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Second Regional Report on Jobs and Growth in North Africa (2018-21): Developments through the COVID-19 Era



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For ILO publications in Cairo:

9 Dr. Taha Hussein St., Zamalek, Cairo, Egypt

Tel: (+202) 27350123

Visit our website: www.ilo.org/cairo

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ERF Report Team

Principal investigators:

Ragui Assaad, Caroline Krafft, Mohamed Ali Marouani

Chapter authors:

Overview chapter:

Ragui Assaad, Caroline Krafft, Mohamed Ali Marouani, Ruby Cheung, Ava LaPlante, Ilhaan Omar, and Sarah Wahby

Egypt chapter:

Chahir Zaki and Moheb Said

Morocco chapter:

Fouzia Ejjanoui

Sudan chapter:

Caroline Krafft, Samia Mohamed Nour and Ebaidalla M. Ebaidalla

Tunisia chapter:

Abdel Rahman El Lahga and Moheb Said

Research assistants:

Sarah Wahby, Emilie Wojcieszynsk, Ruby Cheung, Ava LaPlante and Ilhaan Omar.

Programme manager:

Yasmine Fahim

Programme coordinators:

Passainte Atef and Neamatallah Elsayed

Communications and policy outreach:

Sherine Ghoneim, Namees Nabeel and Romesh Vaitilingam

ILO Team

Cairo office:

Eric Oechslin, Luca Fedi, Valentine Offenloch, Marwa El Feki, Greta Cartoceti and Nour Ashmawy

Morocco office:

Samia Ouzgane

Tunisia office:

Selim El Oueslati

Sudan office:

Alexio Musindo

Editing and translation:

Jen Ross

Report graphic design:

Cremedia

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► LIST OF ACRONYMS

ADWA	Advancing the Decent Work Agenda
CAPMAS	Central Agency for Public Mobilization and Statistics (Egypt)
CBS	Central Bureau of Statistics (Sudan)
CBT	Central Bank of Tunisia
COVID-19	2019 Novel Coronavirus Disease
DEPF	Directorate of Studies and Financial Forecasts (Morocco)
EGP	Egyptian pounds
ERF	Economic Research Forum
FDI	Foreign direct investment
GDP	Gross Domestic Product
HCP	Haut Commissariat au Plan (High Commission for Planning, Morocco)
ILO	International Labour Organization
INS	Institut National de la Statistique (National Institute of Statistics, Tunisia)
IMF	International Monetary Fund
MAD	Moroccan dirham
MENA	Middle East and North Africa
MSMEs	Micro, small and medium-sized enterprises
NEE	Not in employment or education
NEET	Not in employment, education or training
OAMDI	Open Access Micro Data Initiative
OECD	Organisation for Economic Co-operation and Development
p.a.	per annum
PNAFN	National Programme of Assistance to Needy Families (Tunisia)
Q	Quarter
RAMED	Régime d'Assistance Médicale (Medical Assistance Plan, Morocco)
SFSP	Sudan Family Support Programme
SMEs	Small and medium-sized enterprises
UN-ESCWA	United Nations Economic and Social Commission for Western Asia
TND	Tunisian dinar
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
USD	United States dollars

► GLOSSARY

Discouraged job-seekers: Individuals (aged 15–64) who were not employed, desired to work, were available for work and were not searching for work during the reference week.

Employed: Individuals (aged 15–64) who participated for at least one hour in economic activity (for market purposes) during the reference week.

Employment status: Whenever possible, employment status was classified into eight categories: public sector wage work, private sector wage work inside of establishment, private sector wage work outside of establishment, employer, self-employed inside of establishment, self-employed outside of establishment, unpaid/contributing family worker inside of establishment, and unpaid/contributing family worker outside of establishment.

Employment rate: Ratio of the employed to the working-age population (aged 15–64).

Labour force: Individuals (aged 15–64) either employed or unemployed during the reference week.

Labour force participation rate: Ratio of the labour force population to the working-age population (aged 15–64).

NEET (Not in Employment, Education or Training): Young people (aged 15–24) not employed or enrolled in school. The available data did not allow those in training to be taken into account.

NEET rate: Percentage of those in NEET (ages 15–24) to the overall population aged 15 to 24.

Stringency Index: The Oxford Coronavirus Government Response Tracker project calculated a COVID-19 Stringency Index, which is a composite measure based on nine indicators including: school closures, workplace closures, cancellation of public events, restrictions on public gatherings, closure of public transport, stay-at-home requirements, public information campaigns, restrictions on internal movements, and international travel controls. Values range from 0 (least stringent) to 100 (most stringent).

Time-related underemployment: Percentage of the employed (aged 15–64) working less than 35 hours per week, wanting to change work and/or wanting additional work, of total employment.

Unemployed (standard definition): Individuals (ages 15–64) who were not employed, desired to work, were available for work and were searching for work during the reference week.

Unemployment rate (standard definition): Ratio of the unemployed (standard definition) to the labour force.

Executive summary

North African countries had varying experiences during the COVID-19 pandemic, leading to substantially different economic and labour market outcomes. This report focuses specifically on the economies and labour markets of Egypt, Morocco and Tunisia, comparing the situation before and during the pandemic. While Sudan's experience is also discussed separately, so much else was going on in Sudan in terms of political upheaval and economic instability during the relevant period that it is hard to attribute changes to the pandemic. Moreover, data availability from official sources in Sudan is limited, preventing the researchers from making useful comparisons with the other three countries. This report begins by analysing data on COVID-19 cases, deaths and economic growth, as measured by gross domestic product (GDP). Analysis of the labour market based on official labour force surveys in Egypt, Morocco and Tunisia is presented, alongside and the results of COVID-19 MENA Monitor surveys carried out by the Economic Research Forum (ERF).

Regional overview

Egypt appears to have had a milder experience than the other countries, with regards to the health consequences of the pandemic, registering relatively low rates of infection and death, although there are concerns about underreporting. Morocco occupied an intermediate position, with substantial spikes in cases and deaths in the fall of 2020 and the summer of 2021. Tunisia had by far the more difficult experience, with a large increase in cases and deaths in late 2020 and then again with a huge spike in the summer of 2021. All three countries adopted stringent lockdown measures early in the pandemic. While Egypt and Morocco maintained relatively high levels of stringency in the summer of 2020, Tunisia loosened up considerably only to tighten again in the fall of 2020. Egypt's stance continued to moderate slowly through the rest of 2020 and 2021, while Morocco maintained relatively high stringency until the end of 2021. Tunisia's lockdown stance fluctuated through most of 2021 and was substantially loosened in late 2021 after the moderation of its large spike in cases that summer.

The macroeconomic consequences of the pandemic varied considerably across the three countries as well. Egypt, which was already growing faster than either of its North African neighbours prior to the pandemic, managed to maintain a positive overall growth rate of 3.6 per cent per annum (p.a.) in 2020. In contrast, the Moroccan economy contracted by 6.3 per cent and the Tunisian economy by 8.7 per cent in 2020. At the peak of the pandemic in the third quarter of 2020, the Egyptian economy contracted by only 3.1 per cent p.a. compared to contractions of 14.2 per cent p.a. in Morocco and 20.7 per cent p.a. in Tunisia. In all three countries, the most negatively affected sectors were tourism-related (the hotel and restaurant sector), although the transport sector was also strongly affected in both Morocco and Tunisia.

Analysis of data from official labour force surveys

Prior to the pandemic, North African countries suffered from high rates of unemployment and very low rates of female labour force participation relative to other parts of the world. Although unemployment rates were declining, so were labour force participation and employment rates, especially since 2011. Despite the recovery in growth rates in Egypt after the slump associated with the 2011 uprising, employment rates remained low and job quality continued to deteriorate as employment increasingly shifted from the public sector to informal wage employment

outside fixed establishments. This shift was associated with a growth pattern that favours construction, real estate and low-productivity services such as transport and distribution. Morocco's pre-pandemic labour market was characterized by the persistence of segmentation between low and high-productivity sectors, but also by rising rates of wage employment and formality. Meanwhile, Tunisia's labour market was constrained by persistently slow rates of economic growth since its own 2011 uprising, which translated into slow employment and productivity growth.

The onset of the pandemic had a negative but short-lived effect on male labour force participation in all three settings. In Egypt, male participation rates recovered quickly and even exceeded pre-pandemic levels by the fourth quarter of 2020. The most negatively affected groups of males in Egypt were men with lower levels of education and men at both ends of the age distribution. In Morocco and Tunisia, male participation dipped less than in Egypt and recovered fairly quickly, but both countries saw renewed declines in 2021.

However, the negative effects of the pandemic on participation were much more pronounced for women. This was especially true in Egypt and, with a bit of a lag, in Morocco. After recovering in early 2021, female participation rates in Morocco fell again in late 2021, a drop that has been attributed to employment conditions in the drought-affected agricultural sector. In Tunisia, female participation rates recovered quickly and continued to rise steadily throughout 2021.

Trends in employment closely followed trends in participation, but the drop in employment was more pronounced than the drop in participation for men but not for women. This suggests that falling male employment rates mostly translated into higher unemployment as men continued to seek employment, whereas women's falling employment rates translated into falling participation as women withdrew from the labour force.

The pandemic also caused a spike in unemployment in all three countries, with rates increasing by a fifth to a quarter at the height of the pandemic slowdown. However, the subsequent trajectory of unemployment varied across the three countries. In Egypt, the unemployment rate quickly recovered to pre-pandemic levels by the third quarter of 2020. In Morocco, the unemployment rate continued increasing in late 2020 and remained persistently high through to mid-2021. In Tunisia, it dropped slightly in the third quarter of 2020, but then increased again throughout 2021.

There were also important differences by gender in the trajectory of unemployment. In Egypt, where women withdrew from the workforce during the pandemic to address rising care burdens, female unemployment rates actually fell by a quarter due to discouragement and kept falling until the second quarter of 2021, only to climb back in the fourth quarter as Egyptian women started seeking employment again. The same phenomenon of female discouragement was not observed in Tunisia and Morocco. In fact, female unemployment rates kept increasing in Morocco throughout 2020, dipped slightly and then increased again by the third quarter of 2021. In Tunisia, female unemployment rates in early 2021 and continued to fall to levels just below pre-pandemic levels by the fourth quarter of 2021.

Unemployment rates tend to reflect the condition of the labour market for young new entrants, especially the educated among them, but are a poor measure of employment inadequacy for informal workers who simply cannot afford to remain without any work. A better measure of their employment problems is time-related underemployment, defined as the proportion of the employed working fewer than 35 hours per week due to an inability to find more work. Despite the fact that this indicator is very sensitive to cyclical and seasonal conditions in the labour market, it is unfortunately only collected once per year in Egypt and not available at all for Tunisia. Data from Morocco indicate that the time-related underemployment rate is the most sensitive indicator of the state of the labour market during shocks such as the pandemic. This rate spiked in the second quarter of 2020, increasing by nearly 50 per cent. It then took two quarters to return to its pre-pandemic levels, but increased again in late 2021 in response to drought-induced slowdowns in Moroccan agriculture. Unlike the unemployment rate, this indicator is much more responsive to the labour market problems faced by less educated workers engaged in more informal and casual forms of employment.

Summary of results from COVID-19 MENA Monitor surveys

The COVID-19 MENA Monitor surveys followed a sample of mobile-phone-owners and micro, small, and medium-sized enterprises (MSMEs) over time in Egypt, Morocco, Sudan and Tunisia. This report specifically examines responses related to job loss and recovery, the challenges facing wage workers, household income changes, social assistance and the impact of the pandemic on MSMEs. Households' outcomes are examined from November 2020 to August 2021 while firms' outcomes are analysed from the first quarter (Q1) through the third quarter (Q3) of 2021.

Informal private sector wage workers tended to be the most affected by layoffs and decreased earnings, particularly those outside establishments. Public sector workers, followed by private sector formal workers, were less affected. Whether their conditions improved over time varied across countries, with substantial improvements from November 2020 to June 2021 in Tunisia, but less so and more variably by type of work in other countries. Overall, challenges clearly persisted in the labour market, particularly for those workers who were the most vulnerable pre-pandemic. Income losses were more persistent than job losses during the pandemic. Furthermore, income losses increased inequality, being more acute in the

first (poorest) quartile in Morocco and Egypt and in the second quartile in Tunisia, while the fourth (richest) quartile had the fewest income losses. Concerningly, income losses have been relatively persistent over time, not showing much progress or change.

Social assistance – both pre-existing programmes and new emergency assistance programmes – played an important role in the pandemic response. Social assistance decreased over time, particularly in Morocco and less so in Tunisia, but increased in Egypt and especially Sudan. Social assistance was only variably or weakly targeted to those who experienced the largest negative impacts. Although targeting improved over time in Morocco, it worsened in Egypt.

Results from the MSME surveys in the COVID-19 MENA Monitor indicate that small and medium firms were more likely to be open and operating normal hours than microenterprises. Generally, reductions in operations and demand have translated into reduced revenues for firms. As was the case with household income, the revenue losses persisted longer than the closures experienced by firms.

► Egypt

Egypt's economy has been more resilient during the pandemic than those of its North African neighbours. Nevertheless, pre-existing structural features – such as the crowding-out effects associated with bank credit being increasingly diverted away from the private sector to finance the budget deficit – have remained sources of economic vulnerability. As expected, the most affected economic sector was accommodation and food services, but non-oil manufacturing was also negatively affected due to disruptions in supply chains.

A number of government policy responses helped curb the negative effects of the pandemic in Egypt, including a stimulus plan equal to about 1.8 per cent of GDP. This plan included monetary measures, such as loan payment deferrals and new refinancing instruments. At the social level, more funds were allocated to expand existing cash-transfer programmes to needy families and a new temporary monthly allowance directed to irregular workers was introduced.

The pandemic was associated in Egypt with falling rates of public and private investment as well as a declining share of both exports and imports in GDP. It was also accompanied by a sharp rise in external indebtedness and an increase in external imbalances, which were further exacerbated by the Russia-Ukraine war and rising interest rates globally, which eventually led to a substantial devaluation of the currency.

Even prior to the pandemic, the Egyptian labour market had been suffering from rising employment vulnerability and increased discouragement, especially among women. Falling female labour force participation was greatly exacerbated by COVID-19 and recovered only partially in 2021. As women pulled out of the labour force and stopped searching for work, female unemployment rates also declined, in contrast to the situation of men who saw unemployment rates spike briefly during the pandemic. Rates

of time-related underemployment show substantial increases in 2020, especially for less-educated self-employed workers and for those in agriculture and construction. Finally, Egyptian young people not in education, employment or training continue to be a major challenge, especially among women. These findings confirm the existence of important disparities amid the pandemic.

► Morocco

Morocco's economy was strongly impacted by the closures imposed during the pandemic but also by severe drought conditions that affected Moroccan agriculture. These factors resulted in a contraction of 6.3 per cent of GDP in 2020, followed by a rebound of 7.4 per cent in 2021, led by the agricultural sector. Both exports and imports declined disproportionately in 2020.

On the employment front, agriculture continued to be the largest sector in the Moroccan economy, but its contribution fell steadily from 45 per cent in 2000 to under 30 per cent in 2020. The fastest-growing sectors for employment were transportation and storage, communications, and construction. Moroccan authorities have implemented various programmes and strategies to mitigate the impacts of the pandemic and revive economic activity, which contributed to the recovery of the manufacturing and construction sectors. Recovery in the agricultural sector was more likely attributable to favourable rainfall conditions.

Participation rates in the Moroccan labour market were already on a downward trend, but were further exacerbated by the pandemic and the drought conditions in agriculture. This especial-

Meanwhile, the stabilization programmes adopted in response to the pandemic did not address Egypt's deep-rooted structural problems related to employment and inclusive growth. This suggests the need to shift towards more structural policies directed at labour-intensive sectors in order to create more jobs (especially for youth and women).

ly affected women. Participation rates recovered somewhat in 2021, but dipped again towards the end of the year. Unemployment rates had also been on a downward trend prior to the pandemic, a decline that was reversed during the pandemic, for both men and women. The rise in unemployment rates lasted longer for women than men, but eventually abated.

The most sensitive indicator to changes in labour market conditions in Morocco during the pandemic is the time-related underemployment rate, which spiked in the second quarter of 2020, gradually abated by the fourth quarter of 2020 and then increased slightly in 2021, reflecting conditions in Moroccan agriculture. The most-affected groups by this kind of underemployment were youth and those with a less than secondary certificate.

The impact of the pandemic on Morocco's economy was exacerbated by drought conditions in its agricultural sector, which accounts for a substantial share of employment. This was reflected in a decline in participation and an increase in underemployment, with marginalized groups such as women and youth being most affected.

► Sudan

Sudan experienced a number of political and economic challenges during the same period as the pandemic. President Omar al-Bashir was ousted in early 2019, and a new transitional government was formed later in the year. Rampant inflation accelerated in 2020, even pre-pandemic, and eventually the currency was devalued in early 2021. In October 2021, the military detained civilian members of the transitional government. Counter-protests followed, and attempts were made to reinstate civilian leadership, but political difficulties remain acute.

When the pandemic began, Sudan's lockdown measure response was relatively stringent. Cash, food and hygiene items were provided to families during lockdown. The stringency of closure measures had moderated by fall 2020, with some brief periods of elevated stringency during infection waves in 2021. Government assistance during the pandemic included raises in the public sector, financial assistance for small firms and some unemployment benefits to laid-off workers. In 2021, Sudan also worked to expand

the Sudan Family Support Programme (SFSP or 'Thamarat') nationally, to provide cash transfers to households. However, domestic currency depreciation and high levels of debt and inflation constrained Sudan's ability to provide social protection and an effective COVID-19 response.

Sudan's economy contracted in 2018–20, at a rate worse in 2020 (-3.6 per cent) than in any of the other years, which was likely due at least in part to the pandemic. Since Sudan's last official labour force survey was in 2011, analyses of the labour market situation relied on the COVID-19 MENA Monitor phone survey data. There are persistent gender disparities in Sudan's labour market, with lower employment and labour force participation for women than men. Women also face higher unemployment rates than men. A large share of youth are not in education or employment, and time-related underemployment is also high, emphasizing the underutilization of Sudan's human resources. Most of Sudan's employment is self-employment, particularly in agriculture and retail.

► Tunisia

Tunisia experienced a severe surge in COVID-19 cases and deaths as late as the summer of 2021. The pandemic amplified the economic challenges Tunisia had been experiencing since its 2011 uprising. Highly dependent on tourism and other services, Tunisia's economy was severely affected by the pandemic, contracting by 8.7 per cent in 2020 and only then growing by 3.3 per cent in 2021. The Tunisian sector that was most affected by the pandemic in 2020 was the accommodation and food services sector, followed by transportation and construction. However, the drought-affected agriculture sector was the only sector to record negative growth in 2021.

Tunisia adopted a number of social protection measures to assist vulnerable workers and poor households. However, due to budgetary pressures, this assistance was fairly short-lived and did not last beyond the summer of 2020.

While labour force participation rates were only weakly affected by the pandemic in Tunisia, there were larger effects on employment and unem-

ployment rates. Both male and female employment rates declined in the second quarter of 2020. Male employment rates recovered but declined again and remained depressed throughout 2021, reaching their lowest level in three years in the third quarter of 2021. In contrast, female employment rates recovered and had exceeded their pre-pandemic levels by the first quarter of 2021. Similarly, male and female unemployment spiked in the second quarter of 2020, recovered and remained on a rising trend until the third quarter of 2021. By the fourth quarter, unemployment rates among women had fallen below their pre-pandemic levels, albeit remaining far higher than the overall rate for men. Conversely, unemployment among men, and male youth in particular, remained above pre-pandemic rates by the fourth quarter of 2021. Over time, the labour force participation rate has also increased among women and decreased among men, suggesting that discouragement is higher among men than women – the opposite trend to Egypt.

► Chapter 1. Regional overview: Economic growth and labour market outcomes in North Africa (2018-21)



By:

Ragui Assaad: University of Minnesota.

Caroline Krafft: St. Catherine University.

Mohamed Ali Marouani: Paris 1 Panthéon-Sorbonne University and the Institute of Research for Development.

Ruby Cheung, Ava LaPlante and Ilhaan Omar: St. Catherine University.

Sarah Wahby: University of Minnesota.

1. Introduction

The COVID-19 pandemic presented enormous challenges for governments, firms, workers and households in North Africa. Closure policies and government efforts to cushion the impact of the pandemic on lives and livelihoods as well as pre-existing challenges have shaped the evolution of the labour market. This report explores jobs and growth in North Africa during the COVID-19 era. This regional overview examines COVID-19 cases, policy responses, economic growth, official labour force statistics and labour market impacts of COVID-19 based on phone survey data. Given the absence of official labour force survey data for Sudan for the relevant period and the insufficient level of detail on its macroeconomic data, we focus the discussion in the regional overview on Egypt, Morocco and Tunisia, for which comparable data are available. We bring Sudan into the discussion when we present the results of the COVID-19 MENA Monitor Surveys in Section 4, which are available for Sudan.

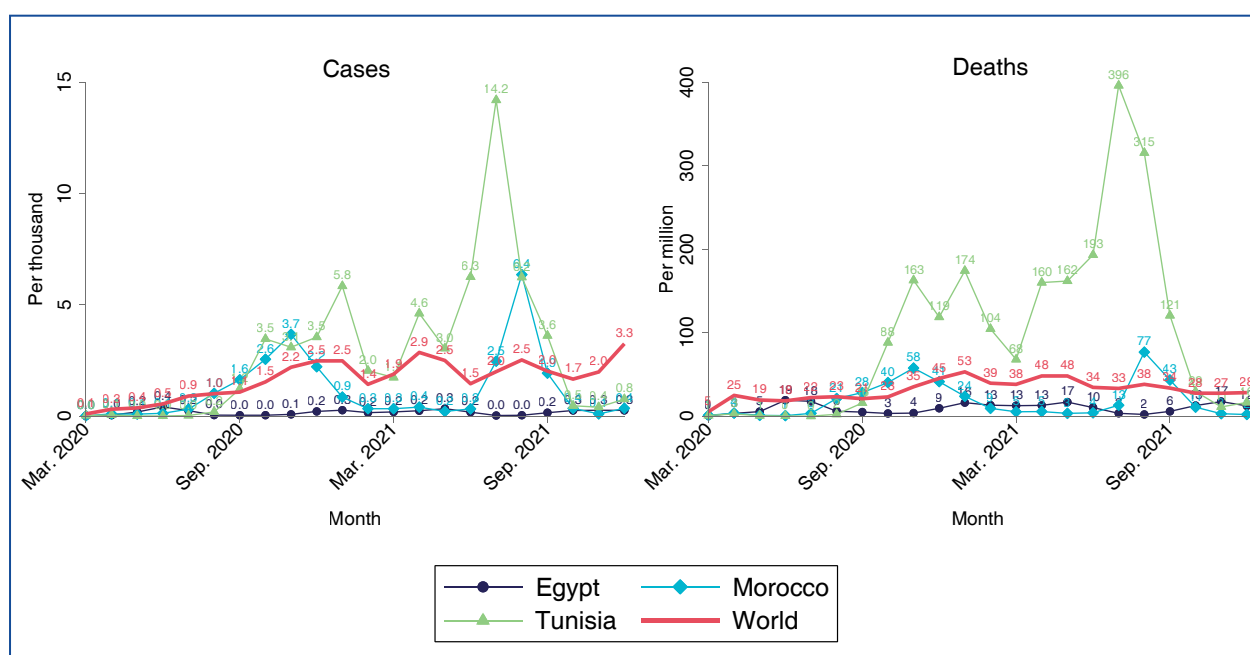
2. Policy responses to COVID-19

► 2.1 Egypt, Morocco and Tunisia had varying experiences of the pandemic

The pandemic's virulence over time, its economic fallout and the policy responses adopted in response varied across Egypt, Morocco and Tunisia. As shown in Figure 1, the number of reported COVID-19 cases per thousand and deaths per million in Egypt were well below the world average. Even accounting for underreporting, Egypt seems to have had a much milder experience with the health consequences of the pandemic than its two North African neighbours. Morocco

occupied an intermediate position, with COVID-19 cases and deaths spiking in November 2020 and then again in October and November 2021. Tunisia had by far the more difficult experience of the three countries, with cases rising in the fall of 2020 and peaking in February 2021, then falling off slightly and rising sharply again in the summer of 2021. In August 2021, the COVID-19 death rate in Tunisia reached a peak of 396 per million – more than ten times the world average.

Figure 1. Monthly new COVID-19 cases (per thousand) and deaths (per million), by country, March 2020 to December 2021

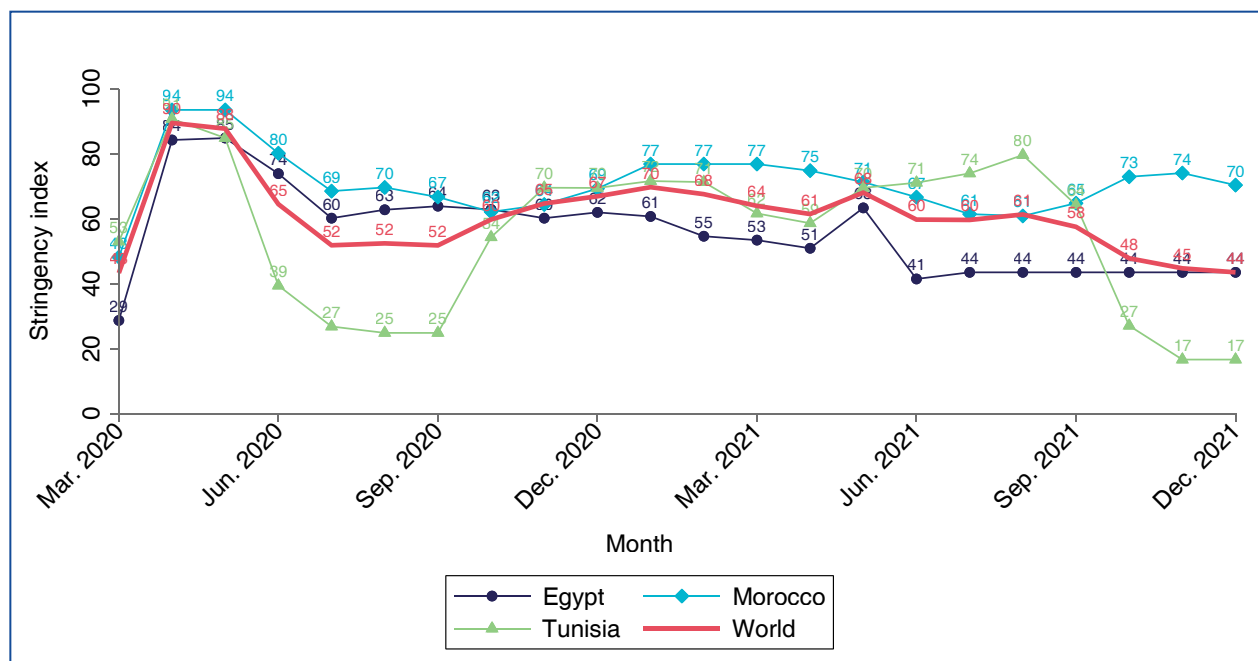


Source: Authors' calculation, based on data from Ritchie et al. 2020.

The public health responses of the three countries to the pandemic also varied substantially. As shown in Figure 2, all three adopted very stringent closure policies early in the pandemic, in April and May 2020, with a stringency index¹ roughly equal to the world average (it was somewhat higher for Morocco and somewhat lower in Egypt). By June 2020, Tunisia had loosened its stance considerably below that of the world average, while Egypt and Morocco only loosened theirs somewhat, remaining above the world average.² Tunisia reversed its loosening in September 2020 as it was hit by a surge in cases, to reach a stringency index well above the world average by November 2020. It then remained at par with the world average of stringency through May 2021, only to tighten further in response to the summer 2021 upsurge. By October 2021, Tunisia had begun substantial loosening, which it maintained through December 2021.

Morocco tightened its policy stance in reaction to its fall 2020 surge in cases, and continued tightening through January 2021, stabilizing at that high stringency level through April 2021, before loosening temporarily through August 2021, and retightening in the fall of 2021. Morocco's stance remained above the world average in stringency throughout these periods. Egypt, on the other hand, adopted a gradual loosening that lasted through June 2021, with the exception of a temporary tightening in May 2021, coinciding with an upsurge of cases. It then stabilized its policy stance at a moderate level through the end of 2021.

Figure 2. Monthly stringency index, by country, March 2020 to December 2021



Note: The stringency index ranges from 0 (least stringent) to 100 (most stringent).

Source: Compiled by authors, based on data from Hale et al. 2021.

¹ The stringency index measures the extent of closures, from none (zero) to totally closed (100).

² Closure policies adopted in each country and how they changed over time are shown in Appendix Table A.1.

► 2.2 Economic and social policy responses to the pandemic

Countries undertook a variety of approaches to try to mitigate the economic and social impacts of the pandemic. As shown in Table 1, the level of response of the three countries varied in proportion to the fiscal space available to them and to their pre-existing economic situation. The size of their fiscal response varied from a low of 1.8 per cent of gross domestic product (GDP) in Egypt, to 2.3 per cent in Tunisia, to 3 per cent in Morocco – all of which were well below the world average fiscal response of 10.2 per cent of GDP (IMF 2021; OECD 2021). The economic interventions consisted of monetary, regulatory and fiscal measures as well as policies targeted to specific industries and to small and medium-sized enterprises (SMEs). The latter included loan payment deferrals, tax delays and reductions, as well as salary subsidies in some cases (See Table 1).³

With regard to social interventions, the three countries relied heavily on existing social protection programmes, such as: the Takaful and Karama cash transfer programmes for needy families in Egypt; the Medical Assistance Plan (RAMED) free health insurance scheme in Morocco; and the National Programme of Assistance to Needy Families (PNAFN) cash transfer programme in Tunisia. Besides expanding the scope and coverage of these programmes, all three countries instituted ad hoc programmes to reach informal workers' households, which are not usually covered by social safety nets. Success rates in targeting such programmes to those who needed them the most varied across countries (Assaad et al. 2022; Krafft et al. 2022; Marouani et al. 2022).

Table 1. Summary of selected economic and social protection policies adopted by Egypt, Morocco and Tunisia

Policies	Categories	Egypt	Morocco	Tunisia
		Stimulus policies: 100 billion Egyptian pounds (EGP) (equivalent to USD 6.4 billion and 1.8 per cent of GDP)	Special fund dedicated to the management of the pandemic of 33.7 billion Moroccan dirham (MAD) in June 2020 (about USD 3.7 billion and 3 per cent of GDP) and expenses of MAD 24.7 billion (USD 2.7 billion) as of the end of July 2021	A 2.6 billion Tunisian dinar (TND) emergency plan was created (equivalent to USD 1 billion and 2.3 per cent of GDP)
	Small and medium-sized enterprises	Support for small projects impacted by COVID-19, mostly in the industrial and labour-intensive sectors, using short-term loans of up to a year to secure the necessary liquidity for operational expenses Microlenders were advised by the Financial Regulatory Authority to consider delays on a case-by-case basis	Establishment of a fund to extend state loan guarantees and deferral of social insurance contributions to firms Businesses with fewer than 500 employees experiencing difficulties were authorized to defer social insurance contribution payments Small and medium-sized businesses and self-employed people were allowed to postpone loan payments and leasing contracts	Cash support to firms (April–May 2020) Guaranteed repayment mechanism for new credit to affected enterprises Support funds for SMEs as well as companies in financial difficulties were established

³ These measures are discussed in more detail in Krafft, Assaad and Marouani 2021a, 2021b, 2021c, 2022.

	Social protection	Regular pensions were increased by 14 per cent	Informal workers benefiting from RAMED received a monthly cash transfer	Support for temporarily unemployed workers
	Regular programmes	Expansion of Takaful and Karama cash transfer programme. By June 2021, 411,000 households were added to the programme's list, which by then included a total of 3.4 million households	Others not benefiting from RAMED could obtain similar support through registration	
	Social protection	Support for 1.6 million irregular workers: EGP 500 in monthly grants (USD 32) for 3 months extended for three more instalments, ending in March 2021	Starting in April 2020, laid-off employees covered by social insurance were allowed to collect a cash transfer of MAD 2,000 per month (USD 227) with coverage currently extended through March 2021.	Households eligible for subsidized health care (470,000 households) received two payments (worth around USD 74 each) in April and May 2020 and a further 300,000 vulnerable households received one such transfer in May 2020
	New programmes	EGP 100 billion (USD 6.4 billion) consumer spending initiative: two-year low-interest loans to pay for consumer goods at discounted rates. Households with ration cards received EGP 200 per household member up to EGP 1,000 (USD 64) in additional spending power per month	In April 2020, almost 1 million workers from 134,000 companies were eligible for these transfers	

Source: Krafft, Assaad and Marouani 2022.

3. Growth and jobs in North Africa in the COVID-19 era

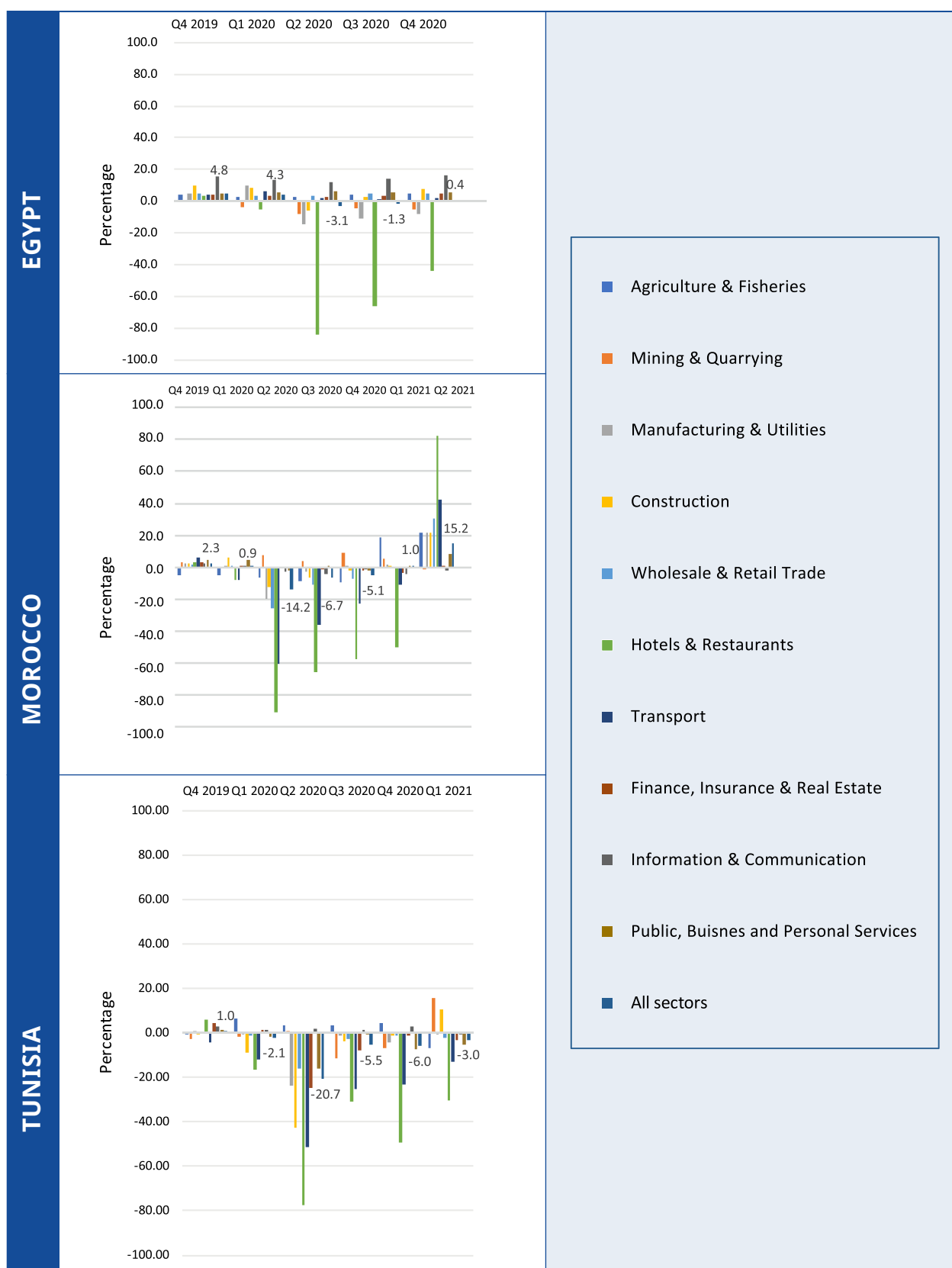
► 3.1 Macroeconomic developments through the pandemic

The economic effects of the pandemic varied widely across country and across sector of economic activity. As shown in Figure 3, the Egyptian economy was growing faster than either the Moroccan or Tunisian economy prior to the onset of the pandemic. Egypt took longer to be negatively affected by the pandemic and, when it was, the effects were milder. At the peak of the pandemic in the third quarter (Q3) of 2020, the Egyptian economy contracted by only 3.1 per cent per annum compared to 14.2 per cent in Morocco and 20.7 per cent in Tunisia. Egypt managed to return to positive growth by the fourth quarter (Q4) 2020 and Morocco by Q1 2021, whereas Tunisia's economy was still contracting through the first quarter (Q1) of 2021. Overall, for the entire 2020 calendar year, Egypt managed to have a positive growth rate of 3.6 per cent per annum, whereas the Moroccan economy contracted by 6.3 per cent and the Tunisian economy by 8.7 per

cent (World Bank 2022). Growth in Egypt slowed slightly in 2021 to 3.3 per cent per annum; recovered in Morocco to 7.4 per cent per annum; but remained fairly sluggish in Tunisia at 3.3 per cent per annum (World Bank 2022).

In all three countries, the hotel and restaurant sector was the most negatively affected, contracting by more than 80 per cent relative to the previous year in Q3 of 2020 in all three countries. However, the transport sector was also very strongly affected in Morocco and Tunisia, albeit less so in Egypt. The manufacturing and construction sectors were also fairly negatively affected in all three countries, especially in the second quarter (Q2) of 2020, but much more so in Tunisia than in Egypt and Morocco. Construction recovered more quickly than manufacturing, returning to growth by Q3 2020 in Egypt, Q1 2021 in Tunisia and Q2 2021 in Morocco.

Figure 3. GDP growth rates (percentage) by industry and country, Q4 2019–Q2 2021



Note: Growth rates are in real terms and compared to the same quarter a year earlier. Data labels are for “all sectors”.

Source: Ministry of Planning and Economic Development (Egypt); Haut Commissariat au Plan (HCP) (Morocco); and Institut National de la Statistique (INS) (Tunisia).

► 3.2 Regional overview of labour market conditions during the COVID-19 pandemic

This regional overview uses quarterly data from official labour force surveys to assess the trajectory of labour markets in Egypt, Morocco and Tunisia from Q1 of 2018 to Q3 of 2021, or as far into 2021 as data permit. Due to limitations in access to data on Tunisia, the level of detail available for Tunisia is much more limited than for the other two countries.

It is by now well established that, as a region, North Africa has had some of the highest unemployment rates in the world, both overall and for youth, and, together with the Middle East, some of the lowest female labour force participation

rates in the world (ILO and ERF 2021). While the trend in unemployment rates has been downward over the past two decades, so have trends in labour force participation and employment rates, especially since 2011. The declining trend in the unemployment rate can be attributed to demographic rather than economic developments. In particular, it is likely due to the slowing growth of the youth and young adult populations, which is the demographic most susceptible to unemployment in the region, rather than to any positive developments on the employment front (Assaad 2022; ILO and ERF 2021).

► 3.2.1 Labour market developments in the period leading up to the pandemic

All three countries suffered from long-term structural problems in their labour markets prior to the pandemic that limited both the quantity and quality of job creation (Amer, Selwaness and Zaki 2021; Belghazi 2022; El Lahga, Ghali and Helel 2021).

Despite the resumption of growth in Egypt after the crisis that followed the 25 January 2011 uprising and the adoption of International Monetary Fund (IMF)-supported macroeconomic reforms in 2016, the employment-to-population ratio continued falling through 2019 (Amer, Selwaness, and Zaki 2021). The quality of jobs created had also been declining over time as employment creation increasingly shifted from public sector employment to informal wage employment outside of establishments – a highly precarious and vulnerable form that is associated with an increase in working poverty (Amer, Selwaness, and Zaki 2021). The growth in the share of informal wage employment outside of establishments is linked to a pattern of economic growth that is characterized by premature de-industrialization and a heavy reliance on construction and real estate activities and low-productivity services, such as transport and distribution (Assaad and Marouani 2021).

Although Morocco's labour market trajectory in the period leading up to the pandemic can be characterized as the persistence of segmentation between low- and high-productivity sectors,

it has also seen increasing rates of wage employment, a sign of structural transformation, as well as rising rates of employment formality (Belghazi 2022). Like its North African counterparts, the Moroccan labour market has been characterized by mostly declining unemployment rates since 2000 (except among women since 2010), but also falling rates of labour force participation and employment among men and women (Belghazi 2022). As a sign of improving employment stability, time-related underemployment had also been falling steadily from 2000 to 2019.

Tunisia's economy has seen persistently slow growth since the 2011 uprising, with GDP growth rates falling from an average of 4.2–4.5 per cent per annum from 2002 to 2010, to 1.7 per cent per annum from 2011 to 2018 (El Lahga, Ghali and Helel 2021). This economic slowdown translated into slowing employment and productivity growth. Despite this, unemployment rates were stable in Tunisia from 2012–19, after a rising trend prior to 2011 and a large spike in 2011. Similarly, employment rates had been fairly stable from 2005 to 2019. As in Egypt, the share of public sector employment in Tunisia had been falling, but Tunisia has done better than Egypt at growing the share of private formal wage employment, which increased from 28 per cent in 2013 to 32 per cent in 2019 (El Lahga, Ghali and Helel 2021).

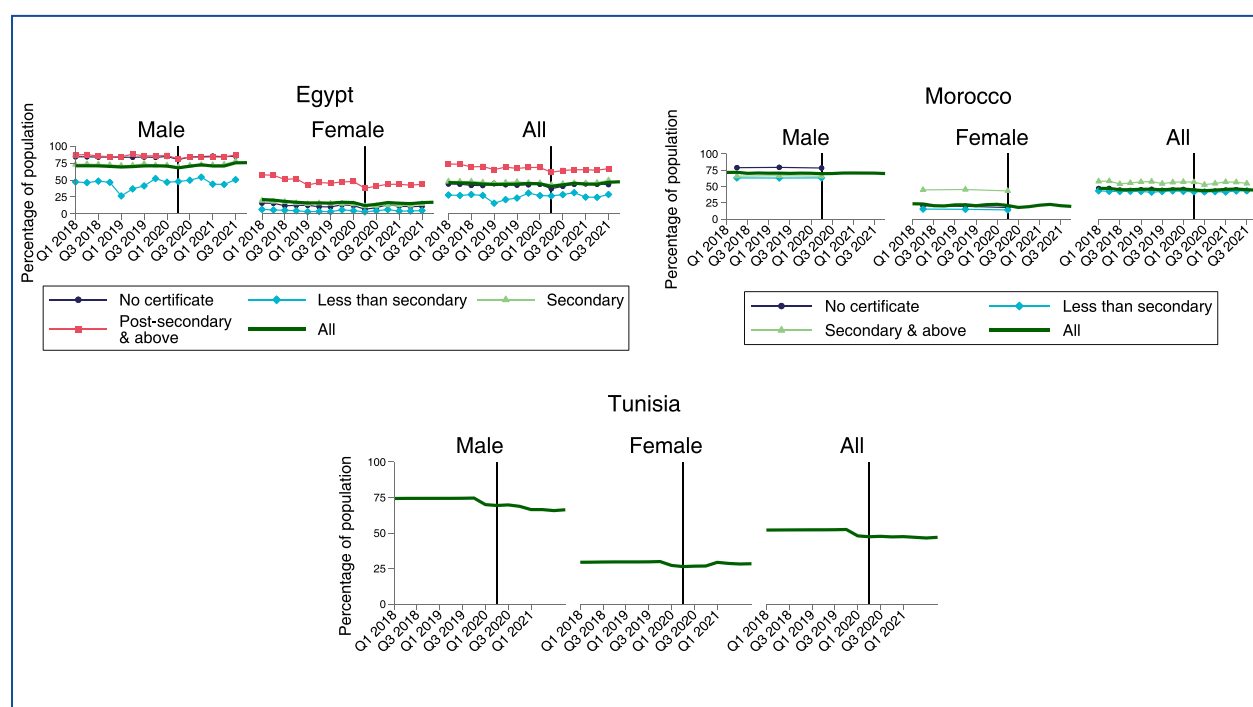
3.2.2 Evolution of major labour market aggregates throughout the pandemic

As shown in Figure 4, labour force participation trends in Egypt and Morocco in 2018 continued the downward trend they were on prior to that year for both men and women, but with a more pronounced downward trend for women in both countries. Morocco's female participation also exhibits a clear seasonal pattern – with high participation in the first quarter and sometimes the second quarter of the year and lower participation in the rest of the year, a pattern linked to Morocco's agrarian economy. Participation rates for both men and women in Egypt turned to a slightly rising trend by Q2 of 2019, which lasted until the pandemic hit. Female participation also recovered slightly in Morocco in 2019 but male

rates were flat. In Tunisia, participation rates for both men and women were essentially flat in the two years prior to the pandemic, except for a slight increase in participation for women in Q4 of 2019 and Q1 of 2020.⁴

Prior to the second quarter of 2020, there was not much difference in the trend by education for men in either Egypt or Morocco or for women in Morocco, but the downward trend among women in 2018 in Egypt appears to have been more pronounced for more educated women.⁵ Similarly, the apparent recovery in female participation in 2019 and early 2020 was a little more pronounced among less-educated women.

Figure 4. Quarterly labour force participation rate (percentage of population 15–64), by sex and education (2018–21)



Note: Data disaggregated by sex and education for Morocco are only available annually up to 2020 and are plotted in the second quarter of each year.

