



► ILO Monitor: COVID-19 and the world of work. Third edition Updated estimates and analysis

29 April 2020

Key messages

Workplace and business closures

- **The proportion of workers living in countries with recommended or required workplace closures has decreased from 81 to 68 per cent over the last two weeks**, mainly driven by the lifting of workplace closures in China. The situation has worsened elsewhere.
- **Currently (as of 22 April 2020), 81 per cent of employers and 66 per cent of own-account workers¹ live and work in countries affected by recommended or required workplace closures**, with severe impacts on incomes and jobs.

Losses in working hours in the first half of 2020

- According to the ILO nowcasting model, global working hours declined in the first quarter of 2020 by an estimated **4.5 per cent (equivalent to approximately 130 million full-time jobs)**, assuming a 48-hour working week, compared to the pre-crisis situation (fourth quarter of 2019).
- **Global working hours in the second quarter are expected to be 10.5 per cent lower than in the last pre-crisis quarter. This is equivalent to 305 million full-time jobs**, which represents a significant deterioration on ILO's previous estimate of 195 million for the second quarter. This has been driven mainly by prolongation and extension of containment measures.
- While the situation has worsened for all major regional groups, **estimates indicate that the Americas (12.4 per cent) and Europe and Central Asia (11.8 per cent) will experience the greatest loss in working hours**. Regarding

income groups, **lower-middle-income countries are expected to register the highest rate of hours lost, at 12.5 per cent**, but the impact is comparable across countries with different levels of income.

Enterprises at risk

- **Taking together employers and own-account workers, around 436 million enterprises in the hardest-hit sectors worldwide** are currently facing high risks of serious disruption.
- **More than half of these – some 232 million – are in wholesale and retail trade**, currently one of the most impacted sectors globally. Own-account workers represent 45 per cent of employment in this segment.
- **Own-account workers and small enterprises together account for more than 70 per cent of global employment in retail trade and nearly 60 per cent in the accommodation and food services sector**, a reflection of the severe vulnerability of these sectors in the present economic crisis.

Informal economy

- **Among the most vulnerable in the labour market, almost 1.6 billion informal economy workers are significantly impacted** by lockdown measures and/or working in the hardest-hit sectors.
- **The first month of crisis is estimated to result in a decline in earnings of informal workers of 60 per cent globally**. By region, the expected decline is largest in Africa and Latin America,

¹ Own-account workers are those workers who, working on their own account or with one or more partners, hold the type of jobs defined as "self-employment jobs", and have not engaged on a continuous basis any employees to work for them, <https://ilostat.ilo.org/resources/methods/description-employment-by-status/>

at 81 per cent. Regarding income groups, it is 82 per cent in lower-middle- and low-income countries, 28 per cent in upper-middle-income countries, and 76 per cent in high-income countries.

- In addition, the rate of **relative poverty**, which is defined as the proportion of workers with monthly earnings that fall below 50 per cent of the median earnings in the population, is expected to increase by almost

34 percentage points globally for informal workers, ranging from 21 percentage points in upper-middle-income countries to 56 percentage points in lower-middle-income economies.

The ILO calls for urgent and significant policy responses to protect both enterprises, particularly smaller businesses, and workers, especially those operating in the informal economy.

Context: Lockdown continues to severely impact enterprises and workers around the globe

The worst global crisis since the Second World War, the COVID-19 pandemic continues to severely affect public health and cause unprecedented disruptions to economies and labour markets.

Since the release of the second edition of the ILO Monitor on 7 April, global COVID-19 infections have more than doubled to reach nearly 2.6 million on 22 April 2020, while the number of deaths has more than tripled, approaching 180,000 worldwide.²

As the pandemic evolves, so do measures taken by governments to tackle it. The second ILO Monitor found that on 1 April 2020, 81 per cent of all workers lived in countries with recommended or required workplace closures. The most recent ILO estimates show that this share has gone down to (a still striking) 68 per cent. This decline is mainly driven by the lifting of workplace closures in China beginning in early April.³ However, the situation has worsened elsewhere, and 64 additional countries have adopted recommended or required workplace closures since 1 April, most of them in Africa, Europe and Central Asia, and the Americas.

Around 68 per cent of the world's total workforce, including 81 per cent of employers and 66 per cent of own-account workers, are currently living in countries with recommended or required workplace closures (figure 1 and table A1). Nearly all employers and own-account workers in lower-middle-income countries are affected, since these are economies with high levels of informality and limited fiscal means and policy space to respond to the needs of such enterprises and own-account workers.

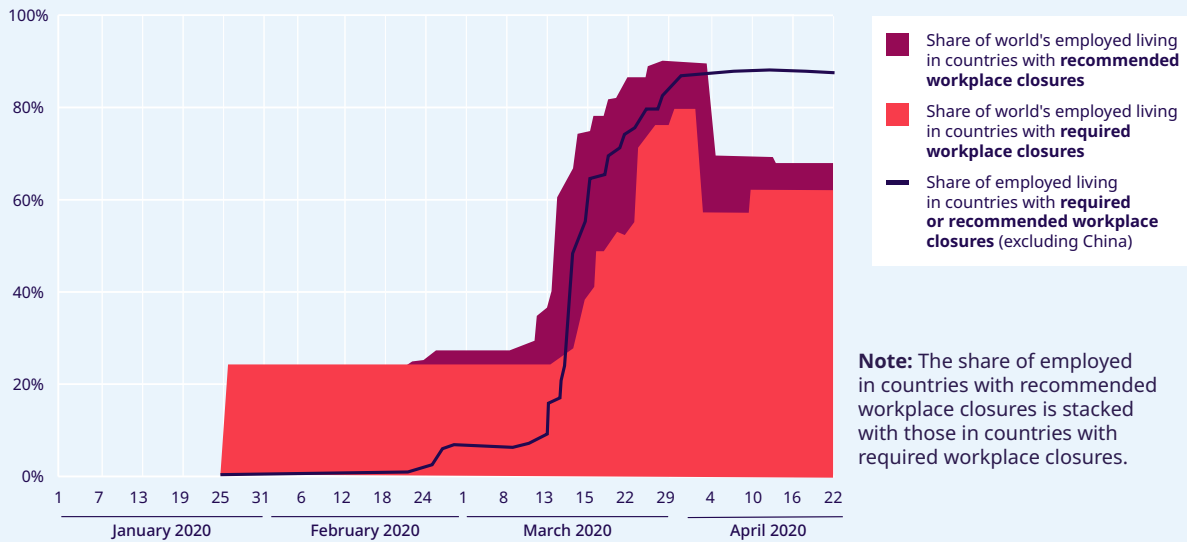
Workplace closures have an immediate and severe impact on enterprises' and own-account workers' current operations and leave them at high risk of insolvency. Even once containment measures are lifted, surviving enterprises and own-account workers will continue to face challenges given that recovery is expected to be uncertain and slow. For those that are engaged in global supply chains, disruptions are likely along the forward and backward linkages of the chain as other countries continue to face reductions in economic activity. Restarting businesses will require significant adjustments with cost implications, including securing safe work environments. Unless tackled by effective policies, these new requirements are likely to put a severe constraint on businesses.

² Available at: <https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>

³ According to the latest version of the Oxford COVID-19 Government Response Tracker, on 3 April workplace closures went from required to recommended in China, and on 9 April the recommendation was lifted altogether.

