

Tunisia's Jobs Landscape OVERVIEW



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BOX O.1. Definitions of Key Labor Market Concepts

Labor market status	
Population of working age	All individuals ages 15 and above
Labor force	All individuals of working age who were either employed or unemployed during the reference week
Employed	The employed population consists of individuals of working age who have worked for pay, profit, or household gain for at least one hour during the reference week. It includes individuals who are temporarily absent from work for reasons such as working time arrangements, the nature of their work, public holidays, annual leave, sick leave, or maternity/paternity leave.
Unemployed	The unemployed population comprises all individuals of working age who were not employed during the reference week, looked for work during the past month, and were available for work during the reference week.
Out of the labor force	The population out of the labor force includes individuals who were neither employed nor unemployed during the reference week.
NEET	Youth, ages 15–24, who are not in employment, education or training.
Type of employment	
Wage worker or employee	A wage worker or employee is a person who works for pay for someone else, even in a temporary employment.
Apprentice	An apprentice is a person being trained for a job or trade. The individual may be paid or may receive some pocket money; a paid apprentice is considered in employment. Unpaid apprentices are considered as out of labor force.
Employer	An employer is a person who operates his/her own business or trade and hires one or more employees.
Own-account worker	An own-account worker is a person who operates his/her own business or trade and does not hire employees. He/She may be working alone or with the help of contributing family workers.
Unpaid or contributing family worker	A contributing family worker is a person who works without pay in a market-oriented enterprise operated by a household member.
Public/private employment	
Public sector employment	Employment in the public sector comprises all employees working in a public establishment or in a public company.
Private sector employment	Employment in the private sector includes all employees not working in a public establishment or in a public company, as well as all employers, own-account workers, and unpaid family workers.
Formal/informal employment	
Informal employment	Informal employment includes (a) employees and apprentices who work for an employer who does not contribute to social security on their behalf or, in the case of missing answers, if they do not benefit from paid annual leave and paid sick leave; (b) own-account workers and employers who run informal sector economic units (as defined below); (c) all contributing family workers.
Informal sector	The informal sector includes own-account workers and employers who run nonincorporated private enterprises without a tax identification number, or with a tax identification number, but without a formal bookkeeping system.

INTRODUCTION

In the aftermath of the revolution, Tunisia embarked on a complex political transition that has been marked by setbacks and is yet to be completed, but has also allowed the country to be celebrated as the only democratic success story of the 2011 Arab Spring. These events brought about a change in economic policy as well. To accommodate social demands, which, together with the desire for political freedom, had sparked the uprising, economic policies became more inclusive and consensus driven. Public sector recruitment was expanded, and public wages were raised, while public transfers, including the Programme National d'Aide aux Familles Nécessiteuses (National Program of Assistance to Needy Families) and access to health insurance at reduced prices, were rapidly scaled up. Yet, the engine of economic growth started to lose steam and has, ever since, been slow compared with income peers, not least because of increased uncertainty, partly a consequence of security incidents that took a toll on tourist arrivals. The export-oriented model based on low-technology manufacturing and tourism-related activities that had been the main driver of the economy before the revolution faced headwinds. The lack of progress along the path of structural reforms contributed to deterioration in the business environment, which became less conducive to investments. The geographical inequalities between rural and urban areas as well as between inland and coastal regions have persisted. Labor market outcomes have sometimes been sluggish. Thus, labor force participation rates are strikingly low, particularly among women. Employment creation is meager; university graduates continue to face high unemployment rates; and a large share of workers are employed informally. In parallel, increasing public expenditures, driven primarily by a rising wage bill, pushed up the fiscal deficit, which, combined with an expanding current account deficit, has highlighted the unsustainability of the economic development model. Then came the COVID-19 pandemic, which has worsened the economic outlook and exacerbated existing imbalances.

Today, Tunisia is faced by limited economic growth, fiscal and current account deficits, and labor market outcomes that are unsatisfactory for the majority of the population and that are nurturing a sense of frustration. It is therefore important to identify the culprits of the subpar performance

of the labor market to be able to single out the key policy levers that need to be pulled.