Source: Authors' calculations, based on data from the Egypt Labour Force Survey (Open Access Micro Data Initiative (OAMDI) 2018, 2019, 2020); private communication with Egypt's Central Agency for Public Mobilization and Statistics (CAPMAS) in 2021; the Morocco National Survey on Employment (l'Enquête Nationale sur l'Emploi) (HCP 2021, 2018a, 2018b, 2019b, 2019a, 2020a, 2020b); and Tunisia's employment and unemployment indicators (INS 2018, 2019, 2020, 2021).

⁴ Due to an inability to access official labour force survey data in Tunisia, researchers were unable to break up participation by either education or age, unlike the two other countries.

⁵ The trends by age group are shown in the Appendix.

The onset of the pandemic had a negative but short-lived effect on labour force participation in all three settings. The negative effect on male participation was limited. In Egypt, male participation declined by 2.6 percentage points (3.7 per cent) in Q2 of 2020, only to recover to its pre-pandemic level by Q3 and to exceed that level by Q4. By Q3 of 2021, it had jumped 4.8 percentage points (6.9 per cent) above its pre-pandemic level. Those most negatively affected in Egypt in terms of participation at the peak of the pandemic were men with lower levels of education and younger and older men. The pickup in participation in 2021 affected all educational groups equally.

In Morocco, male participation dipped by only 0.6 percentage points (less than 1 per cent) from Q1 2020 to Q2 2020 and recovered quickly thereafter to reach pre-pandemic levels by Q4 of 2020 and remained at that level until Q3 of 2021, only to decline again in the fourth quarter.

In Tunisia, male participation was down a mere 0.6 percentage points (0.9 per cent) from Q1 2020 to Q2 2020 and recovered quickly in the third quarter, only to fall by 3.5 percentage points (5 per cent) by the first quarter of 2021. It stayed at that level through Q3 of 2021.

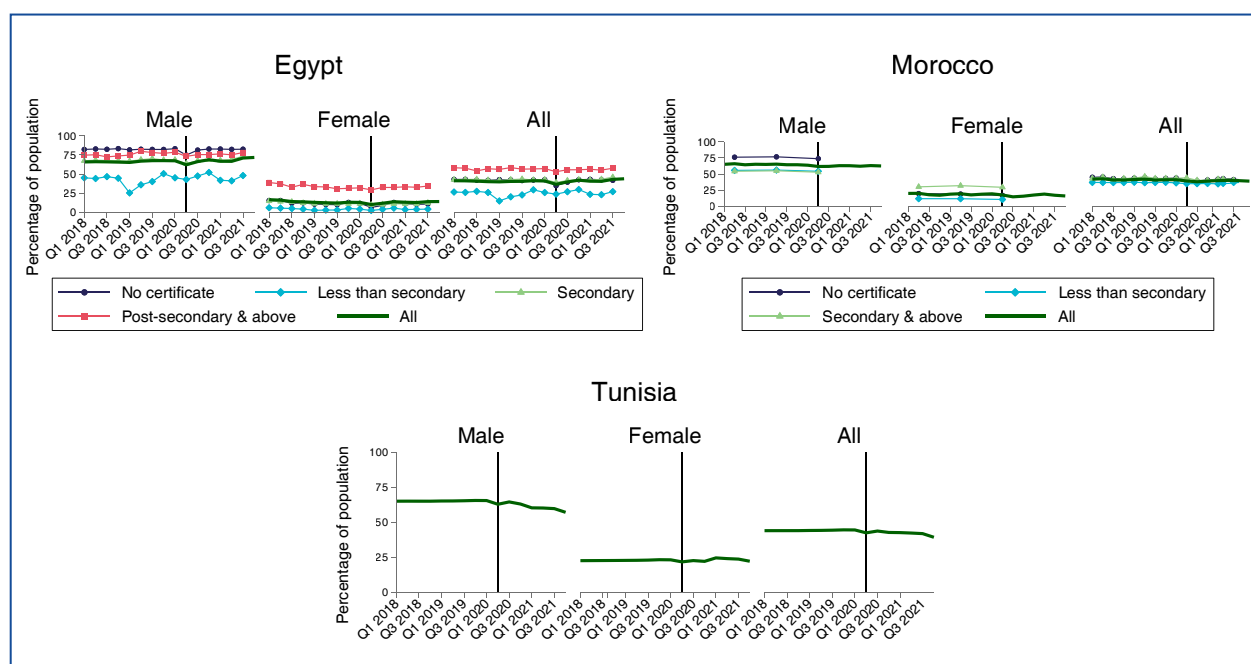
However, the negative effect of the pandemic on participation was much more pronounced for women, especially in Egypt, and with a bit of a lag in Morocco. Women's participation rates fell by 4.5 percentage points (27 per cent) in Egypt, 1.8 percentage points (8 per cent) in Morocco, and 0.8 percentage points (3 per cent) in Tunisia in Q2 of 2020. Female participation rates recovered partially in Egypt in Q3, briefly returned to their pre-pandemic levels in Q4 of 2020, then dipped in the first two quarters of 2021 before recovering again in the third and fourth quarter. In Morocco, female participation rates dipped further in Q3 of 2020, for a total decline of 4.8 percentage points (21 per cent) and then recovered gradually to reach their pre-pandemic levels by Q2 of 2021. They dipped again in Q3 of 2021 – a dip that has been attributed to worsening seasonal employment conditions in Moroccan agriculture (Krafft et al. 2022). In Tunisia, female participation rates recovered immediately, approaching their pre-pandemic levels by Q4 of 2020 and continuing to rise beyond that level in 2021.

In relative terms, the negative shock to female participation was largest for the least-educated women in Egypt. The participation of those without educational certificates declined by 44 per cent and those with less than secondary education declined by 39 per cent, whereas that of women with secondary and post-secondary degrees only declined by 21 per cent. It is not possible to do this analysis for either Morocco or Tunisia, which either only have annual participation data disaggregated by education (Morocco) or no disaggregation by education at all (Tunisia).

With respect to age, the decline in female participation due to the pandemic was highest at the two ends of the age spectrum, where attachment to the labour force is weakest. In Egypt, the decline in participation between Q1 and Q2 2020 was highest for older women aged 60–64 (61.5 per cent), followed by young women aged 15–24 (40 per cent). In Morocco, the decline from Q1 to Q3 2020 was highest for young women aged 15–24 (28 per cent) followed by older women aged 60–64 (22 per cent).

Trends in employment rates closely followed those of participation rates, with some exceptions. As shown in Figure 5, the drop in employment rates for men was more pronounced than the drop in their participation rates, but equally short-lived. Again, Egypt had the sharpest drop in male employment rates (8 per cent), followed by Tunisia (4 per cent) then by Morocco (3 per cent). The largest drop in Egypt was for those with no educational certificate (15 per cent) and for the oldest workers aged 60–64 (22 per cent). In Morocco, the largest drop in male employment rates was for youth aged 15–24 (19 per cent). Female employment rates also fell at the height of the pandemic, but the decline mirrored declines in participation. This suggests that women who stopped working actually withdrew temporarily from the labour force, while men who stopped working continued to seek employment.

Figure 5. Quarterly employment rate (percentage of population 15–64), by sex and education (2018–21)



Note: Data disaggregated by sex and education for Morocco are only available annually up to 2020 and are plotted in the second quarter of each year.

Source: Authors' calculations, based on data from Egypt Labour Force Survey (OAMDI 2018, 2019, 2020); private communication with CAPMAS (2021); the Morocco National Survey on Employment (HCP 2021, 2018a, 2018b, 2019b, 2019a, 2020a, 2020b); and Tunisia's employment and unemployment indicators (INS 2018, 2019, 2020, 2021).

Moving now to examine unemployment rates just prior and during the pandemic, Figure 6 shows that unemployment rates in Egypt were on a declining trend that had started as early as 2015 (Amer, Selwaness and Zaki 2021). The unemployment rate declined fairly steadily from 10.8 per cent in Q1 of 2018 to 7.9 per cent in Q1 of 2020. In Morocco, unemployment was on a downward trend until mid-2019, when it bottomed out at 8.1 per cent and then rose to 10.1 per cent by Q1 of 2020. Similarly, unemployment in Tunisia was on a very slight downward trend prior to the pandemic, bottoming out at 12.1 per cent in Q4 of 2019, then rising slightly to 12.3 per cent in Q1 of 2020.

Not all groups were benefiting from the downward trend in unemployment prior to the pandemic. In Egypt, both young women and women with less than secondary and post-secondary education saw an upward trend in unemployment until mid-2019 but reverted to a downward trend through the rest of 2019 and into Q1 of 2020. In Morocco, the increase in unemployment since mid-2019 was led by youth and young adults.

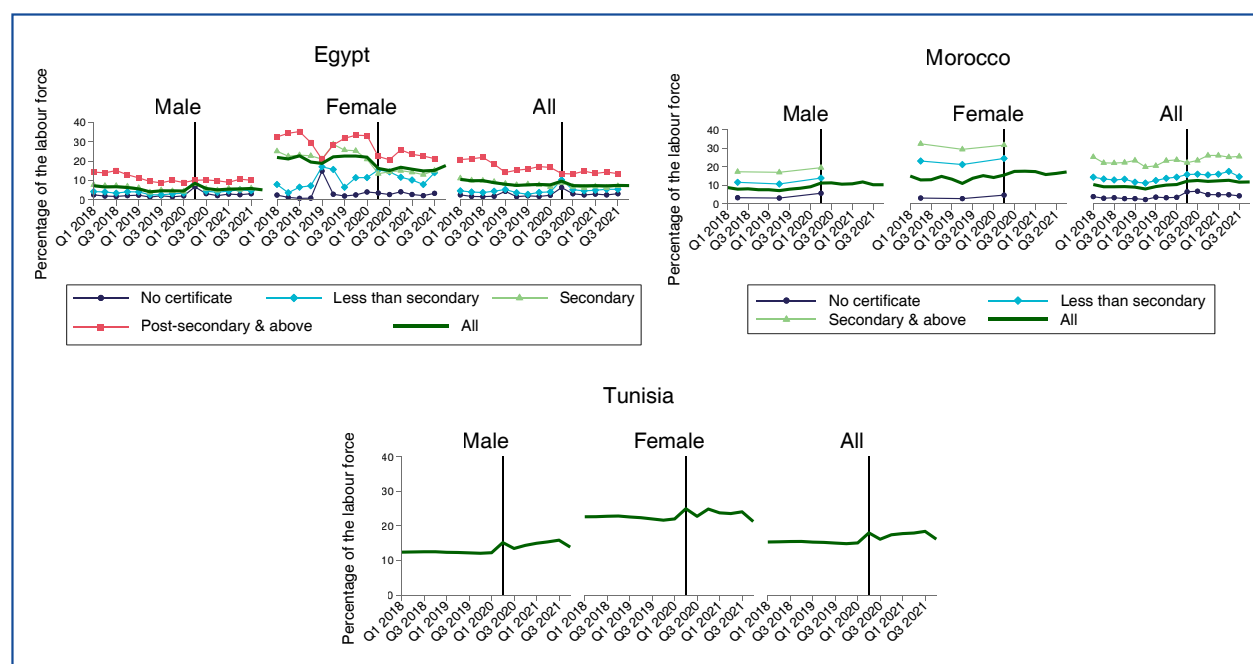
The pandemic, however, caused a spike in unemployment in all three countries. From the first to the second quarter of 2020, unemployment increased by 1.9 percentage points (24 per cent) in Egypt, by 1.8 percentage points (17 per cent) in Morocco, and by 2.9 percentage points (19 per cent) in Tunisia. However, its trajectory thereafter varied considerably by country. In Egypt, it had dropped to below the pre-pandemic level by the third quarter of 2020, falling from 9.7 per cent in Q2 to 7.4 per cent in Q3 (a 4 per cent drop), and it remained at that level through Q4 of 2021. In Morocco, the unemployment rate increased even further in Q3 of 2020 and remained persistently high through Q2 of 2021, dropping only by one percentage point in Q3 of 2021. In Tunisia, the unemployment rate dropped from 18.0 per cent to 16.2 per cent (10 per cent) by Q3 of 2020, then resumed its increase, rising steadily to 18.4 per cent through Q3 of 2021.

Because of the possibility of women withdrawing altogether from the workforce when employment conditions are poor, female unemployment can actually decline during a crisis (as they

are no longer actively looking for work).⁶ This is in fact what happened in Egypt, where female unemployment fell from 22.1 per cent in Q1 of 2020 to 16.3 per cent in Q2 (a decrease of 26 per cent). This sharp decline in the female unemployment rate was happening at a time when the female employment rate was also declining, a clear sign of discouragement. Subsequently the female unemployment rate in Egypt remained on this downward trajectory to reach 15 per cent by Q2 of 2021, one of its lowest levels in more than two decades. Meanwhile, the employment rate only recovered slightly, to 12.9 per cent. By Q4 of 2021, however, the female unemployment rate had climbed back up to 17.8 per cent, a sign that women were beginning to seek employment again.

Morocco and Tunisia did not seem to experience the same phenomenon of female discouragement witnessed in Egypt. In Morocco, the female unemployment rate kept increasing until Q4 of 2020, reaching 17.7 per cent, after which it declined slightly for two quarters to reach a low of 15.9 per cent in Q2 of 2021. In line with the decreased female participation and employment rates in Q3 of 2021 (linked to conditions in Moroccan agriculture), there was an increase in the female unemployment rate (to 16.5 per cent) in that same quarter. In Tunisia, the female unemployment rate reached a peak of 25 per cent in Q2 2020, declining slightly thereafter before increasing again in 2021 to reach 24.1 per cent by Q3.

Figure 6. Quarterly unemployment rate (percentage of the labour force), standard definition, by sex and education (2018–21)



Note: Data disaggregated by sex and education for Morocco are only available annually up to 2020 and are plotted in the second quarter of each year.

Source: Authors' calculations, based on Egypt Labour Force Survey aggregate data by gender (CAPMAS 2018, 2019, 2020, 2021); disaggregated data by education (OAMDI 2018, 2019, 2020); private communication with CAPMAS (2021); the Morocco National Survey on Employment (HCP 2021, 2018a, 2018b, 2019b, 2019a, 2020a, 2020b); and Tunisia's employment and unemployment indicators (INS 2018, 2019, 2020, 2021).

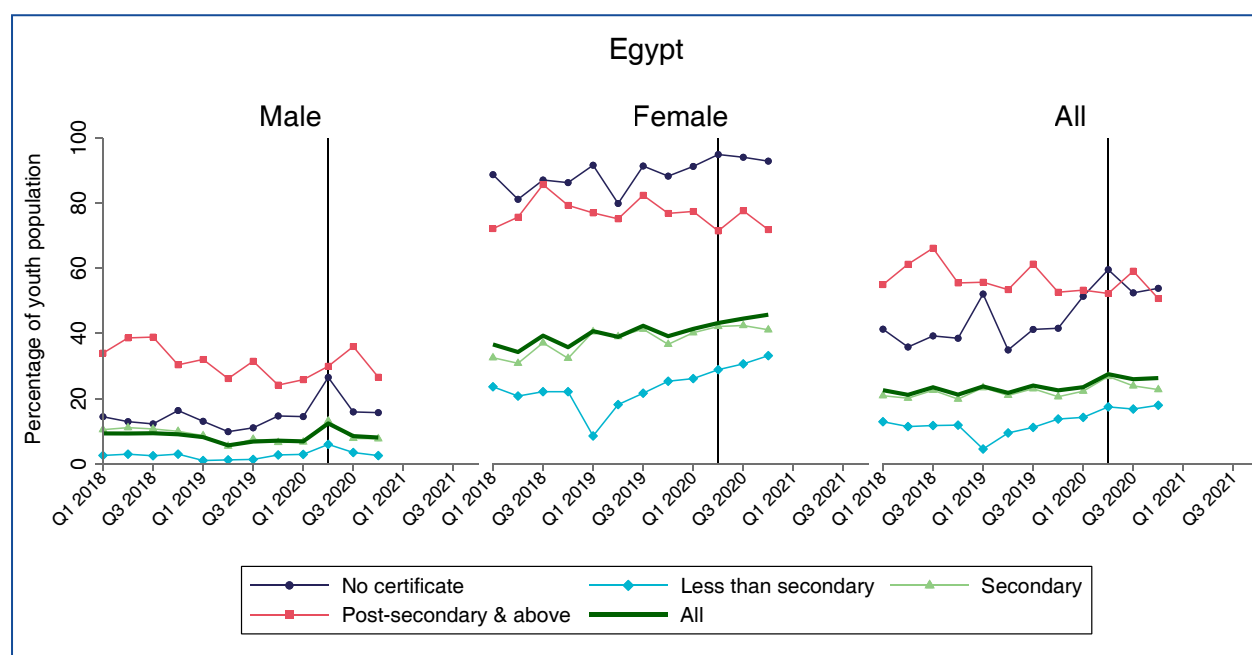
⁶ It could also potentially be the case that increases in care burdens push women out of the labour force. However, married women with children were not disproportionately likely to exit employment during the pandemic, as they had largely already avoided the types of work that were difficult to reconcile with caregiving (Krafft, Selwaness, and Sieverding 2022).

Another indicator of inadequate youth employment is the 'not in employment, education or training' (NEET) rate, which is only calculated for youth aged 15 to 24. Unfortunately, this indicator is only available over the period from 2018 to 2021 for Egypt. The NEET rate was not at all available for Tunisia and only available in Morocco on an annual basis, by sex, for 2018 and 2019. As shown in Figure 7, the overall NEET rate for Egypt was relatively stable prior to the pandemic, with some slight seasonal fluctuations. Since the onset of the pandemic, however, it has been increasing, which confirms that the observed downward trend in unemployment is not an indication of improved employment conditions. The stability of the overall NEET rate masks important differences by sex, with male NEET rates falling slightly and female NEET rates rising. In fact, the NEET rate for young women is five times higher than for young men, as noted in Chapter 2. In particular, the relatively high NEET rates for men

educated at the post-secondary level and above had been falling steadily prior to the pandemic. The lower NEET rates of secondary male graduates were also falling, but at a slower pace. With the onset of the pandemic, however, male NEET rates in Egypt spiked but recovered fairly quickly, except for post-secondary and above graduates, whose rate continued increasing through Q3 of 2021.

Female NEET rates are very high for those at both ends of the educational spectrum in Egypt, but have tended to decline over time for post-secondary and above graduates, as was the case for their male counterparts. In contrast, female NEET rates for secondary graduates and those with less than secondary degrees have tended to increase steadily and have continued to do so after the onset of the pandemic, resulting in a steadily rising trend in the overall female NEET rate.

Figure 7. Quarterly NEET rate (percentage) among the youth population aged 15–24, by sex and education (2018–21)



Source: Authors' calculations based on data from the Egypt Labour Force Survey (OAMDI 2018, 2019, 2020).

› 3.2.3 Time-related underemployment as an important indicator of labour market health during shocks

Time-related underemployment, or involuntary part-time work among the employed, is an important indicator of how labour markets react to shocks such as the pandemic or other sudden economic downturns. More vulnerable workers are often unable to just stop working and become unemployed, which requires them not to have worked even a single hour during the reference week. Workers who are engaged in casual or intermittent employment are more likely to have difficulty finding enough work but will still be working some hours during the reference week in order to survive and ensure some livelihood for their families. For these workers, labour market health is inadequately measured by employment or unemployment rates, but requires an indicator that is sensitive to their reduced ability to find work (Assaad 2019). The time-related underemployment rate is just such an indicator, since it captures the proportion of the employed working less than 35 hours per week due to an inability to find work the rest of the time. Unfortunately, this indicator, which is very sensitive to cyclical and seasonal fluctuations in the labour market, is only collected once per year (in Q4) in Egypt. It is available quarterly in Morocco, except when disaggregating by sex and education. It is not available at all in the tabulated data the authors were able to access for Tunisia.

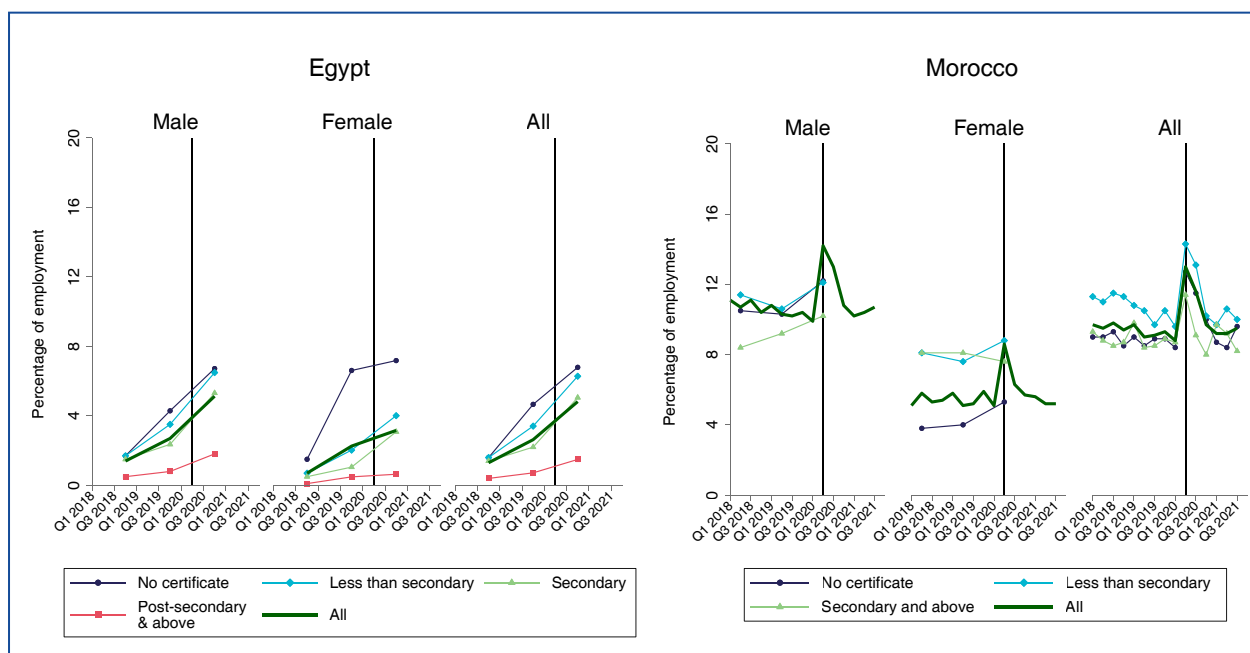
As shown in Figure 8, the time-related underemployment rate is very sensitive to sudden shocks in the labour market. As is clear from the Morocco data, it was on a downward trend prior to

the pandemic and spiked in Q2 of 2020, when it increased from 8.8 to 13.0 per cent, a relative increase of 48 per cent in one quarter. It took at least two quarters to return closer to its pre-pandemic level, falling to 9.2 per cent in Q1 of 2021, then rising again to 9.5 per cent in Q3 of 2021 – an indication of the slowdown in Morocco's agricultural sector.

Although the time-related underemployment rate responded to the crisis similarly for men and women, it is much more likely to increase during shocks for less-educated workers who are more likely to be in vulnerable employment situations. As seen in Appendix Figure A.4, time-related underemployment is also more likely to affect young workers. Unlike unemployment, which measures the total absence of employment during the reference period (typically one week), time-related underemployment measures the inability to find enough employment. It is thus better suited to measuring the employment difficulties of vulnerable or marginally attached workers who can typically not afford to remain completely without work, but who struggle to find enough work to meet their livelihood needs.

From the annual data shown in Figure 8, it is clear that the time-related underemployment rate rose substantially in 2020, with the pandemic, but it had actually started rising even before that, in 2019, particularly in Egypt. In both Egypt and Morocco, the rate is much higher for less-educated workers.

Figure 8. Time-related underemployment rate (percentage of employment), by education and sex



Note: Data disaggregated by sex and education for Morocco are only available annually up to 2020 and are plotted in the second quarter of each year. Data for Egypt are only available in Q4 starting in 2019.

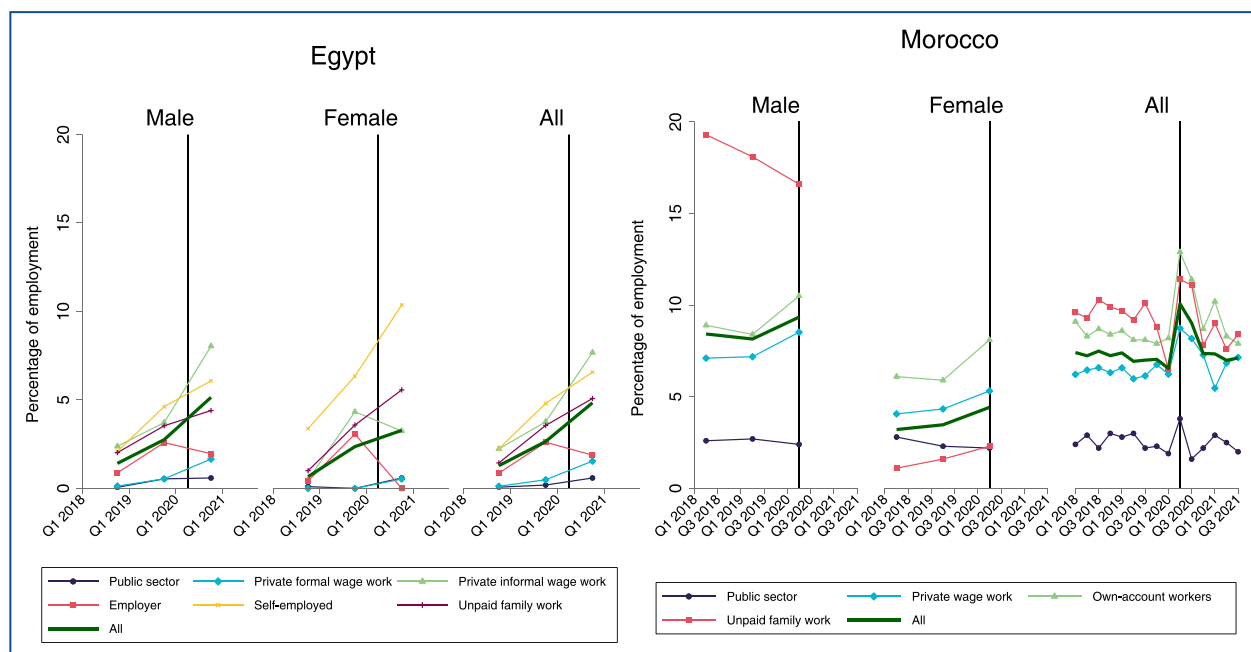
Source: Authors' calculations based on data from the Egypt Labour Force Survey (OAMDI, 2018, 2019, 2020) and Morocco National Survey on Employment (HCP 2021, 2018a, 2018b, 2019a, 2019b, 2020b, 2020a).

Since the time-related underemployment rate is only estimated for employed workers, it can be disaggregated by some important employment characteristics, such as type of employment and industry sector. To first examine how it varies by type of employment, this chapter attempts to classify employment by institutional sector (public vs. private), employment status (wage work, employer, self-employed and unpaid family labour) and by formality for private wage work.⁷ Unfortunately, data are not available to undertake this last disaggregation for Morocco.

As shown in Figure 9, time-related underemployment is highest for workers in vulnerable work categories. These include own-account workers (which include both the self-employed and employers in Morocco), self-employed workers in Egypt, unpaid family workers in both countries, and informal private sector wage workers in Egypt. Since it is not possible to make the formal/informal distinction in Morocco, private sector wage workers can be assumed to be mostly informal and thus also vulnerable to time-related underemployment. As expected, formal private sector wage workers and public sector workers are the least vulnerable to this kind of employment inadequacy.

⁷ Formal wage employment is defined as employment that has social insurance coverage.

Figure 9. Time-related underemployment rate (percentage of employment), by type of employment and sex



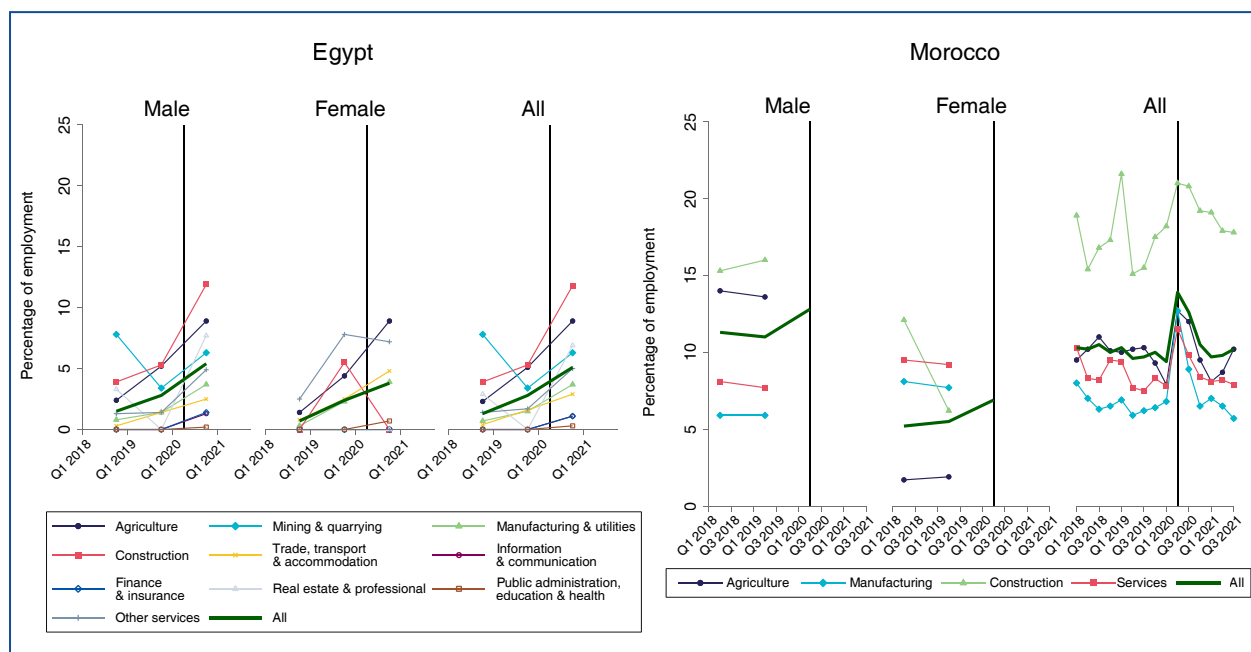
Note: Data disaggregated by sex and education for Morocco are only available annually up to 2020 and are plotted in the second quarter of each year. Data for Egypt are only available in Q4 starting in 2019.

Source: Authors' calculations based on data from the Egypt Labour Force Survey (OAMDI, 2018, 2019, 2020) and Morocco National Survey on Employment (HCP 2021, 2018a, 2018b, 2019a, 2019b, 2020b, 2020a).

It is also useful to disaggregate time-related underemployment by sector of economic activity. As shown in Figure 10, the industry sectors that are most susceptible to this kind of underemployment are construction and agriculture, both of which are characterized by high rates of casual labour. However, in Morocco the increase

in time-related underemployment at the height of the pandemic was also noticeable in the manufacturing and services sectors. The increase in agriculture in Q3 of 2021 is quite apparent, conforming to the aforementioned interpretation of agricultural slowdown.

Figure 10. Quarterly time-related underemployment rate (percentage of employment), by sex and economic activity



Note: Data disaggregated by sex and education for Morocco are only available annually up to 2020 and are plotted in the second quarter of each year. Data for Egypt are only available in Q4, starting in 2019.

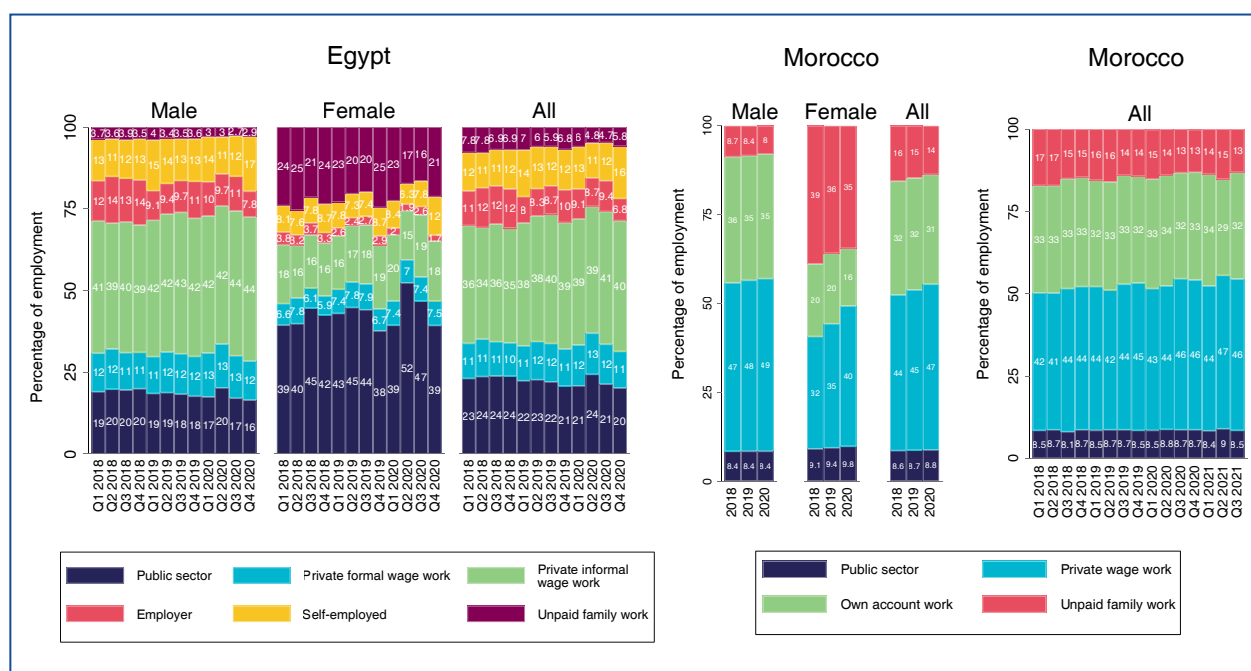
Source: Authors' calculations, based on data from the Egypt Labour Force Survey (OAMDI 2018, 2019, 2020) and Morocco National Survey on Employment (HCP 2021, 2018a, 2018b, 2019a, 2019b, 2020b, 2020a).

> 3.2.4 The progression of the labour market, by type of employment and industry sector

To examine how the structure of employment has progressed throughout the pandemic, this section examines the distribution of employment, by type and by sector of economic activity over time. As shown in Figure 11, the most notable overall trend in Egypt is the increase in the share of private sector informal wage work, which continues a decades-long trend (Amer, Selwaness, and Zaki 2021). The pandemic itself is associated with an increase in the share of the public sector in total employment in Egypt, which is to be expected, given that employment

in that sector was mostly protected. This result is especially true for women, whose share of public sector employment is much higher to start with. Conversely, various forms of non-wage employment declined during the pandemic (Q2 and Q3 2020) for both men and women, especially unpaid family work and self-employment. However, they mostly recovered in Q4 2021. In Morocco, the structure of employment by type appears to be more stable, with a gradual increase in the share of private sector wage work at the expense of non-wage work, especially for women.

Figure 11. Employment share (percentage of employment), by type of employment and sex



Note: Data disaggregated by sex and type of employment for Morocco are only available annually up to 2020

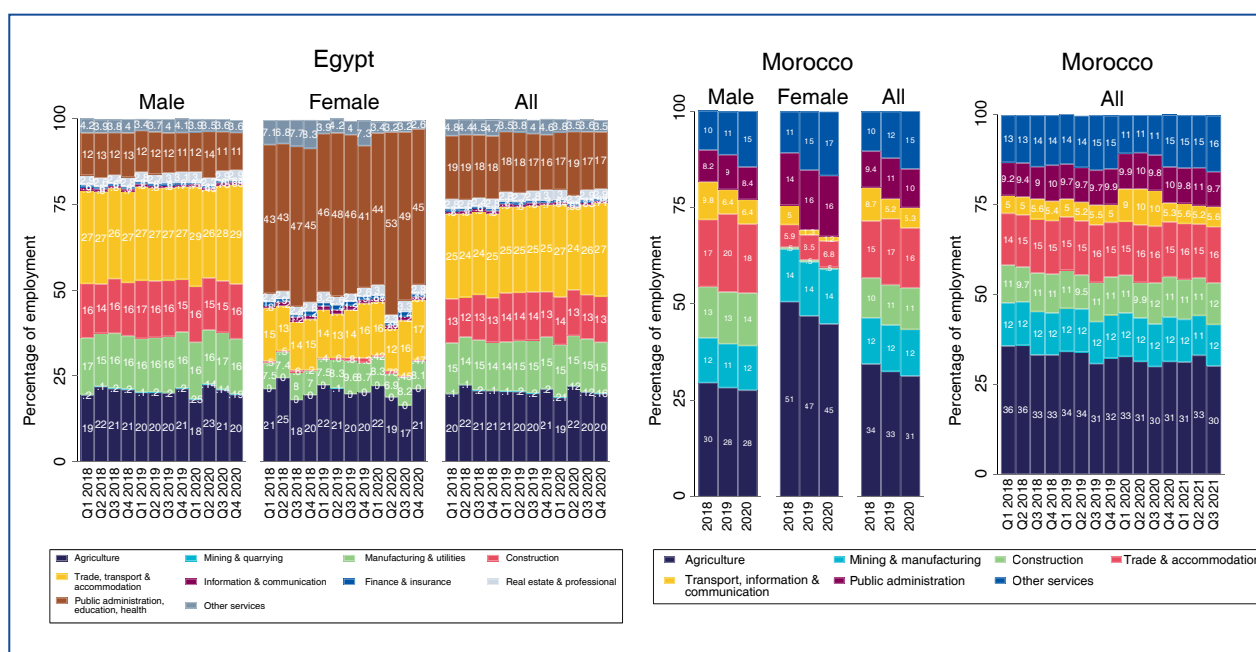
Source: Authors' calculations, based on data from the Egypt Labour Force Survey (OAMDI 2018, 2019, 2020) and Morocco National Survey on Employment (HCP 2021, 2018a, 2018b, 2019a, 2019b, 2020b, 2020a).

There were also noticeable changes in the structure of employment by sector of economic activity. As shown in Figure 12, the onset of the pandemic in Egypt was accompanied by a decline in the share of construction and an increase in the share of public administration, education

and health, whose long-term decline in share of employment was briefly interrupted. In Morocco, the share of transportation, information and communication appears to have increased as early as Q1 2020, but this may be a data artifact rather than a real increase.⁸

⁸ The temporary increase in the employment share of transport, information and communication in Morocco from Q1 2020 to Q3 2020 is too large to be credible and may be due to changes in classification.

Figure 12. Employment share (percentage of employment), by economic activity and sex



Note: Data disaggregated by sex and economic activity for Morocco are only available annually up to 2020 and are plotted in Q2 of each year. Classification of transport and other services economic activities for Morocco are different in Q1 to Q3 of 2020 from the typical classification.

Source: Authors' calculations, based on data from the Egypt Labour Force Survey (OAMDI 2018, 2019, 2020) and Morocco National Survey on Employment (HCP 2021, 2018a, 2018b, 2019a, 2019b, 2020b, 2020a).

4. Impact of COVID-19 on the labour market

This section uses waves of the COVID-19 MENA Monitor household and firms surveys (OAMDI 2021a, 2021b) to assess the impact of COVID-19 on the labour market. These surveys followed a sample of mobile-phone-owners and SMEs over time. In particular, job loss and recovery, the challenges facing wage workers, household in-

come changes and social assistance, and the impact of the pandemic on micro, small and medium-sized enterprises (MSMEs) are examined, as well as households' outcomes from November 2020 to August 2021 and firms' outcomes from Q1 through Q3 of 2021.

► 4.1 Job loss and recovery

Many workers who were employed pre-pandemic (in February 2020) became unemployed or left the labour force during the pandemic. Figure 13 shows the percentage of those who were employed in February 2020 who were unemployed (using a broad definition of unemployment, that does not require searching for work) and out of the labour force in each wave. In November 2020, a substantial share of workers had become unemployed (24 per cent in Morocco; 14 per cent in Tunisia). A further share were out of the labour force (10 per cent in Morocco; 2 per cent in Tunisia). However, through April 2021, a declin-

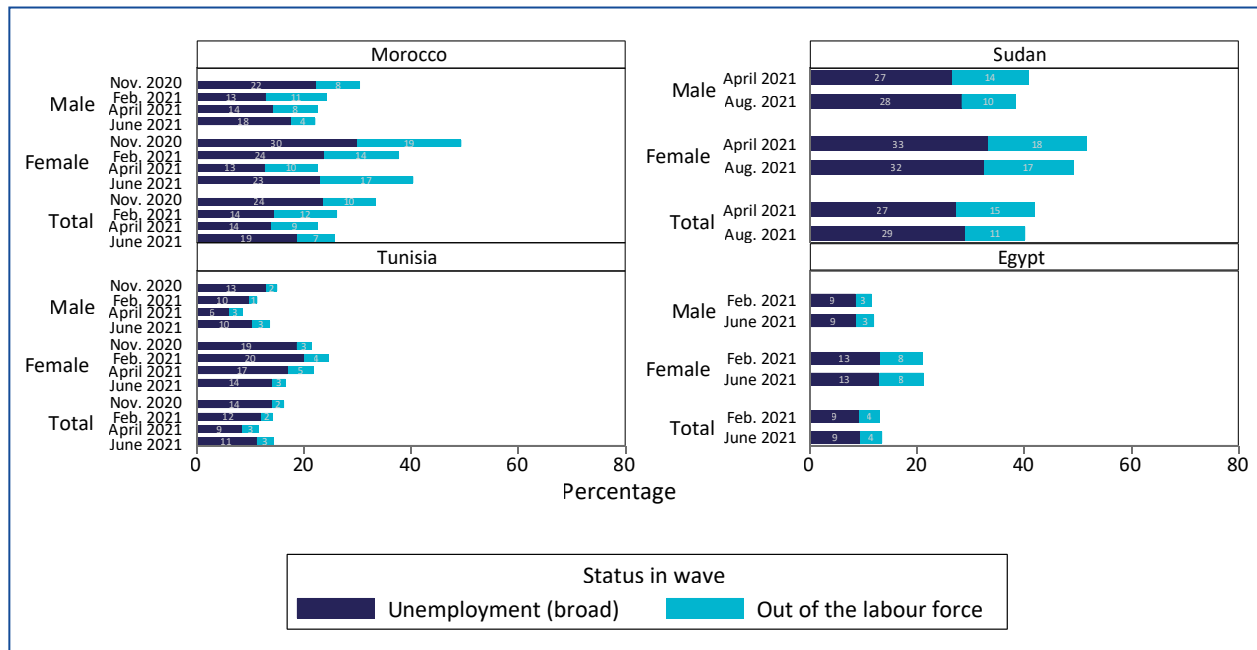
ing share were not employed in both countries, although the share that were unemployed rose again in June 2021 in both countries.

In Egypt and Sudan, where data collection began later, the share of workers who were employed who became unemployed was relatively constant over time. In Sudan, the share out of the labour force declined over time, but in Egypt, it remained constant. Formerly employed women were particularly likely to be out of employment in all countries, although this may be related to women's more frequent exits from employment

even pre-pandemic (Assaad, Ghazouani and Krafft 2018; Assaad, Krafft and Selwaness 2022; Krafft, Assaad and Keo 2022). Higher levels of exits from employment in Sudan and Morocco may

be related to the larger role of agriculture in their economies, contributing to seasonal fluctuations and ongoing exit and entry from employment (Ebaidalla and Nour 2021; Krafft et al. 2022).

Figure 13. Job loss and recovery: Percentage of the employed in February 2020 who became unemployed or out of the labour force, by sex, wave and country



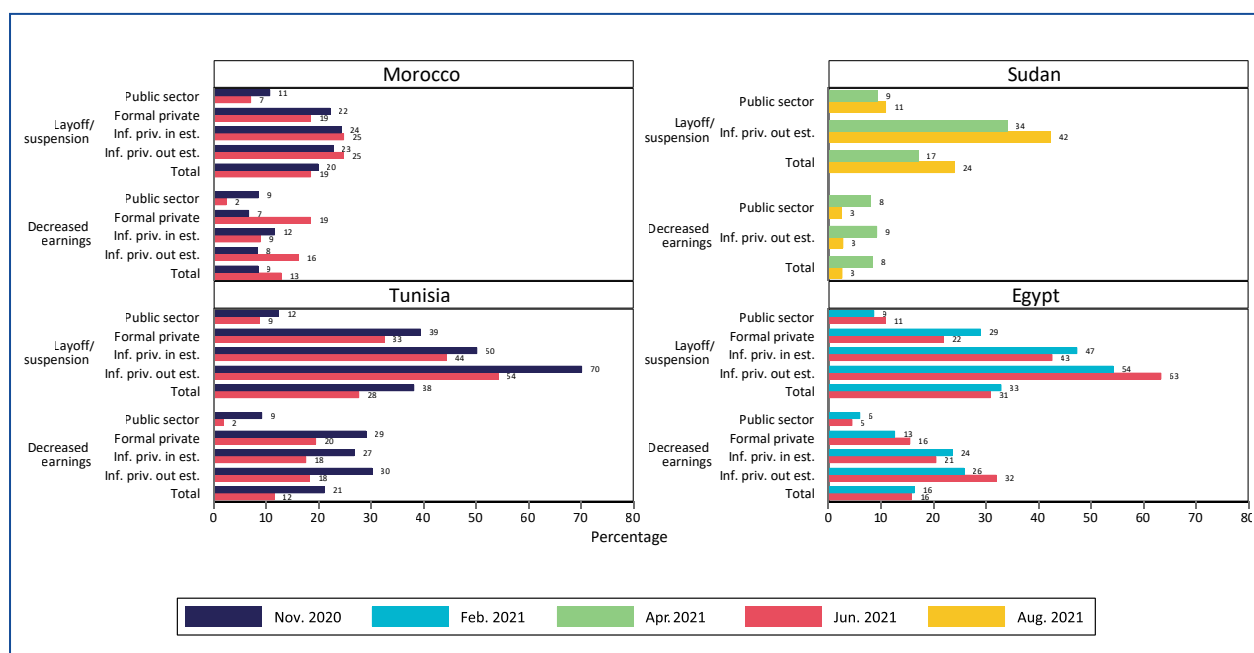
Source: Authors' calculations, based on COVID-19 MENA Monitor.