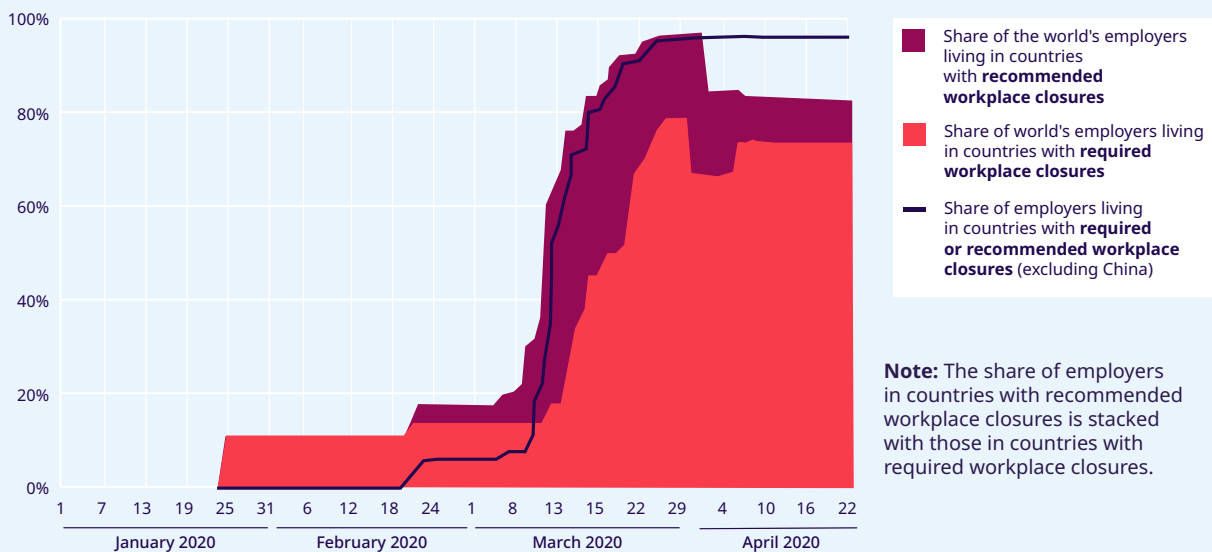
► **Figure 1. Impacts of recommended and required workplace closures (as of 22 April 2020)**

(A) Employment in countries with recommended or required workplace closures



Note: The share of employed in countries with recommended workplace closures is stacked with those in countries with required workplace closures.

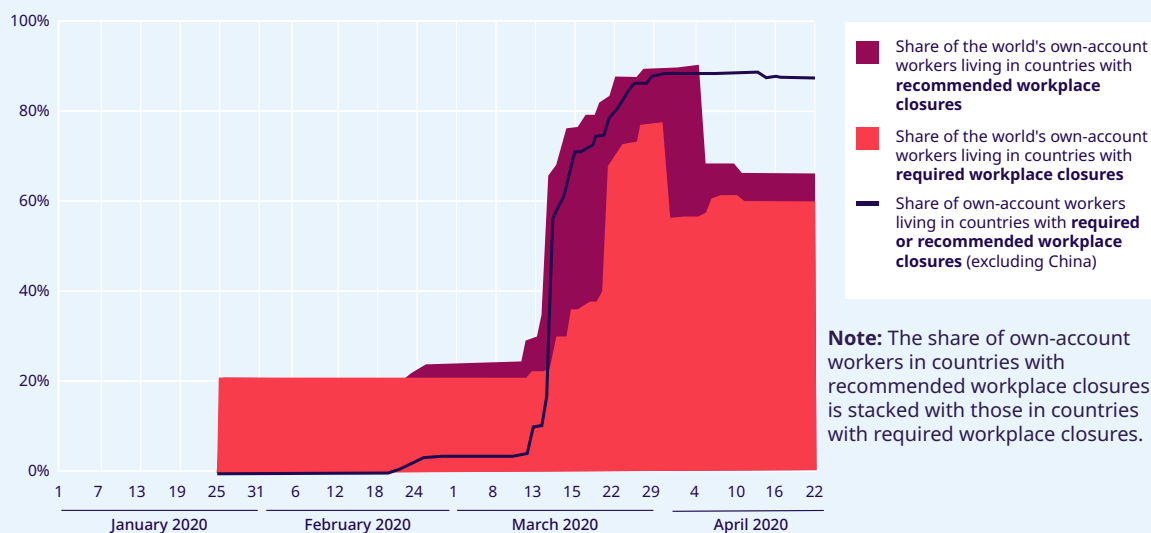
(B) Employers in countries with recommended or required workplace closures



Note: The share of employers in countries with recommended workplace closures is stacked with those in countries with required workplace closures.

Source: ILOSTAT, ILO modelled estimates, November 2019 and The Oxford COVID-19 Government Response Tracker.

(C) Own-account workers in countries with recommended or required workplace closures



Source: ILOSTAT, ILO modelled estimates, November 2019 and the Oxford COVID-19 Government Response Tracker.

Unprecedented losses in working hours in the first half of 2020

The crisis is causing an unprecedented reduction in economic activity and working time. The estimates of hours lost for the first quarter stand at 4.5 per cent (equivalent to approximately 130 million full-time jobs, assuming a 48-hour working week) compared to the pre-crisis level (the fourth quarter of 2019). These estimates have a substantial degree of uncertainty: whereas labour force surveys for the first quarter are available for some countries, for others the data are incomplete, and for many countries no data are available at all.

The estimated decline in work activity in the first quarter of 2020 in different regions is uneven. Whereas the number of hours worked in the first quarter of this year declined by 6.5 per cent in Asia and the Pacific (driven by an 11.6 per cent decline in Eastern Asia) compared to the last quarter of 2019, all other major regions saw declines of less than 2 per cent. This labour market pattern is closely linked to the timing of outbreaks and related social distancing measures

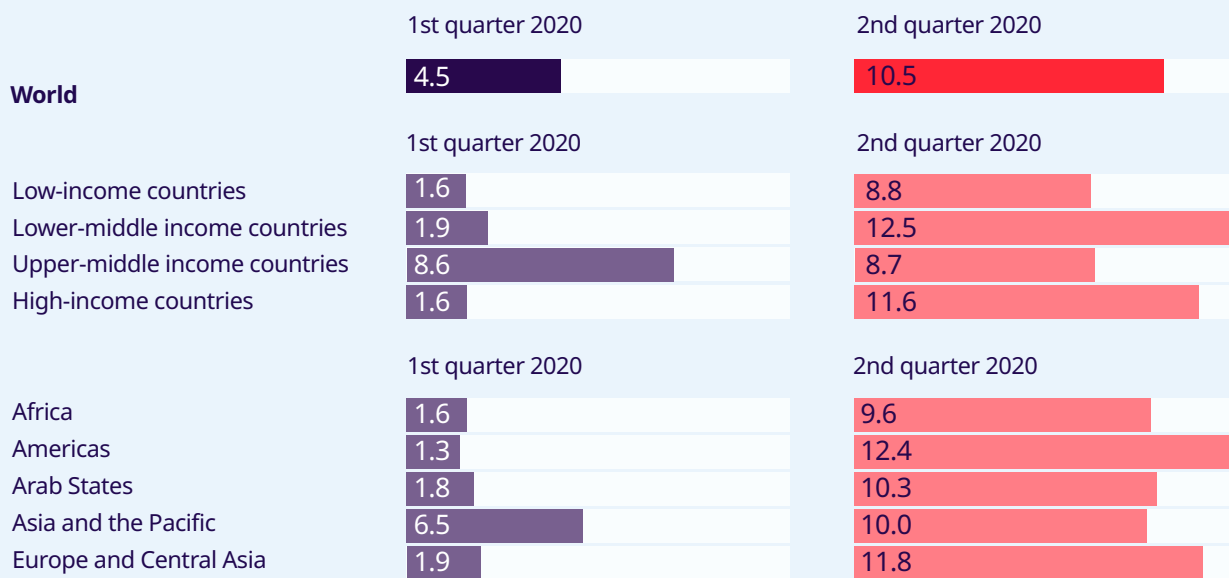
across different regions of the world. Global patterns in hours lost in the first quarter of 2020 are driven in large part by the considerable impact of COVID-19 in China during that period.

The decline in working hours in the second quarter is now expected to be even worse than initially estimated. Based on estimates from 22 April 2020, global working hours in the second quarter are expected to be 10.5 per cent lower than in the last pre-crisis quarter. This is equivalent to 305 million full-time jobs, which represents a significant increase on ILO’s previous estimate of 195 million (or working-hour losses of 6.7 per cent).⁴ In addition to new data for the first three weeks of the second quarter becoming available, two main factors have contributed to this significant revision. First, the prolongation and extension of strict containment measures in many countries where such measures were already implemented caused a cumulative impact on work activity. Second, additional countries implemented stricter containment measures, including required workplace closures.