This report argues that the main driver of the sluggish employment performance is low-grade economic growth, which has been a constant feature of the decade following the 2011 revolution. The high employment-to-growth elasticity observed in the postrevolution period, well above the average in middle-income countries, indicates that a slightly higher economic growth rate would have generated an equally higher rate of employment creation. It is worth noting though that about 20 percent of the net employment added over the period 2011–17 is ascribable to the expansion of employment in the public sector as well as in health care and education services, and therefore it might not be a sustainable path in the medium term.

The study pinpoints several important stylized facts, which are briefly summarized below and developed in the rest of the overview. A full analysis may be found in the main report. First, fewer than 1 working-age individual in 2 actively participates in the labor market, that is, is either employed or looking for a job. Tunisia's human capital is thus largely underutilized, and the public investments in education that have led to considerable improvements in education in past decades are not carrying over into employment opportunities. Two groups in particular stand out because of their low participation and employment rates: women and youth.

In the case of women, despite some improvements spearheaded by youngsters with tertiary education, participation remains, on average, extremely low. Weak labor demand, assigned gender roles, and the limited availability of affordable childcare services are plausible drivers of the persistently low labor force participation among women. In addition, a sizable gender wage gap in the private sector that effectively translates among women into the equivalent of almost three months of free labor per year contributes to the low participation rates among women. Indeed, a large wage difference per hour worked between men and women might provide an economic incentive, in the context of household bargaining between spouses, for wives to bear most of the household burden in housework and family care while their husbands work, thus reinforcing assigned

gender roles. In the case of youth, over the past decade, unemployment has been a steady and serious issue among university graduates. The sluggish creation of high-end jobs is one of the main reasons for the high unemployment rate among youth with tertiary educational attainment, together with a skills mismatch as the curricula selected by many youth are not in line with private sector demand, but are rather more suitable to the profile of civil servants. More importantly, the large wage gap between university graduates employed in the public sector and those employed in the private sector is almost entirely attributable to youth's characteristics. A young Tunisian who holds a university degree and is employed in the public sector does not earn, on average, a higher salary relative to a youth with the same characteristics working in the private sector. Yet, public sector jobs are associated with additional benefits, such as job security, guaranteed salary increases, allowances, a wide range of annual leave options, long maternity leave, and flexible working hours, that can make them more attractive, particularly among women. In addition, many unemployed university graduates can afford to wait while living with their parents. Moreover, active labor market policies consist of wage subsidies that provide temporary employment opportunities to beneficiaries at the cost of significant deadweight loss and substitution effects, but do not lead to more job opportunities in the long term.

Second, a sizable share of workers are employed informally, that is, they do not have access to social insurance or they operate unincorporated businesses that are not registered with the tax authorities or other formal public accounting procedures. Among wage workers, informality is more widespread among men, youth, and workers with little education in rural areas and inland regions. However, while workers with such profiles face difficulties in accessing public sector jobs or formal jobs in the private sector and are not protected against the risks covered by social insurance (such as health events, old age, unemployment, and disability), they do not suffer wage penalties. Most of the wage differential between formal and informal wage workers in the private sector derives from differences in workers' and jobs' characteristics.

Third, returns to education are sizable in Tunisia relative to middle- and high-income countries. In 2019, workers with primary education enjoyed a premium of about 12.6 percent per hour worked relative to workers with no schooling. Secondary education yielded an additional premium of about 9.1 percent relative to primary education, and tertiary education a premium of 26.1 percent relative

to secondary education. In addition, returns to tertiary education are considerably higher in the public sector and have increased over time, while they have declined in the private sector. This raises a question about the sustainability of wage growth in the public sector.

Except for the low participation rates and gender gaps, the evidence identifies limited distortions in the labor market and high employment-to-growth elasticity. The key issue to address in seeking to foster job creation is therefore why economic growth has been so low over the past decade. The answer is not trivial, and multiple factors may be in play. Most of the recent economic growth has arisen because of increases in employment; little has been associated with labor productivity growth. The modest gains in labor productivity have been largely attributable to the movement of labor from lower than average to higher than average productivity sectors, as opposed to growth in labor productivity within sectors. The study advances two complementary hypotheses linked to fiscal and regulatory policies. First, the high and rising fiscal and current account deficit generated by the expansionary fiscal policy in the aftermath of the revolution and by the decline in exports and continued increase in imports, respectively, has increased the cost of capital and contributed to a reduction in investments, together with a deterioration in the business environment. Second, despite high entry and exit rates, particularly among small firms, firms are not growing in size after entry. The lack of private sector dynamism can be blamed on several factors. A key element is the limited market contestability. Politically connected private firms and state-owned enterprises (SOEs) do not respond to any logic of efficiency because they are shielded from competition thanks to direct support and financing guaranteed by the state, the imposition of tariffs, limits on foreign direct investment, and price controls. Such effects are not restricted to the markets in which advantaged firms operate; they extend to upstream and downstream markets, further dampening productivity growth and employment creation.