► 4.2 Challenges facing wage workers

Workers faced a number of challenges during the COVID-19 pandemic, as illustrated in Figure 14, which reports the percentage of wage workers who were temporarily or permanently laid off/suspended and the share with decreased earnings at each wave, by type of employment (in February 2020). A distinction is made between formal and informal private sector work based on whether workers had social insurance, and also between informal work inside versus outside establishments. Informal private sector wage workers tended to be the most affected by lay-offs and decreased earnings, particularly those outside establishments. Public sector workers, followed by private sector formal workers, were

less affected. In Morocco, differences among private sector wage workers were less marked and in Sudan decreased earnings were similar across types of wage workers (which may relate to its high rates of inflation). Over time, whether conditions improved varied across countries, with substantial improvements from November 2020 to June 2021 in Tunisia, but less so and more variably by type of employment in other countries. Overall, challenges clearly persisted in the labour market, particularly for those workers who were already the most vulnerable pre-pandemic (Assaad, AlSharawy and Salemi 2022), exacerbating inequality.

Figure 14. Percentage of wage workers laid off or with decreased earnings, by type of employment in February 2020, wave and country



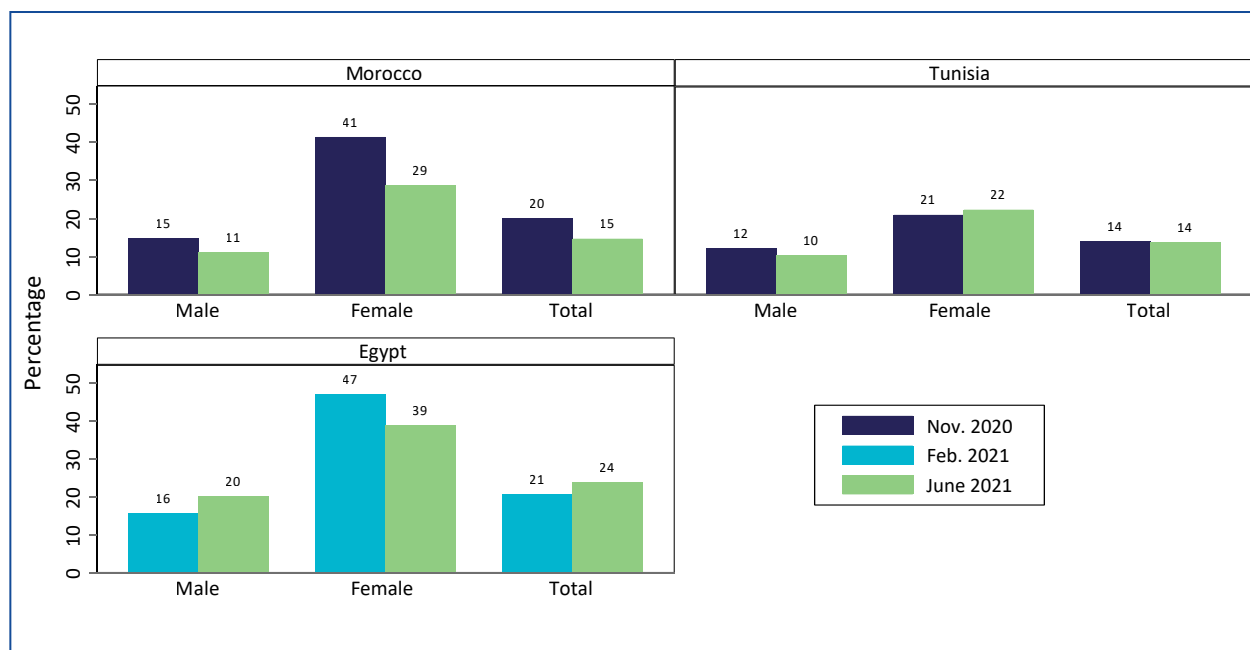
Note: For panel respondents, challenges were only available if they were still wage workers. Categories with fewer than 50 observations (in Sudan) are not shown.

Source: Authors' calculations, based on COVID-19 MENA Monitor.

During the pandemic, the impact of closures and restrictions on workers was mediated in part by their ability to work from home. Figure 15 shows the percentage of wage workers able to work from home in each wave. Only a minority of workers were able to work from home: 14 per cent in Tunisia in both November 2020 and June 2021; 20 per cent in Morocco in November 2020 (dropping to 15 per cent in June 2021); and 21 per cent in Egypt in February 2021 (rising to 24 per cent in June 2021). Women were substantially more likely to be able to work from home

than men, which may relate to the type of work they do (e.g. particularly public sector work or agriculture (Assaad et al. 2022; Krafft et al. 2022; Marouani et al. 2022)). Additional questions regarding why workers were not able to work from home emphasized that it was not possible to do certain jobs from home, or not allowed. Lack of technology or connectivity were rarely barriers. These findings corroborate research emphasizing the limited "teleworkability" of jobs in North Africa (Alazzawi 2021; Marouani and Minh 2020).

Figure 15. Percentage of wage workers able to work from home, by sex, wave and country, first and latest wave



Note: Sudan was not included because it did not have the exact same question.

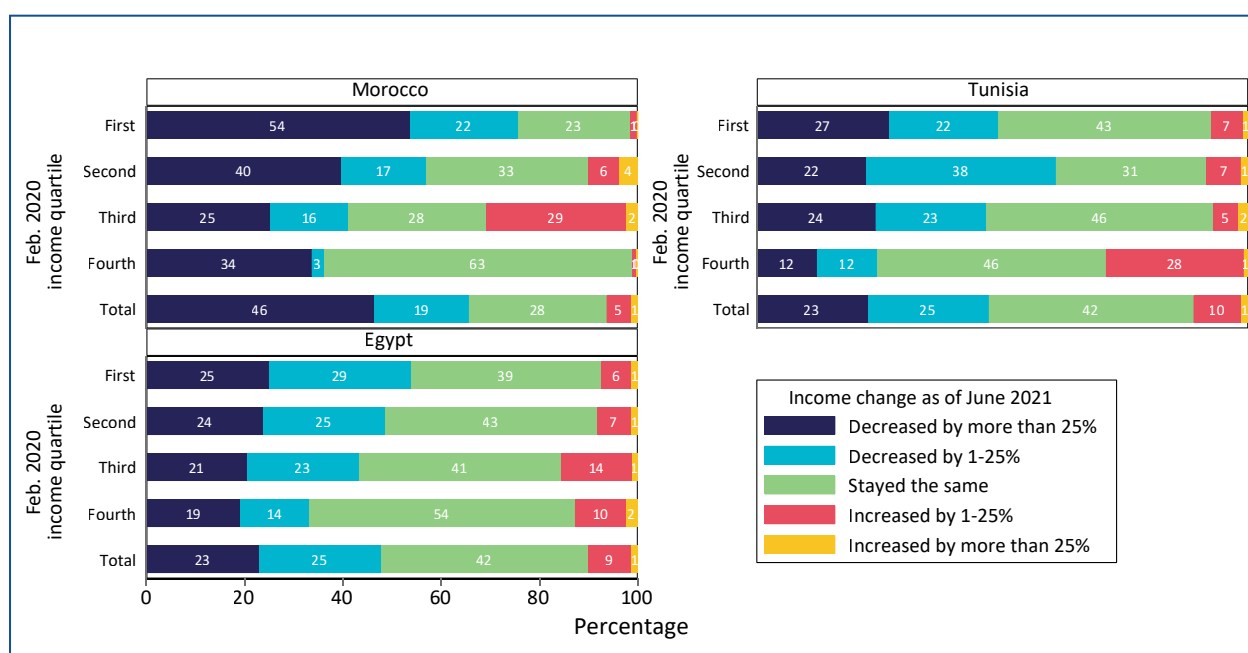
Source: Authors' calculations, based on COVID-19 MENA Monitor.

► 4.3 Income changes and social assistance

Persistent income losses since the pandemic remain a major problem. Figure 16 presents household income changes, compared to February 2020, by income quartile (in February 2020), for the latest wave (June 2021). Half (48 per cent) of households had decreased income in June 2021 compared to February 2020 in Tunisia and Egypt, with 23 per cent experiencing decreases in income of more than 25 per cent. In Morocco, losses were steeper: 46 per cent of households had

losses of more than 25 per cent and 19 per cent saw decreases of 1–25 per cent. Income losses increased inequality as they were more acute in the first (poorest) quartile in Morocco and Egypt and in the second quartile in Tunisia, while the fourth (richest) quartile had the least income losses. Concerningly, income losses have been relatively persistent over time, not showing much progress or change (Assaad et al. 2022; Krafft et al. 2022; Marouani et al. 2022).

Figure 16. Household income changes, past month compared to February 2020, by February 2020 income quartile and country, latest wave (June 2021)



Note: Sudan did not collect data on income changes, due to the level of inflation.

Source: Authors' calculations, based on COVID-19 MENA Monitor.

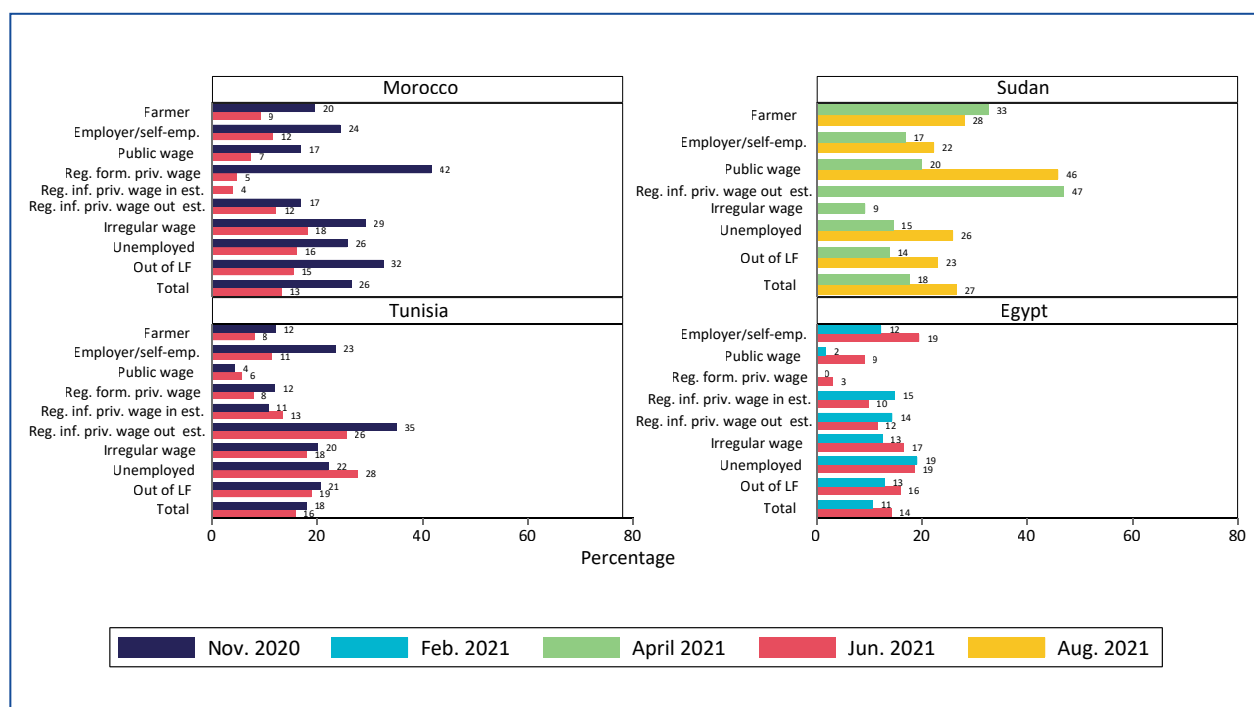
Although Sudan did not collect data on income changes due to the level of inflation, a series of questions was asked about how last month's ability to pay for goods and services compared to February 2020, pre-pandemic. Nearly half (48 per cent) of households reported much less ability to pay for goods and services in August 2021 compared to February 2020, and a further quarter (24 per cent) reported somewhat less ability to pay. The changes were worst for the lowest income groups pre-pandemic in Sudan; while 71 per cent of those in the poorest income quartile pre-pandemic had much less ability to pay for goods and services, only 38 per cent of those in the richest quartile had much less ability to pay. Although disentangling the effects of the pandemic from other economic challenges in Sudan is difficult, in other research, Sudanese households did identify specific additional challenges related to lockdowns (Central Bureau of Statistics and World Bank 2020).

Social assistance (both pre-existing and new emergency assistance) programmes played an important role in the pandemic response. Figure 17 shows the percentage of individuals in households that received government assistance,⁹ by their labour market status in February 2020 (first and latest waves). Regular versus irregular work is further distinguished, since some policies specifically targeted irregular workers. Social assistance decreased over time, particularly in Morocco and less so in Tunisia, but increased in Egypt and especially in Sudan. Social assistance was only variably or weakly targeted to those who experienced the largest negative impacts. For instance, in Morocco, regular formal private sector wage workers were the most likely to benefit from social assistance initially, even though they were not as affected. Although targeting improved over time in Morocco, it worsened in Egypt.¹⁰

⁹ Regular assistance was only asked about at baseline; emergency assistance programmes were asked about for the past month.

¹⁰ For further details on social assistance policy, see (Assaad et al. 2022; Krafft et al. 2022; Krafft Assaad and Marouani 2021a, 2021b, 2021c; Marouani et al. 2022).

Figure 17. Receiving government assistance (percentage), by labour market status in February 2020 and by country, first and latest waves



Note: Categories with fewer than 50 observations are not shown.

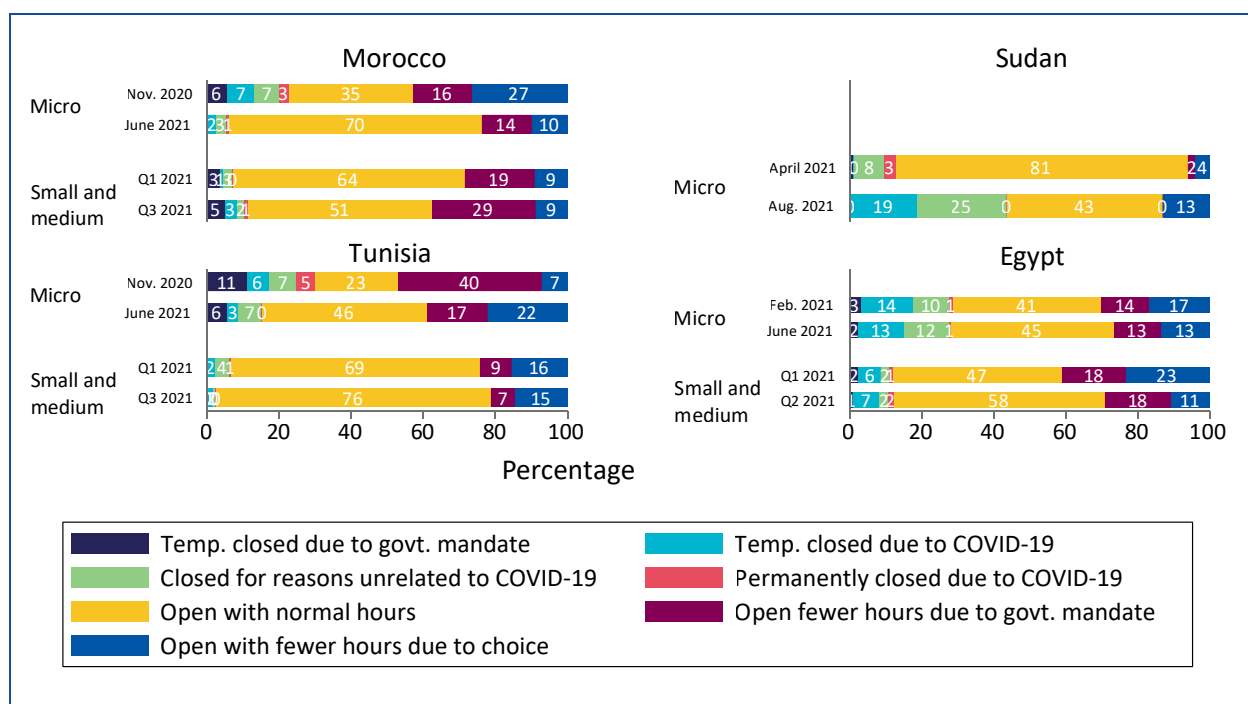
Source: Authors' calculations, based on COVID-19 MENA Monitor.

► 4.4 Micro, small and medium-sized enterprises during COVID-19

The household enterprise module is used in this section to provide data on microenterprises, with one to five workers pre-pandemic, which are compared with outcomes from the firm survey for SMEs, with 6–199 workers pre-pandemic. Figure 18 presents the operational status of enterprises in the first and latest wave for MSMEs. Small and medium enterprises were more likely to be open and operating normal hours than microenterprises. In Morocco (for microenterpris-

es) and in Tunisia and Egypt (for all sizes), there were increases in normal operations over time. In contrast, in Sudan (microenterprises) and Morocco (for SMEs), there were more closures over time. Even more common than outright closures were reductions in hours, either due to government restrictions or due to choice, which may relate to reduced demand (Assaad et al. 2022; Krafft et al. 2022; Marouani et al. 2022).

Figure 18. Operational status of enterprises (percentage), MSMEs in February 2020, by country and wave, first and latest wave



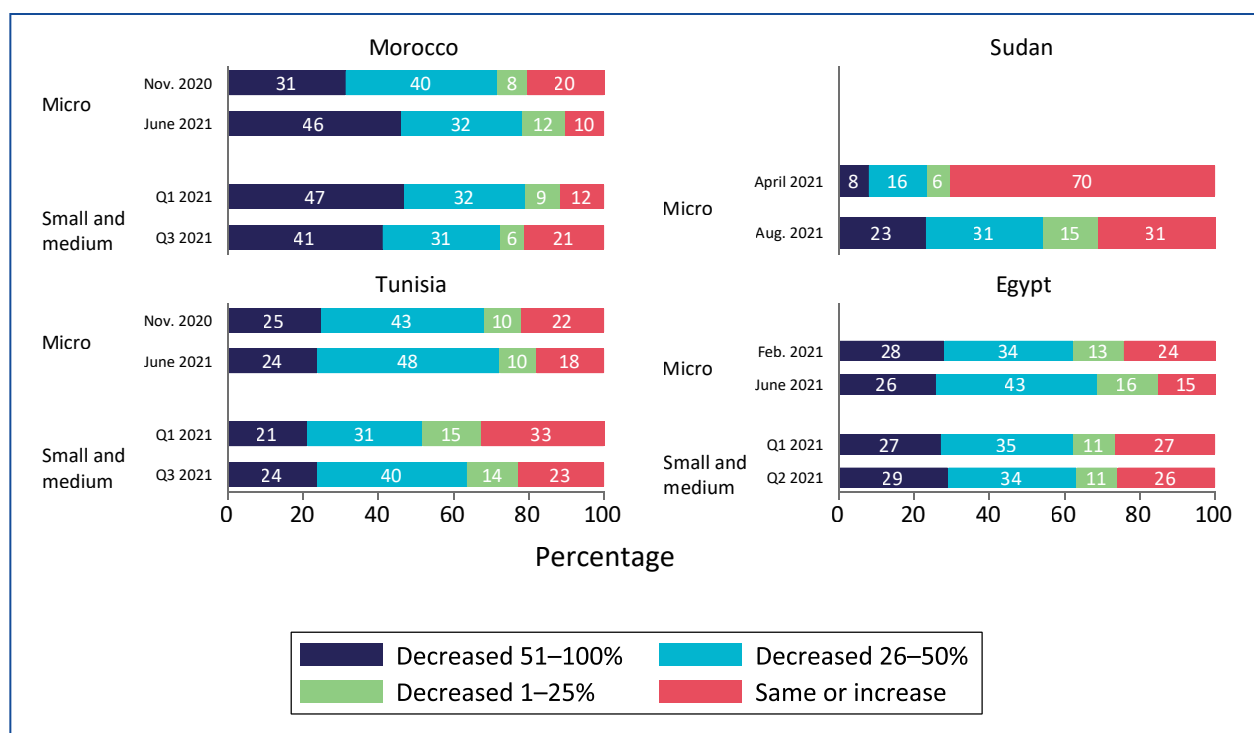
Note: Microenterprises had 1–5 workers in February 2020; small and medium enterprises had 6–199 workers in February 2020. Sudan did not collect firm data.

Source: Authors' calculations, based on COVID-19 MENA Monitor household survey (microenterprises) and firm survey (SMEs).

Reductions in operations and demand have translated into reduced revenues for firms. Figure 19 shows the revenue changes of enterprises (the past 60 days compared to the same season in 2019). Nearly a quarter of firms experienced decreases of 51–100 per cent in Tunisia and Egypt and almost half in Morocco experienced decreases of 51–100 per cent. Sudan was the exception, with only around a quarter of firms reporting the same or increased revenues but this pattern may be due to rapid inflation in Sudan. Although ini-

tially microenterprises in Sudan were doing acceptably (70 per cent same or higher revenues), by August 2021 conditions had worsened (only 31 per cent had the same or higher revenues). The persistence of revenue losses – as with income losses – shows the concerning and far-reaching effects of the pandemic. Firms were more hopeful about future revenues (not shown), but these hopes have yet to materialize (Assaad et al. 2022; Krafft et al. 2022; Marouani et al. 2022).

Figure 19. Revenue changes of MSMEs, over the past 60 days compared to same season in 2019 (percentage), by country and wave, first and latest wave



Note: Microenterprises had 1–5 workers in February 2020; small and medium enterprises had 6–199 workers in February 2020. Sudan did not collect firm data.

Source: Authors' calculations, based on COVID-19 MENA Monitor household survey (microenterprises) and firm survey (SMEs).

5. Conclusion

Workers and firms in North Africa have faced a number of new challenges in the COVID-19 era, compounding pre-existing difficulties. According to official statistics, labour markets in Egypt, Morocco and Tunisia reacted differently to the shock occasioned by the COVID-19 pandemic.

Egypt saw a relatively large immediate negative effect on employment, which manifested itself as a rise in unemployment for men in particular and a decline in participation for women (which was highest among the least-educated women, and younger or older women). However, overall employment rates recovered quickly and even exceeded pre-pandemic levels by the third quarter of 2021. Nevertheless, there is continued evidence of some discouragement among women and a more gradual return to the labour market.

In Morocco, the larger effects on employment came with a one-quarter lag and persisted a little longer. While employment may have been less strongly affected in Morocco than in Egypt, there was a sharp increase in time-related underemployment, a form of employment inadequacy that affects the most vulnerable. In both Egypt and Morocco, time-related underemployment increased during the pandemic, and was highest for less-educated workers and those in more vulnerable work categories.

In Tunisia, although the pandemic had a higher death toll and resulted in more stringent response measures, the initial economic effects of the pandemic were relatively mild. Nevertheless, employment rates continued to fall and unemployment rates continued to rise well into 2021.

In all countries, there were also noticeable changes in the structure of employment by sector of economic activity.

Using the COVID-19 MENA Monitor, the analysis also examined how outcomes for workers and firms have evolved during the pandemic. Workers who were employed pre-pandemic often became unemployed or left the labour force, with only partial recovery over time. Informal private sector wage workers, especially those working outside establishments, struggled with layoffs, suspensions and decreased earnings. Household earnings losses were quite persistent throughout the course of the pandemic. The lowest-income and most vulnerable workers pre-pandemic also experienced the greatest losses in income but were not necessarily well-targeted by social assistance.

Micro, small and medium enterprises were not back at normal operational status, with mixed improvements over time. Reductions in operations and demand contributed to decreased revenues for firms. The persistent pandemic-related challenges facing workers and firms remain a substantial threat to work and livelihoods in North Africa. A concerted effort to better identify and support low-income households and the most vulnerable workers is much needed to prevent substantial increases in poverty and inequality.

► Chapter 2. Jobs and growth in North Africa in the COVID-19 era: The case of Egypt (2018-21)



By:

Moheb Said: Economic Researcher at Economic Research Forum.

Chahir Zaki: Professor of Economics, Faculty of Economics and Political Science, Cairo University and Economic Research Forum.

1. Introduction

As a result of the pandemic and its consequences, global gross domestic product (GDP) decreased by 3.6 per cent in 2020. Yet at the macroeconomic level, some countries in the region, such as Egypt, have been more resilient than others. In fact, its growth rate in fiscal year 2020¹ reached 3.6 per cent. However, despite Egypt's macroeconomic resilience, thanks to stabilization policies (Zaki 2017), most of its structural problems at both the macroeconomic and microeconomic levels have not been addressed, which has affected the ability of the Egyptian economy to generate jobs and to have more sustainable economic growth (Amer et al. 2021). At the structural level, this includes recovery being concentrated in capital-intensive sectors, the crowding-out effect associated with the increase in domestic credit provided to the Government by the financial sector and the decrease of credit going to the private sector (Herrera et al. 2013), as well as a deteriorating investment climate (Zaki 2022). In addition to these factors, at the cyclical level, the volatility of exports and investments as well as external pressures with the increase in external debt have led to further vulnerabilities.

Similar vulnerabilities have been observed at the microeconomic level. In fact, COVID-19 has only exacerbated existing labour market challenges, including a relatively low labour force participation rate and employment-to-population ratio as well as a relatively high unemployment rate, especially among youth and women (Amer et al. 2021 and Assaad et al. 2021). Yet, while some labour market indicators were able to recover from COVID-19 repercussions and return to pre-pandemic levels, other indicators point out the fragility of the labour market, such as the high number of young people (especially females) not in employment, education or training (NEET), informal employment and self-employed individuals who were searching for more stable sources of income.

Against this background, the objective of this chapter is two-fold. First, it presents developments at both the macroeconomic and microeconomic levels just prior to and during the COVID-19 pandemic. Second, it shows how the structural characteristics of the Egyptian economy have exacerbated the negative effects of the pandemic, in addition to some cyclical developments that have worsened the situation. To do so, this chapter relies on data from the Egyptian national accounts published by the Ministry of Planning and Economic Development and by the Central Bank of Egypt at the macroeconomic level. At the microeconomic level, it uses the Egyptian Labour Force Survey (CAPMAS 2018, 2019, 2020, 2021) and Open Access Micro Data Initiative (OAMDI 2018, 2019 and 2020).

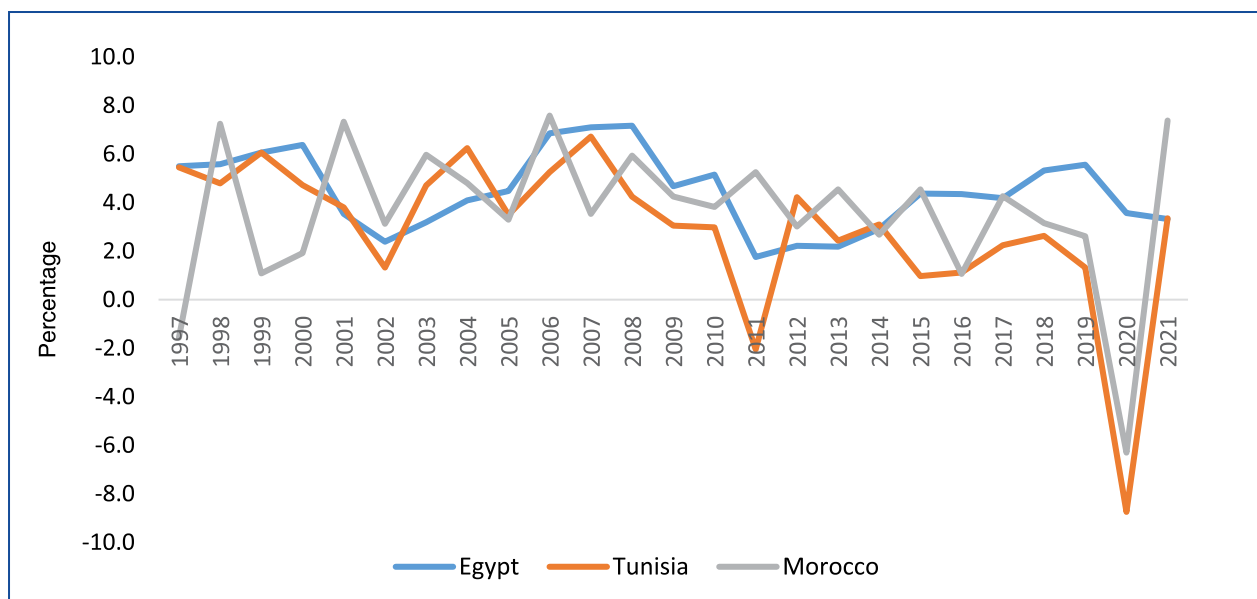
The rest of this chapter is organized as follows: Section 2 presents macroeconomic developments relating to growth, demand and the external sector; Section 3 is dedicated to labour market developments, with a special focus on different indices that better assess labour market performance; and Section 4 concludes and provides some policy recommendations.

¹ Egypt's national accounts follow a fiscal year calendar that starts in July of the previous year and ends in June of the current year.

2. Macroeconomic developments

At the macroeconomic level, Egypt has been relatively more resilient than other comparable economies in the region. Indeed, Figure 1 shows that it was the only country with positive growth rates (3.6 per cent in 2020, down from 5.6 per cent in 2019). The decrease was more pronounced for Tunisia and Morocco, whose GDP growth rates were -8.7 and -6.3 per cent in 2020, down from 1.3 and 2.6 per cent, respectively, in 2019.

Figure 1. Real GDP growth rates (percentage)



Source: World Development Indicators online data set.

Some potential reasons explain why Egypt performed better than other countries. The first pertains to the reform programme that Egypt implemented with the International Monetary Fund (IMF) since 2016, which has improved its macroeconomic aggregates: the growth rate reached 5.6 per cent in 2019 (up from 4.3 per cent in 2016); the inflation rate decreased to 13.8 per cent (down from 23.3 per cent in 2016), the unemployment rate reached 7.9 per cent (down from 12.7 per cent in 2016), the overall fiscal deficit was 8 per cent (down from 12.5 per cent in 2016), and its international reserves increased to reach USD 44 billion (up from USD 15 billion in 2016). Moreover, Egypt continued to support its economic reform programme and infrastructure development by borrowing from abroad. Indeed, the economy witnessed a proliferation in megaprojects over the past four years in order to boost the economy. Based on the investment map of Egypt, these projects are mainly divided into six groups (agriculture, industrial clusters,

tourism, urban development, energy, and new ports). Whereas most of these projects are financed by the Government of Egypt, some have been funded by international donors such as the World Bank, the European Union and the African Development Bank or through joint ventures. These developments have been associated with a significant increase in Egypt's external debt, which reached 37.2 per cent in 2020 (up from 21.1 per cent in 2016). Finally, in 2021, the Ministry of Planning and Economic Development launched a structural reforms programme (2021–24) that enhances the efficiency of the labour market, technical and vocational education and training, promotes the role of the private sector, and removes trade obstacles in order to create a supportive and enabling environment for competition (Zaki and Miniaoui 2022). In addition, this programme aims at diversifying the economy by focusing on three leading sectors, namely manufacturing, agriculture, and communications and information technology.

Second, the Government's policy response helped curb the negative effects of the pandemic. Indeed, the Government announced stimulus policies in a USD 6.13 billion package (EGP 100 billion, 1.8 per cent of GDP). Moreover, to support government revenues, a COVID-19 tax of 1 per cent on all public and private sector salaries and 0.5 per cent on state pensions was imposed to support the sectors that have been negatively affected by the pandemic. At the monetary policy level, several measures have been implemented, such as introducing additional refinancing instruments, relaxing the timeframe for loan payments and deferrals, and postponing credit reimbursement by employees. At the social level, the Ministry of Social Solidarity allocated more funds to support 60,000 families through its Takaful and Karama programmes. Second, the Ministry decided to include women over the age of 65 under the umbrella of the social security scheme.

Moreover, following the directives of President Abdel Fattah El-Sisi, the Ministry of Manpower announced that an exceptional allowance of EGP 500 for irregular workers would be disbursed for three months. Finally, some specific policies targeted some sectors that were deeply hit by the pandemic, such as the industrial and tourism sectors. Thus, while some policies helped increase the macroeconomic resilience of the economy, other policies focused on vulnerable categories and stimulating the labour market.

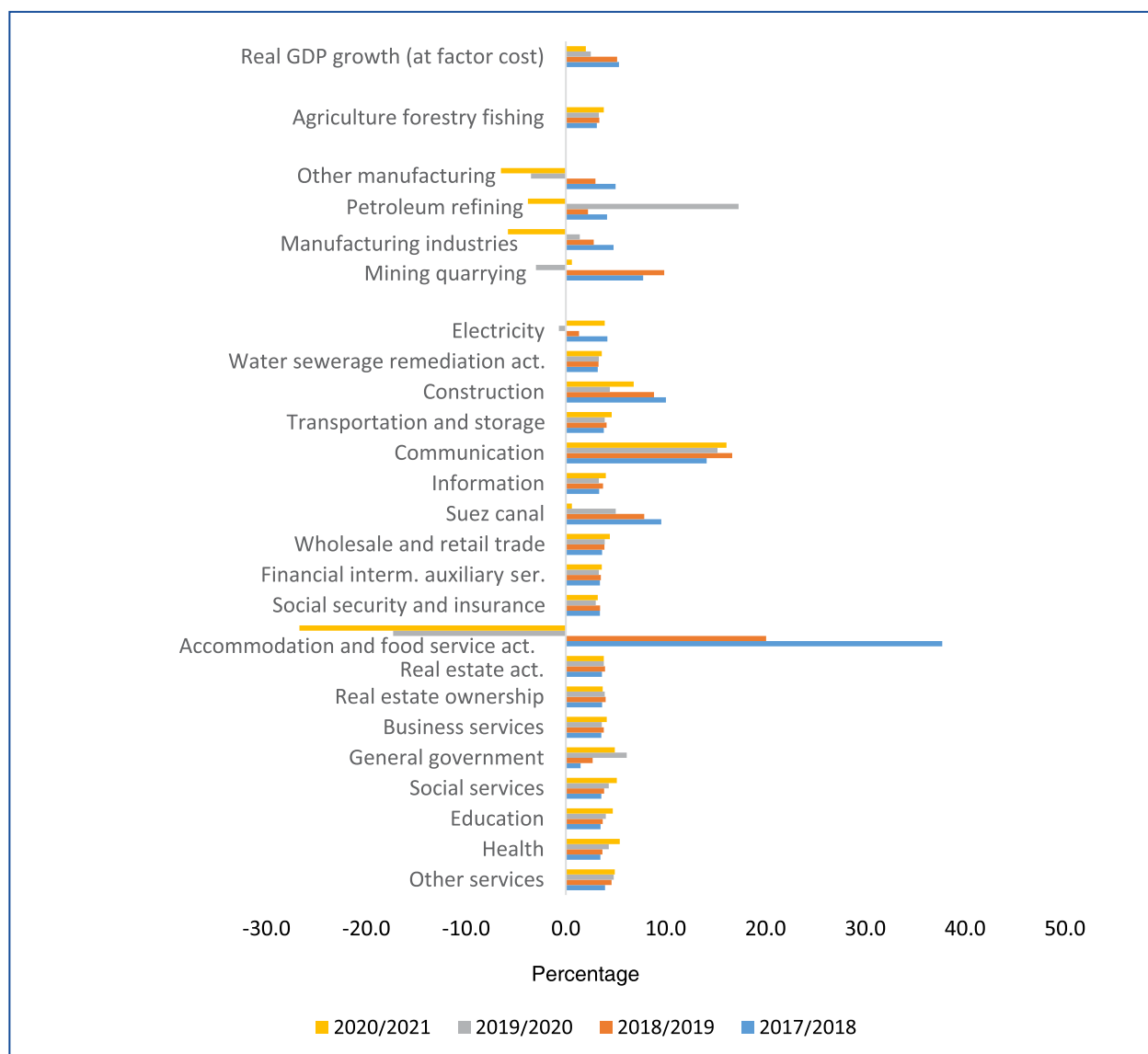
Despite a positive growth rate during the pandemic, the Egyptian economy was still suffering from several cyclical and structural characteristics that affected its ability to generate jobs and to achieve a more sustainable economic growth. These different characteristics are analysed below.

► 2.1 Growth led by capital-intensive sectors and some services

First, with the disruption in supply chains and the decrease in exports and investments, several sectors suffered from the pandemic, especially the non-oil manufacturing sector (which decreased by 3.5 per cent year-over-year between 2019 and 2020) and tourism (which decreased by 17.3 per cent over the same period). This decreasing trend continued in the following fiscal year, during which these two sectors decreased

by 6.5 and 26.7 per cent, respectively. In contrast, sectors that witnessed a significant growth rate were chiefly capital-intensive, such as petroleum (up by 17.3 per cent), construction (up by 4.4 per cent), in addition to some services, especially communication (up by 15.2 per cent) with the shift to online education and telework (see Figure 2).

Figure 2. GDP, by economic activity (real growth rates, percentage)



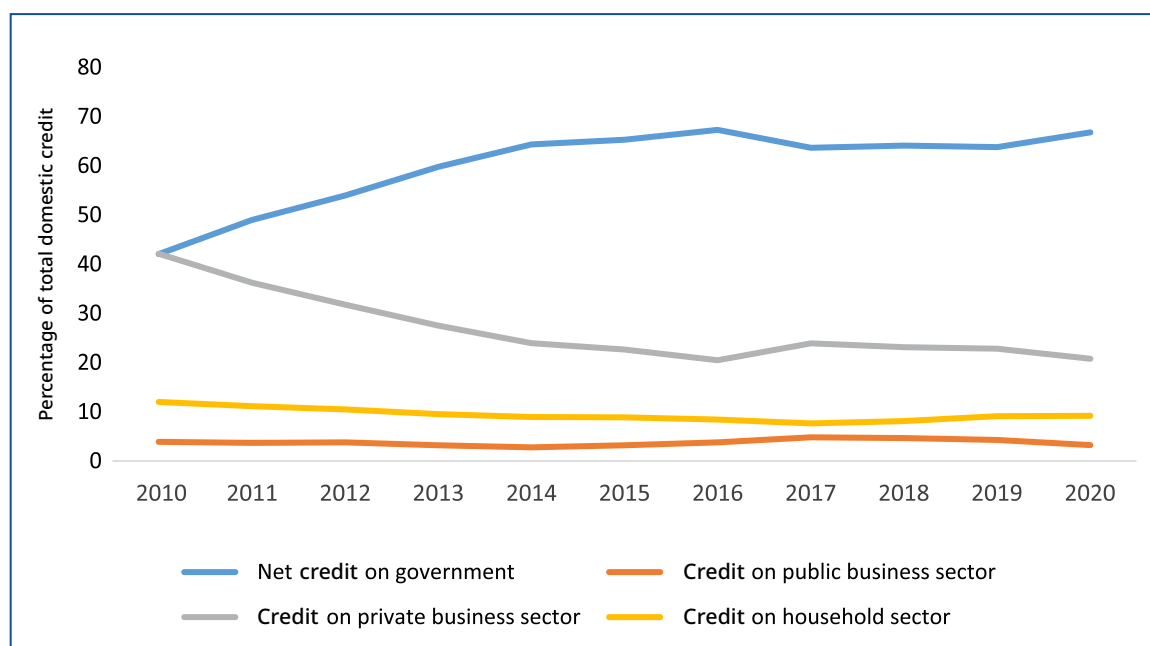
Source: Authors' own elaboration, using the Ministry of Planning and Economic Development's online data set.

► 2.2 Domestic credit to Government crowding out the private sector

Second, at the domestic level, in addition to lower demand, the increase in domestic credit provided to the Government by the financial sector (from 64 per cent in 2017 to 67 per cent in 2020) was associated with a simultaneous decrease in credit to the private sector (21 per cent, down from 24 per cent over the same period). Such government credit was mainly used to finance the fiscal deficit and the domestic debt. Yet, it is important

to note that the long-term trends show stronger changes given that the share of public (private) credit increased (decreased) from 49 to 67 per cent between 2010 and 2020 (from 42 to 21 per cent). Thus, less liquidity has been made available for the private sector, which has affected its contribution to domestic investment and growth, as will be shown later (see Figure 3).

Figure 3. Domestic credit (percentage of total domestic credit)



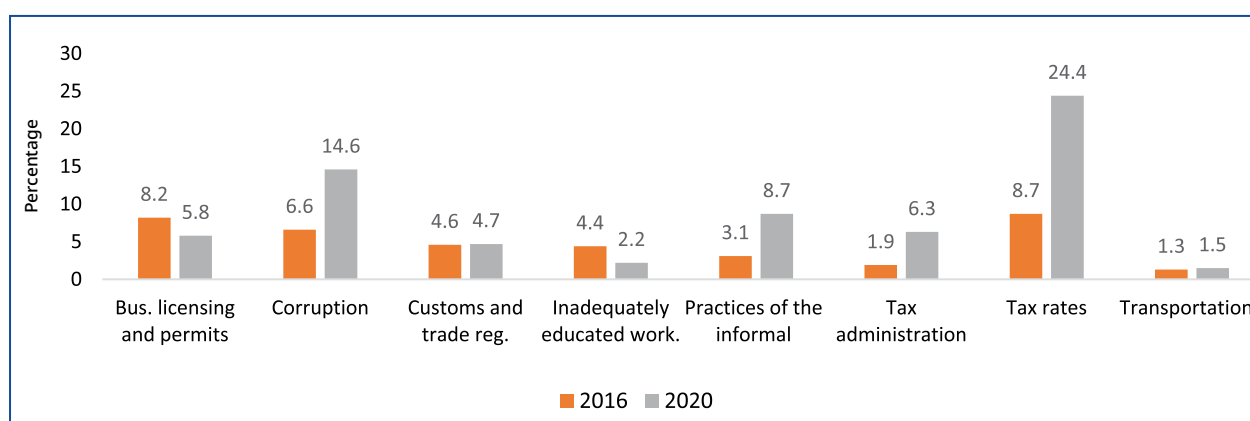
Source: Authors' own elaboration, using Central Bank of Egypt online data set.

► 2.3 A challenging investment climate

Third, another important reason behind the decrease in domestic investment is the deterioration of the investment climate, as shown in Figure 4. In fact, according to the World Bank Enterprise Survey, the share of Egyptian firms identifying

practices of the informal sector, corruption, tax administration, tax rates and customs and trade regulations as major business constraints has increased between 2016 and 2020.

Figure 4. The share of Egyptian firms identifying business constraints as severe



Source: Authors' own elaboration, using Central Bank of Egypt online data set.

Thus, with the pandemic, both public and private investments decreased by 19 and 61 per cent, respectively, between 2019 and 2020. The decrease in public investments was mainly concentrated in the following sectors: petroleum, electricity and

the Suez Canal. In contrast, public investments increased slightly in some services, such as education, health, water and sewage, and storage and transportation (see Table 1).

Table 1. Sectoral distribution of public investment (percentage)

	2017/18	2018/19	2019/20	2020/21
Agriculture	6.9	6.1	5.8	6.9
Petroleum	3.7	13.0	7.1	7.3
Natural gas	9.1	3.3	1.5	1.5
Other extractions	0.0	0.0	0.0	0.0
Petroleum refining	0.4	0.7	0.5	2.0
Other manufacturing	9.7	9.7	9.4	6.8
Electricity	20.5	14.2	10.0	6.7
Water and sewage	3.4	4.3	7.3	8.7
Construction	7.1	6.3	6.0	5.9
Storage and transportation	15.7	14.6	18.0	18.9
Information and communication	0.8	1.1	1.4	3.4
Suez Canal	4.1	3.6	2.1	2.7
Wholesale and retail trade	0.4	1.3	0.2	0.1
Financial intermediary insurance and social security	0.0	0.1	0.2	0.0
Accommodation and food service activities	0.1	0.2	0.1	0.1
Real estate activities	4.8	4.1	4.8	2.5
Education	3.7	4.1	6.6	5.8
Health	1.6	2.3	3.6	4.1
Other services	7.9	11.0	15.4	14.7
Total	100.0	100.0	100.0	100.0

Source: Authors' own elaboration, using the Ministry of Planning and Economic Development online data set.