⁴ Magnitudes above 50 million are rounded to the nearest 5 million, magnitudes below that threshold are rounded to the nearest million. The full-time equivalent employment losses are presented to illustrate the magnitude of the estimates of hours lost. Their interpretation is the estimate of the reduction in hours worked, if those reductions were borne exclusively and exhaustively by a subset of full-time workers and the rest of workers did not experience any hour reduction. The figures should not be interpreted as numbers of jobs actually lost nor increases in unemployment.

► **Figure 2. Estimated drop in aggregate working hours, globally, by region and by income group**

Estimated percentage drop in aggregate working hours compared to the pre-crisis baseline (4th quarter 2019, seasonally adjusted)



Source: ILO nowcasting model; see Technical annex 1.

From a regional perspective, although the outlook has worsened for all major regional groups, the new estimates indicate that the largest decline is occurring in the Americas and in Europe and Central Asia. In the Americas, the loss of working hours in the second quarter is expected to reach 12.4 per cent compared to the pre-crisis level. In Europe and Central Asia, the decline is now estimated at 11.8 per cent. The estimates for the rest of the regional groups follow closely, all being above 9.5 per cent. Across income groups, lower-middle-income countries are likely to register the highest rate of hours lost, at 12.5 per cent, but the impact is comparable across all income groups. The ubiquity of the loss in hours in the second quarter clearly contrasts with the situation in the first quarter of 2020, when the Eastern Asia region accounted for almost three-quarters of global hours lost. Notably, Eastern Asia is the only region that is expected to see a recovery in working hours in the second quarter of this year. However, hours worked in the region are projected to remain 7.2 per cent below the corresponding level in the fourth quarter of 2019.

The eventual increase in global unemployment over 2020 will depend substantially on how the world economy fares in the second half of the year

and how effectively policy measures will preserve existing jobs and boost labour demand once the recovery phase begins.

Enterprises at risk: Identifying the impact of COVID-19

The second ILO Monitor presented estimates of “at-risk workers” based on an identification of sectors most vulnerable to a severe decline in economic output as a result of measures taken to contain the spread of the virus. Based on real-time economic and financial data, the hardest-hit sectors identified were accommodation and food services, manufacturing, wholesale and retail trade, and real estate and business activities. This new edition of the Monitor takes a similar approach to identify **enterprises at risk**. In addition to the sectoral distribution of enterprises, the analysis also considers employment status (employers and own-account workers), along with the relative shares of employment in small businesses.

Approximately 47 million employers, representing some 54 per cent of all employers worldwide, operate businesses in the hardest-hit sectors,

namely manufacturing, accommodation and food services, wholesale and retail trade, and real estate and business activities (table 1). An additional **389 million own-account workers** are engaged in these four sectors. Taking together employers and own-account workers, some **436 million enterprises** worldwide are operating and working in the hardest-hit sectors.

More than half of these enterprises – some 232 million of them – are in wholesale and retail trade. Own-account workers represent 45 per cent of all employment in this sector, while micro firms (between two and nine employees) account for 25 per cent of all workers in it (see table 1).

A further 111 million enterprises in manufacturing, 51 million in accommodation and food services and 42 million in real estate and other business activities are currently facing an extraordinarily difficult business environment with major impacts on employment opportunities. Taken together, these four sectors account for more than **30 per cent of GDP on average.**⁵

Own-account workers and micro-enterprises together represent around 70 per cent of global employment in retail trade and nearly 60 per cent in the accommodation and food services sector, a reflection of the severe vulnerability of these sectors in the current economic crisis. While small enterprises around the globe play a major role as providers of jobs, particularly in low- and middle-income countries,⁶ they often lack access to credit, have few assets and are the least likely to benefit from fiscal measures in general and from the stimulus packages related to the current crisis. As witnessed in the aftermath of the global financial crisis, the number of small businesses in advanced economies is expected to decline due to widespread business failures in the wake of the COVID-19 pandemic. Moreover, it will take considerable time to bring back investment and business operations as recovery is likely to be slow.

► **Table 1. Impact of the crisis on enterprises (employers and own-account workers) in hardest-hit sectors**

Economic sector	Impact of crisis on economic output	Baseline employment situation (global estimates for 2020 prior to COVID-19)				
		Employers (millions)	Own-account workers (millions)	Share of own-account workers in total employment (%)	Share of employed in firms with 2–9 employees in total employment (%)	Share of employed in firms with 10+ employees in total employment (%)
Wholesale and retail trade; repair of motor vehicles and motorcycles	High	21	211	45	25	30
Manufacturing	High	12	99	19	15	66
Accommodation and food services	High	7	44	29	29	41
Real estate; business and administrative activities	High	7	35	21	23	56
Arts, entertainment and recreation, and other services	Medium-high	4	57	30	31	39
Transport, storage and communication	Medium-high	4	76	31	19	50

⁵ Simple average of the shares of total value added per sector.

⁶ ILO: *Small Matters – Global evidence on the contribution to employment by the self-employed, micro-enterprises and SMEs* (Geneva, 2019), available at: https://www.ilo.org/global/publications/books/WCMS_723282/lang-en/index.htm

Construction	Medium	9	103	38	26	36
Financial and insurance services	Medium	1	3	6	11	83
Mining and quarrying	Medium	<1	3	28	14	58
Agriculture, forestry and fishing	Low-medium	19	470	55	30	15
Human health and social work activities	Low	2	11	7	14	79
Education	Low	1	7	5	14	81
Utilities	Low	<1	3	10	13	77
Public administration and defence; compulsory social security	Low	<1	0	2	8	90

Note: ILO's assessment of real-time and financial data, ILOSTAT baseline data on sectoral distribution of employment (ISIC Rev. 4) and ILO Harmonized Microdata. Figures for employers and own-account workers are based on national household survey data from 114 countries representing 66 per cent of global employment. Figures for firm size are based on national household survey data from 134 countries representing 78 per cent of global employment. These are extrapolated to 2020 global employment by sector. See ILO Monitor, Second edition for further details on ratings of sectors, https://www.ilo.org/global/about-the-ilo/WCMS_740877/lang--it/index.htm.

Workers and enterprises in the informal economy are the most vulnerable

As noted in the second ILO Monitor, more than **2 billion people worldwide work in the informal economy**⁷ in jobs that are characterized by a lack of basic protection, including social protection coverage. They often have poor access to health-care services and have no income replacement in case of sickness or lockdown. Many of them have no possibility to work remotely from home. Staying home means losing their jobs, and without wages, they cannot eat.

As of 22 April 2020, close to 1.1 billion informal economy workers live and work in countries in full lockdown, and an additional 304 million in countries in partial lockdown (table A2). These workers together represent 67 per cent of informal employment.

Taking into account the additional effects of sectoral risk (as highlighted in the preceding section) – employment status, the size of enterprises and different levels of lockdown measures (full, partial and