The analysis presented in the report takes advantage of several data sources produced by the Tunisia National Institute of Statistics (INS) that include public use data files, restricted use data files, and reports published by the INS based on microenterprise surveys and the national business register. The analysis would not have been possible without the data collection effort and the excellent support and collaboration of INS. The analysis of wages stands out as an example of collaboration and of how important data production, analysis, and dissemination are

to the understanding of trends and patterns of labor market outcomes and, ultimately, of changes in living standards. The study is a testament to the tireless work of the INS in collecting high-frequency survey data and represents a plea to continue on the virtuous path of strengthening the production and dissemination of data and statistics. More and more high-quality data, together with wide data access, are key to informing evidence-based public debate and policy making.

The report identifies some areas that merit further research. An in-depth analysis of the link between the degree of product market contestability and the lack of firm-level dynamism that appears to be a key driver of the meager economic growth in the country can shed light on the policy levers required to promote the growth of firms and job creation. This may also foster greater participation and employment among women and youth. This will require access to microdata from the national business register and firm-level surveys. Assessing the importance of specific factors that

make transitions from school to work difficult, including the skills mismatch, the quality of education and training, labor regulations, and active labor market policies, can support policy makers in prioritizing and tailoring actions aimed at reducing the number of individuals not in education, employment, or training (NEET) and facilitating labor market entry and retention among university graduates. Labor force survey data, administrative data from technical and vocational education and training and academic institutions, and from institutions and line ministries in charge of active labor market policies will be required to conduct such in-depth analyses. Modest improvements in the labor market participation of women and the persistent large gaps in educational attainment call for attention to factors that might help raise women's engagement in the labor market, such as childcare services, assigned gender roles and cultural barriers, and preferences for certain types of work. Labor force survey data, administrative data on childcare facilities, and the collection of ad hoc microdata on roles, preferences and cultural barriers would inform this research agenda.

Three Key Subpar Outcomes Characterize the Tunisian Labor Market: Low Female Labor Force Participation, High Youth Unemployment, and the Large Share of Workers Employed Informally

More than 1 working-age individual in 2 is not employed and is not looking for a job. The working-age population ages 15 and above is estimated at 8.7 million people, and about 47 percent are active in the labor market, whereas the remaining 53 percent (4.6 million people) are neither employed nor looking for work. Among the inactive, more than 4 in 5 (3.7 million people) are not in education. Tunisia's labor force participation rate is above the average in the Middle East and North Africa region (43.2 percent in 2017, excluding high-income countries), but quite low compared with the average middle-income country (64.9 percent in 2017) (Table O.1).

Labor force participation among women is extremely low, particularly among women with little education. Fewer than 3 women in 10 participate in the labor market (26.5 percent in 2017) (Table O.1). At 41.8 percentage points in 2017, the gender gap in the labor force participation rate is striking. Although women's labor force participation is about 8 percentage points higher in Tunisia than the regional average, excluding high-income economies (18 percent in 2017), it is about half the average among countries of the Organisation for Economic Co-operation and Development (OECD) (52.2 percent in 2017) and about 20 percentage points below the average among middle income countries (45.2 percent in 2017). Exceptionally low is the activity rate of Tunisian women with no education. Their participation rate in 2017 is estimated at 8.7 percent, down from 14.2 percent in 2006.