► 2.4 Volatility of exports and investments

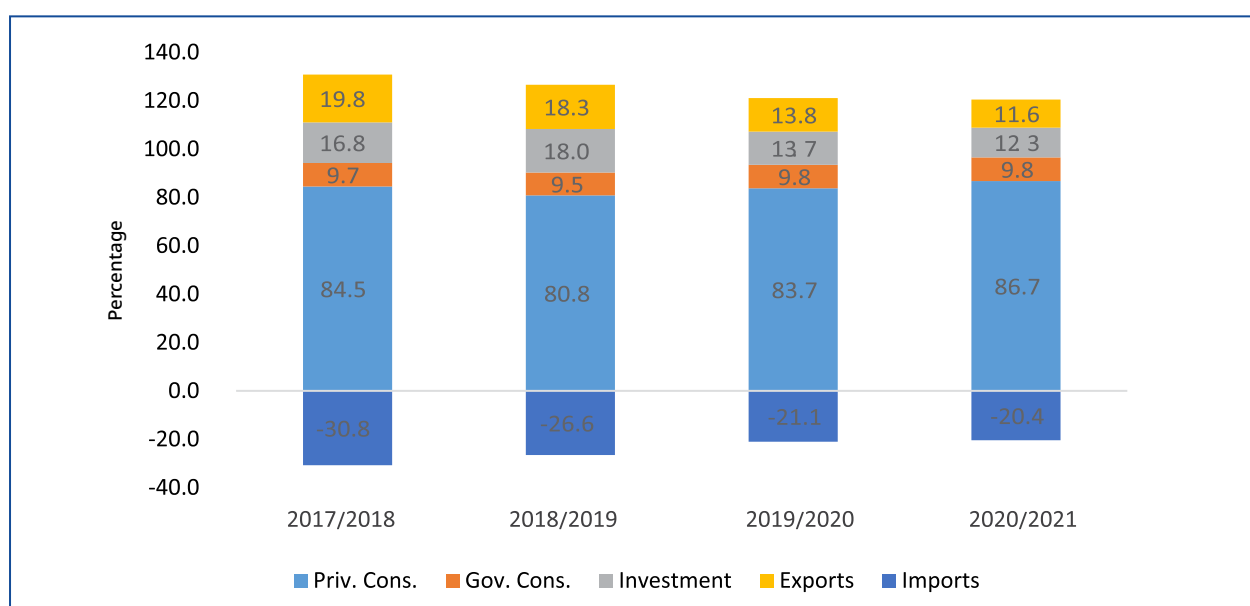
Fourth, at the cyclical level, and because of the pandemic, a detailed look at the demand components shows that, while government and private

consumption increased from 9.5 to 9.8 per cent of GDP and from 80.8 to 83.7 per cent, respectively (Figure 5), investment and exports decreased

significantly, by 20.9 and 21.7 per cent compared to fiscal year 2019 (Figure 6). This decreasing trend continued in the next fiscal year but to a lesser extent (a negative growth of 7.5 per cent and 13.4 per cent, respectively). The decrease in exports and investment can be attributed to both domestic and external factors. On the one hand,

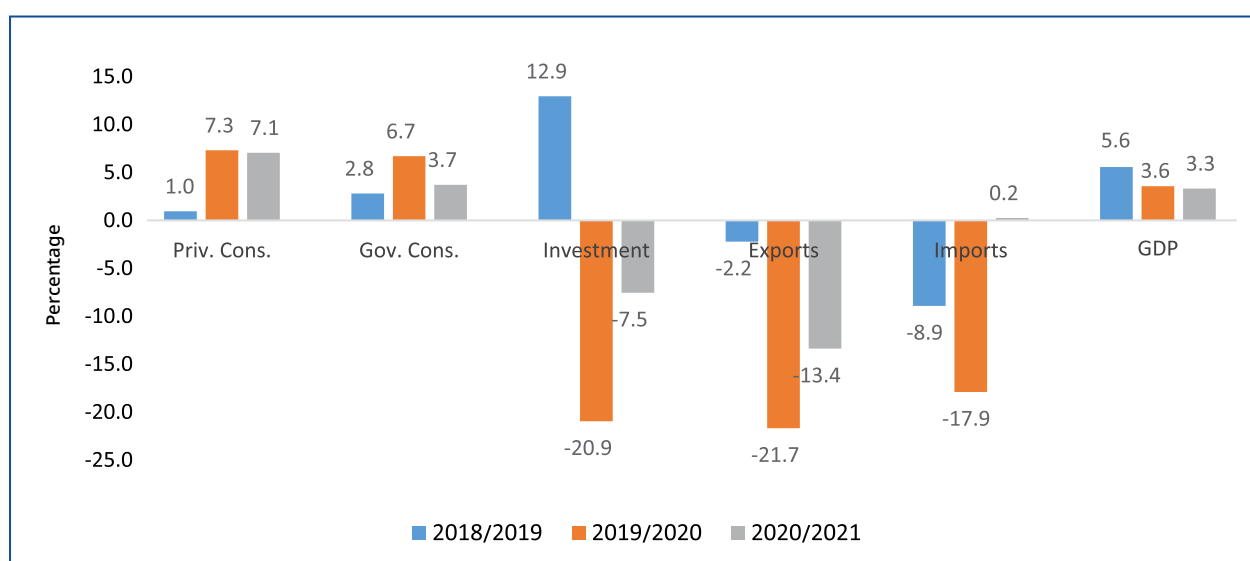
at the external level, with the recessionary effects of the pandemic, exports declined with the lower demand from Egypt's main trade partners (mainly the European Union and Arab countries). The same holds for foreign direct investments (FDI), which decreased from 3 per cent of GDP in 2019 to 1.6 per cent in 2020.

Figure 5. GDP, by demand components (shares percentage)



Source: Ministry of Planning and Economic Development.

Figure 6. Growth rates of GDP components



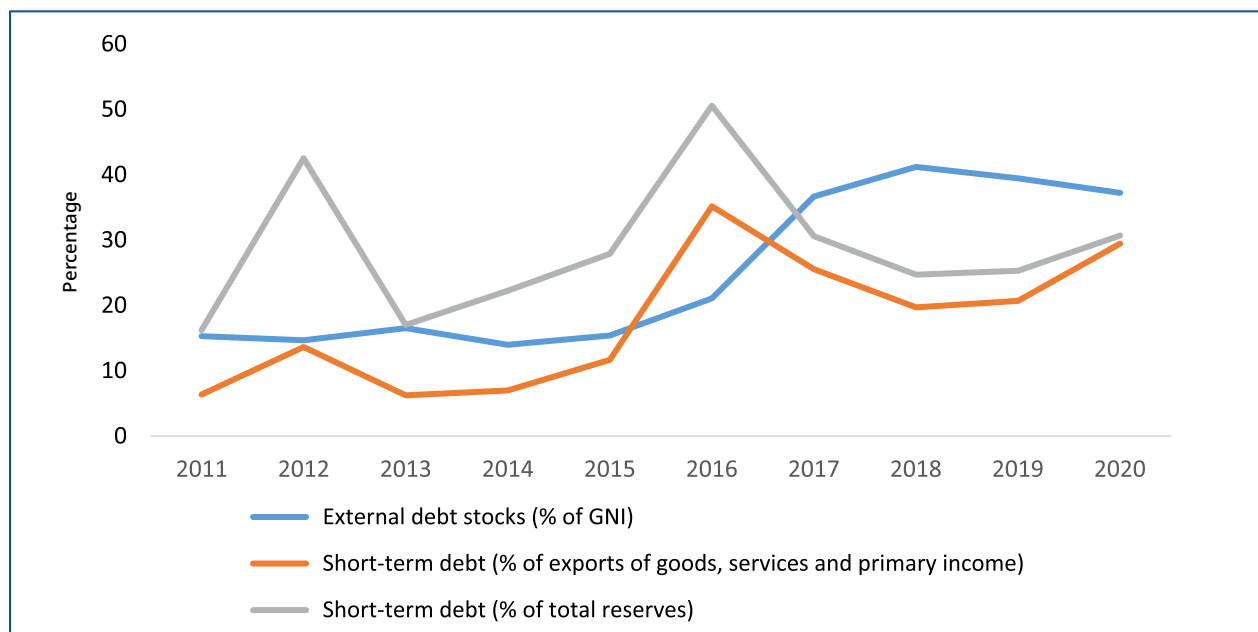
Source: Authors' own elaboration using the Ministry of Planning and Economic Development online data set.

► 2.5 A more fragile external position

Finally, with the increase in foreign reserves (thanks to foreign deposits or loans), external debt has been substantially increasing, as shown in Figure 7. Indeed, the share of external debt in national income increased from 21.1 per cent in 2016 to 37.2 per cent in 2020. Moreover, between

2019 and 2020, the share of short-term debt to foreign reserves increased from 20.7 to 30.7 per cent, putting further pressure on Egypt's foreign currency (pressured by the decrease in tourism, exports and FDI).

Figure 7. External debt in Egypt, (2011 -20)



Source: World Development Indicators online data set.

In addition, with the increase in external debt, the pressure on foreign reserves implied by the Russian invasion of Ukraine and the increase in the U.S. Federal Reserve's interest rate, a scenario similar to the one in 2016, took place in 2022. Indeed, the Central Bank had to devalue the currency once again, from 15.7 EGP/USD to 18.4 EGP/USD in March 2022, to increase in-

terest rates from 8.75 to 9.75 per cent, and the Government is currently negotiating a new loan from the IMF. Thus, while different macro-stabilization programmes have made the Egyptian economy resilient during the pandemic, they have not helped address the deep-rooted causes of Egypt's structural problems, which are related to employment and inclusive growth.

3. Labour market developments

The macroeconomic developments presented above translate into a more vulnerable labour market. Indeed, prior to the COVID-19 pandemic, and since the year 2000, the Egyptian labour market had already been witnessing various challenges manifested first by a declining contribution in value added and in the employment of labour-intensive sectors, particularly manufacturing. Moreover, employment rates have decreased and the proportion of discouraged job-seekers has risen, while both precarious types of employment and

working poverty have increased. Women, young people, and the less educated represented the most vulnerable groups in terms of access to the labour market and the quality of jobs (Amer, Selwaness and Zaki 2021).

In what follows, quarterly data of key labour market indicators are analysed in order to observe the pre-COVID-19 trends, the impact of the pandemic following the first quarter of 2020, as well as to track potential recovery signs. Results are

presented and discussed by sex and education and the Appendix includes figures by age. The two main data sources for this section are the Egypt Labour Force Survey (CAPMAS 2018, 2019, 2020, 2021) and OAMDI (2018, 2019, and 2020). This analysis relies on two sets of indicators: the first set describes the labour market from a

quantitative perspective through the change in labour force participation, employment-to-population and unemployment rates.³ A second set includes other measures that assess the quality of the labour market, namely informal employment, time-related underemployment, and youth not in employment, education or training.

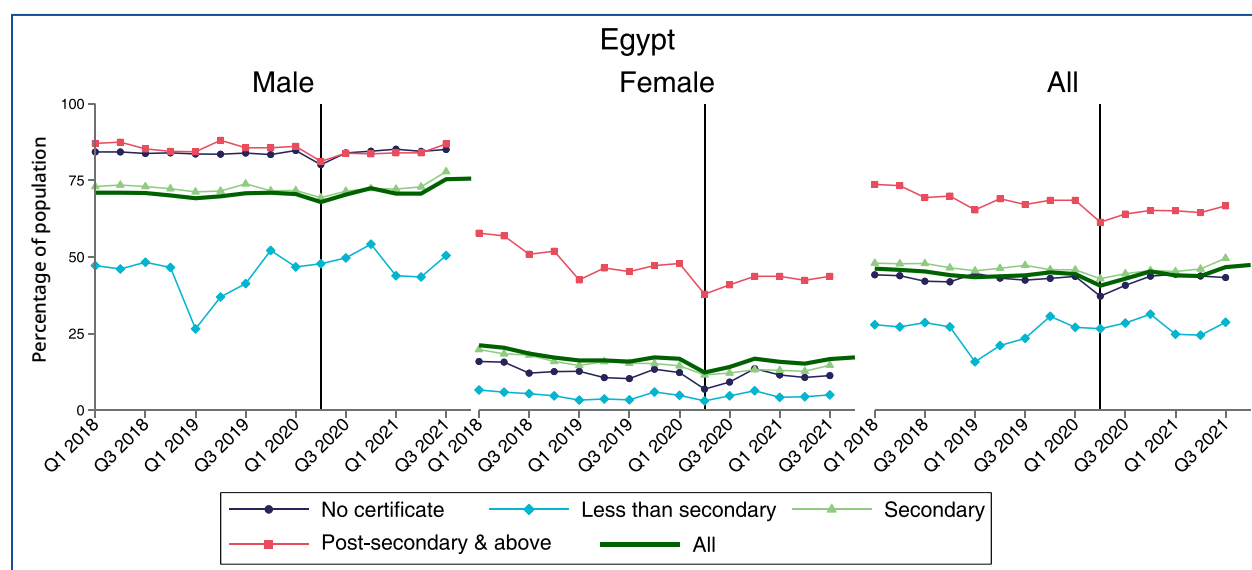
► 3.1 Labour force participation rate

The overall labour force participation rate has seen a shift in trends between 2018 and 2019, where it decreased from 46.2 per cent in the first quarter (Q1) 2018 to 44.1 per cent in the fourth quarter (Q4) 2018 before rising again from 43.1 per cent in Q1 2019 to 45 per cent in Q4 2019 (see Figure 8). The impact of the pandemic on the labour force participation rate materialized in Q2 2020, where the overall rate dropped to 40.7 per cent compared to 45.8 per cent during the same quarter in 2019. The indicator has largely recovered afterwards, reaching 45.3 per cent in Q4 2020.

Figure 8 also highlights the large existing gender disparities: the male labour force participation rate, at 72.5 per cent, was four times higher than the female rate (16.8 per cent) by Q4 2020. In fact, the drop in labour force participation rates following COVID-19 was more intense among fe-

males (12.3 per cent in Q2 2020 vs. 16.8 per cent in Q1 2020) than males (68 per cent in Q2 2020 vs. 70.6 per cent in Q1 2020). Women with higher education witnessed the largest decrease in participation rates; 37.9 per cent in Q2 2020, down from 47.9 per cent in Q1 2020. The overall participation rates started to improve afterwards, approaching pre-pandemic levels at 45.3 per cent in Q4 2020, before fluctuating once again at the end of 2021. The youth labour force participation rate (for those aged 15–24) has more than recovered from COVID-19 repercussions, especially among males, where it reached 41.4 per cent in Q3 2021, compared to 36.4 per cent during the same quarter in 2018 (Figure A1). Lower levels of educational attainment continue to be associated with lower participation rates, except for males with no certificate.

Figure 8. Quarterly labour force participation rate (percentage of population aged 15–64), by sex and educational attainment (2018–21)



Source: Authors' calculations based on data from Egypt Labour Force Survey by the Central Agency for Public Mobilization and Statistics (CAPMAS) 2018, 2019, 2020, 2021 and OAMDI 2018, 2019, 2020).

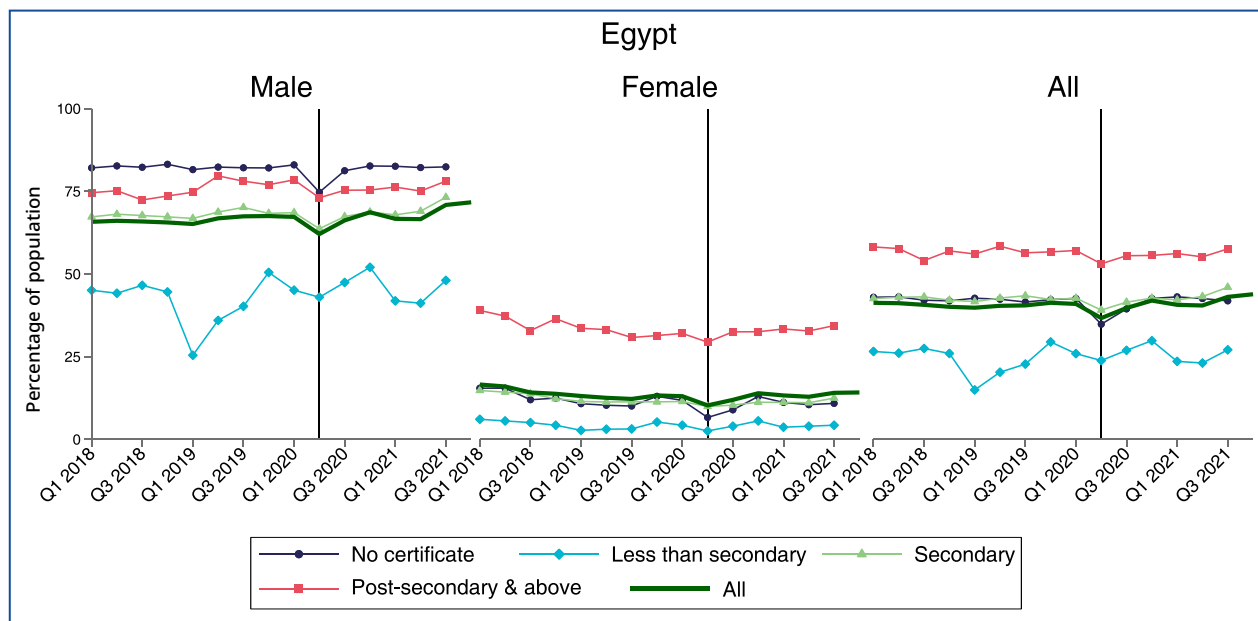
³ In this chapter, labour force participation and employment-to-population rates are defined for the 15–64 age group, whereas in the CAPMAS Labour Force Survey Bulletin 2021, these rates are defined for the age group 15 and above.

► 3.2 Employment-to-population ratio

Employment rates, as presented in Figure 9, reflect the same gender disparities as well as similar recovery trends as observed in the labour force participation rates. The overall employment rate has bounced back, reaching 43.1 per cent in Q3 2021 after witnessing a low of 36.7 per cent

in Q2 2020. Youth (aged 15–24), who often struggle to transition from school to work, had lower employment rates than the other age groups throughout the period. However, youth employment reached a high of 20.9 per cent in Q3 2021, compared to 18.4 in Q3 2018 (Figure A2).

Figure 9. Quarterly employment rate, by sex and educational attainment (2018–21)



Source: Authors' calculations based on data from Egypt Labour Force Survey (CAPMAS 2018, 2019, 2020, 2021; OAMDI 2018, 2019, 2020).

► 3.3 Unemployment rate

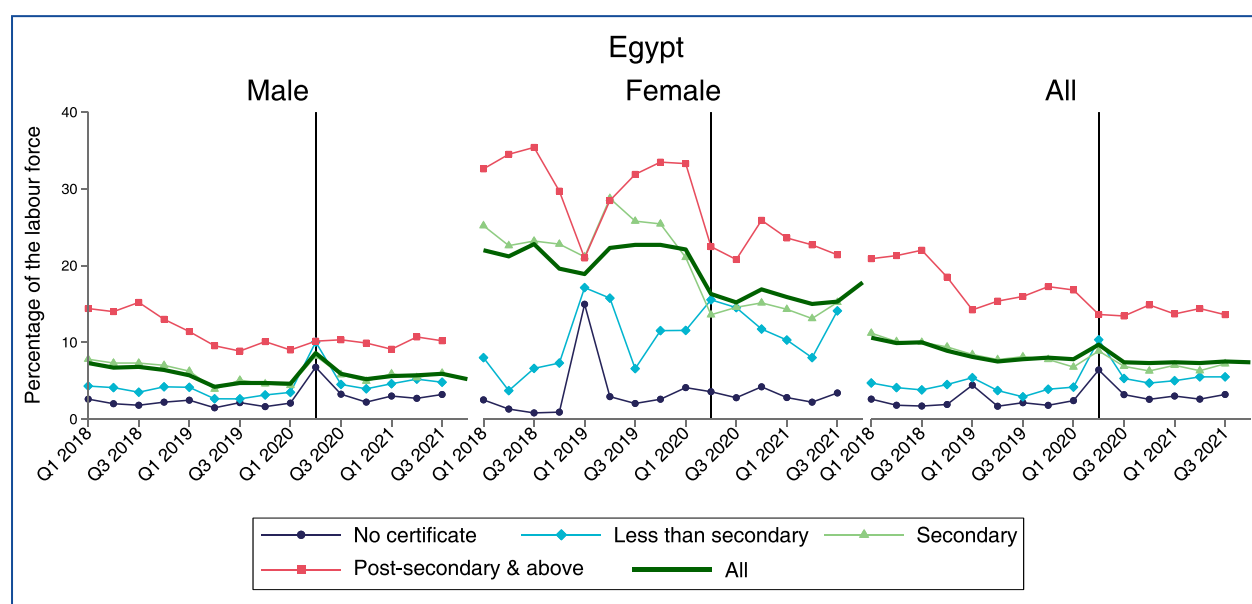
Figure 10 presents unemployment rates, as a percentage of the labour force. The COVID-19 shock pushed up the overall unemployment rate in Q2 2020, reaching 9.8 per cent compared to 7.9 per cent in Q1 2020 and 7.6 per cent in Q2 2019. The quarters that followed showed a reverse trend, where unemployment rates considerably improved, reaching 7.5 per cent in Q3 2020, which is even lower than the pre-pandemic levels. Women experienced much higher rates of unemployment than men over the period, as has historically been true in Egypt (Krafft, Assaad and Keo 2021). Indeed, it can be observed that while male unemployment rates fluctuated between 4.3 and 8.6 per cent over the period, women's unemployment varied between 22.5 and 16.4 per cent. Despite the disparities in levels, the pandemic had a larger impact on men, where male

unemployment rates more than doubled in Q2 2020, reaching 8.6 per cent compared to 4.3 per cent in Q2 2019. In contrast, female unemployment decreased in Q2 2020 (16.4 per cent) and Q3 2020 (15.4 per cent) compared to 23.1 per cent in Q3 2018. However, there is no evidence that more women did actively join the labour market, as female labour participation rates also decreased during the same period, especially among young women (see Figure A3). In 2021, unemployment rates among males started to recover, reaching 5.8 per cent in Q2 2021, which is close to pre-pandemic levels, while female unemployment further decreased to 15.1 per cent during the same period.

When analysing the evolution of unemployment rates through an educational attainment lens, it is clear that unemployment has been particularly high among post-secondary graduates and lower among people with no certificate, which is consistent with previous research on the Egyptian labour market (Amer, Selwaness and Zaki 2021). Highly educated women saw the largest

drop in unemployment rates (22.3 per cent in Q2 2020 versus 33.1 per cent in Q1 2020) as they were more likely to find a job than the other educational levels, especially in the administration, education and health sector, where they were concentrated (see Figure 10). Generally, COVID-19 has had less impact on male unemployment than on that of their female counterparts.

Figure 10. Quarterly standard unemployment rate of the labour force aged 15–64, by sex and educational attainment (2018–21)



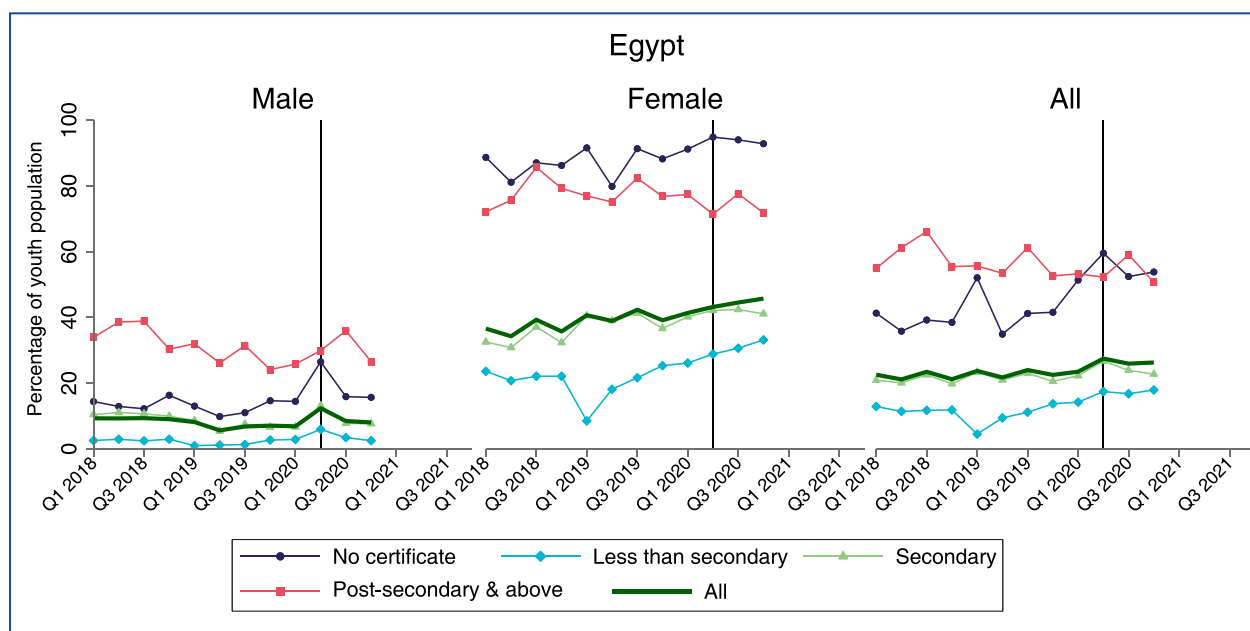
Source: Authors' calculations, based on data from Egypt Labour Force Survey (CAPMAS 2018, 2019, 2020, 2021; OAMDI 2018, 2019, 2020).

► 3.4 Youth not in employment, education or training (NEET)

Despite the overall improvement and recovery across different labour market indicators, Figure 11 shows that more than a quarter of Egyptian youth (26.3 per cent) were neither employed nor enrolled in education or training by Q4 2020. Youth NEET among females reached 45.8 per cent in Q4 2020, which is more than five times higher than the rate for their male counterparts (8.1 per cent). This confirms the existence of important disparities between genders and sug-

gests that the impact of COVID-19 has not been linear among different groups, as males almost returned to pre-pandemic levels, while the number of young women in NEET has been steadily rising. Post-secondary graduates were the least engaged in employment or training across the period, which suggests that there is a mismatch between graduates' skills and the available job and training opportunities.

Figure 11. Quarterly NEET rate for youth (aged 15–24), by sex and educational attainment (2018–21)



Source: Authors' calculations, based on data from Egypt Labour Force Survey (CAPMAS 2018, 2019, 2020, 2021; OAMDI 2018, 2019, 2020).

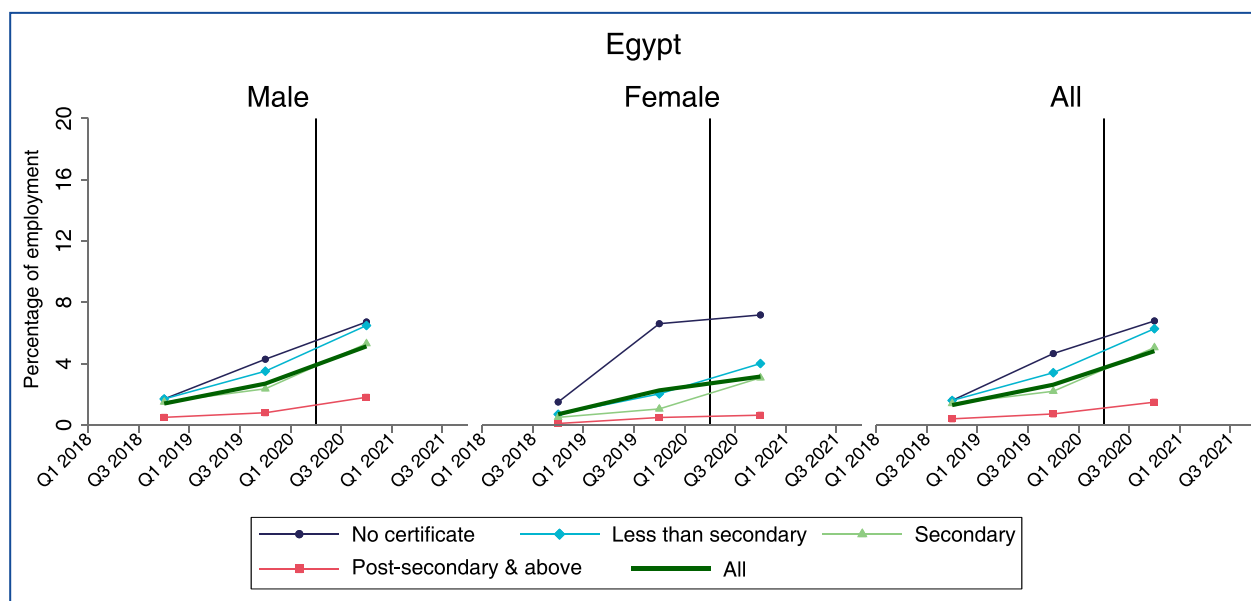
► 3.5 Time-related underemployment rate

Overall, time-related underemployment⁴ is low in Egypt, with 2.6 per cent of workers underemployed in Q4 2019 and 4.8 per cent in Q4 2020 (Figure 12), which is also in line with the fact that the lockdown measures implemented in Egypt following the COVID-19 outbreak were relatively modest. Nevertheless, it is clear that the indicator steadily increased over the period. Female workers recorded lower time-related underemployment rates than males over the period. The time-related underemployment rates reached 5.1 per cent among males and 3.2 per cent among females in Q4 2020, compared to 1.4 per cent and

0.7 per cent respectively in Q4 2018. Moreover, educational attainment is negatively correlated with time-related underemployment; the percentage of those working less than 35 hours per week is larger among the least-educated women and men (with no certificate) and smaller among the most-educated (post-secondary and above graduates). Over the period, the percentage of underemployed male workers with no certificate increased considerably, from 1.7 per cent in Q4 2018 to 6.7 per cent in Q4 2020, and it rose from 1.5 per cent in Q4 2018 to 7.2 per cent in Q4 2020 among women with no certificate.

⁴ The time-related underemployment rate is defined as the share of persons in employment working less than 35 hours per week, wanting to change work and/or wanting additional work. Time-related underemployment data are only available in the fourth quarter of 2018, 2019 and 2020.

Figure 12. Time-related underemployment, by sex and educational attainment



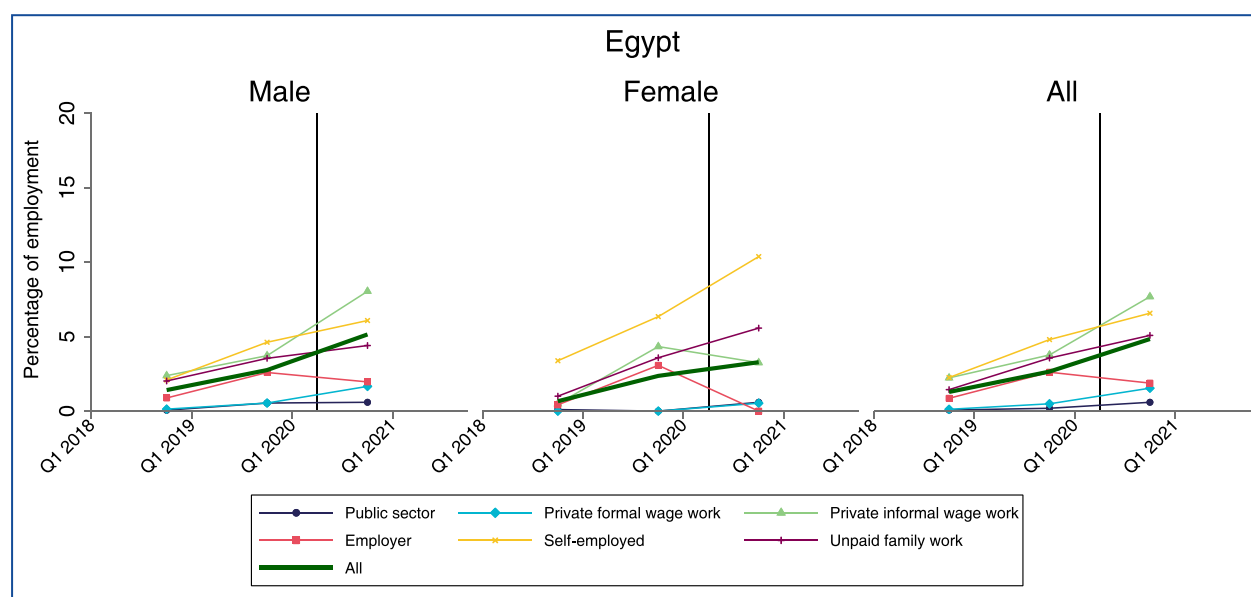
Note: Time-related underemployment is only available in the fourth quarter of 2018, 2019 and 2020

Source: Authors' calculations based on data from Egypt Labour Force Survey (CAPMAS 2018, 2019, 2020, 2021; OAMDI 2018, 2019, 2020).

Public sector and private formal wage workers have the most stable working hours, and thus the lowest levels of time-related underemployment rates, compared to other types of employment that are more irregular (Figure 13). It can be observed that the percentage of underem-

ployed public sector workers was 0.1 per cent in Q4 2018 and this only increased to 0.6 per cent in Q4 2020. Meanwhile, the time-related underemployment rates among private informal wage workers have increased from 2.9 per cent in Q4 2018 to 7.7 per cent in Q4 2020.

Figure 13. Time-related underemployment, by sex and type of employment

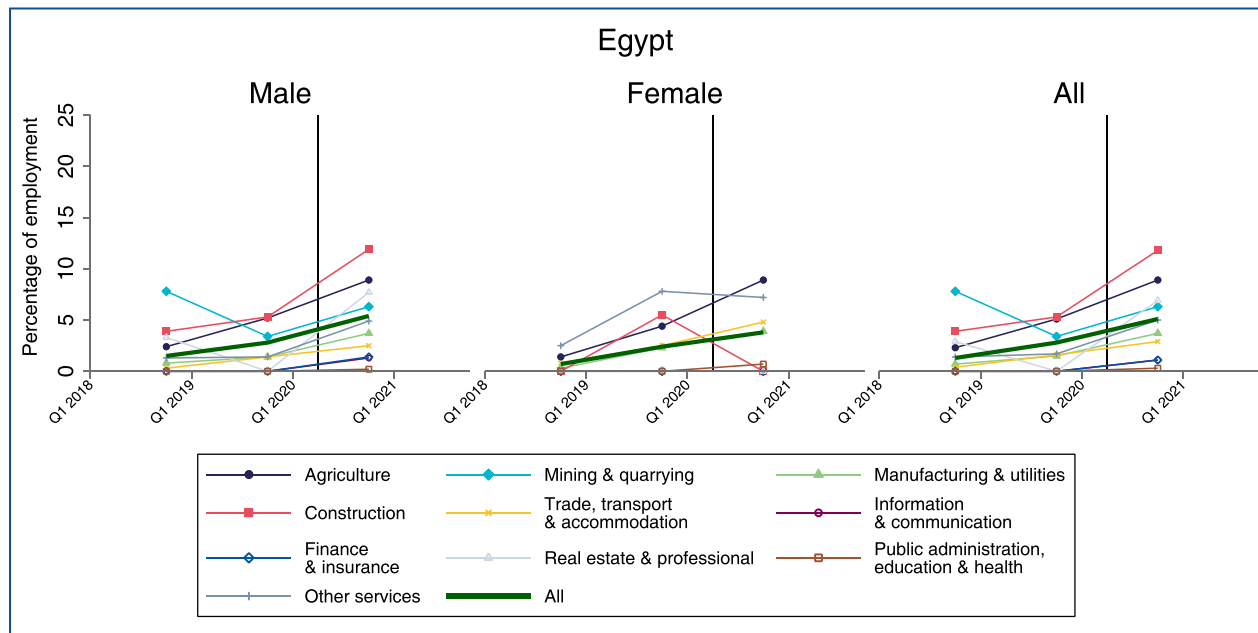


Note: Time-related underemployment is only available in the fourth quarter of 2018, 2019 and 2020.

Source: Authors' calculations, based on data from Egypt Labour Force Survey (CAPMAS 2018, 2019, 2020, 2021; OAMDI 2018, 2019, 2020).

As shown by Figure 14, time-related underemployment was more reported in the construction sector (11.1 per cent), followed by the agriculture sector (8.9 per cent) by Q4 2020.

Figure 14. Time-related underemployment rate, by economic activity



Note: Time-related underemployment data are only available in the fourth quarter of 2018, 2019 and 2020.

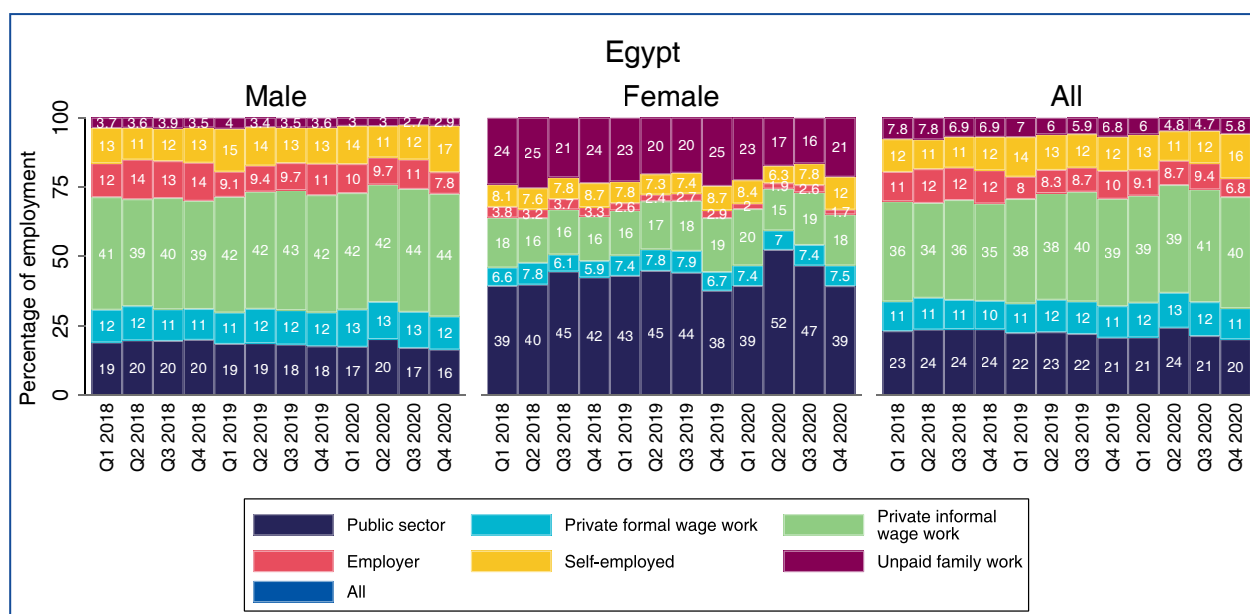
Source: Authors' calculations, based on data from Egypt Labour Force Survey (CAPMAS 2018, 2019, 2020, 2021; OAMDI 2018, 2019, 2020).

► 3.6 Type of employment

Figure 15 presents the distribution of employment by type of employment during 2018–20. Overall, by Q4 2020, 40 per cent of Egyptian workers were private informal wage workers, 20 per cent worked for the public sector, 16 per cent were self-employed, 11 per cent were private formal wage workers and those remaining were employers (6.8 per cent) and unpaid family workers (5.8 per cent). Over 2018–20, a continuing expansion can be seen in the share of private informal wage employment, especially among males. Following the COVID-19 outbreak, the distribution

of female employment shifted towards government, indicating that all other types of employment were negatively affected. Indeed, while the larger proportion of females work for the public sector (52 per cent), male employment is primarily concentrated in private informal wage work (42 per cent in Q2 2020). The rise in the share of public sector work among females could be explained by the fact that COVID-19 repercussions on household income have shifted the priority away from less stable sources of income.

Figure 15. Distribution of employment (percentage of the employed aged 15–64), by type of employment and sex



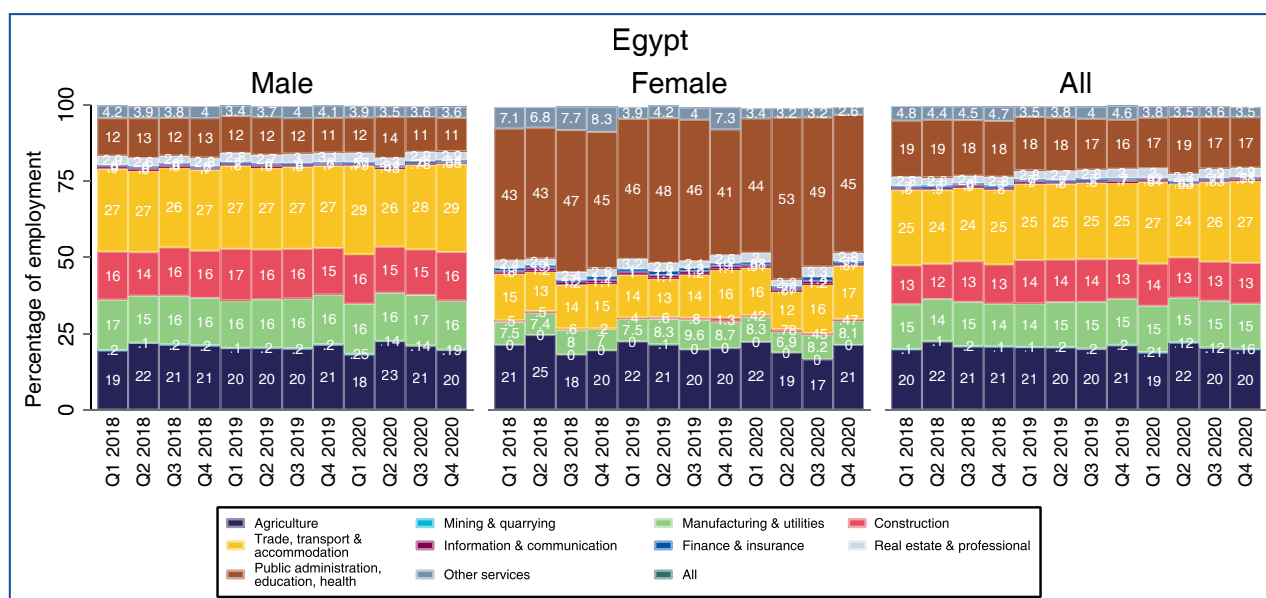
Source: Authors' calculations, based on data from Egypt Labour Force Survey (CAPMAS 2018, 2019, 2020, 2021; OAMDI 2018, 2019, 2020).

► 3.7 Employment by economic activity

Examining the distribution of employment by economic activity and sex during 2018–20, it is observable that the largest two economic sectors in Egypt were the trade, transportation and accommodation sector (employing 27 per cent of all workers) and the agriculture sector (with 20 per cent of total workers in Q4 2020). Female workers were chiefly concentrated in the public administration, education and health sectors, especially following COVID-19, where the percent-

age reached 53 per cent in Q2 2020, up from 44 per cent in Q1 2020. On the other hand, the largest share of males worked in trade, transport and accommodation. However, the share decreased to 26 per cent in Q2 2020 (from 29 per cent in Q1 2020) at the expense of a rise in agricultural employment (23 per cent, up from 18 per cent) and in public administration, education and health (14 per cent, up from 12 per cent).

Figure 16. Distribution of employment (percentage of the employed aged 15–64), by economic activity and sex



Source: Authors' calculations, based on data from Egypt Labour Force Survey (CAPMAS 2018, 2019, 2020, 2021; OAMDI 2018, 2019, 2020).

4. Conclusion

This chapter has assessed Egypt's macroeconomic and labour market performances in an era marked by the global shocks manifested as a result of the COVID-19 outbreak and the war in Ukraine, among other political tensions at the regional level.

Shielded by the improvement of macroeconomic aggregates since the implementation of the IMF reform programme, the Egyptian economy has succeeded in being the only country in the Middle East and Northern Africa to preserve positive growth rates following the pandemic. Nevertheless, this economic growth has not been accompanied by sustainable job creation levels. In addition, the underperformance of the Egyptian labour market is impeding higher growth potential.

At the macroeconomic level, five main challenges can be identified, three of which are structural in nature while the other two are cyclical. Firstly, it can be observed that economic growth is chiefly led by capital-intensive sectors such as petroleum, construction and communication, which witnessed significant growth rates following the pandemic, at the expense of the non-oil manu-

facturing sector and tourism, largely affected by the disruption in supply chains as well as the decrease in exports and investments. This explains why, even after the recovery from the pandemic, created jobs were rather modest. The second structural obstacle is the crowding-out effect associated with the increase in domestic credit provided by financial institutions to the Government and the decrease of those on the private sector between 2010 and 2020. Together with a deteriorating investment climate, domestic investment is far from its contribution potential to growth and thus employment. At the cyclical level, exports and investment have been volatile due to a lower demand from Egypt's main trade partners following the pandemic. Moreover, external debt has been rising substantially with the increase in foreign reserves adding more pressure on Egypt's foreign currency already affected by the decrease in tourism, exports and FDI. Such macroeconomic developments explain why, at the microeconomic level, the quantity and the quality of jobs created were rather modest.

In fact, at the microeconomic level, COVID-19 appears to have only exacerbated existing labour market challenges, including relatively low labour force participation rates and employment-to-population ratios as well as a relatively high unemployment rate, especially among youth and women. The good news is that those labour market indicators were able to largely recover from COVID-19 repercussions and have returned to pre-pandemic levels. However, Egyptian young people not in employment, education and training continue to be one of the major challenges, especially among females, for whom the rate is five times higher than their male counterparts. The dual decrease in labour force participation and NEET rates among women highlights the discouraging impact of COVID-19 on Egyptian women, especially youth. This finding confirms the existence of important disparities between genders and suggest that the impact of COVID-19 has not been the same across different groups.

In sum, while different macro-stabilization programmes have made the Egyptian economy resilient during the pandemic, they have not helped to address the deep-rooted causes of Egypt's structural problems related to employment and inclusive growth. This suggests the need to shift the focus onto more structural policies rather than stabilization policies. Additionally, reforms must be directed towards labour-intensive sectors in order to create more jobs (especially for youth and women) and thus stimulate the economy. Second, in order to increase both domestic and foreign investments, enhancing the business climate – along with facilitating access to finance,

competition, land and energy, especially for small and medium-sized enterprises – should remain at the top of the reform agenda. More specifically, there is a need to develop a transparent state ownership policy and governance framework in order to enable the private sector to make informed investment decisions and reduce uncertainty. This will make different sectors more competitive and thus increase the role of the private sector in the economy and in generating jobs. At the exchange policy level, the Central Bank of Egypt should avoid managing an overvaluation of the Egyptian pound to reduce the burden on foreign exchanges and on the real sector that has to adjust to keep the currency stable. While this is necessary to improve the competitiveness of exports, more reforms are needed to foster and diversify domestic production and remove administrative and unjustified non-tariff measures that affect exports and therefore production and job creation (Youssef and Zaki 2019). Finally, at the fiscal level, changing spending priorities is key in order to create fiscal space and ensure debt sustainability. Indeed, it is important to reallocate government spending from investment in physical capital (infrastructure) to that in human capital (on health and education) given that the latter has a more significant effect on long-term growth than the former.