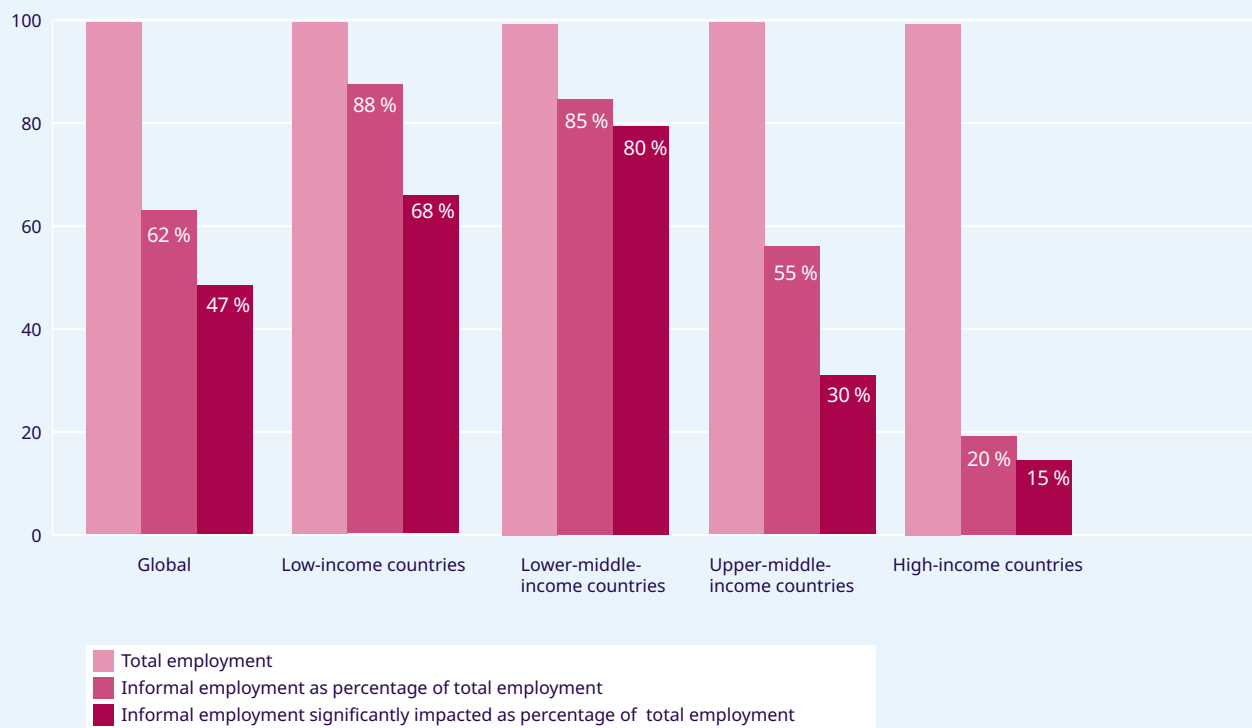
weak measures) – results in an even higher estimate of the impact of COVID-19 on informal economy workers. **This estimate suggests that almost 1.6 billion informal economy workers, accounting for 76 per cent of informal employment worldwide, are significantly impacted** by the lockdown measures and/or working in the hardest-hit sectors (figure 3). Almost all of these workers (over 95 per cent) are working in units of fewer than ten workers (table A3).

Among informal economy workers significantly impacted by the crisis, women are over-represented in high-risk sectors: 42 per cent of women workers are working in those sectors, compared to 32 per cent of men (figure A2).

Income losses for informal economy workers are likely to be massive. ILO estimates show that earnings for informal workers are expected to decline in the first month of the crisis by 60 per cent globally, 28 per cent in upper-middle-income countries, 82 per cent in lower-middle and low-income countries and 76 per cent in high-income countries (table 2). The high figure for high-income countries reflects the fact that the group includes large economies where

⁷ Estimates of informal employment follow the ILO harmonized definition. Employees are considered informally employed if their employer does not contribute to social security on their behalf or, in the case of a missing answer to the question in the household survey that the employer does not contribute, if they do not benefit from paid annual leave or sick leave. Employers and own-account workers are in informal employment if they run enterprises (or economic units) in the informal sector (non-incorporated private enterprises without a formal bookkeeping system or not registered with relevant national authorities). Contributing family workers are informally employed by definition, regardless of whether they work in formal or informal sector enterprises.

► **Figure 3. Informal economy workers: How many are significantly impacted?**



Note: Based on the analysis of national household survey data from 129 countries representing 90 per cent of global employment. Extrapolated to 2020 global employment and by sector. Total employment (represented in light purple) is used as the base of reference (100 per cent) for each income group of countries. Total informal employment is represented in light purple (2 billion informal economy workers). Informal economy workers significantly impacted by the crisis are represented in dark purple (1.56 billion in total). These significantly impacted workers are in countries with workplace closures and/or work in at-risk sectors. See Technical annex 2. The proportion of informal workers significantly affected is given by comparing the light and dark purple areas. Information by sectors classified by level of risk and size of enterprises available in table A3.

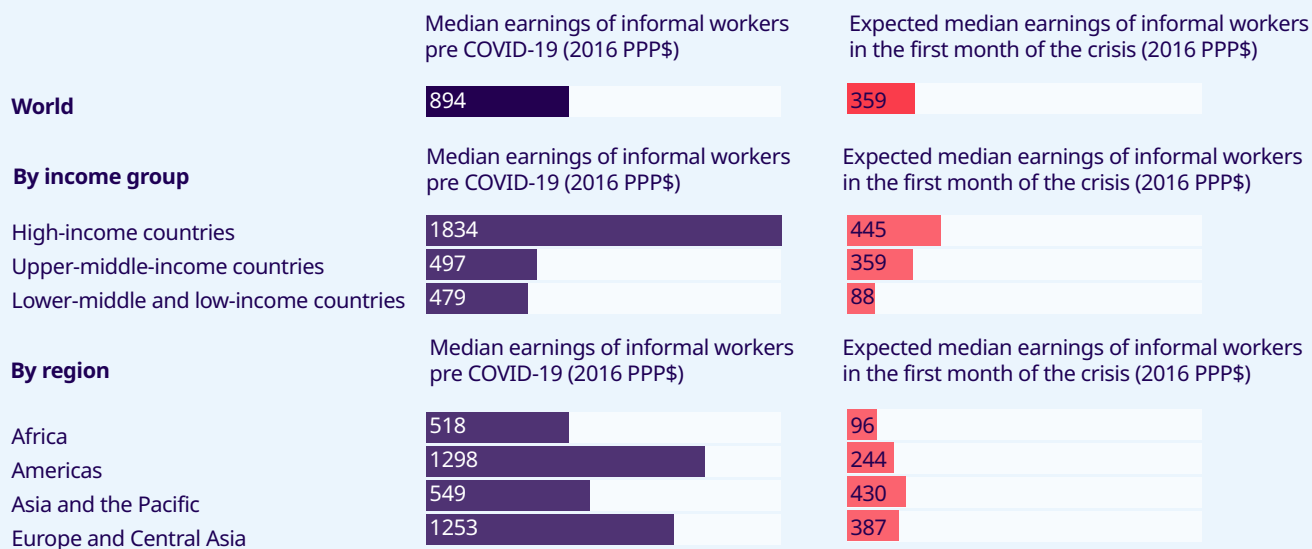
informality is substantial and which have adopted full lockdown policies. The lower figure for upper-middle-income countries is largely explained by the fact that this group comprises fewer countries with full or partial lockdown measures. By region, the expected decline is largest at 81 per cent in Africa and Latin America.

With further increases in income inequality among workers, an even greater proportion of informal economy workers will be left behind.

Assuming a situation without any alternative income sources, lost earnings would result in an increase in the rate of relative poverty (defined as

the proportion of workers with monthly earnings that fall below 50 per cent of the median earnings in the population) for informal workers and their families by almost 34 percentage points globally; more than 21 percentage points in upper-middle-income countries; around 52 points in high-income countries; and 56 points among lower and low-income countries (figure 4).

