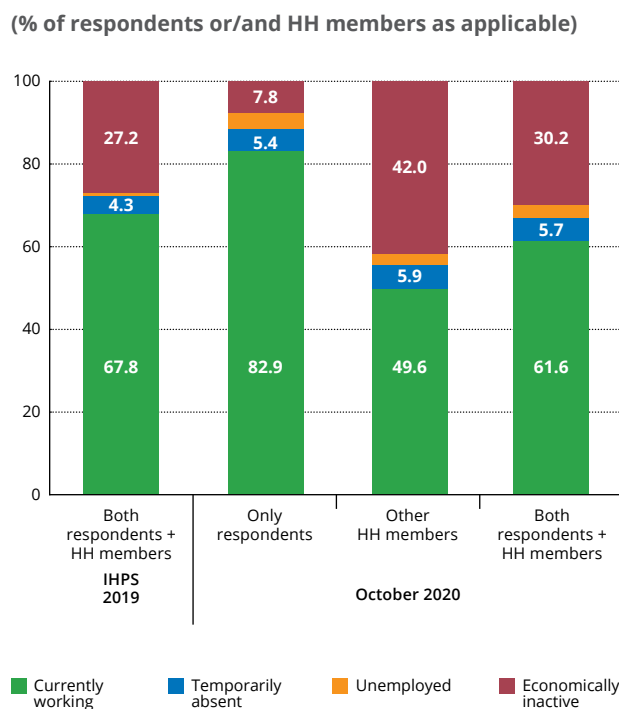
In Nigeria and Malawi, when considering all household members, the labor market does not appear to have fully recovered from the shock of the pandemic. Figures 12 and 13 present the differences in the working situation of the respondents versus the other HH members for Nigeria and Malawi, respectively. The share of respondents with a job is higher than the share of other household members working in Nigeria as well as in Malawi. Furthermore, when we compare the working situation of respondents and household members in the HFPS to the working situation reported in the pre-COVID-19 survey, we observe that the share of individuals working is lower in the HFPS. This suggests that, in both countries, the labor market conditions are worse than what is inferred from the October HFPS data obtained from the respondents only (as summarized above in Figure 11).

**Figure 12.** Respondents from HFPS and HH members in Nigeria



Source: Own calculations based on HFPS and pre-covid19 surveys

**Figure 13.** Respondents from HFPS and HH members in Malawi

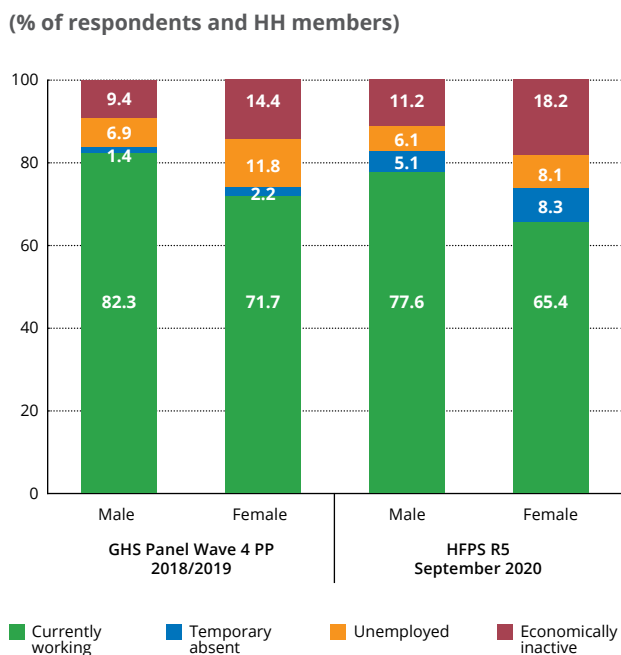


Source: Own calculations based on HFPS and pre-covid19 surveys

The data on all working-age adults captured in Nigeria and Malawi also shed further light on gender inequalities. In Nigeria, as of September 2020, 77.6% of the male individuals (main respondents plus other HH members) were working, while in the pre-COVID-19 survey, this indicator was 82.3%. Consequently, there is still a gap of 4.7 percentage points with the pre-COVID-19 level. In the case of female individuals, this gap is 6.3 percentage points (65.4%-71.7%).