► Chapter 3. Jobs and growth in North Africa in the COVID-19 era: The case of Morocco (2018-21)



By:

Fouzia Ejjanoui: Assistant Professor of Economics at the Faculty of Law, Economics and Social Sciences, University of Sidi Mohamed Ben Abdellah, Fez, Morocco.

1. Economic activity amid the COVID-19 crisis

The confinement measures in place in 2020 to control the COVID-19 pandemic strongly impacted Morocco's economy. These effects added to those of an agricultural year marked by drought. This translated into a recession in economic activity, with a contraction of Morocco's real gross domestic product (GDP) of 6.3 per cent, for the first time in more than two decades.

The economic and social impacts of the pandemic have been felt at multiple levels. Domestic demand declined by 6.7 per cent, particularly affecting household expenditure on manufactured goods, as well as transportation, catering and leisure activities. Imports and exports fell by 15 and 11 per cent, respectively. Meanwhile, the value

added of the agricultural sector declined by 7.2 per cent while that of the non-agricultural sector fell by 5.5 per cent.

In 2021, however, growth saw a strong rebound, of 7.4 per cent. This was largely the result of an increase of 18.9 per cent in agricultural activity and of 5.6 per cent in non-agricultural activities in the fourth quarter. This momentum has been seen in the recovery of the majority of economic activities, albeit at different rates. Nevertheless, as elsewhere in the world, certain key sectors of the economy continue to suffer the negative effects of the crisis, including tourism and related activities, as well as air transportation.

► 1.1 Gross GDP growth rate and its breakdown

Between 2000 and 2019, Morocco's economic growth was characterized by a jagged evolution, with highs and lows based on short-term climactic effects and long-term external factors. Growth accelerated until 2008 (at 4.8 per cent on average), then decelerated until 2019 (at 3.3 per cent on average). During this period, household consumption varied at around 58 per cent, while public spending was around 20 per cent. The gross fixed capital formation rate – more commonly referred to as the investment rate, a key variable driving growth – grew until 2008, then remained above 30 per cent until 2019. The foreign trade balance – an indicator of economic performance, a constraint and an adjustment variable – also remained negative.¹

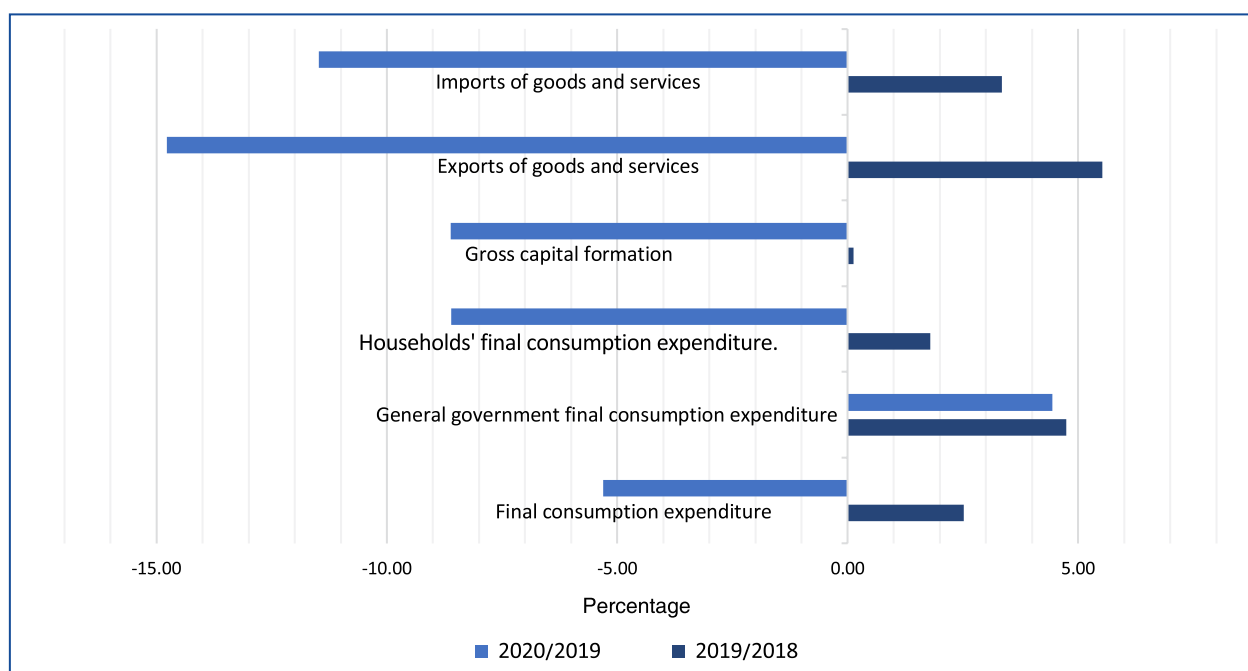
Then in 2020, Morocco's economy suffered the disastrous consequences of the COVID-19 pandemic and its first recession in more than two decades. Real GDP fell by 6.3 per cent, after increasing by 2.6 per cent in 2019. In addition to the adverse effects of the strict three-month COVID-19 lockdown, a drought equally impacted rural incomes, leading to a steep 6 per cent drop in domestic demand, and an ultimately negative contribution to economic growth, of -6.5 per-

centage points (rather than a contribution of 1.8 percentage points a year earlier). Despite the financial aid extended to households to offset the repercussions of the crisis, households' final consumption expenditure saw a decrease of 5.3 per cent, with a negative contribution to growth of 2.3 percentage points. Conversely, general government final consumption expenditure posted growth of 4.4 per cent in 2020, as opposed to 4.7 per cent the year before, with a contribution to economic growth of 0.3 percentage points.

Gross investment (gross fixed capital formation and change in inventories) registered a sharp decline in growth rates, falling from 0.1 per cent in 2019 to -8.6 per cent in 2020, with a contribution to economic growth of -4.6 instead of -0.1 percentage points. In terms of the volume of foreign trade in goods and services, both imports and exports registered sharp declines in 2020. Exports fell sharply, reaching -14.7 per cent in 2020 compared to an increase of 5.5 per cent the previous year, with a negative contribution to growth of 5.6 percentage points. For their part, imports fell sharply, reaching -11.4 per cent instead of an increase of 3.3 per cent in 2019, with a negative contribution to growth of 5.8 points.

¹ See the forthcoming report of the International Labour Organization (ILO) on employment and economic growth in Morocco.

Figure 1. Growth rate of GDP components, in percentage



Source: Growth rates are calculated using World Bank data (values).

The Moroccan economy experienced a recovery in 2021, with a rebound in the volume of GDP, of around 7 per cent. This has allowed GDP to recover 99.5 per cent of its pre-COVID (2019) level, thus registering one of the best growth rates in the Middle East and North Africa (MENA) region. In terms of domestic demand, the purchasing power of households recorded an increase, catapulted by the improvement in income generated by the good agricultural season, remittances from Moroccans living abroad (+43.3 per cent at the end of October 2021), the consolidation of the recovery in job creation, and the increase in consumer credit in a context of moderate in-

flation (which reached 1.4 per cent in 2021, i.e. double the 2020 increase, of 0.7 per cent). The same vigour is emerging in the level of investment, stimulated in particular by the increase in imports of capital goods and in foreign direct investment (FDI). With regard to foreign trade, exports exceeded their pre-crisis level by nearly 10 per cent. This performance concerns all sectors, in particular phosphates and derivatives, automobiles, food, and the electronics and electricity industry. Moreover, the growth of imports surpassed exports, generating an increase in the trade deficit of 26.6 per cent.

► 1.2 Growth in employment and value added, by major sector

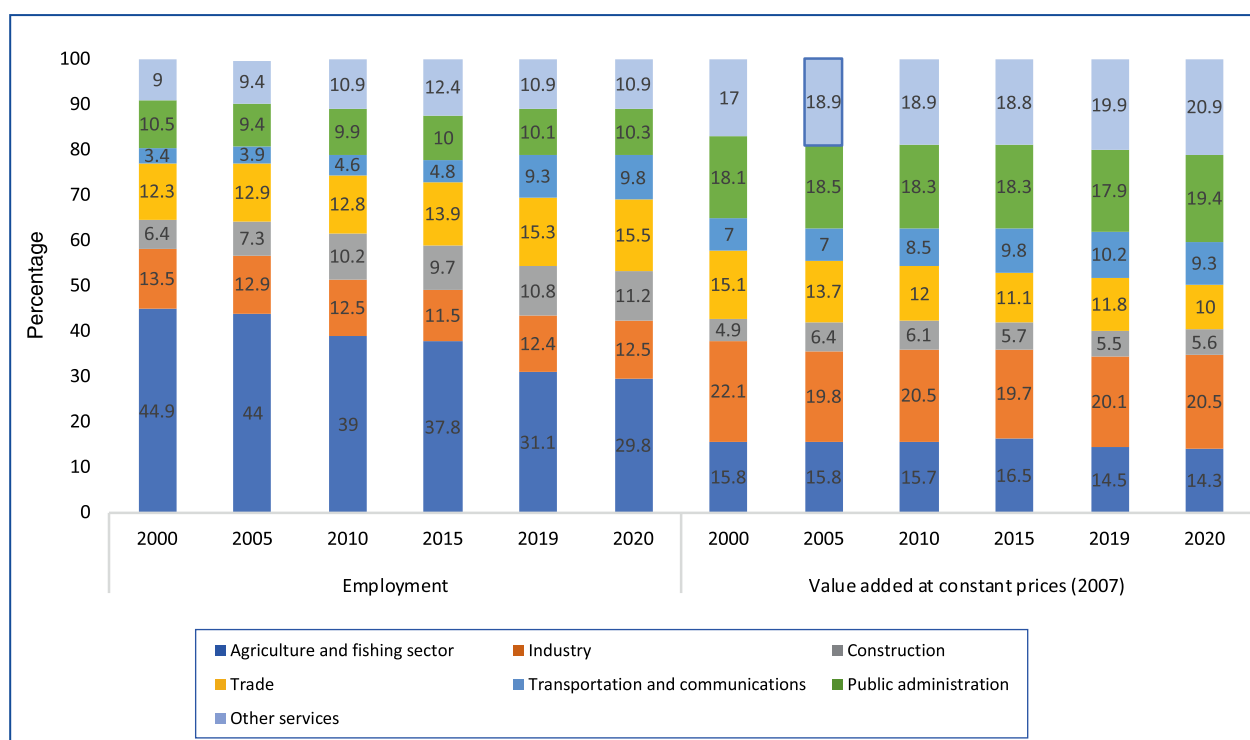
Examining the evolution of the sectoral contribution to economic growth and employment over the last two decades reveals that the agriculture and fishing sector plays an important economic role and remains the largest employer. However, the sector is losing weight in employment faster than in value added. Its contribution to employment fell from 45 per cent in 2000 to 31 per cent in 2019, with the loss accelerating notably from 2015–19. In other sectors, the 2000–19 period was marked by clear increases in employment, particularly for transportation and communications,

and for construction, followed by other services and trade. The industry sector maintained its weight in employment, after a slight decline lasting until 2015, and increased its weight in added value. Public administration saw a slight drop in its weight in employment until 2005, then an increase until 2019. Conversely, the transportation and communications sector increased its weight strongly in employment, and significantly in added value.

As shown in Figure 2, in 2020, a year marked by drought and a public health crisis, the agriculture and fishing sector remained the leading employer (29.8 per cent) despite its considerable decline in weight from 2019 (-8.4 per cent). It was followed by the other services sector (-4.1 per cent),

industry (-3.2 per cent), trade (-3.1 per cent), public administration (-2.8 per cent) and the construction sector (-1.0 per cent). In fact, transportation and communications was the only sector where employment grew during the pandemic (+0.7 per cent).

Figure 2: Breakdown of employment and value added between major sectors of economic activity (in percentage)



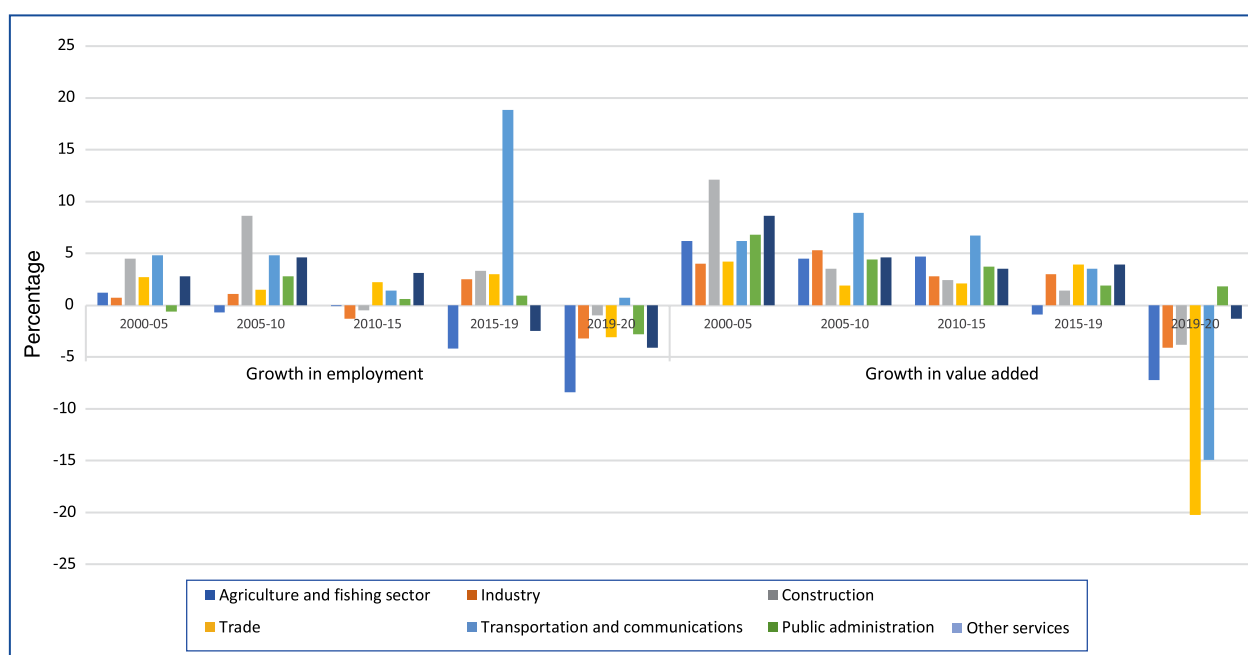
Source: Belghazi, S. Forthcoming ILO report on jobs and growth in Morocco.

In terms of the growth in added value achieved by the sectors of transportation and communications, other services, industry, trade, and public administration, it appears that despite an observable slowdown from the decade spanning 2000–10 to the decade spanning 2010–19, they remain dynamic. The agriculture and fishing as well as the construction sector, however, are experiencing markedly lower growth rates in added value than the other sectors.

other sectors were all negatively impacted. The trade sector – due to total and/or partial closures and the curfew, which reduced working hours – remained the most affected, with added value falling by 20.2 per cent. In second place was transportation and communications, whose added value fell by 14.9 per cent – due to airspace closures and travel restrictions. The agricultural sector, under the effect of the drought, saw a drop of almost 7 per cent.

Figure 3 shows the added value achieved by the economic sectors throughout 2020. It reveals that, with the exception of public administration, whose added value increased by 1.8 per cent, the

Figure 3. Growth in added value and employment, by major sector (in percentage)

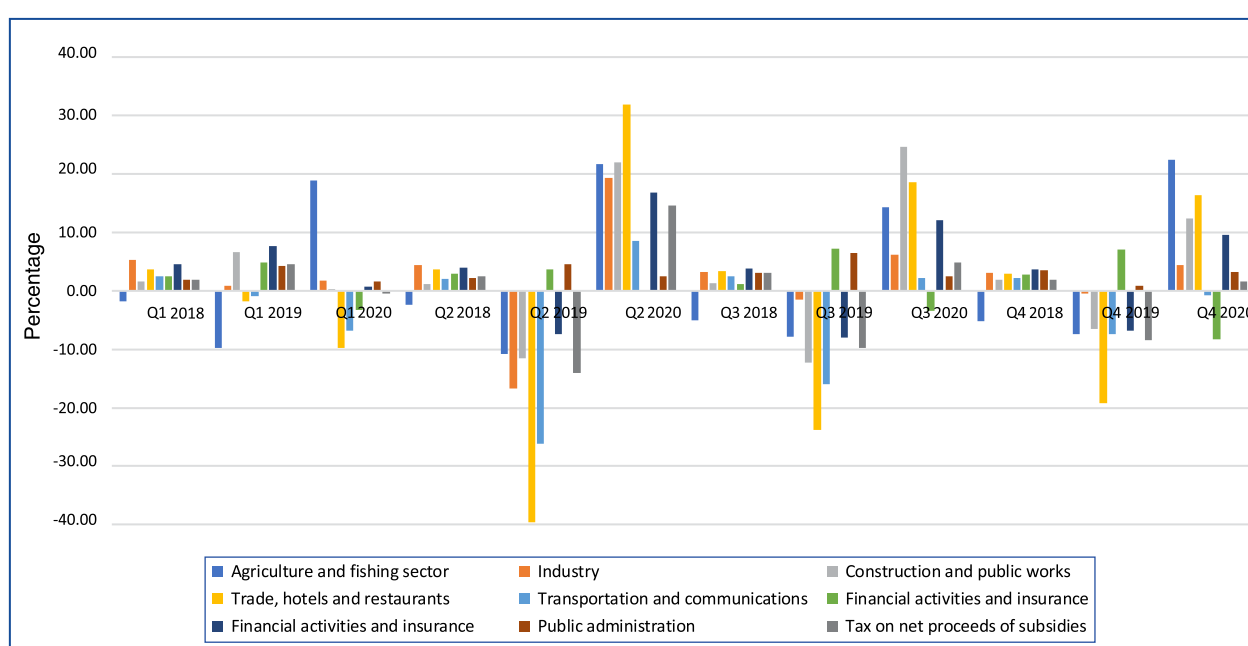


Source: Belghazi, S. Forthcoming ILO report on jobs and growth in Morocco.

The added value of all these sectors experienced a collapse in the second quarter (Q2) of 2020, marked by strict pandemic-related health measures. In this quarter, the added value of the trade sector, as well as transportation and communi-

cations, fell by 40 and 26 per cent, respectively, compared to Q2 of 2019. Similar observations can be made for the other sectors, except for public administration, whose added value increased by 4.5 per cent compared to Q2 of 2019.

Figure 4. Rate of change in sectoral added value, in percentage (quarter-on-quarter)



Source: Growth rates calculated based on data from the Haut Commissariat au Plan (HCP) national accounts.

Faced with this situation and the persistence of the pandemic, Moroccan authorities implemented various programmes and strategies to mitigate the impacts and revive economic activity. This contributed to the recovery of several sectors as of the start of 2021. Thanks to these measures, the industry and construction sectors both achieved good results in their value added, which increased remarkably (by 19.21 per cent and 25 per cent, respectively, in Q2 and Q3 of 2021 compared to the same quarters of 2020).

The trade sector, meanwhile, began recovering in Q2 of 2021, achieving an increase in added value of almost 32 per cent in the same quarter. In the agriculture and fishing sector, after a two-year drop, the sector's performance exceeded forecasts in 2021 thanks to good rainfall and distribution. As a result, the added value of the sector increased by around 20 per cent during Q1, Q2 and Q4 of 2021. However, the transportation and communications sector continued to see a decline in added value.

2. The labour market in light of the COVID-19 health crisis

In the 20 years preceding the pandemic, Morocco was characterized by uneven quality of employment, for those who could find work. Women and young people were those most excluded from the labour market. There was a decline in the labour force participation rate, as well as in employment and in time-related underemployment, coupled with a retraction and virtual stagnation in the unemployment rate.

As of March 2020, Moroccan decision-makers reacted forcefully to slow the spread of the virus. The measures taken had significant repercussions on the job market, which was already dysfunctional. The pandemic exacerbated the downward trend in labour force participation and employment rates that had persisted for the past two decades. The unemployment rate had been improving between 2018 and 2019, a trend reversed just before the pandemic and reinforced with its onset. Although all categories of society have been affected by this crisis, women and young people remain those who have suffered the most, recording the lowest labour force participation and employment rates and the highest unemployment rates. They have also been the slowest to recover after the slight rebound recorded in 2021.

The drop in the participation rate and in employment has been more pronounced among women

with higher education, while for men, this drop has primarily affected those without a diploma. The increase in the unemployment rate during the pandemic has particularly affected women and men with average levels of education. The underemployment rate, generally stable beforehand, saw a very significant increase with the start of the pandemic. It is noteworthy that women, who are generally disadvantaged in the labour market, had much lower rates of underemployment than men. Youth, on the other hand, were those most affected by underemployment. Mid-level graduates also recorded the largest increase in underemployment.

Nevertheless, the labour market has been breathing a sigh of relief since Q2 of 2021. Participation and employment rates have managed to return to pre-pandemic levels, although this is not yet true for unemployment and underemployment rates.

In what follows, the main indicators characterizing the labour market between 2018 and 2021 will be examined, with comparisons by sex, age group, education, and by economic sectors. All this analysis is based on quarterly and annual data relating to labour force participation, employment and unemployment published by the High Commission for Planning (HCP).

► 2.1 Evolution of the labour force participation rate and the COVID-19 health crisis

The labour force participation rate experienced a downward trend over the past two decades, reaching 46 per cent in 2018 (71 per cent among men and 21.8 per cent among women). The disparities between men and women in the labour

market persist, with low female participation despite their increased rates of schooling and levels of education. The economic situation, gender-related norms, and the legal framework, structure of the economy and labour market, as well as

family constraints are among the factors that can explain this, according to a study on the economic costs of gender inequalities in the labour market in Morocco.²

Analysis by age (Figure A1 in the Appendix) shows that alongside people aged 60+, young people aged 15–24 have the lowest participation rate (barely 27 per cent in 2018). Youth and women are thus those most excluded in the labour market in Morocco, recording high rates of inactivity. Analysis by level of education shows that people with mid-level diplomas have the lowest participation rates, while the rate is higher for those with higher-level degrees. However, this varies by gender. The rate is higher for men who have no school diploma and, conversely, for women with higher diplomas. This is a long-term trend observed over the past two decades.

The downward trend in Morocco's labour force participation rate continued to be observed in 2019, settling at 45.8 per cent (a decrease of 0.2 from the previous year). Women and young people aged 15–24 were the most affected by this regression (-0.3 points and -1.7 points, respectively), while for men, the situation has remained fairly constant. Meanwhile, women with no diploma and those with average levels of education saw their inactivity rates increase in 2019, while women with diplomas recorded the opposite trend. Among men, those with average levels of education most experienced the decline in participation rates in 2019.

In 2020, under the combined effects of the COVID-19 pandemic and a dry agricultural year, the structural decline in the labour force participation rate was more pronounced, falling by one percentage point, to settle at 44.8 per cent. This dip was greater among women (-1.6 percentage points), establishing itself at 19.9 per cent, compared to 70.4 per cent for men (-0.6 percentage points). By age, youth aged 15–24 were the most affected (-1.6 percentage points).

Analysis of the evolution amid the pandemic, for different educational levels (Figure 5), shows that the labour force participation rate dropped negatively and in an almost equal way for people with no diploma (-1.5 percentage points) as for those with higher diplomas (-1.4 percentage points). This decline was more pronounced among women with higher educational levels (-2.2 percentage points), falling from 45.4 to 43.2 per cent.

Meanwhile, for men this drop primarily affected those with no diploma (-0.9 percentage points), falling from 79.3 per cent in 2019 to 78.4 per cent in 2020. The latter generally occupy precarious jobs, which were the most affected by lockdown and COVID-19 restrictions. Total shutdowns and/or reduced opening hours due to the curfew can partly explain the drop in the participation rates of men with no diploma.

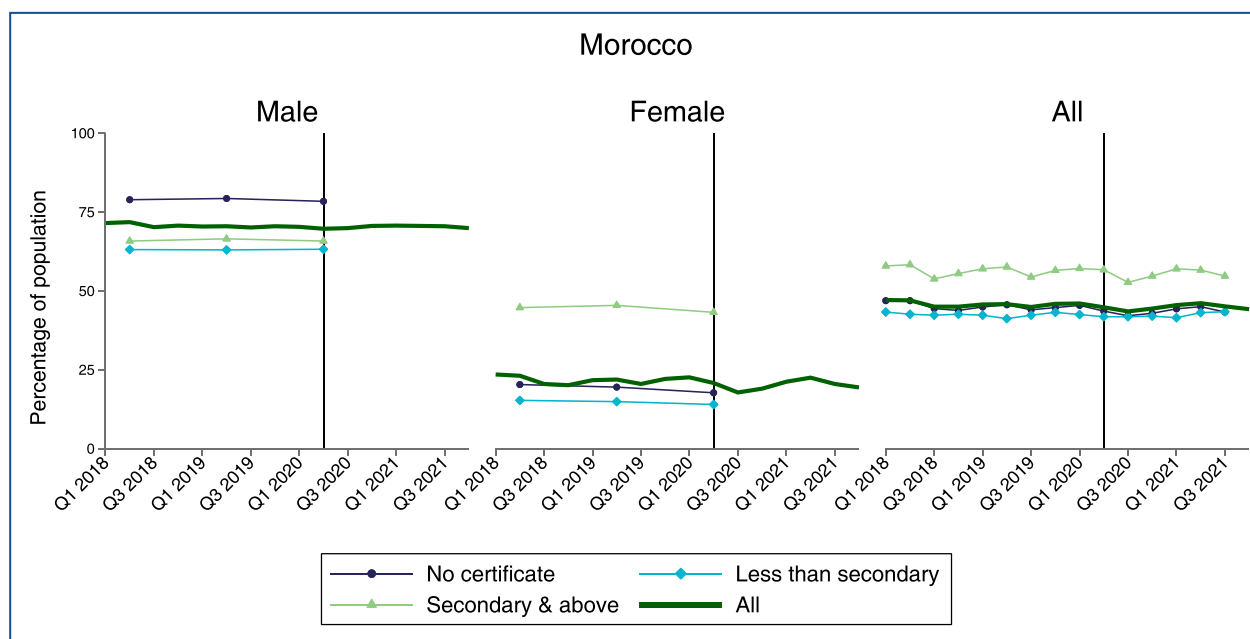
As expected, the labour force participation rate reached its lowest level in Q2 and Q3 of 2020, with a slight recovery in Q4. This is in line with the results of the COVID MENA Monitor survey, which show that the rate has been on an upward trend since Q4 of 2020. However, the COVID MENA Monitor shows a decline in Q3 of 2021 which can be explained by the seasonal employment of women in the agricultural sector (Verme, Barry and Guennouni 2016). It should be noted that men were able to recover more quickly as of Q4 of 2020, unlike those in categories that generally experience lower participation rates (women and young people). Indeed, those most affected by the pandemic are taking longer to recover.

The participation rate is showing signs of recovery since Q1 of 2021, establishing itself at 45.5 per cent (70.7 per cent for men and 21.2 per cent for women), a mild improvement over the levels for Q1 of 2020 (46, 70.3 and 22.6 per cent). The rates for Q2 and Q3 of 2021 were notably higher than their corresponding quarters in 2020. This can be expected, given that the health measures applied amid the COVID-19 pandemic were more severe during those two quarters of 2020, which negatively impacted the labour market. A comparison between the first three quarters of 2021 also shows an increase in the female labour force participation rate in Q2 (of 1.3 percentage points) followed by a drop during Q3 (of 2 points). Conversely, the labour force participation rates of men were relatively more stable. This reveals once again that the seasonal trend observed in Morocco's participation rate is primarily influenced by the rates for women.

The downward trend in participation rates in general, and of women in particular, can be explained by various factors, including the longer time spent in schooling. In addition, the increase in the schooling rate of young people aged 15–24 and its increasing duration have also resulted in a drop in the participation rate of this category of workers.

² DEPF and UN Women. 2021.

Figure 5. Quarterly labour force participation, by sex and education (2018-21)



Note: Data disaggregated by sex and education for Morocco are only available annually up to 2020 and are plotted in the second quarter of each year.

Source: Authors' calculations, based on data from the National Survey on Employment (HCP 2018a, 2018b, 2019a, 2019b, 2020a, 2020b, 2021).

► 2.2 Evolution of the employment rate and COVID-19 health crisis

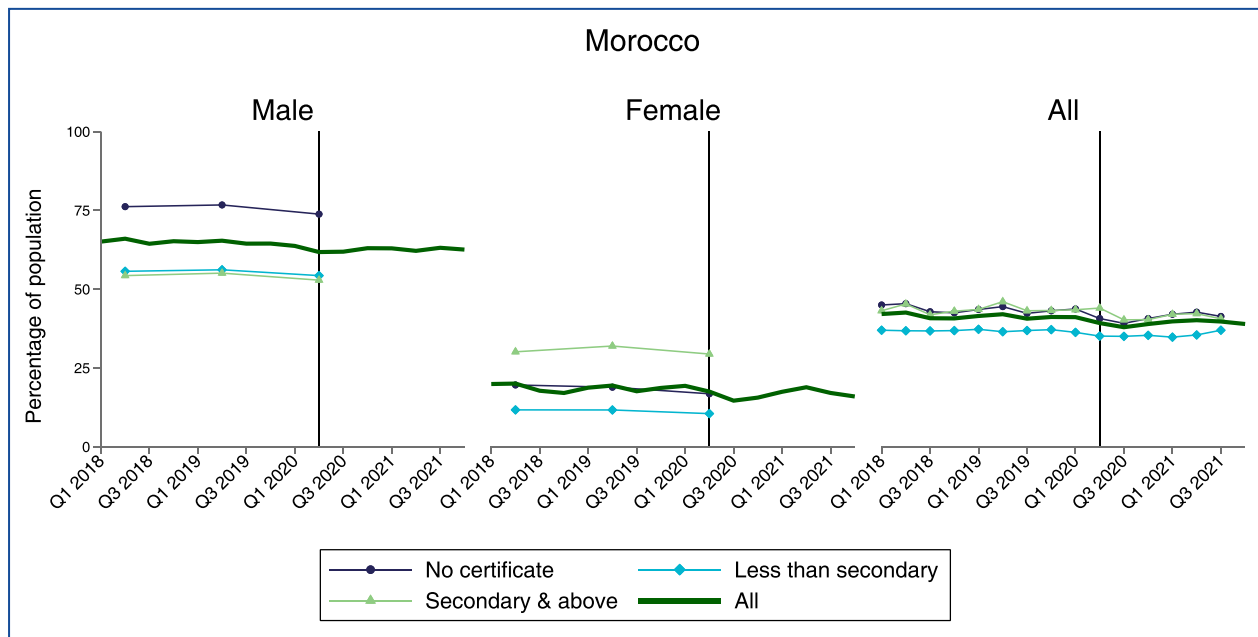
Employment rates have seen a continuous decline over the past two decades for all categories of the population. As shown in Appendix Figure A2, the groups with the lowest participation rates also record the lowest employment rates – namely women and youth. In 2019, the employment rate for women was 18.6 per cent, versus 65.5 per cent for men and 18.9 per cent for youth.

Analysis by education level (Figure 6) shows that men with no school certificate generally have higher rates of employment than the most educated (77 versus 55 per cent). Conversely, for women the employment rate is higher among those with higher levels of education (32 versus 18 per cent for those with no school certificate). As expected, the pandemic reinforced the existing downward trend in employment. Indeed, the employment rate fell from 41.6 per cent in 2019 to 39.4 per cent in 2020 (-2.2 points). This decline affected men more (-2.57 points) than women (-1.92 points). Among men, those with no school

diploma suffered most notably from the decline (-2.91 points), whereas women with higher educational levels were the most impacted (-2.54 points). All age groups were affected by the drop in employment, but it has been most pronounced among people aged 25–34 (-3.2 points), followed by youth aged 15–24 (-2.7 points).

At the end of the observed period, the employment rate had started to recover, although it has not yet returned to its pre-pandemic level. The general tendency is mainly informed by the trend among men. Female employment rates were on an upward trend before the pandemic, and although women were hit hard by the start of the pandemic, they had already recovered most of the decline by Q3 of 2021. Meanwhile, young people were not necessarily the most deeply affected at the start of the pandemic, but they have been the slowest to recover.

Figure 6: Quarterly employment rate, by sex and education (2018–21)



Note: Data disaggregated by sex and education for Morocco are only available annually up to 2020 and are plotted in the second quarter of each year.

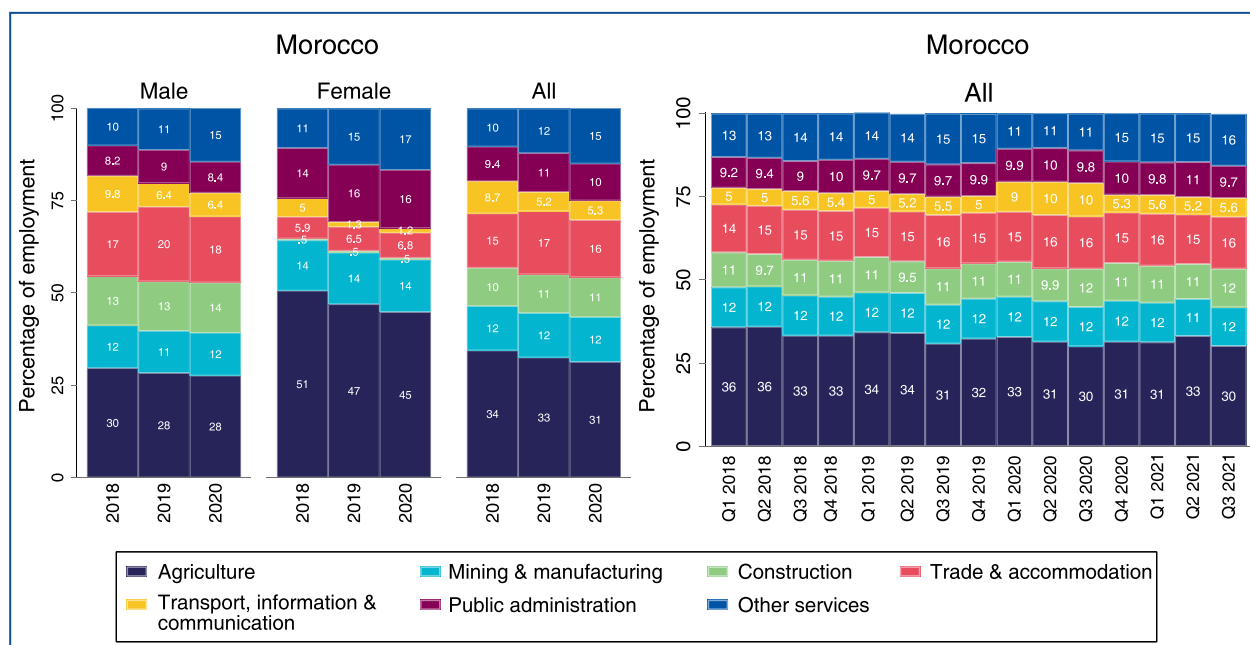
Source: Authors' calculations, based on data from the National Survey on Employment (HCP 2018a, 2018b, 2019a, 2019b, 2020a, 2020b, 2021).

As Morocco is an agriculturally oriented country, in 2018, this sector contributed the most to job creation (34 per cent – representing 50 per cent of all female employment and almost 30 per cent of male employment), followed by the service sector, construction and industry. In 2019, the agriculture and fishing sector remained the leading contributor to job creation, at a rate of 28.3 per cent, but the number of jobs created fell (by -1.9 percentage points) to the benefit of the service sector, which saw an upward trend (+2.4 points). The construction sector also created slightly more jobs in 2019 compared to 2018 (+0.1 points). This may indicate a deterioration in

working conditions, since employment in agriculture and construction includes the most precarious jobs.

Under the effect of the coronavirus, the most affected sectors in 2020 included the tourism sector (-1.6 points), with the closure of airspace, followed by the agriculture and fishing sector (-1.2 points), which was also largely impacted by drought. On the other hand, the construction and industry sectors saw a slight increase in their contribution to employment (of +0.4 points and +0.1 points, respectively).

Figure 7: Quarterly employment share, by sex and economic activity (2018-21)



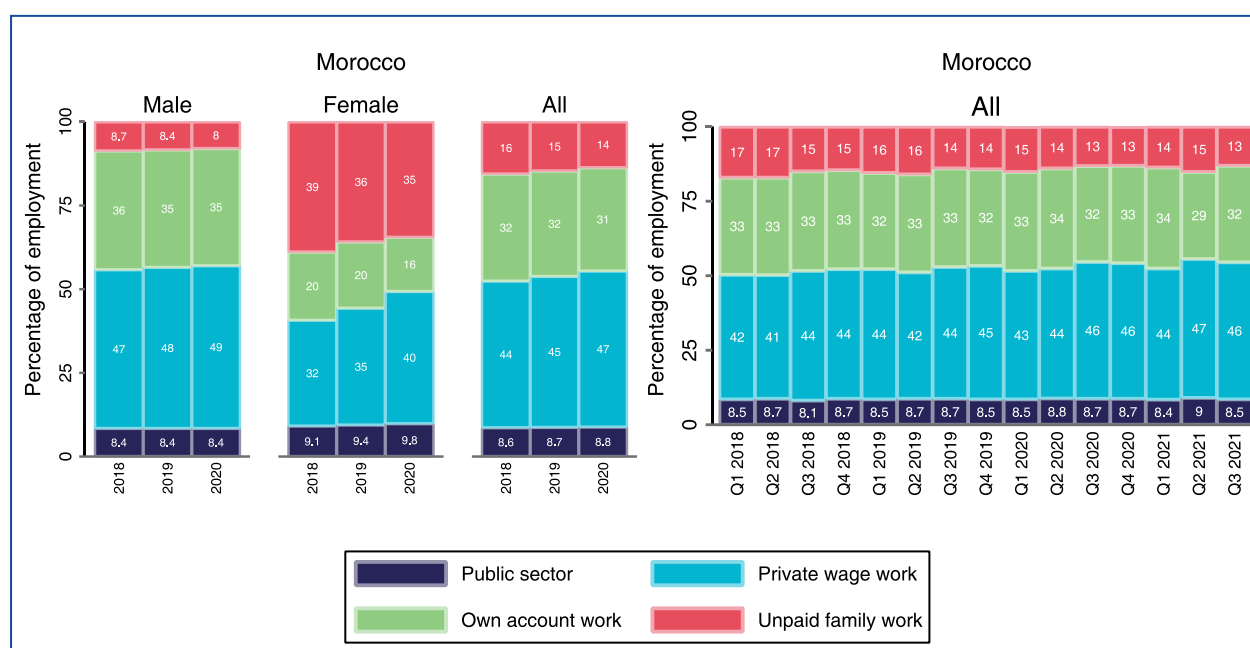
Note: Data disaggregated by sex and economic activity for Morocco are only available annually up to 2020 and are plotted in the second quarter of each year.

Source: Authors' calculations, based on data from the National Survey on Employment (HCP 2018a, 2018b, 2019a, 2019b, 2020a, 2020b, 2021).

Regarding the contribution of the public/private sector to job creation, it appears that the private sector employs the most people in Morocco (90 per cent in 2018 and 90 per cent in 2019) compared to the public sector (8.6 per cent in 2018 and 8.7 in 2019). The share of women is higher in the public sector (9.1 per cent, versus 8.4 per cent for men), while the share of men is higher in the private sector (90.9 per cent, versus 86.8 per cent for women). In 2020, despite the pandemic, both the private and public sectors experienced

a slight increase in job creation that applied equally to both sexes. More than half of men were employees (including in the public, formal private and informal private sectors), followed by those in self-employment (35 per cent) and finally by those in unpaid activities (8 per cent). On the other hand, just under half of women were employees (49.8 per cent), followed by a sizeable proportion who carried out unpaid activities (35 per cent), and finally those who were self-employed (16 per cent).

Figure 8: Quarterly employment share, by type of employment (2018–21)



Note: Data disaggregated by sex and type of employment for Morocco are only available annually up to 2020 and are plotted in the second quarter of each year.

Source: Authors' calculations, based on data from the National Survey on Employment (HCP 2018a, 2018b, 2019a, 2019b, 2020a, 2020b, 2021).

► 2.3 Evolution of the unemployment rate and COVID-19 health crisis

Morocco's unemployment rate had dropped considerably, from 10.5 per cent in Q1 of 2018 to 8.1 per cent in Q3 of 2019. This drop was rather exceptional given that the general trend in 2010–19 was of stagnation in the unemployment rate.³ However, this trend was reversed in Q4 of 2019 and exacerbated with the onset of the pandemic, shooting up to 10.5 per cent in Q1 of 2020, 12.3 per cent in Q2, and 12.7 per cent in Q3 of the same year. It fell slightly in Q4 of 2020, then returned to an upward trend in the first two quarters of 2021 before reaching its lowest level since the start of the pandemic (11.8 per cent) in Q3 of 2021. This is in contrast to the results of the COVID MENA Monitor survey covering Q2 of 2021, which saw the lowest reported unemployment rate before rising again in Q3 (OAMDI 2021). This can be explained by the different representation of the COVID MENA Monitor survey sample.⁴

The drop in registered unemployment between 2018 and 2019 affected both males and females; however, women were those most affected, with

a rate of 14.06 per cent (versus 8.1 per cent for men) in 2018 and 13.48 per cent (versus 7.81 per cent for men) in 2019. This result is to be expected, given the weakness of employment and the importance of inactivity therein.

Similarly, unemployment increased among both men and women in 2020, reaching 10.7 and 16.2 per cent, respectively. It should be noted that both genders have yet to return to pre-pandemic unemployment levels despite the slight drop in Q3 of 2021. This decrease affects both men (-1 point) and women (-1.09 points). This could be explained by the crisis, from which certain sectors of activity are still suffering – in particular the tourism sector, despite the opening of airspace during the third quarter of 2021.

Another segment of the Moroccan population that suffers from unemployment is youth (Appendix Figure A3), which recorded the highest unemployment rates (25.6 in 2018 and 24.9 per cent in 2019), with a slight decline between

³ Forthcoming ILO report on employment and growth in Morocco.

⁴ As a telephone survey that excludes those without telephones, it may under-represent the unemployed.

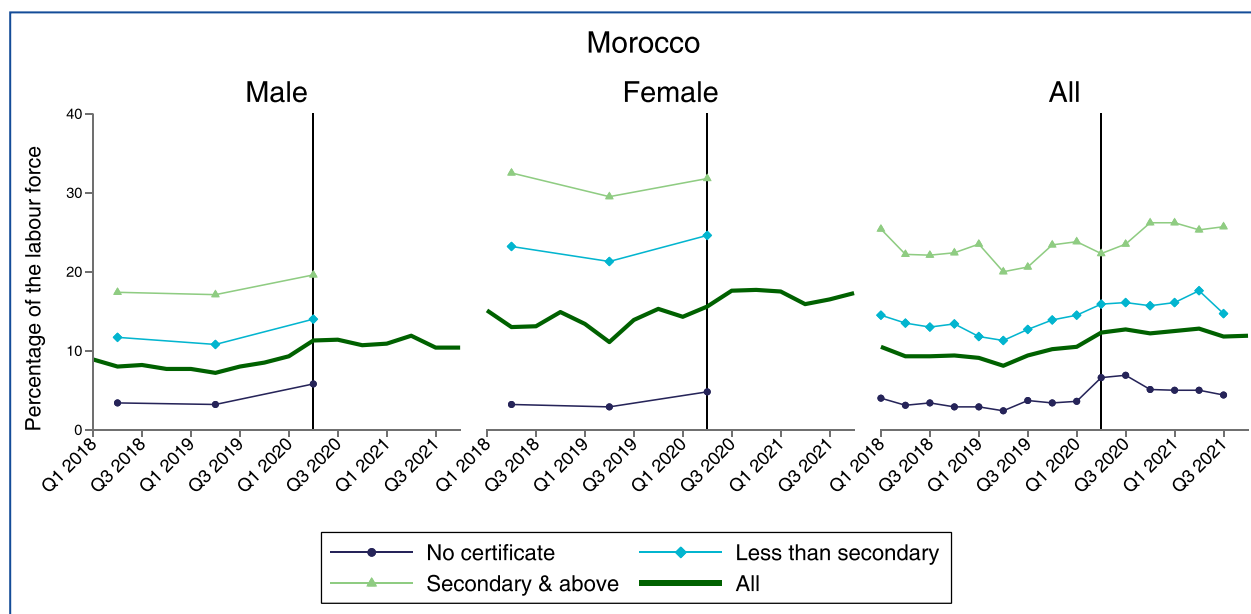
these two years. As expected, young women in this bracket are more affected by unemployment than young men (34.24 versus 22.5 per cent in 2018, and 33.42 versus 21.97 per cent in 2019). The rise in unemployment during the pandemic affected all age categories, but most notably youth aged 15–24, whose unemployment rate increased by 6.2 percentage points in 2020 (6.05 for young males and 7.75 for young females).

The preponderance of unemployment among youth also raises the phenomenon of those not in employment, education or training (NEET), which continues to characterize the Moroccan population in recent years, despite its downward trend. The two problems (of NEET and youth unemployment) have common underlying characteristics and causes. Individuals aged 15–24 who are NEET represent 27.6 per cent of the total population of this age group (with a NEET rate of 12.3 per cent for males and 43.2 per cent for females) in 2018. A slight decrease in NEET status was recorded in 2019, falling to 26.5 per cent (11.6 per cent among men and 41.7 per cent among women). The improvement in schooling partly explains this decline observed over the long term.

The military service strategy implemented in Morocco as of 2019 could also explain this trend, as it specifically targets young people aged 19–25 who are unemployed and not in education or training. Alongside military training, participants benefit from training in other areas that will allow them to integrate into the labour market.