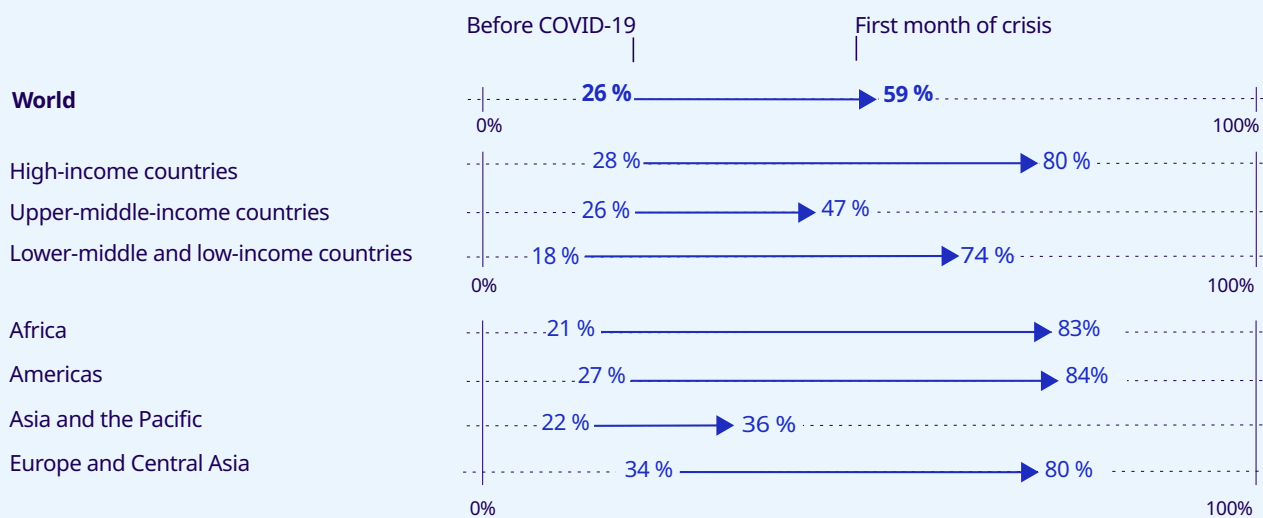
► **Figure 4.**
Potential impacts of the pandemic on earnings of informal workers



Note: Estimates are based on weighted averages from 64 countries with data collected on a time interval between 2016 to 2019. Earnings include earnings from own-account workers, employers self-reported earnings and wages of wage employees. The estimates exclude unpaid family workers who are not usually asked to declare monetary earnings. Whenever possible, estimates include earnings from jobs other than the main job. The original local currency values have been converted to constant 2016 PPP dollars. The countries covered represent 65 per cent of the world's employees and include the economies with the largest population in each region. No data is available for Arab economies.

Potential impacts of the pandemic on poverty levels of informal workers

Expected rise in relative poverty rates of informal workers



Note: Estimates are based on weighted averages from 64 countries with data collected on a time interval between 2016 to 2019. Earnings include earnings from own-account workers, employers self-reported earnings and wages of wage employees. The estimates exclude unpaid family workers who are not usually asked to declare monetary earnings. Whenever possible, estimates include earnings from jobs other than the main job. The original local currency values have been converted to constant 2016 PPP dollars. Relative poverty is defined as the proportion of workers with monthly earnings that fall below 50 per cent of the median monthly earnings. The countries covered represent 65 per cent of the world's employees and include the economies with the largest population in each region. No data is available for Arab economies.

Policy responses: Protecting both enterprises and employment

Immediate support is needed for enterprises and workers around the world on an unprecedented scale across all pillars of the ILO’s policy framework (see figure 5).

This edition of the ILO Monitor highlights the urgency of policy actions to protect both

enterprises, particularly smaller businesses, and workers, especially when operating and working in the informal economy. Guided by the ILO policy framework, effective policy measures need to be developed with strong attention to the following issues.

Support to businesses and jobs need to target the most vulnerable in order to mitigate the economic and social consequences of the confinement period. Given the vulnerability of small

► Figure 5. Policy framework: Four key pillars to fight COVID-19 based on International Labour Standards

Pillar 1

Stimulating the economy and employment

- ▶ Active fiscal policy
- ▶ Accommodative monetary policy
- ▶ Lending and financial support to specific sectors, including the health sector

Pillar 2

Supporting enterprises, jobs and incomes

- ▶ Extend social protection for all
- ▶ Implement employment retention measures
- ▶ Provide financial/tax and other relief for enterprises

Pillar 3

Protecting workers in the workplace

- ▶ Strengthen OSH measures
- ▶ Adapt work arrangements (e.g. teleworking)
- ▶ Prevent discrimination and exclusion
- ▶ Provide health access for all
- ▶ Expand access to paid leave

Pillar 4

Relying on social dialogue for solutions

- ▶ Strengthen the capacity and resilience of employers’ and workers’ organizations
- ▶ Strengthen the capacity of governments
- ▶ Strengthen social dialogue, collective bargaining and labour relations institutions and processes

enterprises and workers in the informal economy, governments should explore all options to finance measures that support firms and their workers and provide adequate social protection. As shown above, substantial numbers of own-account-workers, micro and small businesses, and people in the informal economy are highly vulnerable to the impact of the pandemic in developing countries.

International coordination on stimulus packages is critical to make the global recovery more effective and sustainable. As called for by the UN Secretary-General, the international community can play a decisive role in supporting countries with very limited fiscal space by providing liquidity and financial assistance and by relieving or postponing payment of foreign debt.⁸ The G20 support to the time-bound suspension of multilateral and bilateral debt service payments for low-income countries is a significant step in the right direction, as is the potential debt relief urged by the IMF and the World Bank.

Effective responses require speed and flexibility. Swift policy action, based on country-specific contexts (structure of enterprises' composition, level of informality, etc.) will be essential at each distinct phase of the COVID-19 crisis: containment measures and reduction of economic activity, re-activation once the pandemic is under control, and recovery. Policies and programmes should remain flexible and result from consultation with the social partners, with monitoring in place to maintain, adjust and phase out interventions as appropriate.

Governments need to continue to expedite assistance to businesses and workers. Governments should prioritize simplifying and expediting procedures to access unemployment benefits, extend support to own-account workers and make it easier for firms, especially small and informal ones, to access credit and loan guarantees. As much as possible, existing but simplified administrative channels should be used, such as bank relationships or existing social security schemes, to provide for fast and efficient access to support funds.

Policies need to focus on providing income support for both businesses and workers to maintain economic activities, with special attention to enterprises that are at greater risk of business failure and to the self-employed and workers who are more likely to fall into long-term unemployment or underemployment. Temporary waivers or rescheduling of taxes and other payments should be introduced to preserve livelihoods and prevent bankruptcies. Temporary subsidies to firms to

cover labour costs and the extension of credit lines and loan guarantees at concessional terms should be considered to support employment retention. Short-time working arrangements are helping more advanced economies cope with the drop in labour demand thus far, as this allows businesses to maintain employment relationships more easily and to prevent mass layoffs.

Tailored responses are needed to reach and support small businesses, through combined measures of direct financial support and loan guarantees to avoid saddling firms with too much debt (but conditional on retaining workers). Preparedness to identify and expand financial resources is therefore essential to deal with high demand for lines of credit. For small businesses, microfinance and semi-formal financial institutions can constitute an effective means of reaching enterprises and own-account workers operating in the informal economy.

Income support for workers and enterprises operating in the informal economy is critical to prevent them from plunging far deeper into poverty. As there is little time to design new schemes, successful programmes should be prioritized and scaled up, such as cash transfers, child allowances and programmes used for shelter and food relief. In many cases, conditional and unconditional cash transfers may be needed for an extended period of time. Income support for poor workers and households is vital for firms, especially those that produce consumption goods.

In the reactivation phase, policies should target the provision of timely information about the status of containment measures and exit strategies. Exit from containment should take advantage of social dialogue to ensure that reopening of workplaces occurs with safeguards for the safety of workers and consumers. Many sectors will require governments to coordinate the distribution of essential inputs to firms and provide support to reprogramming production towards the health sector and essential products and services.

Longer-term, large public investments are needed to boost employment and crowd in private investment. Governments could accelerate economic growth and boost employment with measures such as employment-intensive public investment, government procurement that provides preferences to small businesses, and tax incentives to stimulate local sourcing of larger firms. Investments in upgrading physical and social infrastructure can

⁸ Available at: https://www.un.org/sites/un2.un.org/files/un_policy_brief_on_debt_relief_and_covid_april_2020.pdf

improve firms' access to supplies and offer new market opportunities, including opportunities to mitigate and adapt to climate change.

Job-rich recovery will lay the foundation for inclusive and sustainable growth. As shown above, the impact of the pandemic is likely to be uneven, adding significantly to existing vulnerabilities and inequalities. In the recovery phase, greater attention should be paid to the strengthening of employment policies to support enterprises and workers, along with strong labour market institutions and comprehensive and well-resourced social protection systems, including care policies and infrastructure, that kick in automatically and in an inclusive way as crises occur.