About 15 percent of the labor force is unemployed, with a peak among university graduates. About 0.6 million people were looking for jobs in 2017, but could not find one. This corresponds to an unemployment rate of 15.3 percent,

almost three times the rate observed in middle-income countries and about 2.5 points higher than the regional average (see Table O.1). The unemployment rate increased over the years that led to the 2011 revolution, from 12.5 percent in 2006 to 18.3 percent in 2011. Since then, it has gradually declined, and yet it remains above the rate observed a decade ago. Among young university graduates, the unemployment rate is twice the national rate (29.1 percent in 2017) and has been roughly stable since 2011. The rate is much higher relative to Tunisians with secondary (15.6 percent) or lower education (8.3 percent among those with primary education and 4.3 percent among those with no schooling).

Most Tunisians work for a wage, and about 2 in 10 are employed in the public sector. About 75 percent of the employed population works for a wage, a 7 percentage point increase over the past decade, with steady and stable growth both before and after the revolution. The figure is above the average in middle-income countries and in the region (see Table O.1). Of the over 3.5 million wage workers, about 750,000 are employed in the public administration or in state-owned enterprises (SOEs), contributing about 21 percent to total employment (Figure O.1). The rest of the employed population works as an employer (7 percent), as own-account workers (16 percent), or as unpaid family workers (3 percent). The employment share of the latter two categories of workers has declined.

In the private sector, almost 1 worker in 2 is employed informally; the highest informality rate is observed among nonwage workers. In 2019, of almost 2.80 million workers employed in the private sector, about 1.55 million were informal (see Figure O.1), with an average informality rate of 43.9 percent. The share of informal employment in Tunisia is below the average in Arab states, excluding

TABLE O.1. Key Labor Market Indicators, Tunisia, 2006–17

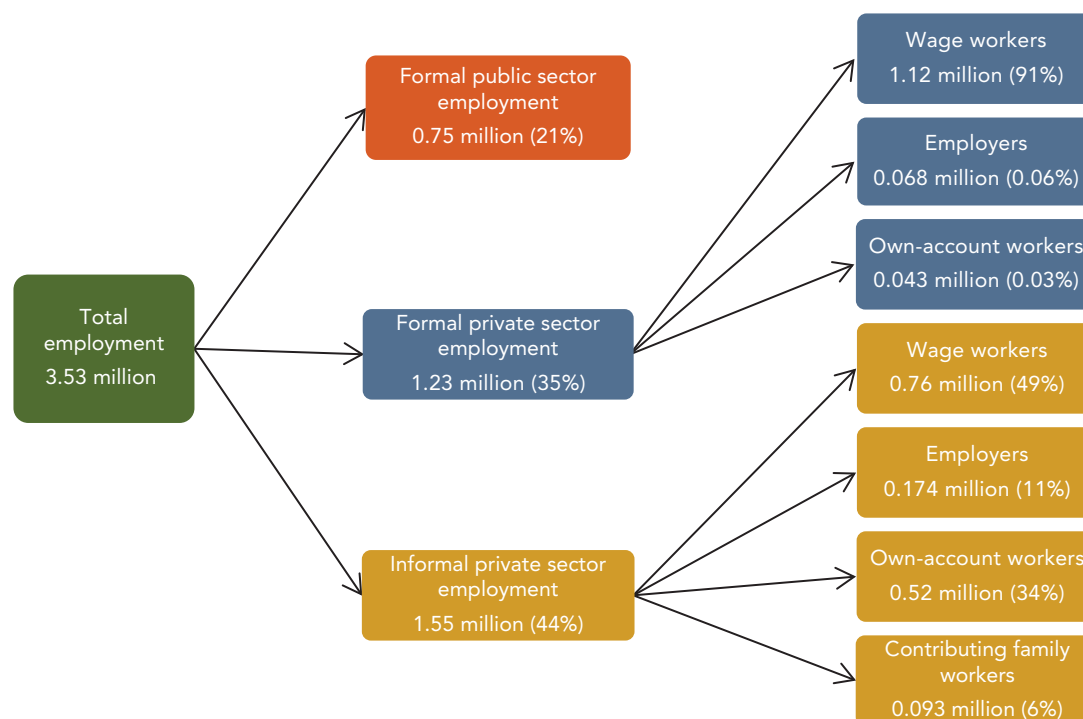
	2006	2008	2009	2011	2013	2015	2016	2017	MICs	MENA	USA
Labor force participation rate	45.6	46.2	46.5	47.2	47.4	47.1	47.2	47.0	64.9	43.2	62.8
Labor force participation rate - women	24.4	24.7	24.8	24.9	25.6	26.0	26.6	26.5	45.2	18.0	57.0
Employment-to-population ratio	39.9	40.4	40.3	38.5	39.9	39.9	39.8	39.8	61.3	38.1	60.1
Unemployment rate	12.5	12.4	13.3	18.3	15.9	15.2	15.6	15.3	5.6	12.9	4.4
Share of wage employment (% of total employment)	68.2	69.3	—	71.2	72.0	72.8	72.2	75.1	47.6	62.6	93.7
Share of nonagricultural employment (% of total employment)	80.9	82.3	81.9	83.8	84.7	85.2	85.3	85.3	30.7	20.4	1.4