As seen in Figure 9, the highest unemployment rates are among people with higher education: 22.9 per cent, compared to 3.3 per cent for people without any diploma in 2018 (17.4 versus 3.4 per cent for men and 32.5 versus 3.2 per cent for women). With the pandemic, unemployment increased among all strata of the population, regardless of their level of education. People with average qualifications appear to have been the most affected (registering an increase of 3.1 percentage points), followed by people without a diploma (by 2.5 percentage points) and by those with higher diplomas (2.3 percentage points). A gender analysis yields the same conclusions. Women and men with average levels of education have been those most affected by unemployment (3.3 and 2.6 points, respectively).

Figure 9: Quarterly unemployment rate, by sex and education (2018–21)



Note: Data disaggregated by sex and education for Morocco are only available annually up to 2020 and are plotted in the second quarter of each year.

Source: Authors' calculations, based on data from the National Survey on Employment (HCP 2018a, 2018b, 2019a, 2019b, 2020a, 2020b, 2021).

► 2.4 Evolution of the underemployment rate and COVID-19 health crisis

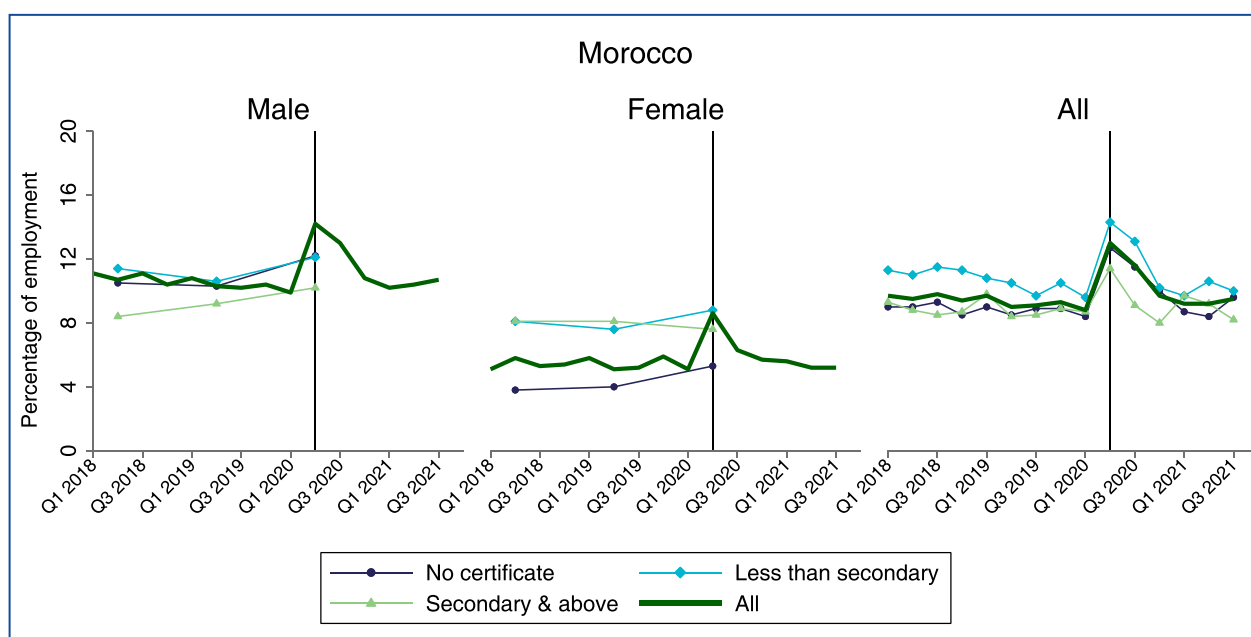
The employed working population in a situation of underemployment⁵ linked to working hours, was 9.3 per cent in 2018 and 9.2 per cent in 2019. Appendix Figure A4 shows that the highest underemployment rates were recorded in particular among males and youth aged 15–24. In contrast, women had much lower underemployment rates, suggesting that, despite their lower participation rates, women who do end up working are working their desired number of hours.

In 2020, the underemployment rate increased to 10.7 per cent. The categories of the population that experienced the largest increases were people aged 45 and over (+2.1 percentage points),

those with no diploma (+1.9) and men (+1.6). In addition, with the pandemic, it was middle-level graduates (combining primary education and college secondary certificates) who recorded the largest increases (+3.1 percentage points), rising from 12.4 in 2019 to 15.5 per cent in 2020.

As shown in Figure 10, simultaneous analysis of sex and education level reveals that, in line with previous results, men with an average level of education (characterized by the lowest labour force participation rate) are those who recorded the highest underemployment rates.

Figure 10: Quarterly time-related underemployment rate, by sex and education (2018–21)

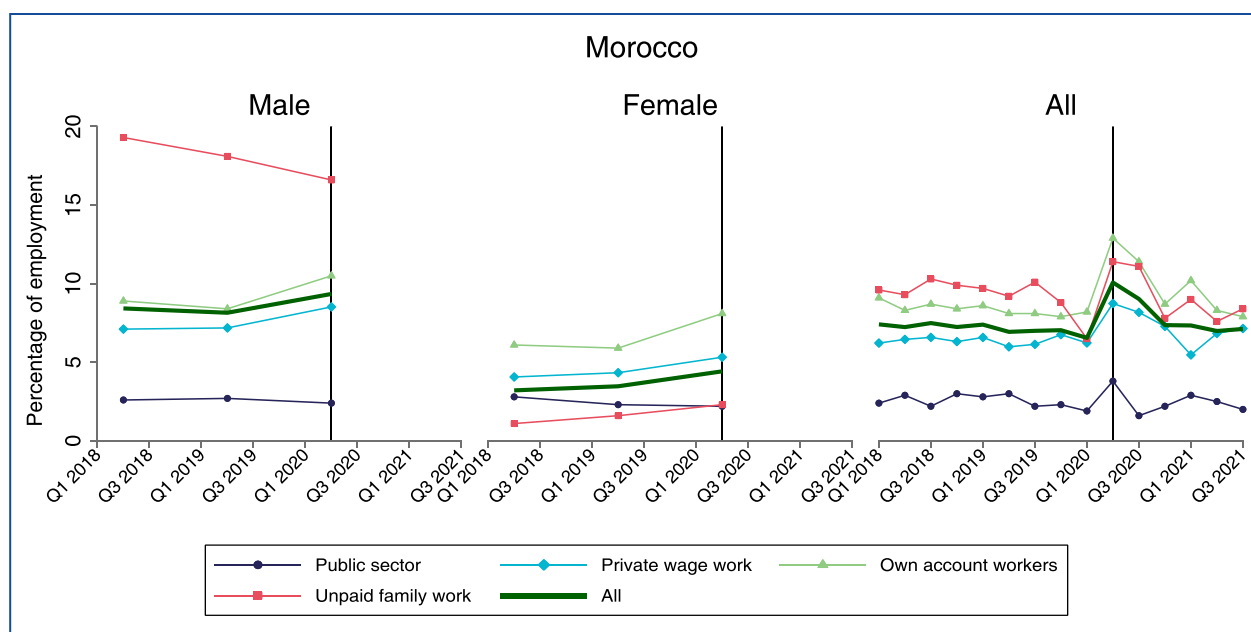


Note: Data disaggregated by sex and education for Morocco are only available annually up to 2020 and are plotted in the second quarter of each year.

Source: Authors' calculations, based on data from the National Survey on Employment (HCP 2018a, 2018b, 2019a, 2019b, 2020a, 2020b, 2021).

⁵ This term refers to employed persons aged 15 and over who are willing to work additional hours, available to do so, and who have worked less than 48 hours during the reference week.

Figure 11: Quarterly time-related underemployment rate, by sex and type of employment (2018-21)



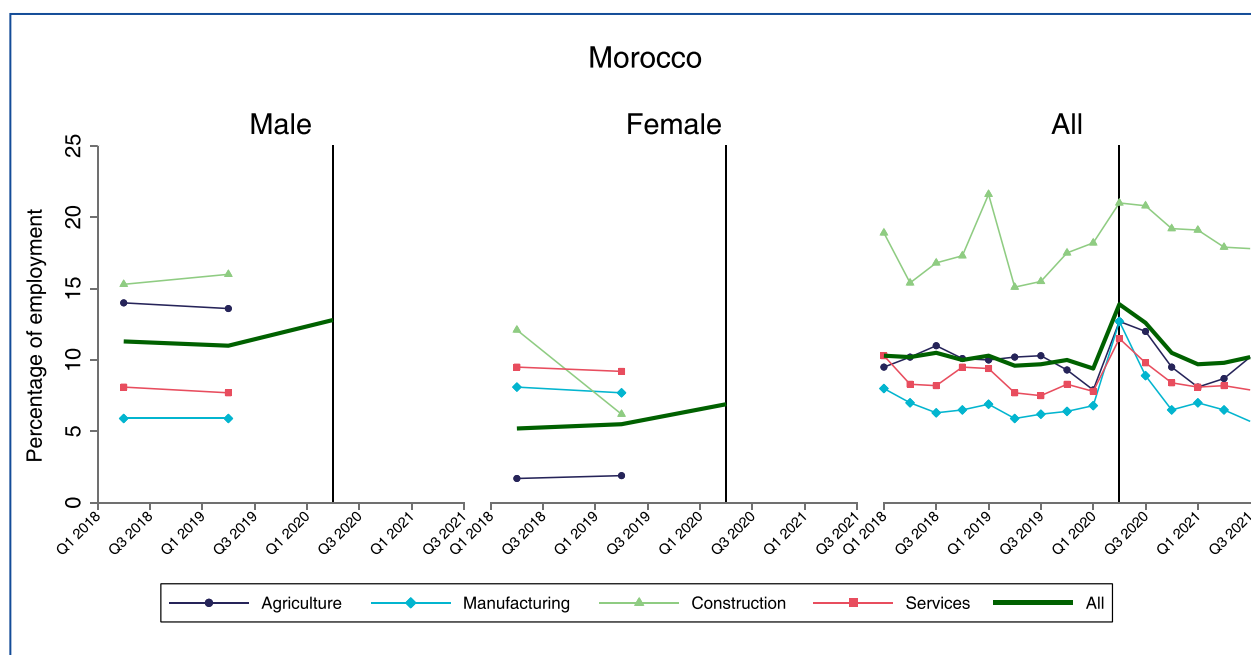
Note: Data disaggregated by sex and economic activity for Morocco are only available annually up to 2020 and are plotted in the second quarter of each year.

Source: Authors' calculations, based on data from the National Survey on Employment (HCP 2018a, 2018b, 2019a, 2019b, 2020a, 2020b, 2021).

By sector of economic activity, construction was the most affected by underemployment, with a rate of 15.3 per cent in 2018 and 15.9 per cent in 2019. This affected men and women alike, although the underemployment rate was particularly high among women working in the service sector in 2019. The sectors least affected by underemployment were the industrial sector for men and the agricultural sector for women.

The rise in underemployment in 2020 affected all sectors of economic activity. However, the highest increase was in the construction sector (+3.7 percentage points compared to 2019), followed by the industrial/manufacturing sector (+2.3 percentage points), and agriculture and fishing (+0.6 percentage points).

Figure 12: Quarterly time-related underemployment rate, by sex and economic activity (2018–21)



Note: Data disaggregated by sex and economic activity for Morocco are only available annually up to 2020 and are plotted in the second quarter of each year.

Source: Authors' calculations, based on data from the National Survey on Employment (HCP 2018a, 2018b, 2019a, 2019b, 2020a, 2020b, 2021).

3. Conclusion

Morocco was hit hard by the COVID-19 health crisis, which paralysed the country and very quickly turned into an economic crisis. The Kingdom entered into recession in 2020, with a contraction of GDP (of -6.3 per cent, compared +2.5 per cent growth in 2019). The sectors most impacted by this crisis and the accompanying health measures have been tourism, trade, transportation and communication, and industry. The agricultural sector has also not escaped, suffering the dual effects of the pandemic and a drought. As a result, the value added of the agricultural sector fell by 7.2 per cent compared to the non-agricultural

sector, which fell by 5.5 per cent. It should be noted that almost all of these sectors experienced permanent or temporary stoppages in their activities, which aggravated the existing deficits in the Moroccan labour market. These circumstances have been reflected in a decline in activity and employment rates on the one hand and an increase in unemployment and underemployment rates on the other. Moreover, it appears that the most marginalized groups in the labour market, namely women and youth, have also been those most affected by the repercussions of the current situation.

► Chapter 4. Jobs and growth in North Africa in the COVID-19 era: The case of Sudan (2018-21)



By:

Caroline Krafft: Associate Professor of Economics at St. Catherine University.

Samia Mohamed Nour: Full Professor of Economics, Department of Economics, Faculty of Economic and Social Studies, at University of Khartoum.

Ebaidalla M. Ebaidalla: Associate Professor in Faculty of Economic and Social Studies, at University of Khartoum.

1. Introduction

This section discusses growth in Sudan from 2018–20, as well as labour market outcomes from a mobile phone survey in 2021. The first section provides policy context for Sudan's political and economic situation during the COVID-19 pandemic. The second section uses data from World Development Indicators (World Bank 2022) to discuss trends in economic performance based on gross domestic product (GDP) in Sudan during the period from 2018–20. The third section discusses the labour market in Sudan, using data from two waves of the Economic Research Forum (ERF) COVID-19 MENA Monitor Household Surveys (in April 2021 and August 2021). It is important to note that although the period covered includes the challenges of COVID-19, during this same period Sudan was experiencing a number of other political and economic challenges that also influenced outcomes. These challenges include protests that led to the ousting of President al-Bashir in early 2019, the formation of a new power-sharing government later in the year, rampant inflation accelerating in 2020, an eventual currency devaluation in early 2021, and political instability and protests since 25 October 2021.

2. Jobs and growth policy responses to the COVID-19 pandemic

When the pandemic began, the Sudanese Government set up a high-level emergency committee to coordinate its pandemic response. Initial actions included closures (of schools and borders), restrictions on internal movement and gathering, and some lockdown measures (Central Bureau of Statistics & World Bank 2020; Hale et al. 2021). Although the closure response through summer of 2020 was relatively stringent compared to the world average, by fall 2020 these measures were less stringent, a trend that continued for the remainder of 2020 and into 2021. More stringent measures were put in place again in March–June 2021, in response to a new wave of infections, before again falling to lower levels through late 2021 (Hale et al. 2021; International Monetary Fund 2021). The shifts in containment measures — from more stringent in April 2021 (the first wave of survey data) to less stringent by August 2021 (the second wave of survey data) — may be particularly relevant to changes in the labour market over this period in Sudan. Closures helped protect public health but presented a substantial challenge to livelihoods and household welfare (Central Bureau of Statistics & World Bank 2020).

The Government also undertook a number of actions to support the economy, firms and workers. Initial measures in response to the pandemic included increasing salaries for public sector employees and increasing the wage subsidies to small firms affected by the pandemic, measures to provide unemployment benefits to laid-off workers, and measures to protect loans and banking (UNECA 2020). Cash assistance, along with food and hygiene assistance, were provided to families during the initial lockdown period

(UNICEF 2020). In 2021, Sudan began rolling out the Sudan Family Support Programme (SFSP or 'Thamarat') nationally, aiming to provide cash transfers to up to 80 per cent of Sudanese families (Sudan Family Support Programme 2021).

However, domestic currency depreciation and high levels of debt and inflation constrained Sudan's ability to provide social protection and an effective COVID-19 response (UN-ESCWA 2021). Predating and continuing throughout the COVID-19 pandemic, Sudan suffered from an economic crisis with rampant inflation increasing the prices of essential commodities such as food and medicine. Inflation was already at 71.3 per cent in February 2020 at the start of the COVID-19 crisis and estimated at 81.3 per cent for 2020 overall (UNDP 2020). All these challenges, along with the difficult political situation, have limited the ability of the transitional government to support poor households and informal workers who have been hurt by the pandemic and its containment measures (UNDP 2020).

The COVID-19 pandemic overlapped with a period of political instability and uncertainty. The transitional government in Sudan was instated and internationally recognized in 2019. Despite the efforts of the transitional government to improve the prevailing political and economic conditions, Sudan continued to suffer from both political and economic instability. Floods, inflation and the risk of renewed protests, on top of the pandemic, contributed to the declaration of an economic emergency in 2020 (UN-ESCWA 2021). On 25 October 2021, the military detained civilian members of the transitional government. However, after counter-protests, attempts were

made to reinstate civilian leaders. The prime minister resigned after he was unable to form a government in the face of ongoing anti-military

protests. These political difficulties continue to limit Sudan's economy and response to ongoing health and economic challenges.

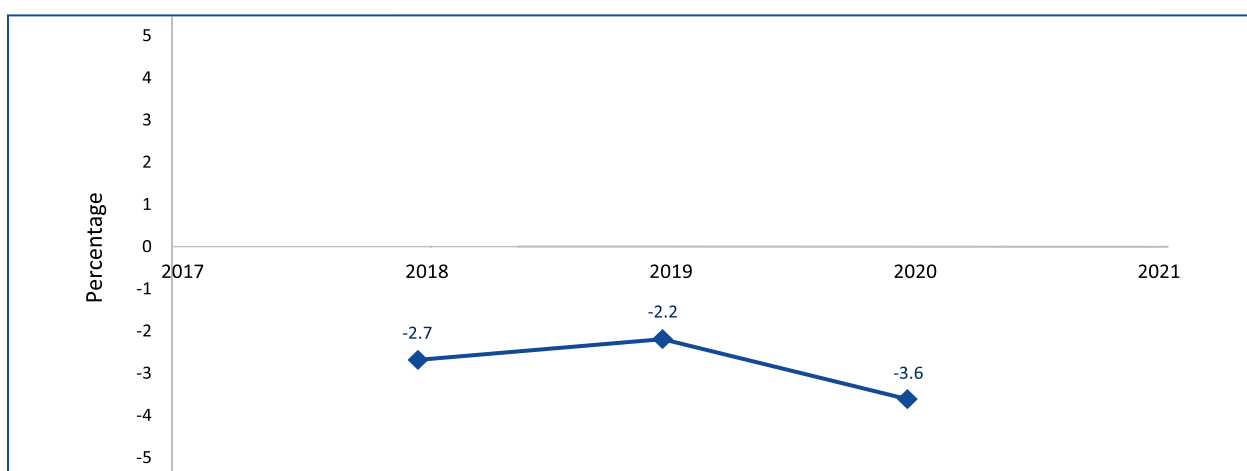
3. Trends in economic performance and GDP (2018–20)

This section uses data from the World Bank (2022) to discuss the trends in economic performance and GDP indicators¹ in Sudan over 2018–20. Due to the lack of quarterly data, an annual series is utilized. The indicator used is Sudan's real GDP annual growth rate.

Sudan's real annual GDP growth rate shows the economy contracted throughout 2018–20 (see

Figure 1). Although growth was 0.7 per cent in 2017 (World Bank 2022) it fell to -2.7 per cent in 2018, -2.2 per cent in 2019 and -3.6 per cent in 2020. However, the contraction of GDP for Sudan predates the COVID-19 pandemic. It is difficult to determine the degree to which the pandemic further depressed growth given the number of other events occurring in Sudan in 2020 as well.

Figure 1. Real annual GDP growth rate (percentage), 2018–20



Source: Authors' elaboration, based on data from World Bank 2022.

4. Impact of COVID-19 on the labour market in Sudan

This section discusses key labour market indicators: the labour force participation rate, employment-to-population ratio, unemployment rate, employment by sector of economic activity and type of employment, and time-related underemployment, in 2021. Results are presented and discussed by sex and education. The Appendix includes figures by age. The data source for

this section is the ERF COVID-19 MENA Monitor Household Survey (April 2021 and August 2021 waves) (OAMDI 2021). It is important to note that this is a mobile phone survey with a sample of around 2,000 individuals aged 18–64, and is thus a selected segment of Sudan's labour market: working-aged adults owning mobile phones.

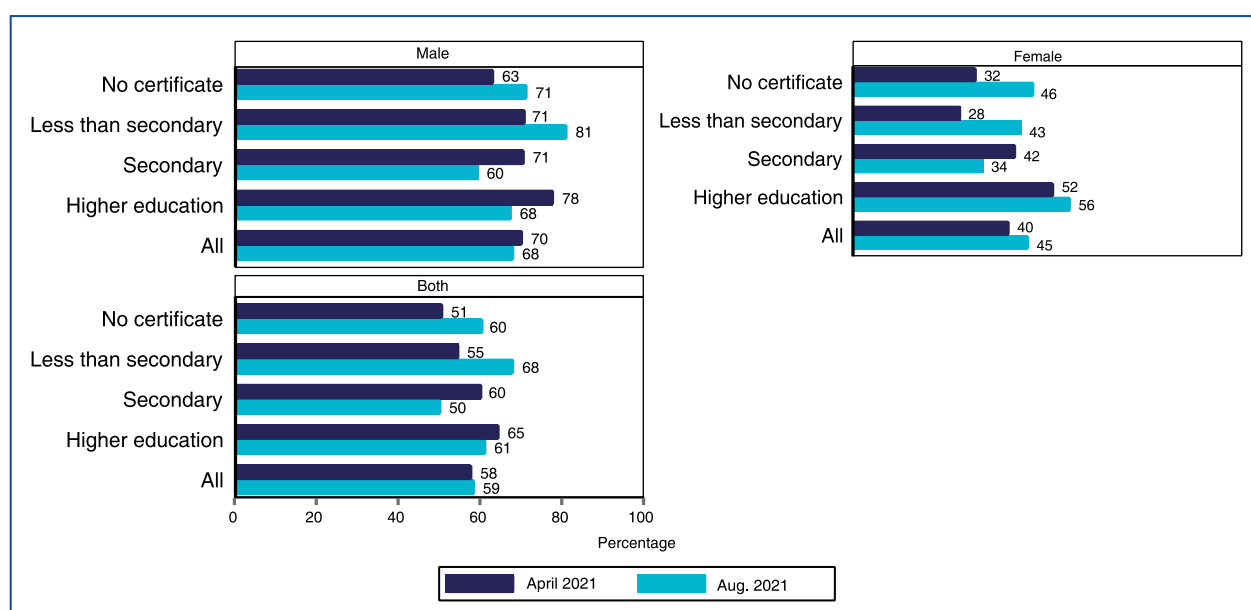
¹ Unfortunately, Sudan's Central Bureau of Statistics was unable to provide detailed data on GDP in constant prices.

► 4.1 Labour force participation rate

The standard definition of labour force participation is used herein: the share of the population aged 18–64 that is either employed or unemployed and searching for work. Overall, as Figure 2 shows, there is a gender gap in labour force participation, as the rate for men (68 per cent in August 2021) is higher than for women (45 per cent; 59 per cent rate overall). However, from April to August 2021, the labour force par-

ticipation rate decreased slightly (from 70 to 68 per cent) for men and increased (from 40 to 45 per cent) for women. There are no large differences in labour force participation by education, which is consistent with past research showing relative convergence by education (Ebaidalla and Nour 2021). There are also no clear patterns in how labour force participation has changed over time by education and sex.

Figure 2. Labour force participation rate (percentage of population aged 18–64), by wave, educational attainment and sex



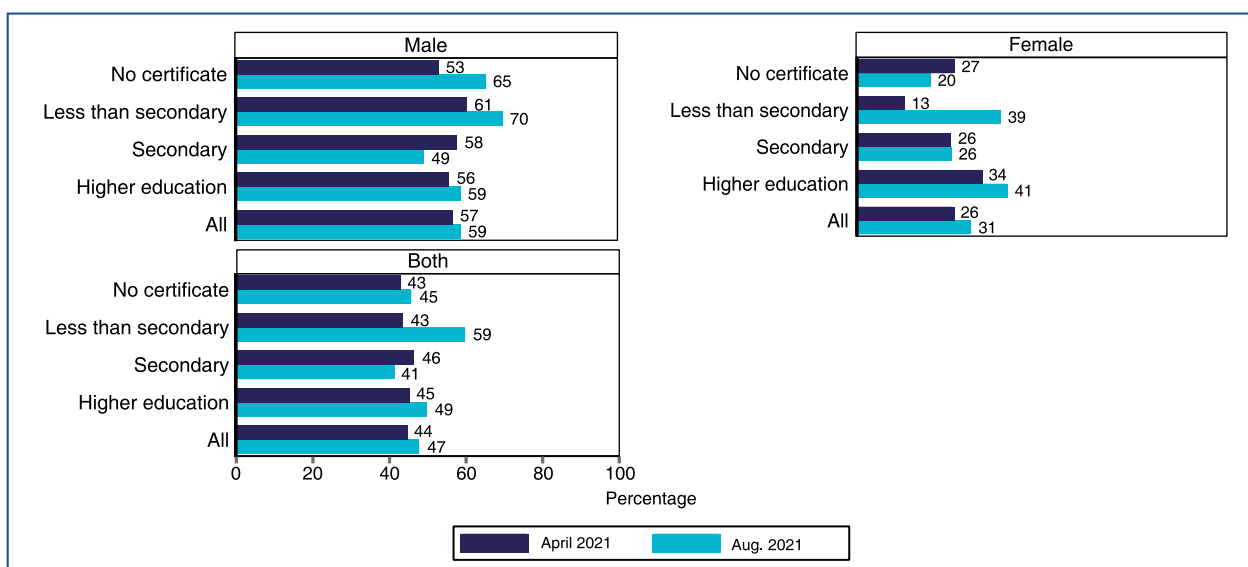
Source: Authors' calculations, based on COVID-19 MENA Monitor.

► 4.2 Employment-to-population ratio

Figure 3 shows the employment-to-population ratio by educational attainment and sex. As with labour force participation, rates of employment are higher for men (59 per cent) than for women (31 per cent) in August 2021. For both sexes, em-

ployment rose from April to August 2021, from 26 to 31 per cent for women and from 57 to 59 per cent for men. As was the case for labour force participation, there were no clear patterns of employment by education.

Figure 3. Employment rate (percentage of population aged 18–64), by wave, educational attainment and sex



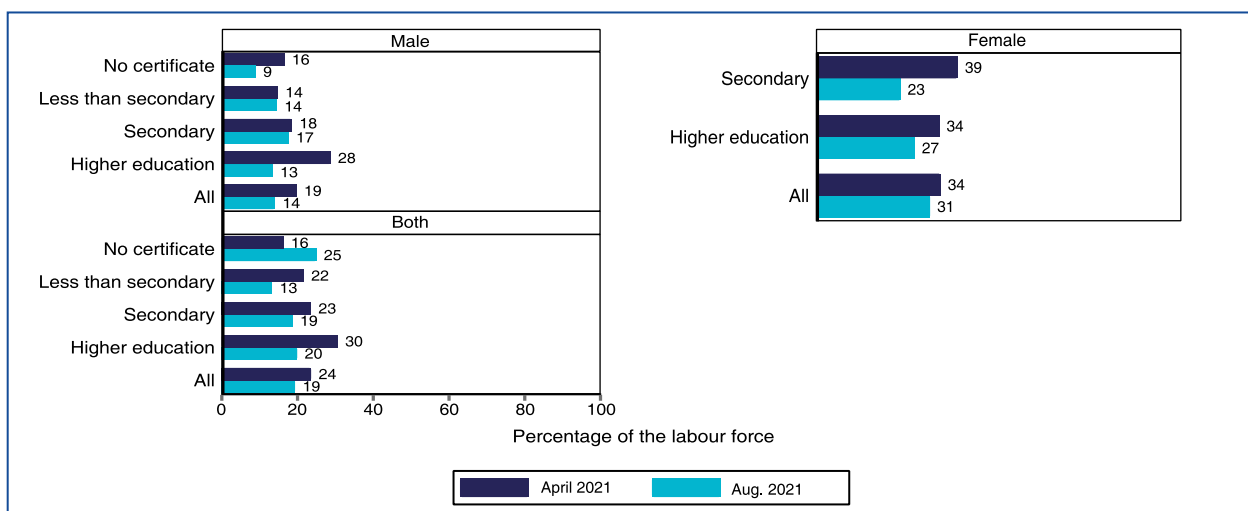
Source: Authors' calculations, based on COVID-19 MENA Monitor.

► 4.3 Unemployment rate

The unemployed are those who are not working for pay or profit during the reference week, but desiring to work, available to do so, and actively searching for a job. The unemployment rate is presented as a share of the labour force in Figure 4. The unemployment rate for women (31 per cent) was more than double that of men (14 per cent) in August 2021, consistent with previous la-

bour force surveys in Sudan (Ebaidalla and Nour 2021). Over the period from April to August 2021, the unemployment rate fell from 19 to 14 per cent for men and from 34 to 31 per cent for women. There was no clear pattern of unemployment by education, which is also consistent with past research (Ebaidalla and Nour 2021).

Figure 4. Standard unemployment rate (percentage of labour force aged 18–64), by wave, educational attainment and sex



Note: Data suppressed if N<50.

Source: Authors' calculations, based on COVID-19 MENA Monitor.

The reduction in the unemployment rate and increase in the employment-to-population ratio between April and August 2021 reflects the changing labour market and economic situation. The exchange rate stability between the two waves may also explain some of the improvement. Moreover, August corresponds to the farming season in Sudan, and agriculture absorbs a sizable amount of labour. Furthermore, in August

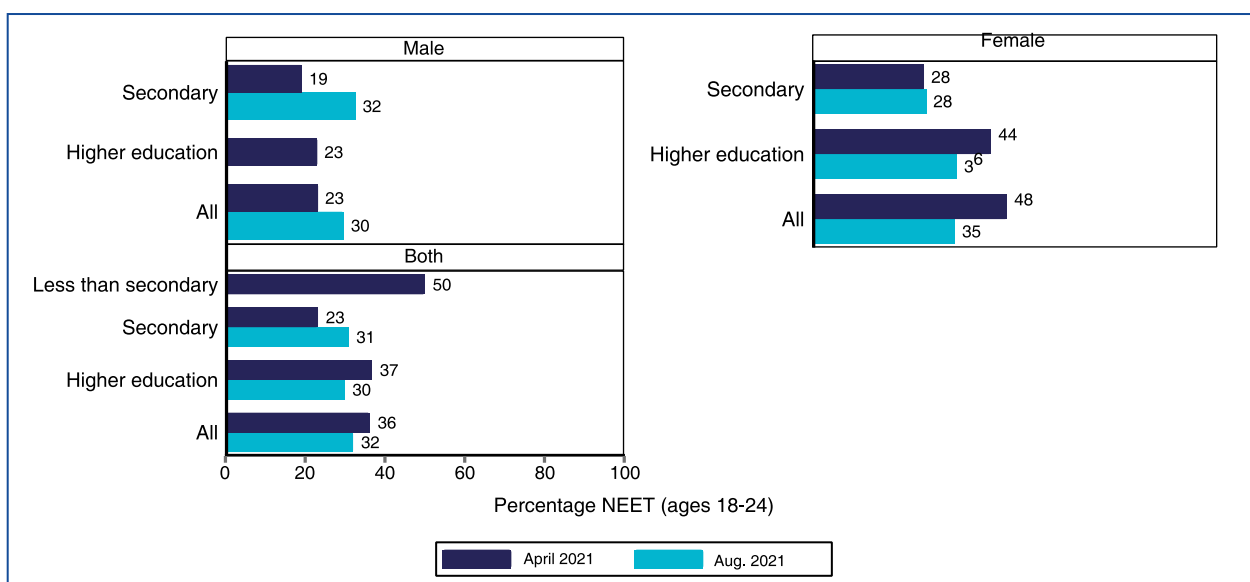
2021, the country was experiencing less stringent closure measures compared to April 2021 (Hale et al. 2021). The gradual lifting of COVID-19 restrictions between waves may help to explain the improvement in these key labour market indicators. Despite the observed improvements in employment and unemployment, the labour market in Sudan continued to suffer from a sizeable gender gap.

► 4.4 Youth not in employment or education (NEE) rate

One important metric of youth labour market engagement is the percentage of youth not in employment, education or training (NEET). Since the survey data did not collect information on training, only the share of youth not in employment or education (NEE) can be estimated. Youth aged 18–24 are shown in Figure 5. The share of youth NEE fell from 36 per cent in April 2021 to 32 per cent in August 2021, mirroring general

labour market improvements. There were opposite patterns of change for men and women, with NEE falling for women and rising for men. However, given the limited sample of youth aged 18–24, particularly when broken down by sex and education, differences should be interpreted with caution. Overall, a sizeable fraction of youth (roughly one third) are NEE, underscoring labour underutilization challenges in Sudan.

Figure 5. Not in employment or education rate (percentage of population aged 18–24), by wave, educational attainment and sex



Note: Data suppressed if N<50.

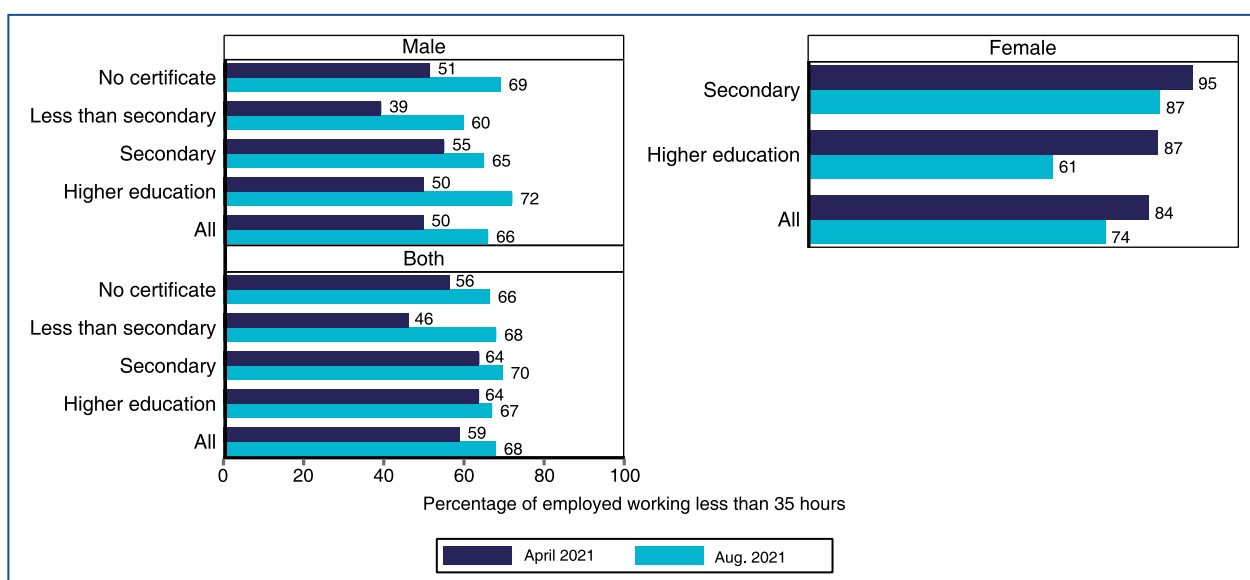
Source: Authors' calculations, based on COVID-19 MENA Monitor.

► 4.5 Time-related underemployment rate

The analysis defines the time-related underemployment rate as the share of persons in employment working less than 35 hours per week. There are no available data on whether these people wish to work more. Overall, time-related underemployment is high in Sudan, with 59 per cent of workers underemployed in April 2021 and 68 per cent in August 2021 (Figure 6). While the employment-to-population ratio increased in this peri-

od, hours of work show more underemployment, which may be related to additional employment in agriculture, but for shorter hours. While labour underutilization is common in developing countries, Sudan's underemployment has reached an alarming level, which may be related to the pandemic and lockdowns in part. As with other indicators, there are no clear patterns of time-related underemployment by education.

Figure 6. Time-related underemployment rate (percentage of the employed aged 18–64), by wave, educational attainment and sex



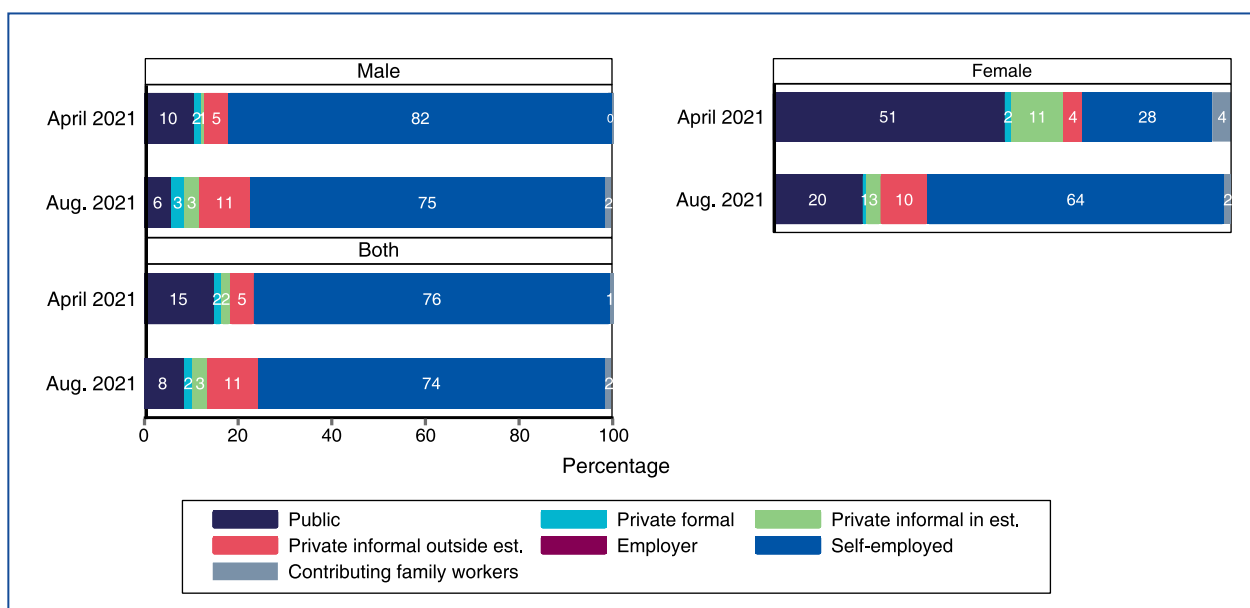
Source: Authors' calculations, based on COVID-19 MENA Monitor.

► 4.6 Type of employment

A key feature of employment in Sudan is that it is primarily self-employment (including in agriculture), as evidenced in the distribution of employment in Figure 7. In August 2021, 74 per cent of the employed were self-employed and the rate was higher for men (75 per cent) than women (64 per cent). Women were more likely to work in the public sector (20 per cent, versus 6 per cent for men, in August 2021). From April to August 2021,

employment in private informal wage work outside establishments increased, from 5 to 11 per cent. This increase is consistent with the farming season absorbing a portion of the labour force. There is relatively little private formal wage work in Sudan (2 per cent of employment) and only some private informal wage work inside establishments (3 per cent in August 2021).

Figure 7. Distribution of employment (percentage of the employed aged 18–64), by wave, type of employment and sex



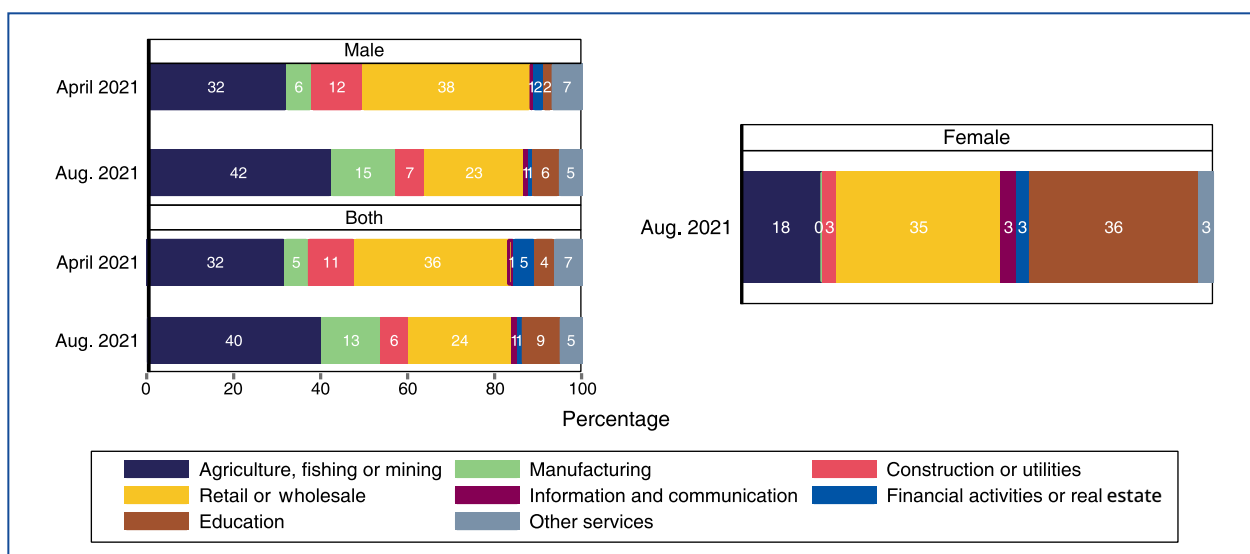
Source: Authors' calculations, based on COVID-19 MENA Monitor.

► 4.7 Employment by economic activity

Figure 8 illustrates the distribution of employment (percentage of the employed aged 18–64) by economic activity and sex. The two largest activities in Sudan are agriculture (40 per cent of employment in August 2021) and retail or wholesale (24 per cent of employment in August

2021). From April to August 2021, employment increased substantially in the agriculture sector (from 32 to 40 per cent). Employed women were particularly likely to be in the education sector (36 per cent in August 2021), retail or wholesale (35 per cent) or agriculture (18 per cent).

Figure 8. Distribution of employment (percentage of the employed aged 18–64), by wave, economic activity and sex



Source: Authors' calculations, based on COVID-19 MENA Monitor.

5. Conclusion

Sudan has faced a number of growth and labour market challenges since 2018. Sudan's economy, as measured by GDP (World Bank 2022), contracted in 2018–20. Although this contraction predates COVID-19, the pandemic likely worsened the situation in 2020. A number of long-standing economic challenges as well as recent economic and political developments have contributed to Sudan's difficulties. During the pandemic, in April and August of 2021, Sudan continued to face a number of labour market challenges, as seen in the results of the COVID-19 MENA Monitor mobile phone survey. Labour force participation continued to be lower for women than for men, although the rates for women actually increased between April and August 2021, while they fell slightly for men. As was found in past research (Ebaidalla and Nour 2021), unemployment was substantial but was not strongly associated with age or education. Moreover, women were less likely to be employed and had higher unemployment rates than men. Youth NEE and time-related underemployment rates also continue to be high. Employment in Sudan was primarily self-employment and largely concentrated in agriculture.

► Chapter 5. Jobs and growth in North Africa in the COVID-19 era: The case of Tunisia (2018-21)



By:

AbdelRahman El Lahga: Associate Professor, Institut Supérieur de Gestion de Tunis, Tunisia.

Moheb Said: Economic Researcher at Economic Research Forum.

1. Introduction

The COVID-19 outbreak amplified existing economic and social challenges that the Tunisian economy was facing following the 2011 uprising and the recent political transition. As an economy that chiefly depends on trade openness and the large role of services, including tourism, the lockdowns and disruption of global value chains have had a substantial impact (Marouani, Krafft and Assaad 2022; World Bank 2021). The pandemic has severely affected economic growth in Tunisia – which was already modest, at 1 per cent per annum in 2019 – occasioning a severe recession with -8.7 per cent growth in 2020. This has since recovered, but only to a rate of 3.3 per cent per annum in 2021.

At the microeconomic level, the COVID-19 shock has only aggravated pre-existing labour market challenges in Tunisia, which include high rates of unemployment – 15 per cent overall and 34 per cent for youth in 2019 (Marouani, Krafft and Assaad 2022; Institut National de la Statistique 2021). Tunisia also had a high rate of discouraged unemployment, particularly among youth and in rural areas, as illustrated by the gap between broad unemployment¹ and standard unemployment² (Marouani, Krafft and Assaad; Assaad, Ghazouani and Krafft 2018a; Assaad and Krafft 2016). The pandemic substantially increased both overall and youth unemployment, which rose by nearly 20 per cent and remained stubbornly high throughout the third quarter of 2021. Although a little lower in the fourth quarter of 2021, these rates remained higher than pre-pandemic levels.

The Tunisian Government has been proactive in adopting sanitary and socioeconomic measures in response to the COVID-19 outbreak in March 2020. Social protection measures were partially financed by budget support from different international partners, including the World Bank, European Union and African Development Bank. Tunisia experienced its most challenging period in summer 2021, where daily cases started to rise exponentially, reaching an all-time peak of 14.2 cases per thousand and 396 deaths per million in July 2021 (Marouani, Krafft and Assaad 2022). This situation was critical to the point that the Tunisian health system was near collapse due to shortages in beds and oxygen (Saleh 2021). It was not until the vaccination campaign accelerated in August 2021 that the pressure on the health system was lessened. Indeed, the number of vaccines administered exceeded the world average and reached 58.8 vaccinations per hundred in September 2021.

Alongside these health measures, the Government attempted to provide social protection assistance to workers in vulnerable sectors, such as tourism, and to irregular workers (400,000 beneficiaries) as well as a one-off aid to needy families who already benefited from the National Programme of Assistance to Needy Families (PNAFN) cash transfer programme (260,000 families). Given budgetary limitations, these interventions were very ad hoc and only partially mitigated the impacts of the crisis (Kokas et al. 2020; Krafft, Assaad and Marouani 2021).

The objective of this chapter is to present the most recent macroeconomic and microeconomic developments in Tunisia during the COVID-19 pandemic. Analysing the evolution of macroeconomic aggregates and labour market indicators during 2019–21 provides insights into the pandemic's repercussions as well as the pace of recovery. It complements existing work by Marouani, Krafft and Assaad (2022), which relies on data from four rounds of the Economic Research Forum (ERF)'s COVID MENA Monitor, by analysing quarterly labour market data from official sources. However, due to limitations in data access, this analysis must remain at a fairly aggregated level. It begins with an examination of trends in macroeconomic performance based on gross domestic product (GDP) and changes in sectoral activity over the 2018–21 period. It then uses results from the Labour Force Survey to present the main labour market developments in Tunisia throughout the pandemic.