International Labour Standards need to be the guiding framework for interventions at all steps of the process. Recommendation No. 204 concerning the Transition from the Informal to the Formal Economy⁹ and Recommendation No. 205 concerning Employment and Decent Work for Peace and Resilience¹⁰ are particularly relevant for small enterprises and the informal economy. These standards have been approved at the global level and in a tripartite manner, therefore providing consensus-based solutions.

9 https://www.ilo.org/employment/units/emp-invest/informal-economy/WCMS_443501/lang-en/index.htm

10 Available at: <https://www.ilo.org/global/topics/employment-promotion/recovery-and-reconstruction/r205/lang-en/index.htm>

► Annexes

► **Table A1. Employment in countries with workplace closures (as of 22 April 2020)**

Refers to countries implementing required or recommended workplace closures.

	Employed in countries with workplace closures (in millions)	Share of employed in countries with workplace closures (%)	Employers in countries with workplace closures (in millions)	Share of employers in countries with workplace closures (%)	Own-account workers in countries with workplace closures (in millions)	Share of own-account workers in countries with workplace closures (%)
World	2,259	68	71	82	740	66
Low-income countries	75	25	2	31	40	27
Lower-middle-income countries	1,119	98	32	100	540	97
Upper-middle-income countries	502	39	19	62	115	31
High-income countries	563	96	19	96	44	94
Africa	265	56	11	77	117	51
Americas	460	98	17	98	87	95
Arab States	49	89	1	76	4	69
Asia and the Pacific	1,092	57	29	71	486	65
Europe and Central Asia	393	95	13	96	45	94
World without China	2,259	88	71	93	740	84

Source: ILOSTAT, ILO modelled estimates, November 2019 and The Oxford COVID-19 Government Response Tracker.

► Table A2. Informal economy workers living in countries with mandatory workplace closures and/or full, partial or weak lockdown measures

	Workplace closure (required)		Full lockdown ¹	Partial lockdown ¹	Share of informal workers living in countries with full or partial lockdowns (%)
	Informal workers living in countries with workplace closures (millions)	Share of informal workers in countries with workplace closures (%)	Informal (millions)	Informal (millions)	
World	1 274	64	1 082	304	67
Low-income countries	69	27	67	50	46
Lower-middle-income countries	878	90	831	85	94
Upper-middle-income countries	250	35	143	124	37
High-income countries	76	65	40	45	72
Africa	180	46	164	101	68
Americas	177	93	122	63	97
Arab States	16	53	16	0	53
Asia and the Pacific	827	61	752	77	62
Europe and Central Asia	73	73	28	62	90

¹ Lockdown measure used for the second set of indicators: number and percentage of informal economy workers affected and decrease in labour income. Classification of 'full lockdown', 'partial lockdown' and 'weak lockdown'. **Full lockdown:** These are countries that have taken three measures, namely, (a) mandatory workplace closure, (c) mandatory internal travel controls (i.e., restriction on the internal movement of citizens); and (b) mandatory shutdown of public transport. **Partial lockdown:** At least one of the three measures taken on a mandatory basis. **Weak lockdown:** the country does not take any of the three selected measures on a mandatory basis.

Note: Based on the analysis of national household survey data from 129 countries representing 90 per cent of global employment. Extrapolated to 2020 global employment and by sector.

► **Table A3. Number and percentages of informal workers, including those significantly impacted by level of risks associated with sectors and size of enterprises**

	Impact of crisis on economic output ¹					
	High	Medium to high	Medium	Low to medium	Low	Total
World						
Total employment (millions)	1 245	384	331	880	484	3 324
Informal employment (millions), of which:	712	213	213	795	128	2 060
-- Own-account workers (%)	43	44	43	57	12	47
-- 2-9 workers (%)	26	31	28	31	22	28
-- 10-49 (%)	10	6	11	4	11	7
-- Over 50 (%)	22	19	18	8	56	18
Highly impacted informal economy workers	626	194	176	515	54	1564
% highly impacted	88	91	83	65	42	76
High income						
Total employment (millions)	256	87	70	16	159	587
Informal employment (millions), of which:	54	17	14	8	24	117
-- Own-account workers (%)	31	36	43	53	13	31
-- 2-9 workers (%)	36	31	29	22	25	31
-- 10-49 (%)	9	7	5	2	10	8
-- Over 50 (%)	24	26	24	24	51	30
Highly impacted informal economy workers	44	14	12	5	10	86
% highly impacted	81	82	86	66	43	73
Upper-middle						
Total employment (millions)	560	151	121	265	202	1 298
Informal employment (millions), of which:	303	73	78	207	56	716
-- Own-account workers (%)	30	34	16	39	11	30
-- 2-9 workers (%)	26	24	38	34	15	28
-- 10-49 (%)	17	13	25	12	10	16
-- Over 50 (%)	27	29	21	15	64	26
Highly impacted informal economy workers	182	49	46	109	9	395
% highly impacted	60	68	59	53	17	55
Lower-middle						
Total employment (millions)	369	123	125	425	107	1 149
Informal employment (millions), of which:	306	103	108	413	41	971
-- Own-account workers (%)	37	41	62	68	14	49

-- 2-9 workers (%)	42	20	20	26	29	29
-- 10-49 (%)	19	20	3	0	11	11
-- Over 50 (%)	2	20	16	6	46	10
Highly impacted informal economy workers	304	102	107	379	22	914
% highly impacted	99	99	98	92	55	94
Low-income						
Total employment (millions)	60	24	15	175	17	291
Informal employment (millions), of which:	48	20	12	168	8	256
-- Own-account workers (%)	63	38	44	57	9	52
-- 2-9 workers (%)	22	44	36	37	18	34
-- 10-49 (%)	4	4	8	2	14	4
-- Over 50 (%)	11	13	12	4	60	9
Highly impacted informal economy workers	44	18	10	123	2	197
% highly impacted	91	88	85	73	24	77

1 Groups of sectors classified according to the impact of crisis on economic output follow the classification presented in table 1.

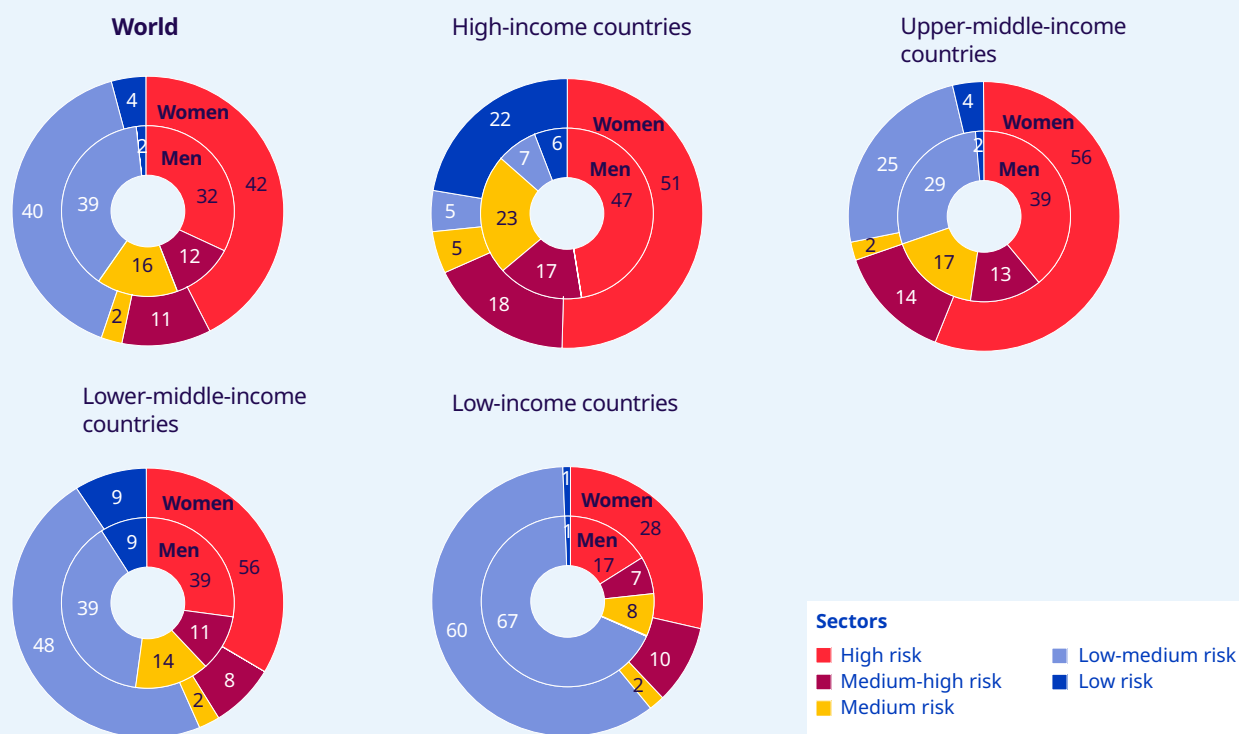
Note: Based on the analysis of national household survey data from 129 countries representing 90 per cent of global employment. Extrapolated to 2020 global employment and by sector.