In Malawi, females are a long way from returning to levels reported before the COVID-19 outbreak. As of October 2020, male respondents are 4.4 percentage points less likely to work (66.5-70.9), which is similar to the gap for males in Nigeria. However, while in 2019, 64.8% of the female individuals were working, this went down to 55.6% in October 2020. Therefore, the female gap reaches the value of 9.2 percentage points.

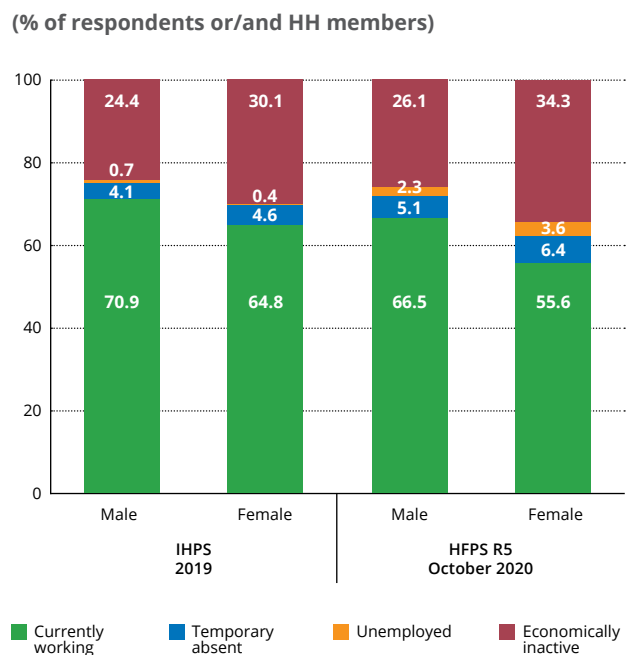
**Figure 14.** Respondents from HFPS and HH members in Nigeria by gender



Note: This figure is restricted to those that are included in both surveys (GHS-Panel Wave 4 PP 2018/2019 and Nigeria HFPS R5)

Source: Own calculations based on HFPS and pre-covid19 surveys

**Figure 15.** Respondents from HFPS and HH members in Malawi by gender



Note: This figure is restricted to those that are included in both survey (IHPS 2019 and Malawi HFPS R5)

Source: Own calculations based on HFPS and pre-covid19 surveys

## CONCLUSIONS

- As the pandemic is still ongoing, policies need to focus on the vulnerable groups that have been hit hardest. This brief shows that working-age women are recovering slower in terms of their economic participation in labor markets, and that the urban sector has been hit the hardest.
- There is substantial variation in job losses across the four countries. In Nigeria, 44.6% of the respondents that were working before the outbreak reported that they lost their job for reasons related to the pandemic, while in Uganda, this share was 16.9%, in Ethiopia 8.4%, and in Malawi 6.6%.
- In addition to the COVID-19 impact through job loss, there are other factors that may affect households' income such as reduced business activity or a decrease in working hours. Consequently, public policies focused on the recovery should also consider these other factors beyond job losses.
- Data for all household members, available for Nigeria and Malawi, suggest the labor market has not yet fully recovered. Furthermore, the crisis is entrenching preexisting labor market gender inequality. A similar analysis for the other countries is needed to disentangle the differentiated impacts that may be hidden when considering just one respondent.



## **THE LABOR MARKET IMPACTS OF COVID-19 IN FOUR AFRICAN COUNTRIES (APRIL-OCTOBER 2020)**

**EVIDENCE FROM LSMS-SUPPORTED HIGH-FREQUENCY PHONE SURVEYS ON COVID-19**

JUNE 2021

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