¹ Broad unemployment consists of all the people within the economically active population or working-age group who are either without work or available for work, irrespective of whether they are seeking work or not.

² Standard unemployment refers to the percentage of the total labour force that is unemployed but actively seeking employment and willing to work.

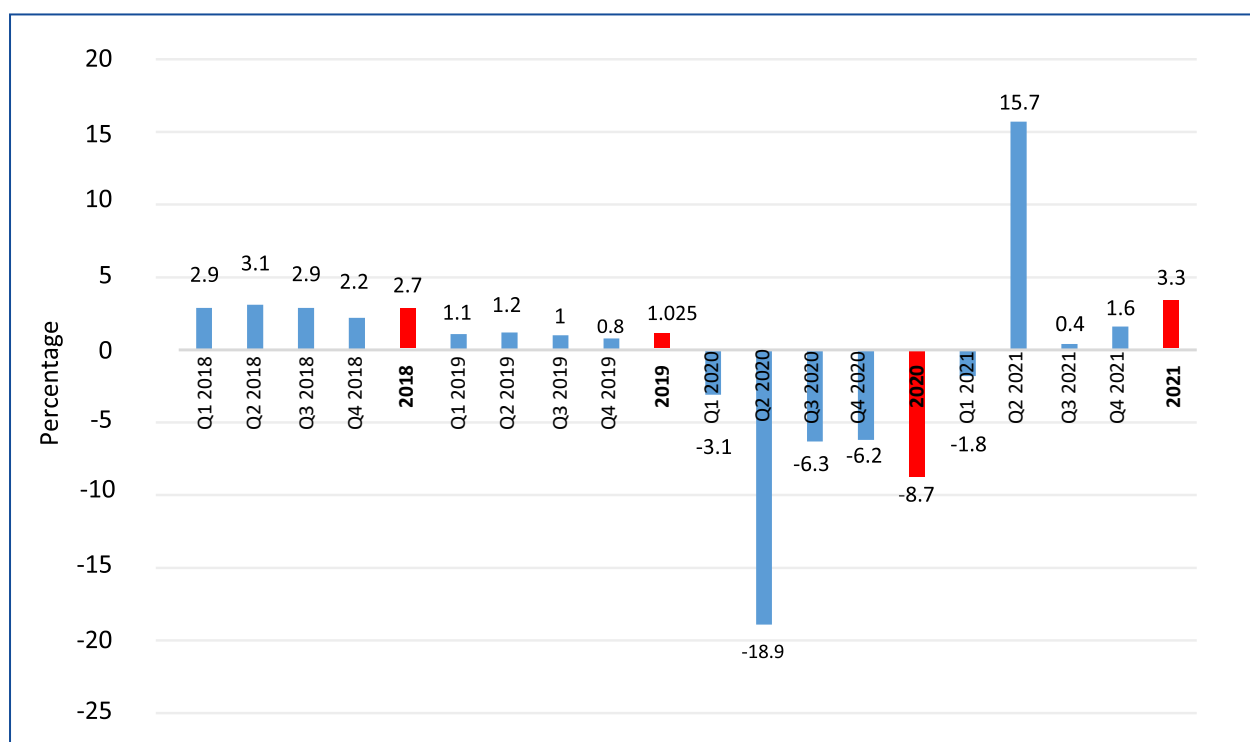
2. Trends in economic performance and GDP (2018–21)

This section uses National Statistical Institute (INS) data to discuss recent trends in economic activity over the period 2018–21, i.e. two years before and nearly two after the start of the crisis. Figure 1 presents the quarterly evolution of GDP. Even prior to the COVID-19 outbreak, the economic growth of Tunisia was relatively weak, amounting to 2.7 per cent in 2018 and 1 per cent in 2019. These rates indicate that the Tunisian economy was already performing below its potential, which made the fight against poverty and unemployment even more challenging. Indeed, the COVID-19 crisis hit the Tunisian economy at a time where economic growth was already slowing down and falling into recession, with -3.1 per cent growth in the first quarter of 2020 (see Figure 1). This performance points towards the existing structural imbalances of the Tunisian economy, which is largely manifested by an inadequate rate of investment and a poor business climate, as discussed extensively in the International Labour Organization (ILO)'s *Regional Report on Jobs and Growth in North Africa* (ILO 2021). The COVID-19 outbreak in March 2020, together

with the implementation of a strict lockdown, resulted in a severe GDP contraction of -18.9 per cent in Q2 2020. The second half of 2020 saw an average decline of -6 per cent in the midst of the health crisis, and the economy ended the year with an average growth rate of around -8.7 per cent. This rate was similar to other comparable economies; for instance, economic growth contracted by 6.3 per cent and 5.5 per cent in Morocco and Algeria, respectively. An estimate by Kokas et al. (2020) reveals that the poverty rate (based on national standards) is projected to reach 21 per cent in 2020, compared to 15.5 per cent in 2015 (See also UNICEF 2020).

The Tunisian economy witnessed some recovery in 2021, achieving a positive GDP growth rate of 3.3 per cent thanks to considerable growth of 15.7 per cent in Q2 2021, which is the highest rate since 2018. However, Tunisian economic growth was still below middle-income economies' average growth rate of 6.1 per cent in 2021 (IMF 2022a).

Figure 1. Real quarterly annual GDP growth rate (percentage), 2018–21



Note: Quarterly rates are relative to the same quarter a year earlier.

Source: Authors' own elaboration, based on National Institute of Statistics data (INS 2020a and 2022a).

One of the main engines of economic growth is investment. Table 1 presents the evolution of investment rates as well as saving rates as a percentage of GDP during 2015–20 in Tunisia. It is clear that the Tunisian economy recorded its lowest saving and investment rates (4 and 13 per cent, respectively) in 2020, following the COVID-19 shock. In fact, government spending priorities had to be adjusted in order to accommo-

date the health and economic repercussions of the pandemic by increasing current spending on social transfers at the expense of capital spending. Moreover, the Central Bank of Tunisia (CBT) reduced its key interest rate in March and October 2020 by a cumulative 125 basis points.³ This, in turn, pushed down the saving and investment rates in 2020 by 57 and 27 per cent, respectively, compared to 2019.⁴

Table 1. Investment and saving rates, as percentage of GDP

	2015	2016	2017	2018	2019	2020
Saving, as percentage of GDP	11.1	9.6	9.1	10.5	9.4	4.0
Investment, as percentage of GDP	19.8	19.3	18.9	18.4	18.3	13.3

Source: Authors' own elaboration, using the Central Bank of Tunisia data set.

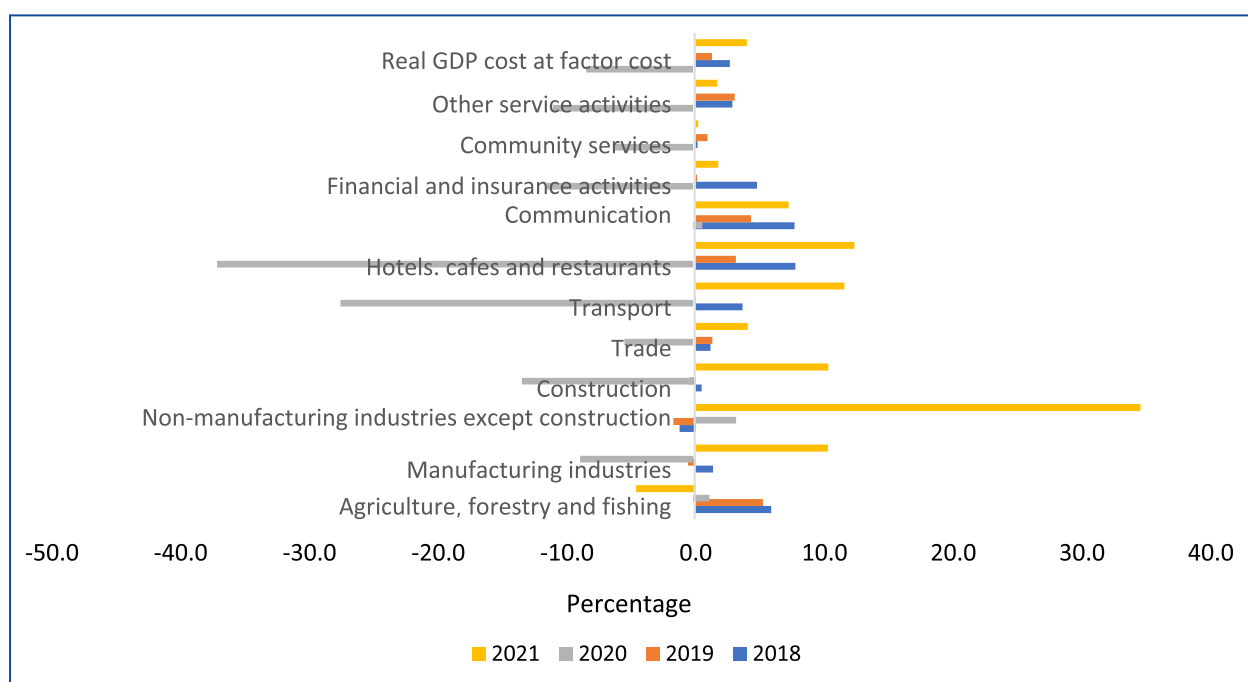
Economic sectors were differently affected by the repercussions of COVID-19 in 2020 and 2021 (see Figure 2). During 2020, several sectors suffered from the pandemic, especially the hospitality sector (which decreased by 38.5 per cent year-over-year between 2019 and 2020), transport (which decreased by 28.5 per cent) and construction (which decreased by 13.8 per cent) over the same period due to the shutdowns experienced in the country.

In 2021, the majority of sectors witnessed positive growth, especially the non-manufacturing industry, which increased by 34.6 per cent year-over-year between 2021 and 2020. The agriculture sector was the only one to record negative growth in 2021 (-4.6 per cent) due to adverse weather conditions, which strongly determine this sector's performance.

³International Monetary Fund (IMF). 2021. "Policy Responses to COVID-19, Policy Tracker Database." September.

⁴Data on the evolution of investment across the public and private sectors are not available.

Figure 2. Growth rate, by selected sectors



Source: Authors' own elaboration, based on INS 2019, 2020b, 2021 and 2022b.

3. The labour market in Tunisia during the COVID-19 crisis

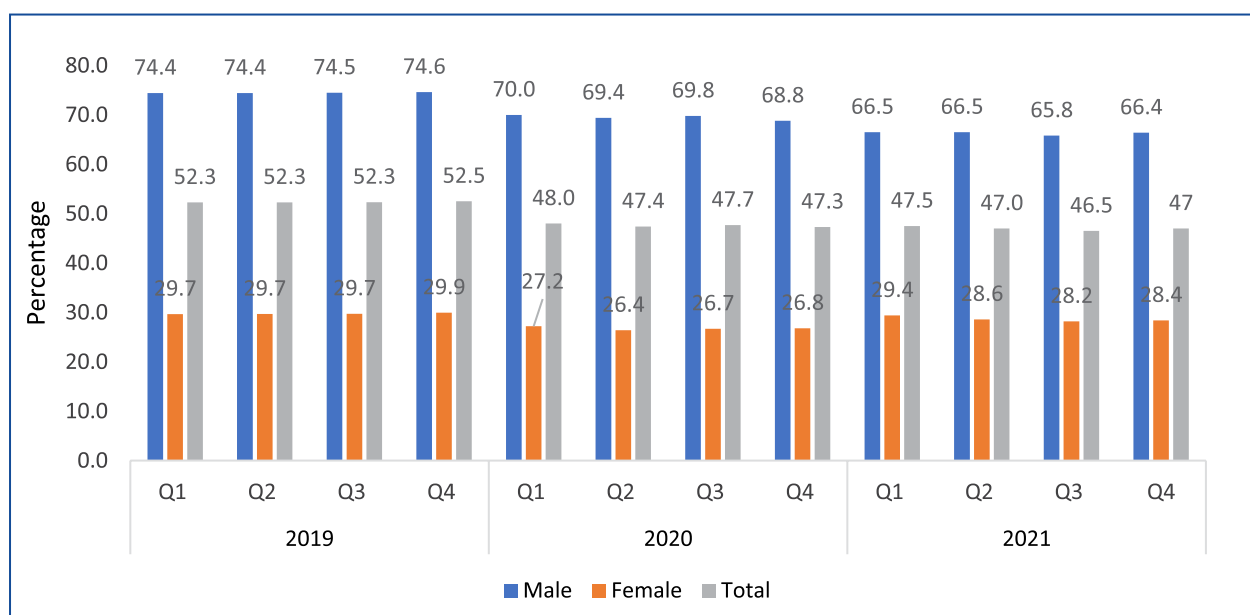
In this section, the labour market developments in Tunisia amid the COVID-19 crisis are discussed. Given data limitations, the analysis focuses on the main labour market indicators, including labour force participation rates and employment and unemployment rates by sex and among youth in particular.⁵

Figure 3 presents the evolution of labour force participation rates between 2019–21. It is worth noting that the overall labour force participation rate was weakly affected by the pandemic, decreasing by less than 1 percentage point (2 per cent) to 47.4 per cent in Q2 2020 (following the COVID-19 outbreak) and further decreasing to 47 per cent in Q4 2021. It is also noteworthy that the impact of the pandemic on participation was equally limited for both sexes, in contrast to coun-

tries such as Egypt, where female labour force participation was much more adversely affected as unemployed women stopped searching for work (see chapter on Egypt). However, in 2021, male and female labour force participation rates moved in opposite directions. While the male labour force participation rate decreased from 68.8 per cent in Q4 2020 to 66.4 per cent a year later, female participation rates increased by almost two percentage points (7 per cent), reaching 28.4 per cent during the same period. The abrupt decline in male labour force participation rates in 2021 might be linked to a discouragement effect a year after the COVID-19 outbreak. Conversely, women's participation rate is largely determined by their education level, i.e., women with higher levels of education tend to have higher participation rates (ILO 2021).

⁵The choice of indicators was also based on the availability of data in the INS data set.

Figure 3. Labour force participation rate 2019–21

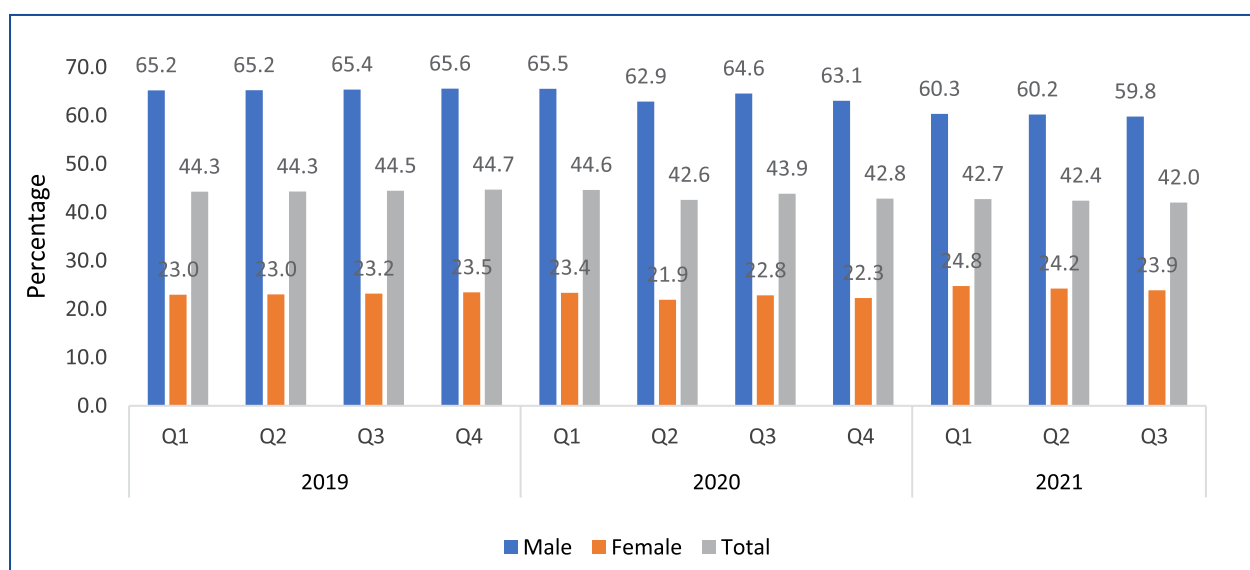


Source: Authors' own elaboration, based on INS 2020c and 2022c.

The same trend is observed when analysing the employment-to-population ratios during the same period (see Figure 4), where male employment rates were following a decreasing trend in 2021 reaching a low of 59.8 per cent in Q3 2021. This is less than it was in Q2 2020 by 3 percentage points (5 per cent), and less than it was at the

start of 2019 by more than 5 percentage points (7 per cent). On the other hand, female employment was slightly impacted following COVID-19 but was able to gain momentum afterwards, reaching 23.9 per cent in Q3 2021, compared to 23.2 per cent in Q3 2019.

Figure 4. Employment rate 2019–21

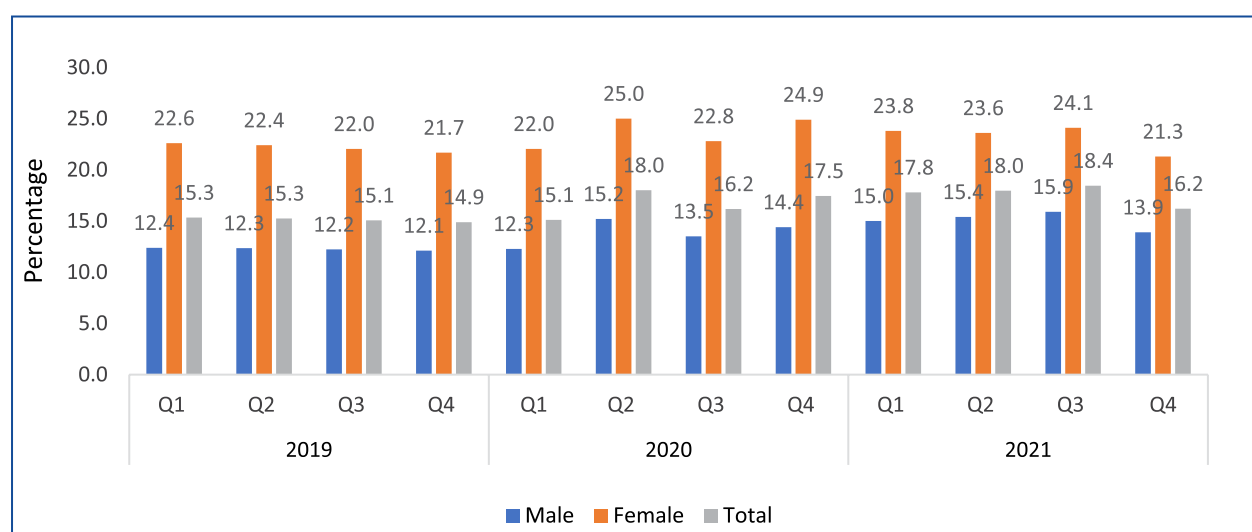


Source: Authors' own elaboration, based on INS 2020c and 2022c.

It is also important to observe the unemployment dynamics during 2019–21. Figure 5 shows that the direct impact of COVID-19 on the unemployment rates in Q2 2020 was similar across gender, where unemployment rates for men and women increased by nearly three percentage points to reach 15.2 per cent and 25 per cent, respectively. Accordingly, the overall unemployment rate increased by the same magnitude, reaching 18 per cent in Q2 2020, a nearly 20 per cent increase.

Unemployment declined temporarily in Q3 2020, but increased again and remained persistently high through the third quarter of 2021. By Q4 2021, the unemployment rate declined to 16.2 per cent but remained well above its pre-pandemic level of 15.5 per cent. This result highlights the inability of the Tunisian economy to fully recover from the effects of the pandemic, which, unlike other countries like Egypt and Morocco, appear to persist longer over time.

Figure 5. Unemployment rate 2019–21

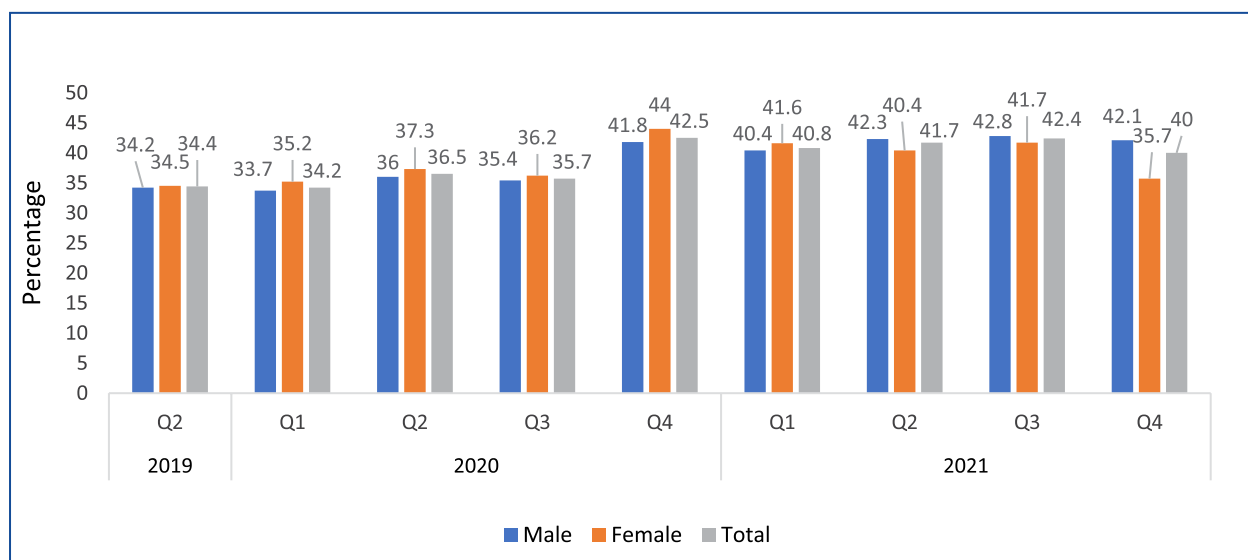


Source: Authors' own elaboration, based on INS 2020c and 2022c.

Figure 6 presents the evolution of unemployment among young Tunisians (aged 15–24) during 2019–21. A similar trend can be seen as at the global level, where COVID-19 led to a rise in unemployment rates in 2020. However, the effect on youth seems to have been delayed until the fourth quarter of 2020, when their unemployment rate increased by 6.8 percentage points (19 per cent) relative to the third quarter and 8.3 per-

centage points (24 per cent) relative to the first quarter of 2020. In 2021, the youth unemployment rate remained stubbornly high, at above 40 per cent through to the fourth quarter. Data in Figure 6 also show that young women's unemployment rates recovered more quickly than of young men, returning close to pre-pandemic levels by the fourth quarter of 2021.

Figure 6. Youth unemployment rate, 15–24 years



Note: For 2019, only data for the second quarter are shown, due to data limitations.

Source: Authors' own elaboration, based on INS 2020c and 2022c.

4. Conclusion and policy implications

This chapter has provided an overview of Tunisia's macroeconomic and labour market performances just prior to, and during, the COVID-19 pandemic. It illustrates how the COVID-19 outbreak in March 2020 exacerbated existing challenges, both at macro- and micro-economic levels.

At the macroeconomic level, the Tunisian economy experienced a negative growth of -8.7 per cent in 2020, compared to 1 per cent in 2019. The worst-performing economic sectors in 2020 were the hospitality and tourism sector, as well as the construction sector, which were all affected by the shutdowns experienced in the country. Moreover, the inadequate rate of investment and a poor business climate undermine Tunisia's economic growth. Indeed, the rise in interest rates and the decline of capital spending have pushed down investment, which is one of the main engines of economic growth. In 2021, the Tunisian economy witnessed some recovery, achieving a positive GDP growth rate of 3.3 per cent; however, it remains below the middle-income economies' average growth rate of 6.1 per cent.

As for labour market developments, the outbreak of COVID-19 amplified the already high unemployment rates, which remained persistently high through to the end of 2021. However, over time,

the labour force participation rate is increasing among women and decreasing among men, which could possibly be explained by a discouragement effect. Similarly, COVID-19 has affected unemployment rates by sex by roughly the same magnitude; however, female unemployment had more than recovered by Q4 2021, achieving a lower rate than pre-pandemic levels. At the same time, the unemployment rates among Tunisian youth are alarmingly high, exceeding 40 per cent throughout 2021. Young women were faster to recover and return to pre-pandemic levels, whereas the unemployment rate among young men remained high and above the rates observed a year before.

These results regarding Tunisia's macroeconomic and labour market performance during the 2019–21 period provide some lessons regarding how to build economic resilience to future shocks. First, a number of structural imbalances at the macro- and micro-economic levels have manifested themselves in the declining role of investment in the economy and the high unemployment rates among women and youth. Structural solutions are thus required to reverse these economic trends.

Policies that create more fiscal space for public investment are needed. These might include the introduction of an equitable taxation reform, containing the public sector wage bill, replacing generalized subsidies with transfers targeting the poor, and advancing reforms of state-owned enterprises. In addition, strengthening competition and opening up the economy to private sector investment would ensure inclusive and job-rich economic growth (IMF 2022b). Moreover, improving the business climate is necessary to allow for foreign direct investment inflows, which do not only positively affect economic growth in the host country, but can also improve employment creation through spillover effects on productivity and working conditions in domestically owned firms (ILO 2012).

Finally, while there is no one-size-fits-all policy solution for Tunisia's labour market challenges, it is essential to boost the capacities of the private sector to provide higher-productivity jobs that fit the aspirations of educated youth. Moreover, it is advisable to reduce the cost of formality compared to the cost of operating in the informal sector. This would encourage firms to join the formal sector and subsequently increase the demand for skilled, educated workers and thus increase labour force participation, especially among women who would benefit from better jobs in terms of type of contract, social security, working conditions, etc. (Boughzala 2019).

► APPENDIX

Appendix 1: Overview chapter

Table A.1. Timeline of government responses to COVID-19, by country

		Egypt	Morocco	Tunisia
Late March to April 2020	Closure measures	School closings at all levels Required workplace closing for some sectors Required cancelling of public events Restrictions on very large (1000+) gatherings Required closing of public transport Stay-at-home with exceptions for essential trips Internal movement restrictions Total border closure	School closings at all levels Required closing for all-but-essential workplaces Require cancelling of public events Restrictions on gatherings of more than 10 people Required closing of public transport Stay-at-home with exceptions for essential trips Internal movement restrictions Total border closure	School closings at all levels Required closing for all-but-essential workplaces Required cancelling of public events Restrictions on any gatherings Recommended closing of public transport Stay-at-home with exceptions for essential trips Internal movement restrictions Total border closure
May–June 2020	Change in closure measures	School closings loosened in early June Closing of public transport loosened in early June Stay-at-home switched to recommendation in early June	Workplace restrictions loosened in early June Closing of public transport lifted in early June Stay-at-home orders lifted in late June	School closings loosened in late May Workplace restrictions loosened in early May and lifted in early June Cancellation of public events lifted in early June Restrictions on gatherings lifted in early June Closing of public transport lifted in early June Stay-at-home loosened in mid-May and lifted in early June Restrictions on internal movements lifted in early June
July–September 2020	Changes to closure policies	Restrictions on international travel lifted in early July but additional screening introduced in early August	School closings loosened in late September	Restrictions on international travel loosened in early August and reinstated in late August

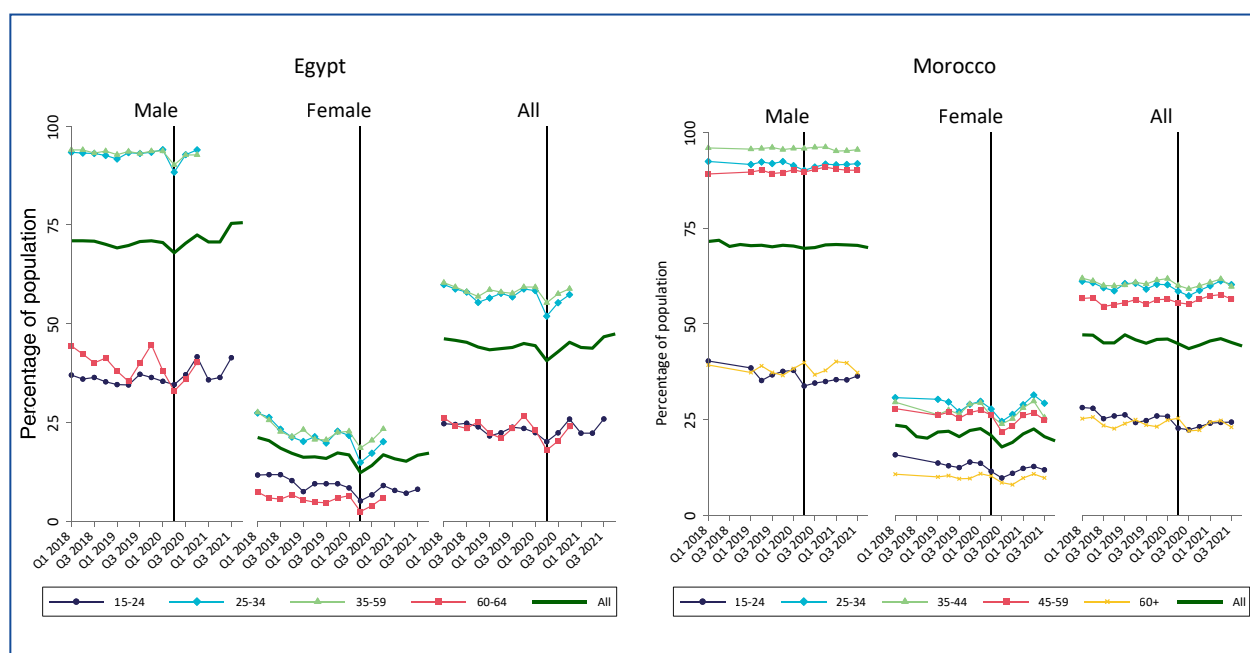
		Egypt	Morocco	Tunisia
			Stay-at-home requirements with exceptions reinstated in early August	
			Restrictions on international travel loosened in mid-September	
October–December 2020	Changes to closure policies	Restrictions on gatherings tightened gradually to ban all gatherings in late December	School closings loosened in early October	School closings reinstated in late October but loosened in mid-November
		Public transport restrictions tightened in mid-October and dropped in early November	Workplace closing reinstated for some sectors in early November	Workplace closings recommended in early October
			Restrictions on gatherings of ten people or less reinstated in late December	Requirement to cancel public events reinstated in early October
			Recommended closing of public transport reintroduced in late October	Restrictions on all gatherings reinstated in early October
				Stay-at-home requirements with exceptions reinstated in early October
				Restrictions on internal movements reimposed in late October
				International travel restrictions lifted in early November
January–March 2021	Vaccination campaigns	Vaccination campaign launched in mid-March	Vaccination campaign launched in mid-March	Vaccination campaign launched in mid-March
	Change in closure measures	Restrictions on gatherings of any size	Restrictions on gatherings of any size	School closings required for some levels or categories, loosened to recommended closing in early March
		Recommendation to stay at home		Required cancellation of public events, switched to recommended cancellation in early March

		Egypt	Morocco	Tunisia
October–December 2020	Changes to closure policies	Restrictions on internal movements in place but lifted in mid-January		Required closures of public transport reinstated in late January and loosened in early March
				Ban on international travel arrivals from some regions, loosened in early March to quarantine arrivals from high-risk regions
	Changes to closure policies	School closings loosened to recommend closing in early April, tightened to require closings for some levels in early May, and loosened again in early June	School closings tightened to require closing of some categories of schools in early June	School closings tightened to require closing all levels in mid-April and loosened to recommend closing in mid-May
		Workplace restrictions loosened to recommend closing in early June	Restrictions on public events loosened to recommend closing in early June	Workplace restrictions policy fluctuated a number of times during the period, ending with required closing of all-but-essential workplaces in late June
		Cancellation of public events briefly dropped in early June but quickly reinstated	Restrictions on gatherings loosened to allow gatherings of less than 1,000 people in early June	Restrictions on public events fluctuated during the period, ending with required cancellation of public events in early June
		Restrictions on all gatherings briefly loosened in June but quickly reinstated	Restrictions on public transport tightened to require closing in early June	Restrictions on public transport tightened to require closing in mid-June
		Required closings of public transport reintroduced in early May and lifted again in early June		Restrictions on internal movements were put in place in late April, loosened briefly in May and put back in place in mid-June
		Stay-at-home recommendation lifted in early June	International travel restrictions loosened to quarantine arrivals from high-risk regions in late June	International travel controls fluctuated throughout the period, going from screening only to quarantine on arrival, ending with banning arrivals from some regions

Note: Red shading means measures are becoming more restrictive, blue shading means measures are becoming less restrictive, purple shading means change in measures is mixed, and no shading means no change.

Source: Authors' compilation, based on Hale et al. 2021.

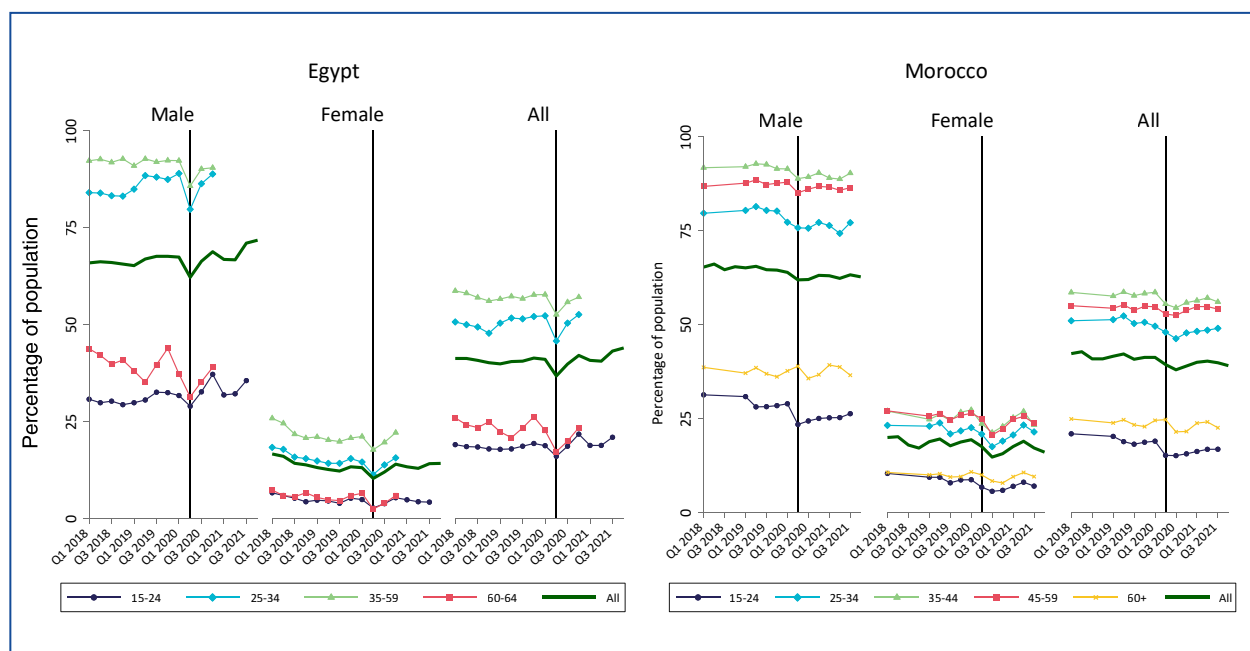
Figure A.1. Quarterly labour force participation rate (percentage), by sex and age (2018–21)



Note: Data disaggregated by sex and age are not available for quarters 2, 3 and 4 of 2018 for Morocco.

Source: Authors' calculations, based on data from the Egypt Labour Force Survey (OAMDI 2018, 2019, 2020); private communication with CAPMAS (2021); Morocco National Survey on Employment (HCP 2021, 2018a, 2018b, 2019b, 2019a, 2020a, 2020b).

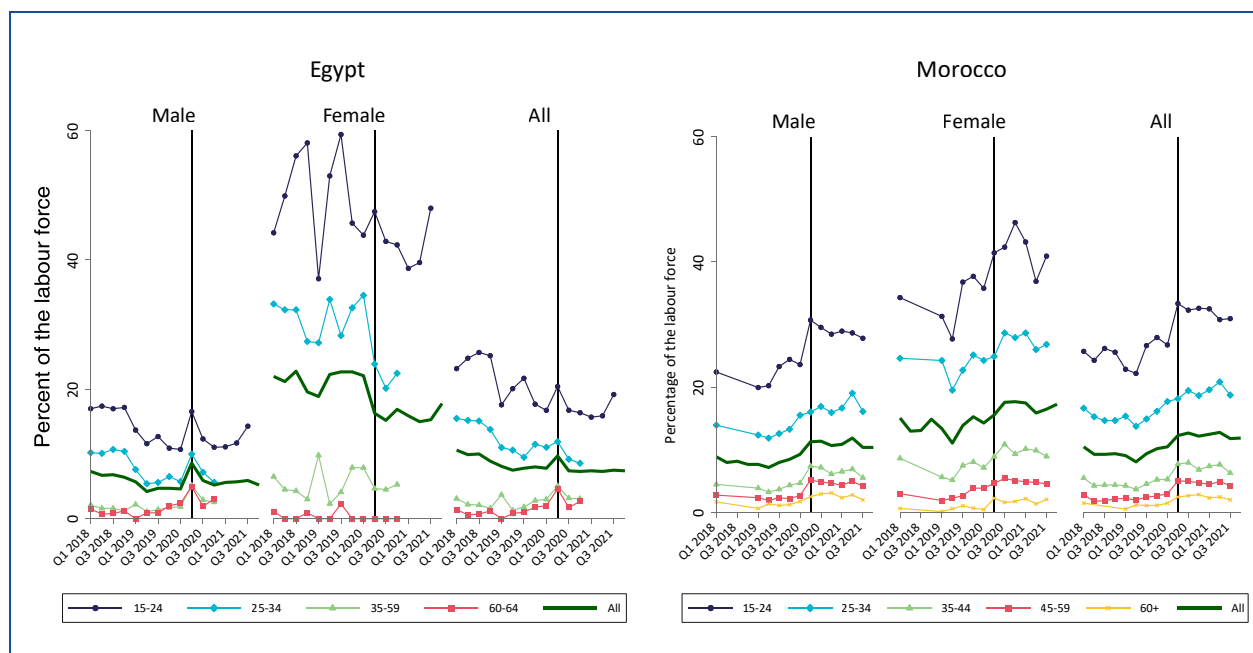
Figure A.2. Quarterly employment rate (percentage), by sex and age (2018–21)



Note 1: Data disaggregated by sex and age are not available for quarters 2, 3 and 4 of 2018 for Morocco; Note 2: The total for quarters 2,3 and 4 of 2018 for Morocco was omitted given that the age classification in available data was different than for other quarters.

Source: Authors' calculations, based on data from the Egypt Labour Force Survey (OAMDI 2018, 2019, 2020); private communication with CAPMAS (2021); Morocco National Survey on Employment (HCP 2021, 2018a, 2018b, 2019b, 2019a, 2020a, 2020b).

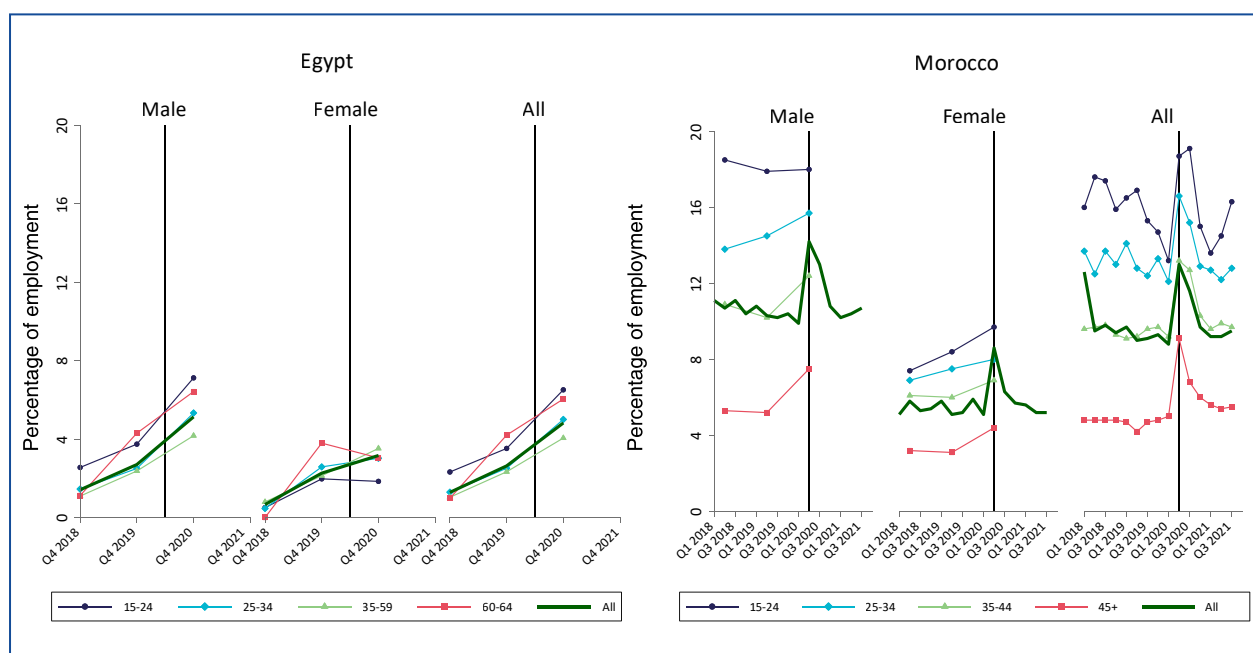
Figure A.3. Quarterly unemployment rate (percentage, standard definition), by sex and age (2018-21)



Note: Data disaggregated by sex and age are not available for quarters 2, 3 and 4 of 2018 for Morocco.

Source: Authors' calculations, based on data from the Egypt Labour Force Survey, aggregated data by gender (CAPMAS 2018, 2019, 2020, 2021) and disaggregated data by age (OAMDI 2018, 2019, 2020); private communication with CAPMAS (2021); Morocco National Survey on Employment (HCP 2021, 2018a, 2018b, 2019b, 2019a, 2020a, 2020b).

Figure A.4. Time-related underemployment (percentage of employment), by age and sex

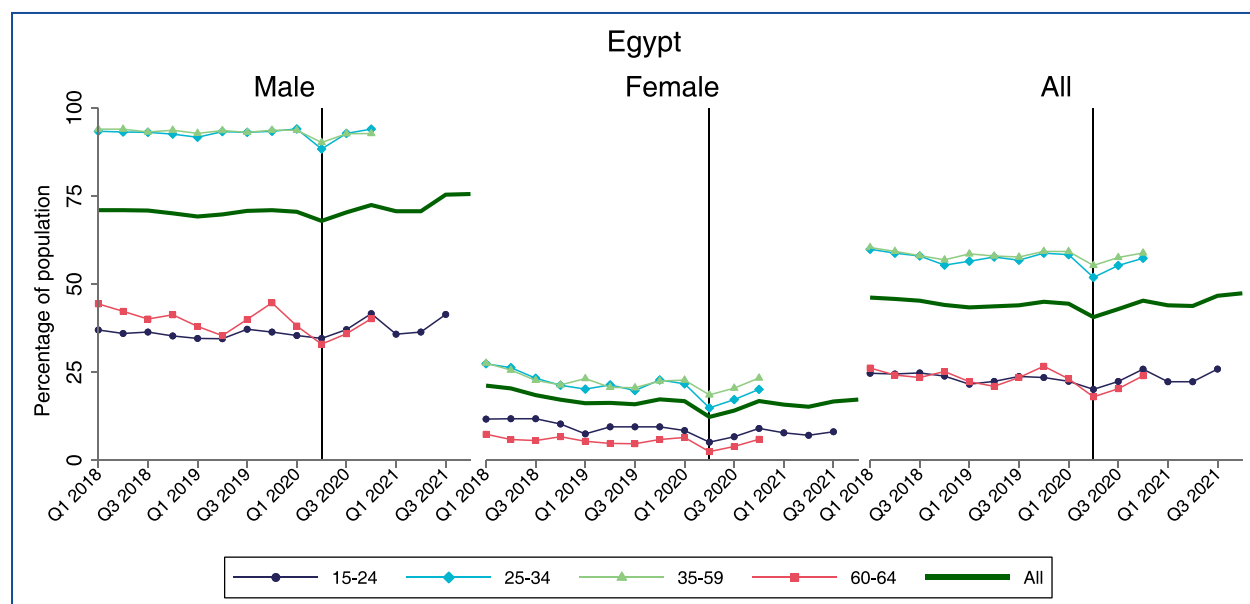


Note: Data disaggregated by sex and education for Morocco are only available annually up to 2020 and are plotted in the second quarter of each year. Data for Egypt are only available in quarter 4, starting in 2019.

Source: Authors' calculations, based on data from the Egypt Labour Force Survey (OAMDI 2018, 2019, 2020) and Morocco National Survey on Employment (HCP 2021, 2018a, 2018b, 2019a, 2019b, 2020b, 2020a).