► **Figure A1. Composition of total employment in sectors defined by their level of risk, formal and informal employment and size of enterprise (world and income groups of countries)**



Note: Based on the analysis of national household survey data from 129 countries representing 90 per cent of global employment. Groups of sectors classified according to the impact of crisis on economic output follow the classification presented in table

► **Figure A2. Gender differences in the impact of the crisis in the informal economy: Women are over-represented in high-risk sectors**



Note: Based on the analysis of national household survey data from 129 countries representing 90 per cent of global employment. Groups of sectors classified according to the impact of crisis on economic output follows the classification presented in table 1.

► Technical annex 1: ILO nowcasting model

The ILO has continued to monitor the labour market impacts of the COVID-19 crisis based on its “nowcasting” model. This is a data-driven statistical prediction to provide a real-time measure of the state of the labour market, which takes advantage of real-time economic and labour market data. This means that we do not explicitly define a scenario of how the crisis unfolds, but let the real-time data implicitly define this scenario.

The target variable of the ILO nowcasting model is hours worked, and more precisely the decline in hours worked that can be attributed to the outbreak of the COVID-19 crisis. To estimate this decline, we set a fixed reference period to use as the baseline, the fourth quarter of 2019 – seasonally adjusted. The statistical model produces an estimate of the decline in hours worked during the first and second quarters of 2020 compared to the fixed baseline. Hence, the figures reported should not be interpreted as a quarterly or an inter-annual growth rate.

For this edition of the Monitor, the information available to track developments in the labour market has substantially increased. Most notably, the following data sources have been added to the model: labour force survey data for the first quarter of 2020, administrative data on the labour market – such as registered unemployment – for the month of March, and up-to-date mobile phone data from Google Mobility Reports. Additionally, three weeks of data are now available for the second quarter and have been utilized in the estimates. These include Google Trends data, Oxford Stringency Index data, and data on the incidence of COVID-19. The modelling exercise itself is carried out over a period of several days. The results were finalized on 22 April, while the latest data update spanned the period from 16 to 20 April, depending on the source.

In the direct nowcasting exercise, to incorporate this greater amount of information, we have used principal component analysis (PCA) to model the relationship of these variables with hours worked. Based on available real-time data, we estimate the historical statistical relationship between these indicators and hours worked, and use the resulting coefficients to predict how hours worked reacts, given the latest observations of the nowcasting indicators. We evaluate multiple candidate relationships based on their prediction accuracy to construct a weighted average nowcast. This direct approach is used for 33 countries for which we have relevant indicators. For five countries, the input data for nowcasting were available but not the target variable itself, namely hours worked. In those cases, the coefficients estimated from a panel of countries were used to produce an estimate.

For the remaining countries, we apply an indirect approach, whereby we extrapolate the relative hours lost from countries with direct nowcasts. The basis for this extrapolation is the observed mobility decline from the Google Mobility Reports¹¹ and the index of stringency of COVID-19 containment measures published by the University of Oxford, since countries with comparable drops in mobility and similarly stringent restrictions are likely to have a similar impact on hours worked. From the Google Mobility Reports an average of the workplace and retail and recreation indices is used. The stringency and the mobility indices are combined into a single variable¹² via PCA. Additionally, for countries without data on restrictions, we use mobility data if available, and subsequently the updated incidence of the COVID-19 pandemic in each country to extrapolate the impact on hours. Given the different recording practices of countries in counting cases, we use the more homogenous concept of deceased patients as a proxy of the extent of the pandemic. We compute the variable at an equivalent monthly frequency, but the data are updated daily. The source is the European Centre for Disease Prevention and Control. Finally, for a small number of countries with no readily available data at the estimation time, we use the regional average to impute the target variable. The table below summarizes the information and statistical approach used to estimate the target variable for each country or territory.

Given the exceptional situation, including the scarcity of relevant data, the estimates are subject to a substantial amount of uncertainty. The unprecedented labour market shock created by the COVID-19 pandemic is difficult to assess by benchmarking against historical data. Furthermore, at the time of estimation, consistent time series of readily available and timely high-frequency indicators are still relatively scarce. These limitations result in a high overall degree of uncertainty. For these reasons, the estimates will be subject to regular updates and revision.

¹¹ Adding this variable allows to strengthen the extrapolation of results to countries with more limited data by using the Google Mobility Reports alongside the Oxford Stringency Index, to account for differential implementation of containment measures. The variable has only partial coverage of the first quarter, and hence for the estimates of the first quarter only the stringency and COVID-19 incidence data are used. The source of the data can be found in the following link: <https://www.google.com/covid19/mobility/>.

¹² Missing mobility observations are imputed on the basis of stringency.

Approach	Data used	Model	Reference area
Nowcasting	High frequency data including: Labour force survey data, Administrative register labour market data, PMI indices (country or group), Google trends, Consumer and Business Confidence Surveys	U-midas/Panel data regression PCA for data aggregation	Argentina, Australia, Austria, Belgium, Brazil, Canada, Cyprus, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Latvia, Lithuania, Malta, Mexico, Montenegro, Netherlands, North Macedonia, Portugal, Republic of Korea, Slovakia, Slovenia, Spain, Sweden, Thailand, Turkey, United Kingdom, United States
Extrapolation based on high-frequency labour market-related data	High frequency data including: Administrative register labour market data, PMI indices (country or group), Google trends, Consumer and Business Confidence Surveys	U-midas/Panel data regression/ Pooled regression PCA for data aggregation	Albania, China, Japan, Luxembourg, Switzerland
Extrapolation based on mobility and containment measures	Google Mobility Reports(Q2 only) and/or Containment Stringency	Pooled regression by quarter PCA for data aggregation	Afghanistan, Algeria, Angola, Australia, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belize, Benin, Bolivia (Plurinational State of), Bosnia and Herzegovina, Botswana, Brunei Darussalam, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Cabo Verde, Chad, Chile, Colombia, Costa Rica, Côte d'Ivoire, Croatia, Cuba, Czechia, Democratic Republic of the Congo, Denmark, Djibouti, Dominican Republic, Ecuador, Egypt, El Salvador, Eswatini, Fiji, Gabon, Gambia, Georgia, Ghana, Guam, Guatemala, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong-China, Iceland, India, Indonesia, Iran (Islamic Republic of), Iraq, Jamaica, Jordan, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Lao People's Democratic Republic, Lebanon, Lesotho, Libya, Macau-China, Madagascar, Malawi, Malaysia, Mali, Mauritania, Mauritius, Mongolia, Morocco, Mozambique, Myanmar, Namibia, Nepal, New Zealand, Nicaragua, Niger, Nigeria, Norway, Occupied Palestinian Territory, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Puerto Rico, Qatar, Republic of Moldova, Romania, Russian Federation, Rwanda, Saudi Arabia, Senegal, Serbia, Sierra Leone, Singapore, South Africa, Sri Lanka, South Sudan, Sudan, Syrian Arab Republic, Tajikistan, Togo, Trinidad and Tobago, Tunisia, Uganda, Ukraine, United Arab Emirates, United Republic of Tanzania, Uruguay, Uzbekistan, Venezuela (Bolivarian Republic of), Viet Nam, Yemen, Zambia, Zimbabwe.
Extrapolation based on the incidence of COVID-19	COVID-19 incidence proxy, Detailed subregion	Pooled regression by quarter	Armenia, Bhutan, Central African Republic, Congo, Equatorial Guinea, Eritrea, Ethiopia, French Polynesia, Guinea, Liberia, Maldives, New Caledonia, Saint Lucia, Saint Vincent and the Grenadines, Sao Tome and Principe, Somalia, Suriname, Timor-Leste, United States Virgin Islands.
Extrapolation based on region	Detailed subregion	Pooled regression by quarter	Channel Islands, Comoros, Korea (Democratic People's Republic of), Samoa, Solomon Islands, Tonga, Turkmenistan, Vanuatu, Western Sahara.