Source: Based on data of the Labor Force Survey (ENPE), INS; and World Development Indicators, World Bank.

Note: Data for middle-income countries (MICs) and countries in the Middle East and North Africa (MENA) region refer to 2017 and are based on national estimates with the exception of the share of wage employment and of employment in agriculture in both MICs and MENA countries and the overall and the female labor force participation rate in MICs countries that are based on modeled estimates of the International Labour Organization. Data for the MENA region excludes high-income countries.

high-income countries (68.6 percent circa 2016; OECD 2018a). (Definitions of informal employment may differ across countries.) The informality rate is considerably higher among nonwage workers (87.7 percent) relative to wage workers (29.0 percent). The rate is estimated at 72 percent among employers and 92 percent among own-account workers (Figure O.2).

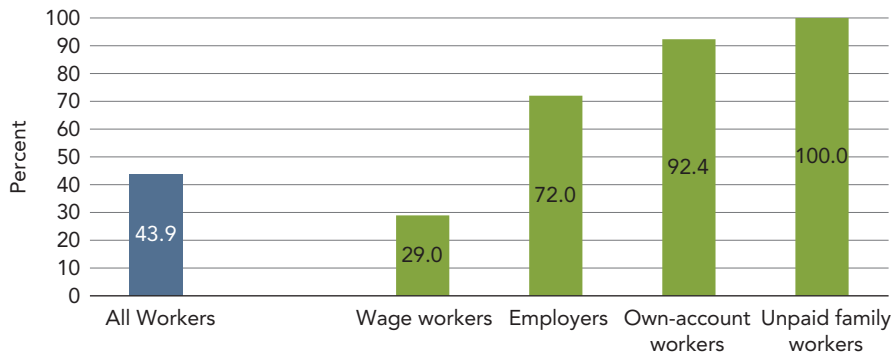
The COVID-19 pandemic and the economic crisis have had deleterious effects on the Tunisian labor market, particularly among men and youth. Compared with the first quarter (Q1) of 2020, employment dropped by 4.5 percent in Q2, and, after a partial rebound in Q3, it continued to decline in the last quarter of 2020 as well as in the first three quarters of 2021 (Figure O.3, panel a). Total employment

FIGURE O.1. Employment Composition, by Formality Status, Tunisia, 2019

Source: Based on data of the Labor Force Survey (ENPE), INS.

Note: The percentages in brackets are calculated as a share of the level displayed in the higher-level cell. Estimates of public sector employment differ from administrative data possibly due to measurement error in information about place of work reported by respondents in the labor force survey.