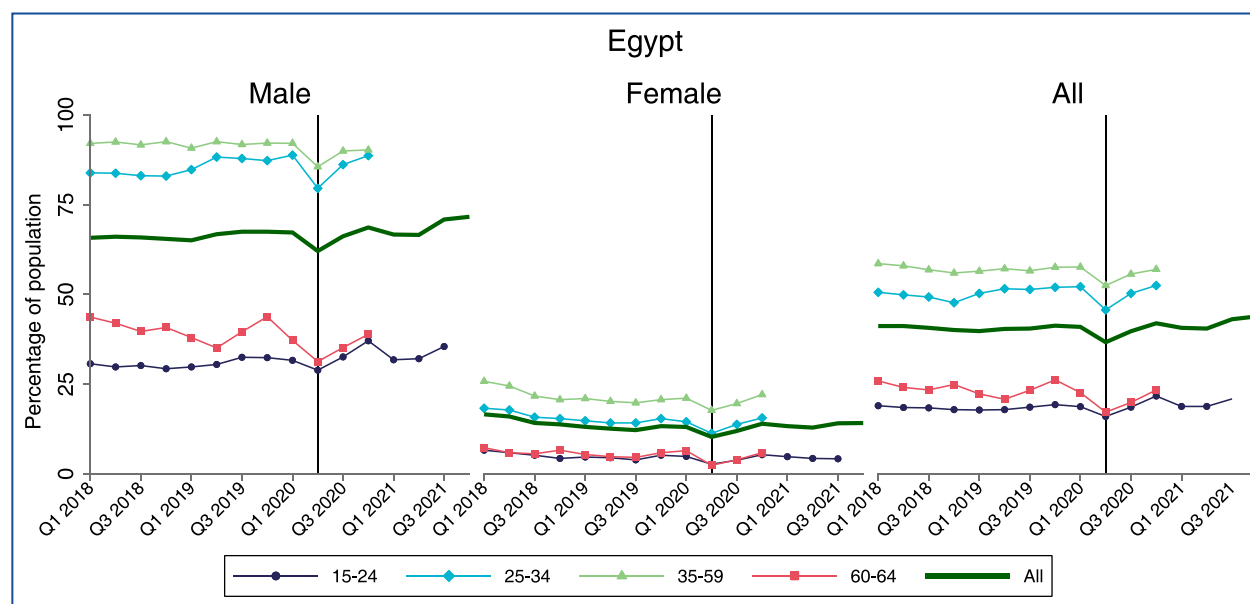
Appendix 2: Egypt

Figure A.1. Quarterly labour force participation rate (percentage of population aged 15–64), by sex and age (2018–21)



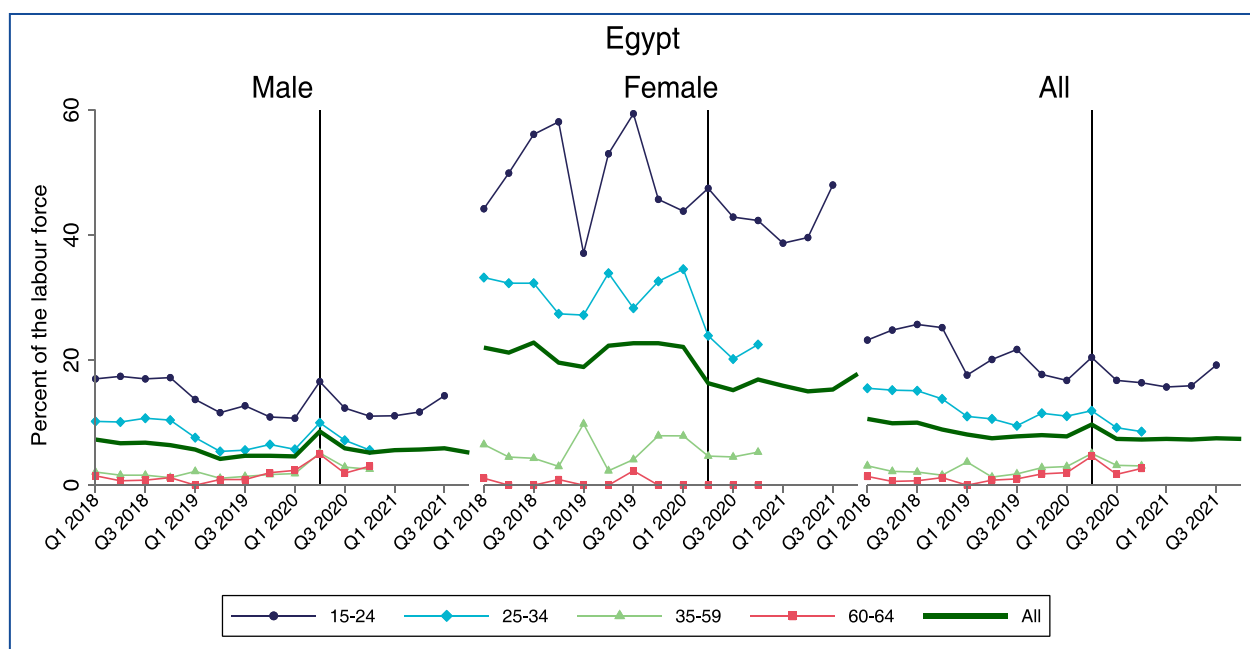
Source: Authors' calculations. Based on data from Egypt Labour Force Survey (CAPMAS 2018, 2019, 2020, 2021; OAMDI 2018, 2019, 2020).

Figure A.2. Quarterly employment rate, by sex and age (2018–21)



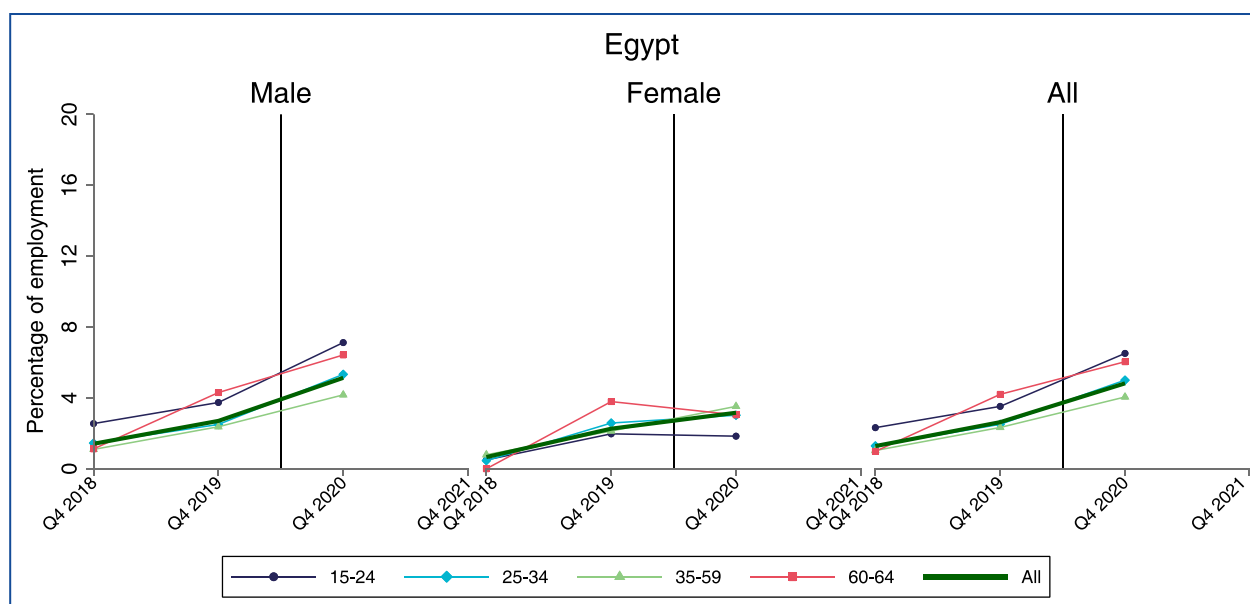
Source: Authors' calculations, based on data from the Egypt Labour Force Survey (CAPMAS 2018, 2019, 2020, 2021; OAMDI 2018, 2019, 2020).

Figure A.3. Quarterly standard unemployment rate percentage of labour force (aged 15-64), by sex and age (2018-21)



Source: Authors' calculations, based on data from Egypt Labour Force Survey (CAPMAS 2018, 2019, 2020, 2021; OAMDI 2018, 2019, 2020).

Figure A.4. Time-related underemployment, by sex and age

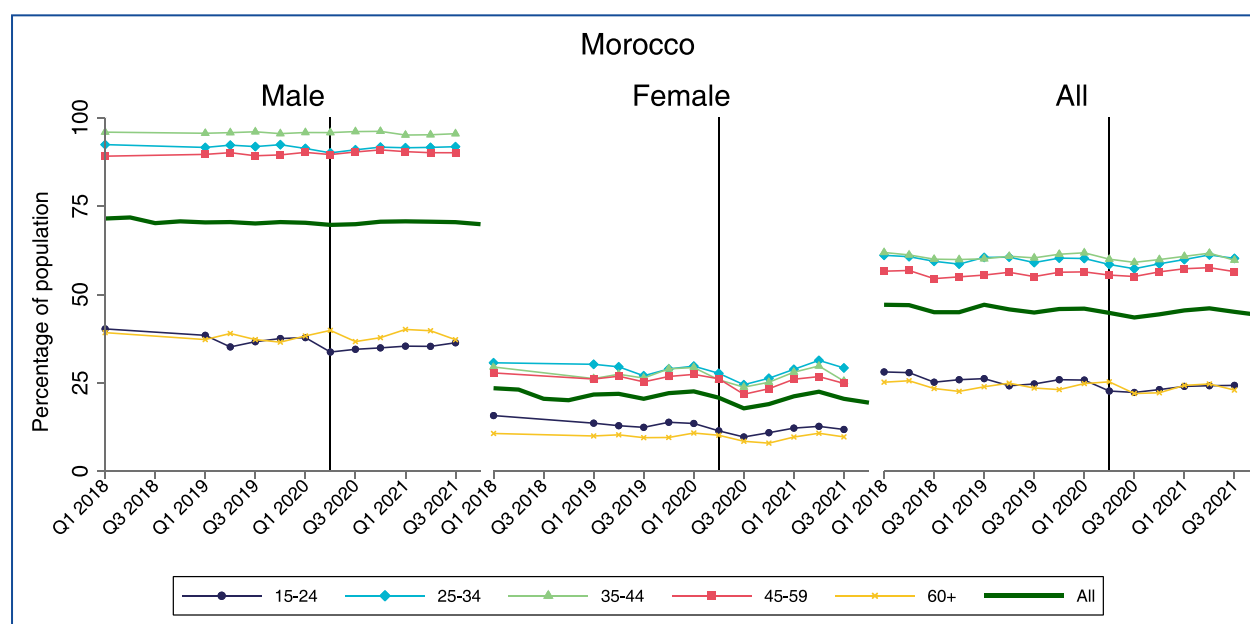


Note: Time-related underemployment is only available in quarter 4 in years 2019 and 2020.

Source: Authors' calculations, based on data from Egypt Labour Force Survey (CAPMAS 2018, 2019, 2020, 2021; OAMDI 2018, 2019, 2020).

Appendix 3: Morocco

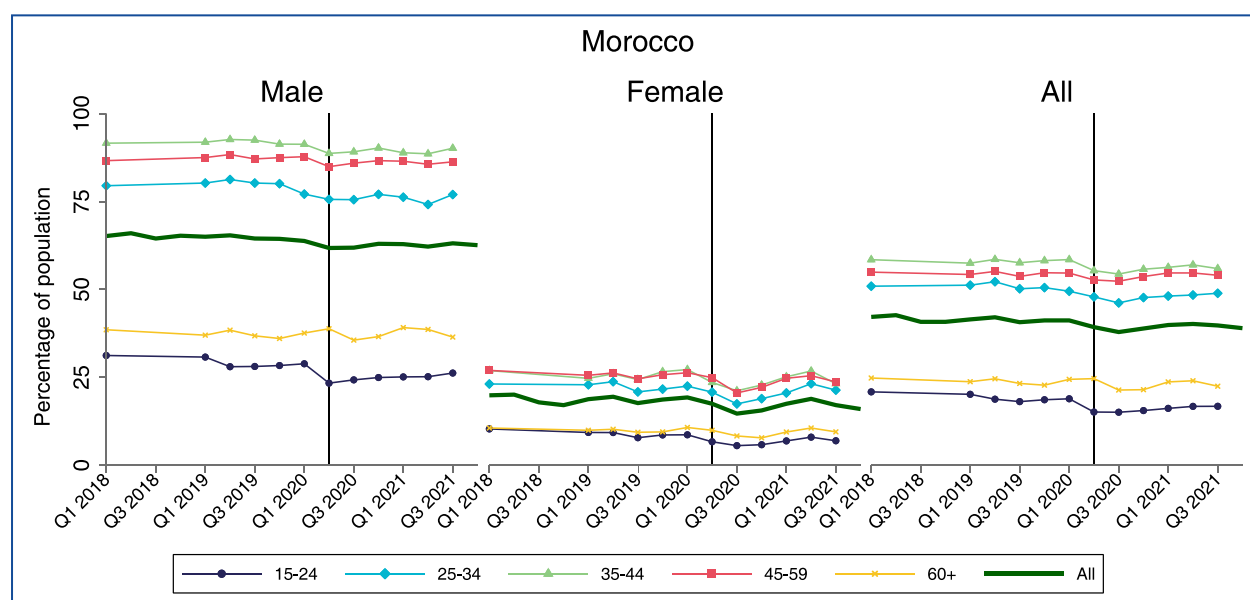
Figure A.1. Quarterly labour force participation rate, by sex and age (2018–21)



Note: Data disaggregated by sex and age are not available for the 2nd, 3rd and 4th quarters of 2018 for Morocco.

Source: Authors' calculations, based on data from the National Survey on Employment (*l'Enquête Nationale sur l'Emploi*) (HCP 2018a, 2018b, 2019a, 2019b, 2020a, 2020b, 2021).

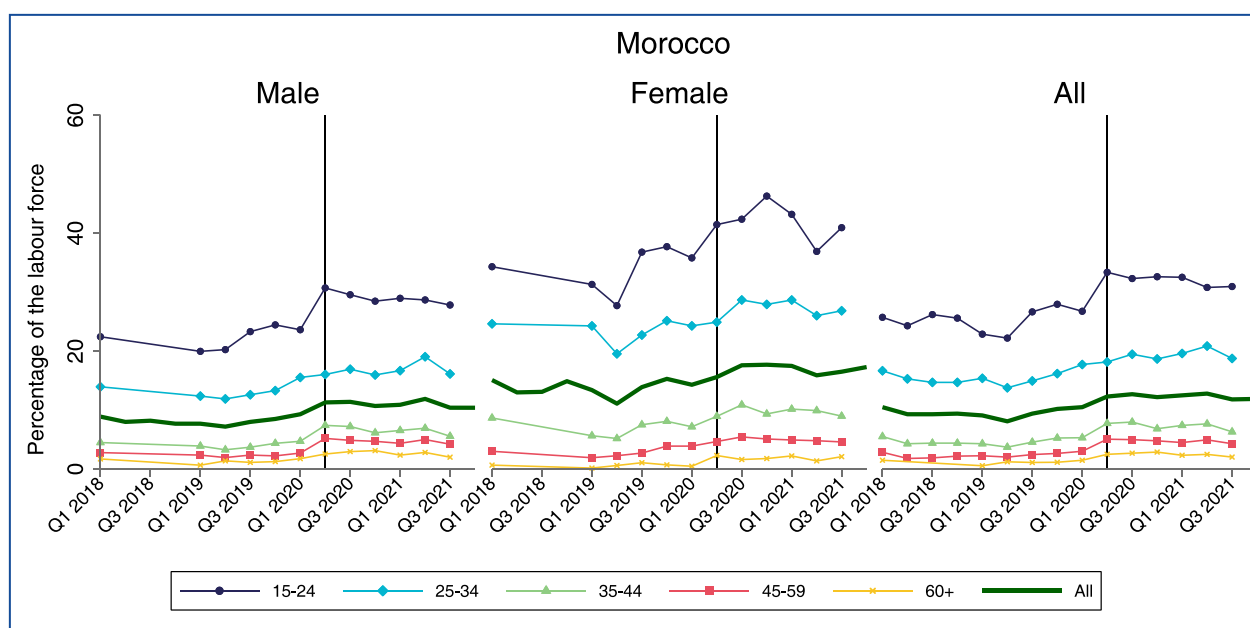
Figure A.2. Quarterly employment rate, by sex and age (2018–21)



Note: a) Data disaggregated by sex and age are not available for the 2nd, 3rd and 4th quarters of 2018 for Morocco; b) the total for quarters 2, 3 and 4 of 2018 for Morocco was omitted given that the age classification in available data was different than for other quarters.

Source: Authors' calculations, based on data from the National Survey on Employment (HCP 2018a, 2018b, 2019a, 2019b, 2020a, 2020b, 2021).

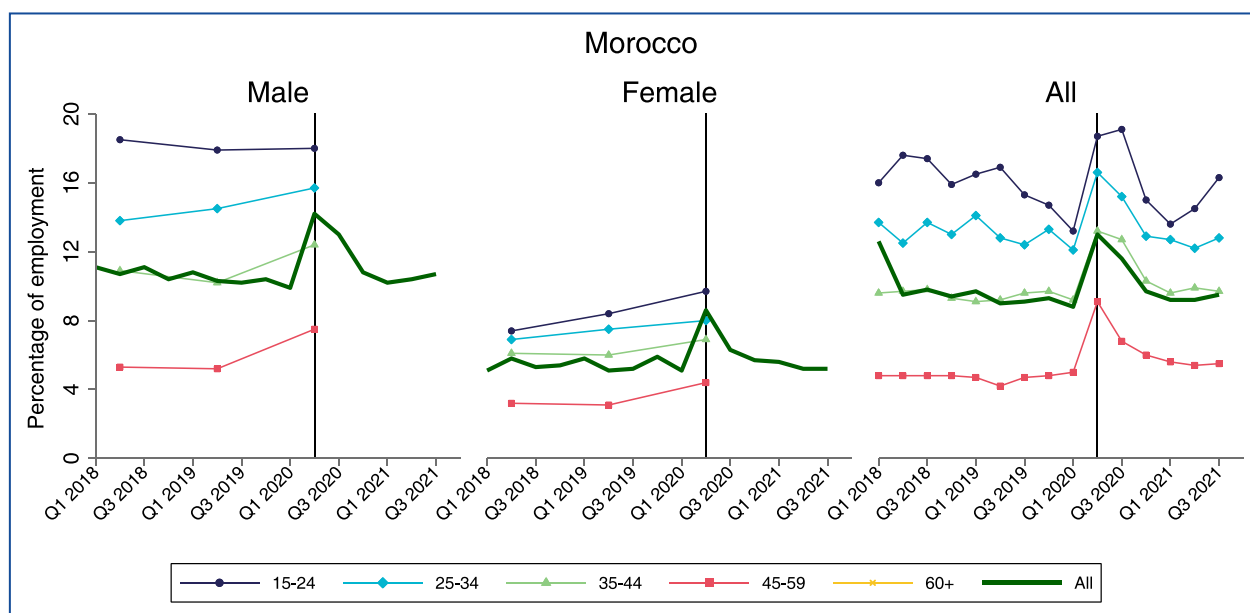
Figure A.3. Quarterly unemployment rate, by sex and age (2018-21)



Note: Data disaggregated by sex and age are not available for the 2nd, 3rd and 4th quarters of 2018 for Morocco.

Source: Authors' calculations, based on data from the National Survey on Employment (HCP 2018a, 2018b, 2019a, 2019b, 2020a, 2020b, 2021).

Figure A.3. Quarterly time-related underemployment rate, by sex and age (2018-21)

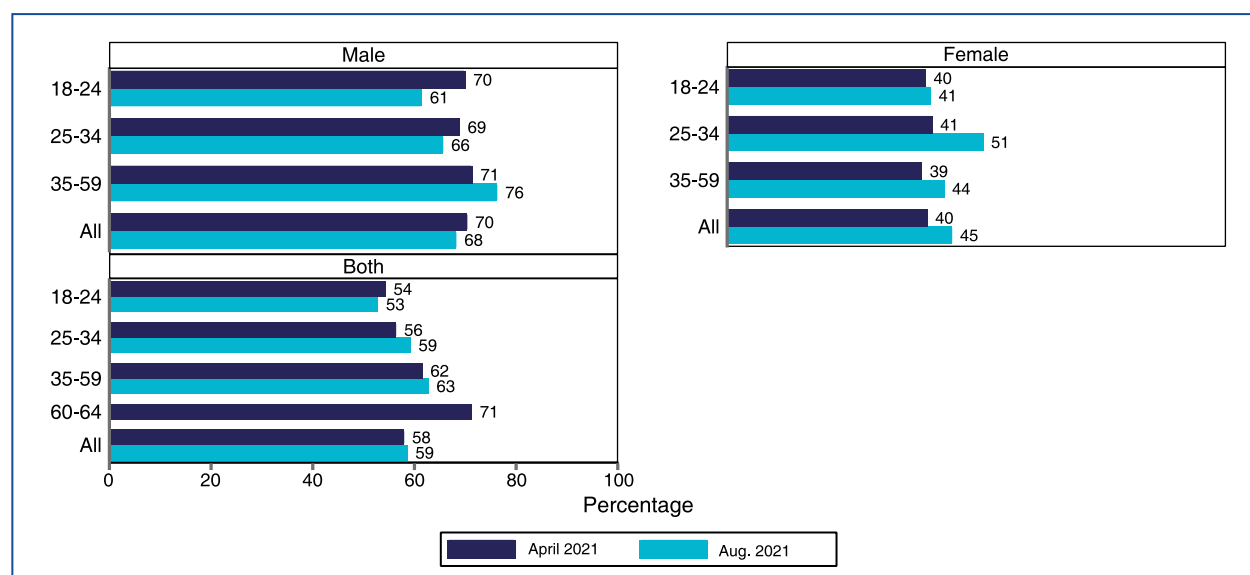


Note: Data disaggregated by sex and age for Morocco are only available annually up to 2020 and are plotted in the second quarter of each year.

Source: Authors' calculations, based on data from the National Survey on Employment (HCP 2018a, 2018b, 2019a, 2019b, 2020a, 2020b, 2021).

Appendix 4: Sudan

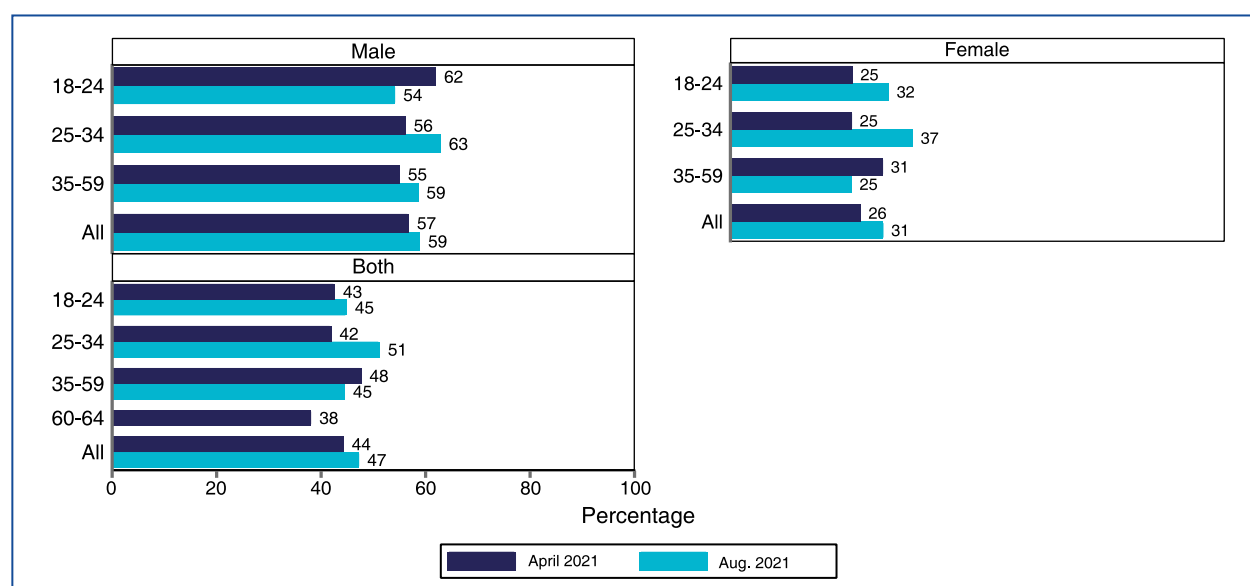
Figure A.1. Labour force participation rate (percentage of population aged 18–64), by wave, age group and sex



Note: Data suppressed if N<50.

Source: Authors' calculations, based on COVID-19 MENA Monitor.

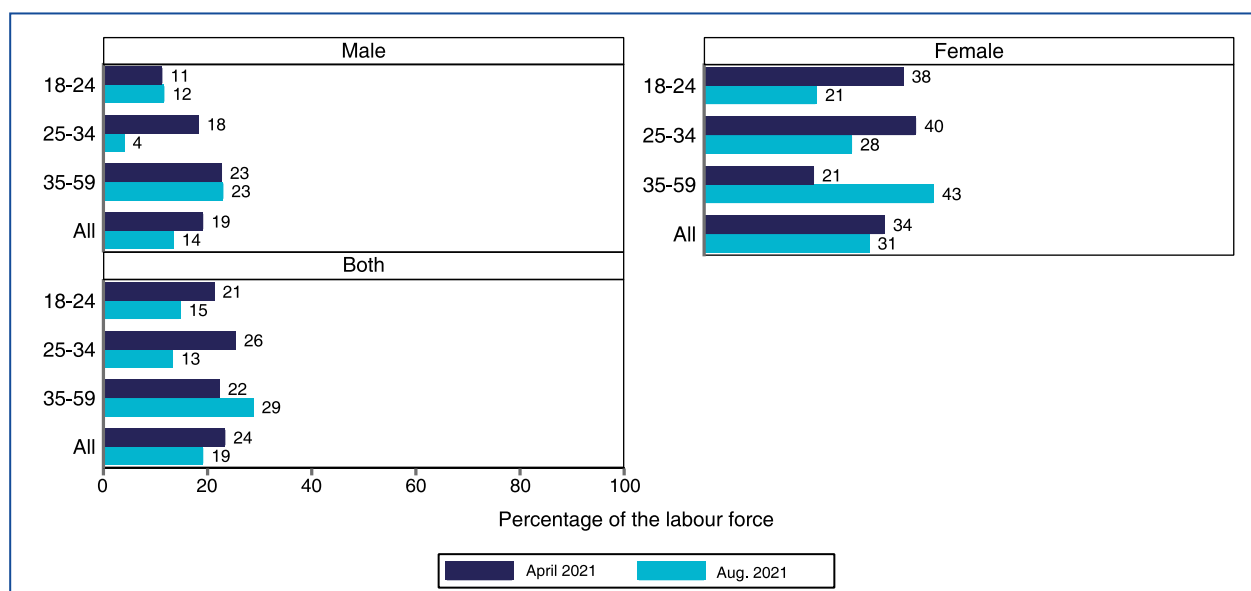
Figure A.2. Employment rate (percentage of population aged 18–64), by wave, age group and sex



Note: Data suppressed if N<50.

Source: Authors' calculations, based on COVID-19 MENA Monitor.

Figure A.3. Standard unemployment rate (percentage of labour force aged 18–64), by wave, age group and sex



Note: Data suppressed if N<50.

Source: Authors' calculations, based on COVID-19 MENA Monitor.

LIST OF REFERENCES

References for overview chapter:

- Alazzawi, S. 2021. "Lives Versus Livelihoods: Who Can Work from Home in MENA?" *Economic Research Forum Working Paper Series No. 1471*. Cairo, Egypt.
- Amer, M., I. Selwaness, and C. Zaki. 2021. "Patterns of Economic Growth and Labour Market Vulnerability in Egypt." In *Regional Report on Jobs and Growth in North Africa 2020*, edited by International Labour Organization and Economic Research Forum, 97–151. Cairo: ILO and ERF.
- Assaad, R. and M.A. Marouani. 2021. "Economic Growth and Labour Market Outcomes in North Africa: An Overview of Developments in Algeria, Egypt, Sudan and Tunisia since 2000." In *Regional Report on Jobs and Growth in North Africa 2020*, edited by the ILO and ERF, 23–53. Cairo: ILO and ERF.
- Assaad, R. 2019. "Moving beyond the Unemployment Rate: Alternative Measures of Labor Market Outcomes to Advance the Decent Work Agenda in North Africa." Approach Paper: Expert Group Meeting, December 2019. Cairo.
- . 2022. "Beware of the Echo: The Evolution of Egypt's Population and Labor Force from 2000 to 2050." *Middle East Development Journal* 1–31.
- Assaad, R., A. AlSharawy, and C. Salemi. 2022. "Is The Egyptian Economy Creating Good Jobs? Job Creation and Economic Vulnerability from 1998 to 2018." In *The Egyptian Labor Market: A Focus on Gender and Vulnerability*, edited by C. Krafft and R. Assaad. Oxford: Oxford University Press.
- Assaad, R., S. Ghazouani, and C. Krafft. 2018. "Marriage, Fertility, and Women's Agency in Tunisia." In *The Tunisian Labor Market in an Era of Transition*, edited by R. Assaad and M. Boughzala, 171–193. Oxford: Oxford University Press.
- Assaad, R., C. Krafft, M.A. Marouani, S. Kennedy, R. Cheung, and S. Wahby. 2022. *Egypt COVID-19 Country Case Study. ILO/ERF Report*.
- Assaad, R., C. Krafft, and I. Selwaness. 2017. "The Impact of Marriage on Women's Employment in the Middle East and North Africa." *Economic Research Forum Working Paper Series No. 1086*.
- Belghazi, S. 2022. *Croissance Économique et Marché Du Travail Au Maroc : Au-Delà Des Taux à La Recherche d'un Travail Décent*. Cairo.
- CAPMAS (Central Agency for Public Mobilization and Statistics). 2018. *Quarterly Bulletin: Labor Force Survey*. Cairo.
- . 2019. *Quarterly Bulletin: Labor Force Survey*. Cairo.
- . 2020. *Quarterly Bulletin: Labor Force Survey*. Cairo.
- . 2021. *Quarterly Bulletin: Labor Force Survey*. Cairo.
- CBS (Central Bureau of Statistics) and World Bank. 2020. *Socioeconomic Impact of COVID-19 on Sudanese Households*.
- Ebaidalla, E. M., and S.M. Nour. 2021. "Economic Growth and Labour Market Outcomes in an Agrarian Economy: The Case of Sudan." In *Regional Report on Jobs and Growth in North Africa 2020*, 152–182. Cairo: International Labour Organization and Economic Research Forum.
- El Lahga, A., S. Ghali and Y. Helel. 2021. "Growth and Employment Patterns in Pre- and Post-Up-rising Tunisia." In *Regional Report on Jobs and Growth in North Africa 2020*, 186–217. Cairo: ILO and ERF.
- Hale, T., N. Angrist, R. Goldszmidt, B. Kira, A. Petherick, T. Phillips, S. Webster, E. Cameron-Blake, L. Hallas, S. Majumdar, and H. Tatlow. 2021. "A Global Panel Database of Pandemic Policies (Oxford COVID-19 Government Response Tracker)." *Nature Human Behaviour* (5) 529–538.
- HCP (Haut-Commissariat au Plan). 2018a. *Activité, Emploi et Chômage, Premiers Résultats (Annuel)*. Rabat.
- . 2018b. *Activité, Emploi et Chômage (Trimestriel)*. Rabat.
- . 2019a. *Activité, Emploi et Chômage, Premiers Résultats (Annuel)*. Rabat.
- . 2019b. *Activité, Emploi et Chômage (Trimestriel)*. Rabat.
- . 2020a. *Activité, Emploi et Chômage, Premiers Résultats (Annuel)*. Rabat.
- . 2020b. *Activité, Emploi et Chômage (Trimestriel)*. Rabat.

—. 2021. *Activité, Emploi et Chômage (Trimestriel)*. Rabat.

ILO (International Labour Organization and ERF (Economic Research Forum). 2021. *Regional Report on Jobs and Growth in North Africa 2020*.

IMF (International Monetary Fund). 2021. *Policy Responses to COVID-19: Policy Tracker*.

INS (Institut National de la Statistique). 2018. *Indicateurs de l'emploi et Du Chômage (Trimestriel)*. Tunis.

—. 2019. *Indicateurs de l'emploi et Du Chômage (Trimestriel)*. Tunis.

—. 2020. *Indicateurs de l'emploi et Du Chômage (Trimestriel)*. Tunis.

—. 2021. *Indicateurs de l'emploi et Du Chômage (Trimestriel)*.

Krafft, C., R. Assaad, and C. Keo. 2022. "The Evolution of Labor Supply in Egypt, 1988-2018." In *The Egyptian Labor Market: A Focus on Gender and Vulnerability*, edited by C. Krafft and R. Assaad, 13-48. Oxford: Oxford University Press.

Krafft, C., R. Assaad, and M.A. Marouani. 2021a. "The Impact of COVID-19 on Middle Eastern and North African Labor Markets: Glimmers of Progress but Persistent Problems for Vulnerable Workers." *Economic Research Forum Policy Brief* No. 57.

—. 2021b. "The Impact of COVID-19 on Middle Eastern and North African Labor Markets: A Focus on Micro, Small, and Medium Enterprises." *Economic Research Forum Policy Brief* No. 60.

—. 2021c. "The Impact of COVID-19 on Middle Eastern and North African Labor Markets: Vulnerable Workers, Small Entrepreneurs, and Farmers Bear the Brunt of the Pandemic in Morocco and Tunisia." *Economic Research Forum Policy Brief* No. 55.

—. 2022. "The Impact of COVID-19 on Middle Eastern and North African Labor Markets: Employment Recovering, but Income Losses Persisting." *Economic Research Forum Policy Brief* No. 73.

Krafft, C., M.A. Marouani, R. Assaad, R. Cheung, A. LaPlante, I. Omar, and S. Wahby. 2022. *Morocco COVID-19 Country Case Study. ILO/ERF Report*.

Krafft, C., I. Selwaness, and M. Sieverding. 2022. "The Impact of the COVID-19 Pandemic on Women's Care Work and Employment in the Middle East and North Africa." *ILO/ERF Working Paper*.

Marouani, M.A., C. Krafft, R. Assaad, S. Kennedy, R. Cheung, A.D. Latifi, and E. Wojcieszynski. 2022. *Tunisia COVID-19 Country Case Study. ILO/ERF Report*.

Marouani, M. A., and P.Le. Minh. 2020. "The First Victims of COVID-19 in Developing Countries? The Most Vulnerable Workers to the Lockdown in the Tunisian Economy." *GLO Discussion Paper* No. 581.

OAMDI (Open Access Micro Data Initiative). 2018. OAMDI, 2018. *Egypt - Labor Force Survey (LFS)*. Various Rounds. Cairo: Economic Research Forum.

—. 2019. OAMDI, 2019. *Egypt - Labor Force Survey (LFS)*. Various Rounds. Cairo: Economic Research Forum.

—. 2020. OAMDI, 2020. *Egypt - Labor Force Survey (LFS)*. Various Rounds. Cairo: Economic Research Forum.

—. 2021a. *COVID-19 MENA Monitor Household Survey (CCMMHH). Version 4.0 of the Licensed Data Files; CCMMHH_Nov-2020-Jun-2021*.

—. 2021b. *COVID-19 MENA Monitor Enterprise Survey (CCMMET). Version 2.0 of the Licensed Data Files; CCMMET Wave1, Wave2*.

OECD (Organisation for Economic Co-operation and Development). 2021. *Fiscal Monitor: Database of Country Fiscal Measures in Response to the COVID-19 Pandemic*.

Ritchie, H., E. Mathieu, L. Rodés-Guirao, C. Appel, C. Giattino, E. Ortiz-Ospina, J. Hasell, B. Macdonald, D. Beltekian, and M. Roser. 2021. "Coronavirus Pandemic (COVID-19)." *Our World in Data*.

World Bank. 2022. *World Development Indicators*. Accessed 6 October 2022. <https://databank.worldbank.org/source/world-development-indicators>.

References for Egypt chapter:

Assaad, R., C. Krafft and M.A. Marouani. 2021. "The Impact of COVID-19 on Middle Eastern and North African Labor Markets: Glimmers of Progress but Persistent Problems for Vulnerable Workers a Year into the Pandemic" *ERF Policy Brief* No. 57.

Amer, M., I. Selwaness, and C. Zaki. 2021. "Patterns of economic growth and labor market vulnerability in Egypt" in *Regional Report on Jobs and Growth in North Africa 2020*, edited by R. Assaad and M.A. Marouani, International Labour Organization and Economic Research Forum.

Herrera, S., C. Hurlin, and C. Zaki. 2013. "Why don't Banks Lend to Egypt's Private Sector?", *Economic Modeling* 33: 347-356.

Krafft, Caroline, Ragui Assaad, and Caitlyn Keo. 2021. "The Evolution of Labor Supply in Egypt, 1988-2018." In *The Egyptian Labor Market: A Focus on Gender and Vulnerability*, edited by Caroline Krafft and Ragui Assaad, 13-48. Oxford: Oxford University Press.

Youssef, H. and C. Zaki. 2019. "From Currency Depreciation to Trade Reform: How to Take Egyptian Exports to New Levels?", Policy Research Working Paper No. 8809. The World Bank.

Zaki, C. 2017. "An Overview of Structural Imbalances in Egypt", *Egypte Monde Arabe*, « L'État égyptien en quête de stabilité », 16 (3): 99-124.

Zaki, C. 2022 [forthcoming]. "Why Don't Firms Grow? Evidence from Egypt", *International Journal of Economic Policy in Emerging Economies*.

Zaki, C. and H. Miniaoui. 2022. *The Impact of Trade and Investment Policies on Productive and Decent Work Country Report for Egypt*. International Labour Organization, METI Programme.

References for Morocco chapter:

Bank Al-Magreb. 2019. « Rapport sur l'exercice 2019 ». Rapport annuel.

———. 2020. « Rapport sur l'exercice 2020 ». Rapport annuel.

Belghazi, S. Forthcoming. « Croissance économique et marché du travail au Maroc : au-delà des taux à la recherche d'un travail décent ». ERF, ILO. Revised version, 2022.

DEPF (Direction des Études et des Prévisions Financières) and UN Women. 2021. « Coûts économiques des inégalités de genre dans le marché du travail au Maroc ».

HCP (Haut Commissariat au Plan). 2018a. « Activité, Emploi et Chômage ». Rapport annuel publié par la Direction de la statistique 2018.

———. 2018b. « Activité, Emploi et Chômage ». Rapports trimestriels publiés par la Direction de la Statistique 2018.

———. 2019a. « Activité, Emploi et Chômage ». Rapport annuel publié par la Direction de la statistique 2019.

———. 2019b. « Activité, Emploi et Chômage ». Rapports trimestriels publiés par la Direction de la statistique 2019.

———. 2019c. « Note d'information sur la situation économique nationale ». Publications trimestrielles 2019.

———. 2019d. « Situation économique nationale en 2019 ». Publication annuelle.

———. 2020a. « Activité, Emploi et Chômage ». Rapport annuel publié par la Direction de la statistique.

———. 2020b. « Activité, Emploi et Chômage ». Rapports trimestriels publiés par la Direction de la statistique 2020.

———. 2020c. « Note d'information sur la situation économique nationale ». Publications trimestrielles 2020.

———. 2020d. « Situation économique nationale en 2020 ». Publication annuelle.

———. 2021a. « Activité, Emploi et Chômage ». Rapport annuel publié par la Direction de la statistique.

———. 2021b. « Activité, Emploi et Chômage ». Rapports trimestriels publiés par la Direction de la statistique.

———. 2021c. « Note d'information sur la situation économique nationale ». Publications trimestrielles 2021.

OAMDI. 2021. COVID-19 MENA Monitor Household Survey (CCMMHH). <http://www.erfdataportal.com/index.php/catalog>

Verme, Paolo, Abdoul G. Barry, and Jamal Guennouni. 2016. "Female Labor Participation in the Arab World: Some Evidence from Panel Data in Morocco." Policy Research Working Paper Series. 7031. The World Bank.

World Bank. 2018. « Indicateurs du développement : Maroc », données annuelles 2018-20.

References for Sudan chapter:

Al Jazeera and news agencies. 2022. "Timeline: Sudan's Political Situation since Al-Bashir's Removal". *Al Jazeera*, 25 October 2021.

Central Bureau of Statistics & World Bank. 2020. *Socioeconomic Impact of COVID-19 on Sudanese Households*.

Ebaidalla, E. M., & S. M. Nour. 2021. "Economic Growth and Labour Market Outcomes in an Agrarian Economy: The Case of Sudan". In *Regional Report on Jobs and Growth in North Africa 2020*. 152-182. International Labour Organization and Economic Research Forum.

Hale, T., N. Angrist, R. Goldszmidt, B. Kira, A. Petherick, T. Phillips, S. Webster, E. Cameron-Blake, L. Hallas, S. Majumdar, & H. Tatlow. 2021. "A Global Panel Database of Pandemic Policies (Oxford COVID-19 Government Response Tracker)". *Nature Human Behaviour* (5): 529–538.

International Monetary Fund. 2021. Policy Responses to COVID-19. *Policy Tracker*.

OAMDI. 2021. COVID-19 MENA Monitor Household Survey (CCMMHH). *Version 5.0 of the Licensed Data Files; CCMMHH_Nov-2020-Aug-2021*. Accessed 30 November 2021 from <http://www.erfdportal.com/index.php/catalog>

Sudan Family Support Programme. 2021. *Thamarat: Supporting Sudanese Families*.

UN-ESCWA (United Nations Economic and Social Commission for Western Asia). 2021. Arab LDCs: *Development Challenges and Opportunities*.

UNDP (United Nations Development Programme). 2020. *Covid-19 Socio-Economic Impact Assessment for Sudan*.

UNICEF. 2020. *UNICEF Sudan - COVID-19 Response 2020*.

UNECA (United Nations Economic Commission for Africa). 2020. *COVID-19 Crisis in North Africa: The Impact and Mitigation Responses. COVID-19 Response*.

World Bank. 2022. World Development Indicators. *World Bank Databank*. Accessed 6 January 2022 from <https://databank.worldbank.org/source/world-development-indicators#>

References for Tunisia Chapter:

Assaad, Ragui, Samir Ghazouani, and Caroline Krafft. 2018a. "The Composition of Labor Supply and Unemployment in Tunisia." In *The Tunisian Labor Market in an Era of Transition*, edited by Ragui Assaad and Mongi Boughzala, 1–38. Oxford, UK: Oxford University Press.

Assaad, Ragui, and Caroline Krafft. 2016. "Labor Market Dynamics and Youth Unemployment in the Middle East and North Africa: Evidence from Egypt, Jordan and Tunisia", Economic Research Forum Working Paper Series No. 993.

Boughzala, Mongi. 2019. "Unemployment in Tunisia: why it's so high among women and youth", The ERF Policy Portal. 21 May 2019. <https://theforum.erf.org.eg/2019/05/07/unemployment-tunisia-high-among-women-youth/>.

CBE (Central Bank of Tunisia). 2022. "Les comptes de la nation". www.bct.gov.tn.

ILO (International Labour Organization). 2012. "Executive Summary and Policy Recommendations for Tunisia".

———. 2021. *Regional Report on Jobs and Growth in North Africa 2020*.

IMF (International Monetary Fund). 2022a. "World Economic Outlook: April 2022". <https://www.imf.org/en/Publications/WEO/Issues/2022/04/19/world-economic-outlook-april-2022>.

———. 2022b. "Statement by Director Jihad Azour at the Conclusion of a Visit to Tunisia", 22 June 2022. <https://www.imf.org/en/News/Articles/2022/06/22/pr22220-tunisia-statement-by-director-jihad-azour-at-the-conclusion-of-a-visit-to-tunisia>.

INS (National Institute of Statistics, Tunisia). 2019. "Bulletin Mensuel des Statistiques". May. <http://www.ins.tn/sites/default/files/publication/pdf/bms%20mai.pdf>.

———. 2020a. "La croissance économique (Trimestriel)". February. <http://www.ins.tn/publication/la-croissance-economique-au-quatrieme-trimestre-2019>.

———. 2020b. "Bulletin Mensuel des Statistiques". May. <http://www.ins.tn/sites/default/files/publication/pdf/bms%20Mai%202020.pdf>.

———. 2020c. "Indicateurs de l'emploi et du chômage". http://www.ins.tn/sites/default/files/publication/pdf/Note_ENPE_1T2020.pdf.

———. 2021. "Bulletin Mensuel des Statistiques". May. <http://www.ins.tn/sites/default/files/publication/pdf/bms%20Mai%20pour%20site.pdf>.

———. 2022a. "La croissance économique (Trimestriel)". August. <http://www.ins.tn/publication/la-croissance-economique-au-deuxieme-trimestre-2022>.

———. 2022b. "Bulletin Mensuel des Statistiques". May. <http://www.ins.tn/sites/default/files/publication/pdf/bms%20mai%202022.pdf>.

———. 2022c. "Indicateurs de l'emploi et du chômage". <http://www.ins.tn/publication/indicateurs-de-lemploi-et-du-chomage-premier-trimestre-2022>.

Kokas, Deeksha, Gladys Lopez-Acevedo, Abdel Rahman El Lahga, Vibhuti Mendiratta. 2020. "Impacts of COVID-19 on Household Welfare in Tunisia". Policy Research Working Paper No. 9503.

Krafft, Caroline, Ragui Assaad, and Mohamed Ali Marouani. 2021. "The Impact of COVID-19 on Middle Eastern and North African Labor Markets: Vulnerable Workers, Small Entrepreneurs, and Farmers Bear the Brunt of the Pandemic in Morocco and Tunisia." Economic Research Forum Policy Brief No. 55.

Marouani, Mohamed Ali, Caroline Krafft and Ragui Assaad. 2022. "Tunisia COVID-19 Country Case Study". ILO/ERF report.

Saleh, Heba. 2021. "Delta Variant Deepens Crisis for Tunisia's Fragile Democracy". *Financial Times*. July 21.

UNICEF. 2020. "*Impact des mesures de confinement associées à la pandémie COVID-19 sur la pauvreté des enfants*".

World Bank. 2021. *Tunisia Economic Monitor: Navigating Out of the Crisis: Spring 2021*. Washington, D.C.: World Bank.

- ▶ **Email:** adwa@ilo.org
- ▶ **Address:** 13 Brazil St., Zamalek, 11211, Cairo, Egypt
- ▶ ilo.org/Cairo | [Twitter](#) | [Facebook](#) | [YouTube](#)