Note: (1) The reference areas included correspond to the territories for which ILO modelled estimates are produced; (2) A country is classified according to the type of approach used for the second quarter of 2020; (3) The results from the recent study by Alexander Bick and Adam Blandin ("Real Time Labor Market Estimates During the 2020 Coronavirus Outbreak", Working Paper, 2020) are used to compute the decline in hours for the month of April in the United States. Given Switzerland's economic activity correlation with the Eurozone's, the PMI for the latter is used to extrapolate the loss in hours. Finally, in order to model the impact for China during the first quarter of 2020, the independent variable of the regression (hours lost) and the Google trends index for the countries that are available for the second quarter are used in the regression that extrapolates the result for the country. The objective behind this exercise is to account for the fact that the extrapolation needs to be made in a quarter where, on average, the target country is affected in an exceptionally large manner.

Reference area	Time	Full-time equivalents (40 hours per week)	Full-time equivalent (48 hours per week)	Percentage hours lost
World	2020Q1	160,000,000	130,000,000	4.5
World	2020Q2	365,000,000	305,000,000	10.5
World: Low income	2020Q1	4,000,000	4,000,000	1.6
World: Low income	2020Q2	24,000,000	20,000,000	8.8
World: Lower-middle income	2020Q1	23,000,000	19,000,000	1.9
World: Lower-middle income	2020Q2	155,000,000	130,000,000	12.5
World: Upper-middle income	2020Q1	120,000,000	100,000,000	8.6
World: Upper-middle income	2020Q2	125,000,000	105,000,000	8.7
World: High income	2020Q1	9,000,000	7,000,000	1.6
World: High income	2020Q2	65,000,000	55,000,000	11.6
Africa	2020Q1	7,000,000	6,000,000	1.6
Africa	2020Q2	44,000,000	37,000,000	9.6
Americas	2020Q1	6,000,000	5,000,000	1.3
Americas	2020Q2	55,000,000	48,000,000	12.4
Americas: High income	2020Q1	2,000,000	2,000,000	1.1
Americas: High income	2020Q2	28,000,000	23,000,000	15.8
Latin America and the Caribbean	2020Q1	4,000,000	4,000,000	1.5
Latin America and the Caribbean	2020Q2	31,000,000	25,000,000	10.3
Central America	2020Q1	1,000,000	1,000,000	1.5
Central America	2020Q2	9,000,000	8,000,000	10.5
South America	2020Q1	3,000,000	2,000,000	1.4
South America	2020Q2	20,000,000	16,000,000	10.3
Northern America	2020Q1	2,000,000	2,000,000	1.1
Northern America	2020Q2	27,000,000	22,000,000	16.2
Northern America: High income	2020Q1	2,000,000	2,000,000	1.1
Northern America: High income	2020Q2	27,000,000	22,000,000	16.2
Arab States	2020Q1	1,000,000	1,000,000	1.8
Arab States	2020Q2	8,000,000	6,000,000	10.3
Asia and the Pacific	2020Q1	135,000,000	115,000,000	6.5
Asia and the Pacific	2020Q2	210,000,000	175,000,000	10.0
Asia and the Pacific: High income	2020Q1	1,000,000	1,000,000	0.7
Asia and the Pacific: High income	2020Q2	5,000,000	4,000,000	3.8
Eastern Asia	2020Q1	115,000,000	95,000,000	11.6
Eastern Asia	2020Q2	70,000,000	60,000,000	7.2
Eastern Asia: High income	2020Q1	1,000,000	1,000,000	0.6
Eastern Asia: High income	2020Q2	3,000,000	3,000,000	2.9
Europe and Central Asia	2020Q1	8,000,000	6,000,000	1.9
Europe and Central Asia	2020Q2	47,000,000	39,000,000	11.8
Europe and Central Asia: High income	2020Q1	5,000,000	4,000,000	2.4
Europe and Central Asia: High income	2020Q2	27,000,000	23,000,000	12.7

Northern, Southern and Western Europe	2020Q1	5,000,000	4,000,000	2.5
Northern, Southern and Western Europe	2020Q2	25,000,000	20,000,000	13.1
Northern Europe	2020Q1	1,000,000	1,000,000	1.7
Northern Europe	2020Q2	5,000,000	5,000,000	11.7
Southern Europe	2020Q1	2,000,000	2,000,000	3.3
Southern Europe	2020Q2	9,000,000	8,000,000	15.9
Western Europe	2020Q1	2,000,000	2,000,000	2.3
Western Europe	2020Q2	10,000,000	8,000,000	11.9
Central and Western Asia	2020Q1	1,000,000	1,000,000	1.7
Central and Western Asia	2020Q2	8,000,000	7,000,000	10.9
Western Asia	2020Q1	1,000,000	1,000,000	1.7
Western Asia	2020Q2	5,000,000	4,000,000	11.1
BRICS	2020Q1	125,000,000	105,000,000	8.1
BRICS	2020Q2	165,000,000	135,000,000	10.4

Note: Magnitudes above 50 million are rounded to the nearest 5 million, magnitudes below that threshold are rounded to the nearest million. The full-time equivalent employment losses are presented to illustrate the magnitude of the estimates of hours lost. Their interpretation is the estimate of the reduction in hours worked, if those reductions were borne exclusively and exhaustively by a subset of full-time workers and the rest of workers did not experience any hour reduction. The figures should not be interpreted as numbers of jobs actually lost nor increases in unemployment.

► Technical annex 2: Estimating the impacts of the COVID-19 pandemic on employment and labour income for informal workers

Workers in the informal economy are likely to suffer disproportionately from the adverse effects of the COVID-19 associated lockdown or social distancing measures. We quantify these effects on employment (*number of informal economy workers living in countries concerned by workplace closures*¹³ and *number of workers highly affected in the informal economy*) and on labour income (*change in the median labour monthly earnings among informal workers, and change in the rate of relative poverty*). The following procedure has been used for estimation.

Using the Oxford COVID-19 Government Response Tracker¹⁴ concerning lockdown around the world, we estimate the share of workers that are more likely to be affected by the lockdown and related measures. Estimation is made separately for non-wage workers — own-account workers/employers/contributing family workers — and informal wage employees according to enterprise size. National labour force statistics (micro data sets) are used as main sources for this estimation.

Next, using the “degree of risk factor” assigned to each of the 14 economic sectors in the *ILO Monitor: COVID-19 and the world of work. Second edition*, we estimate how these different categories of workers are distributed in at-risk sectors. A number of modifications are introduced so as to align these sectoral data with national labour force statistics. The proportion of informal workers considered as “significantly impacted” depends on lockdown measures, working in sectors most at risk and, for lower-risk sectors or partial lockdown measures, on the size of enterprises. This proportion is the highest in situations of full lockdown measures for workers in hardest-hit sectors.

By combining 14 economic sectors and three types of countries based on stringency measures, a total of 42 cells are produced, and employment and labour income effects are estimated for each cell.

For further details, see the forthcoming ILO factsheet, *“Impact of the COVID 19 on the informal economy in numbers”*.

¹³ This first indicator follows the same methodology as the one used for total employment as presented in earlier editions of the ILO Monitor, using the same selected countries affected by business closures (Oxford database, S2-indicator) and is not concerned by the method presented in this note.

¹⁴ Available at: <https://www.bsg.ox.ac.uk/research/research-projects/coronavirus-government-response-tracker>