FIGURE O.2. Informality Rates, Overall and by Type of Employment, Tunisia, 2019

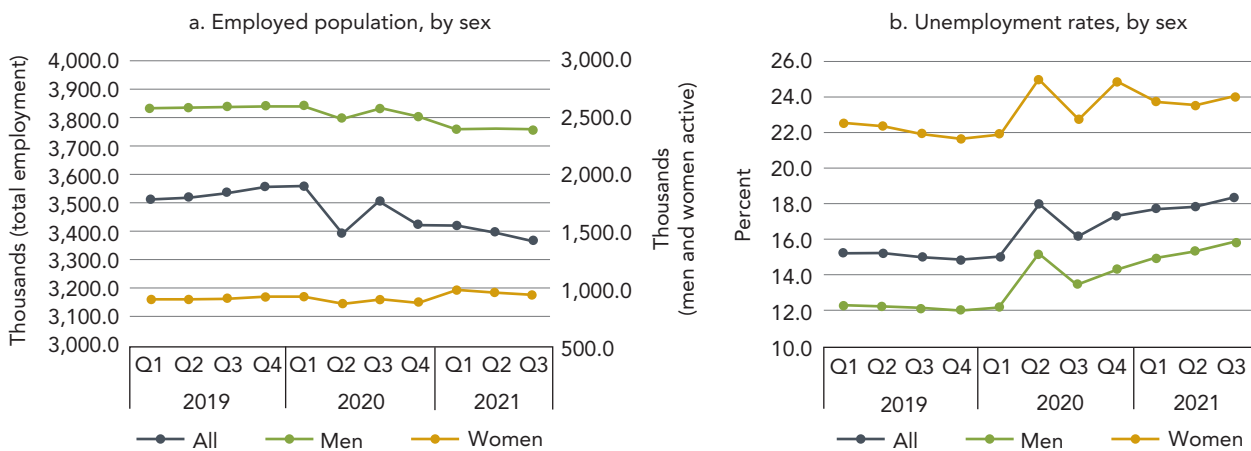


Source: Based on data of the Labor Force Survey (ENPE), INS.

is estimated at 3.38 million in the third quarter of 2021, which is about 3.8 percent (or almost 133,000 workers) below the level observed one year earlier. Women’s employment dropped significantly more in relative terms compared with men during the first lockdown (Q2 of 2020), though it bounced back more rapidly. In Q3, 2021, it was above the prepandemic level. By contrast, men have continued to experience job losses, and their employment level is about 8 percent below the level observed in Q1, 2020. Overall, the partial rebound in employment is largely attributable to the dynamics of informal employment,

which had increased by 2.6 percent as of Q3, 2020 relative to the same quarter of 2019. Informal employment has risen more rapidly among women than among men (5.5 percent vs. 2 percent, respectively). With the reduction in employment, unemployment rates have increased, and they remain above prepandemic rates, particularly among men (Figure O.3, panel b). Similarly, the youth unemployment rate increased from 34.2 percent before the pandemic to 42.4 percent in Q3, 2021. This can have long-lasting scarring effects, particularly among labor market entrants.

FIGURE O.3. Recent Trends in Selected Labor Market Indicators, by Sex, Tunisia, Q1, 2019–Q3, 2021



Source: Based on data of the Labor Force Survey (ENPE), INS.

Lackluster Economic Growth is the Main Culprit Behind Sluggish Employment Creation

Before the revolution, Tunisia's growth performance was on par with regional and income-group peers. During 1981–2000, economic growth averaged 4.2 percent a year in Tunisia, which compares with 3.8 percent in the Middle East and North Africa region (excluding high-income countries) and 4.1 percent in middle-income countries. After accounting for differences in population growth rates, Tunisia's historical performance, estimated at 2.4 percent per year on average between 1981 and 2000, beats regional (1.4 percent) and income group comparators (2.1 percent and 2.8 percent among lower- and upper-middle-income countries, respectively) (Table O.2).

Over the past decade though, the engine of economic growth has lost steam. Economic growth, measured by annual changes in gross domestic product (GDP) per capita, has faded in comparison with the historical trend of the country and of income group and regional comparators (see Table O.2). The subpar growth pushed Tunisia back to the lower-middle-income group five years after the graduation to the upper-middle-income group in 2010. In 2019, GDP per capita was estimated at \$10,756 (measured in 2017 purchasing power parity) compared with a regional (excluding high-income countries) average of \$10,172.

Economic growth was underpinned by labor productivity gains before the revolution and by employment creation thereafter. Between 2006 and 2011, output per worker, a measure of labor productivity, increased by almost 3 percent per year and was the main driver of economic growth, with a contribution of 104.6 percent. Demographics, captured by the share of the working-age population in total population, contributed about 20 percent. And employment, measured by the ratio of the employed to the working-age population, contributed negatively (–24.5 percent), as employment creation fell short of the increase in the working-age population (Figure O.4, panel a). In 2011–17, following the revolution, labor productivity gains faded (+0.2 percent per year on average) as value added growth was outpaced by employment creation. Employment increased at a rate of

1.7 percent per year on average and contributed 80.4 percent to economic growth, becoming the main driver of economic growth (Figure O.4, panel a). Demographics had a modest negative effect on growth because the number of the elderly rose more rapidly than the working-age population. Over the most recent period (2011–17), Tunisia is the country with the smallest contribution of labor productivity to economic growth among comparators and stands out because it shows the largest positive effect of employment creation on economic performance (Figure O.4, panel b).

Poverty reduction continued uninterrupted between 2000 and 2015 and accelerated between 2010 and 2015, thanks to an expansion in public transfers and public sector jobs. Measured against the national poverty line, the poverty headcount ratio, estimated at 25.4 percent in 2000, declined to 23.1 percent in 2005 and 20.5 percent in 2010 (Figure O.5). Between 2010 and 2015, the poverty rate declined by 5 percentage points to reach 15.2 percent in 2015. In the aftermath of the revolution, Tunisia scaled up the cash transfer program, known as the Programme National d'Aide aux Familles Nécessiteuses (National Program of Assistance to Needy Families).¹ The number of beneficiary households increased dramatically, from 176,000 in 2011 to 234,000 in 2015, and the amount of the transfer was raised from TD 72 in 2010 to TD 150 in 2015 (real terms) (CRES, ADB, ADF 2017). In addition, health insurance at reduced prices was provided to an increasing number of vulnerable households, and generous consumption subsidies continued to shield purchasing power. Public sector employment increased considerably with the 2012 law promoting access to public administration by people wounded in the revolution and those covered by the amnesty of 2011 as well as in the following years (Brockmeyer, Khatrouch, and Raballand 2015; INS 2017; OECD 2018a).

¹ Because low-income households largely rely on public transfers (69 percent of household income in 2014), namely, pensions and social assistance (Krafft and Davis 2021), the transfers have a considerable impact on the welfare of the poor relative to other sources of income.

TABLE O.2. Average Annual GDP Per Capita Growth Rates by Period, Tunisia and Comparators, 1981–2019

	1981–90	1991–2000	2001–05	2006–10	1981–2010	2011–19
Tunisia	1.0	3.1	3.1	3.5	2.4	0.7
Lower-middle income	1.0	1.0	4.1	4.2	2.1	3.7
Upper-middle income	1.4	2.0	4.6	5.6	2.8	3.8
Middle East and North Africa, excluding high income	0.4	1.3	2.4	2.8	1.4	0.7

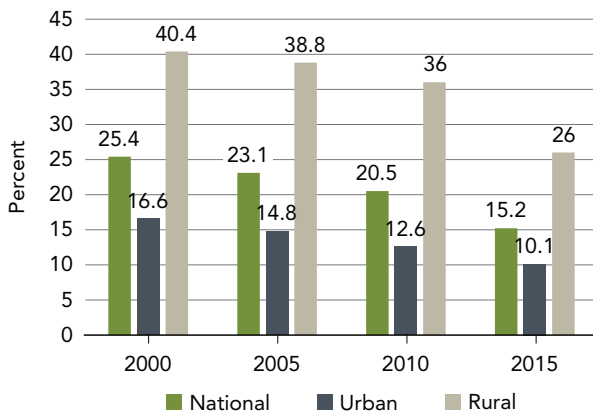
Source: Based on data of World Development Indicators, World Bank.

Note: Annual percentage growth rate is based on of gross domestic product (GDP) at market prices expressed in constant local currency. Aggregates are based on constant 2015 prices, expressed in US dollars.

FIGURE O.4. Decomposition of changes in per capita value added, Tunisia and comparator countries, 2006–11 and 2011–17

Source: Based on data of the Labor Force Survey (ENPE), Statistical Yearbook, INS; World Development Indicators, World Bank.

FIGURE O.5. Trends in the Poverty Headcount Ratio Overall and by Area (National Poverty Line), 2000–15



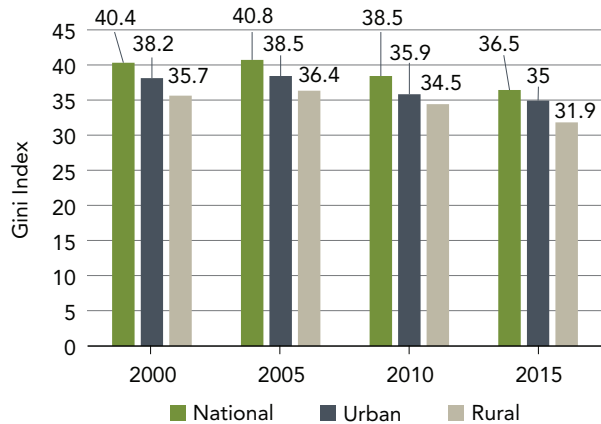
Source: Based on data of the EBCNV 2000, 2005, 2010, 2015, INS.

Yet, sizable disparities in living standards persist between urban and rural areas as well as between inland and coastal regions. In 2015, about 26 percent of the population in rural areas was poor compared with 10 percent in urban areas (see Figure O.5). Poverty is high in the Center-West (30.8 percent) and North-West (28.4 percent) as opposed to the coastal areas (World Bank and INS 2020). Although the incidence in the latter, Grand Tunis (5.3 percent), North-East (11.6 percent), and Center-East (11.5 percent) is low compared with the rest of the country, there are pockets of poverty. Similarly, geographical gaps persist in terms of inequality. A large part of the inequality is driven by disparities within urban and rural areas and between regions. As of 2015, in urban areas, the Gini index was estimated at 35, while, in rural areas, it stood at 31.9, and the gap widened over time (see Figure O.6).

Since the 2011 revolution, employment-to-growth elasticity has picked up and is above the average elasticity in middle-income countries. Employment-to-growth elasticity, which measures the rate of increase in employment if the economy grows by 1 percentage point, rose from 0.28 in 2006–11 to 0.89 in 2011–17 (Figure O.7). Thus, 1 percentage point of growth was associated with an increase in employment by 0.90 percentage points. This elasticity is higher relative to historical trends in Tunisia (0.61 and 0.57 in 1980–89 and 1990–99, respectively), income-group comparators (0.35 in 2011–17), regional (North Africa) and global estimates (0.51 and 0.30 in 1999–2003, respectively), and estimates for comparator countries (except Jordan) (Figure O.8).² Had economic growth been a little higher, for example,

²Historical estimates for Tunisia are from Mouelhi and Ghazali (2014); estimates for North Africa are from Kapsos (2005).

FIGURE O.6. Trends in Inequality Overall and by Area (Gini Index), 2000–15

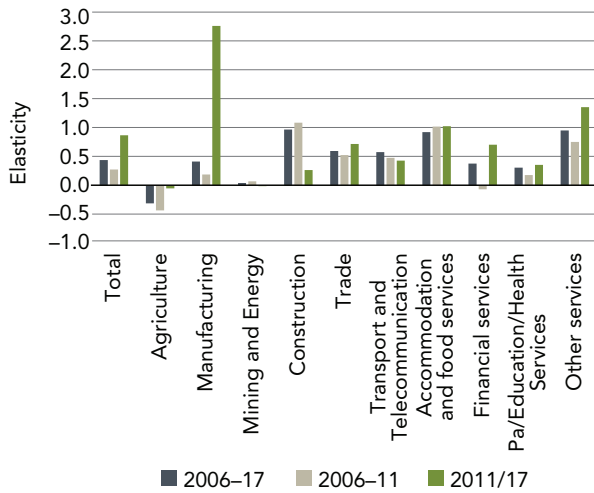


3.5 percent a year, employment would have increased at an annual rate of about 3.0 percent compared with the observed 1.6 percent a year. Manufacturing is the sector with the highest employment elasticity since 2011, followed by other services (that is, real estate, business support services, and social and cultural activities), accommodation and food services, and financial services (Figure O.7).

Yet, employment creation remains insufficient to keep up with the increase in the labor force, particularly among university graduates. Between 2006 and 2017, the Tunisian economy added employment at an annualized rate of 1.4 percent, on average (Figure O.9). Over the same period, the labor force increased at a rate of 1.7 percent a year, and the working-age population rose by 1.2 percent a year. Thus, Tunisia had, on average, a net employment deficit of about 18,000 jobs a year. Aggregate numbers though hide important differences by educational level. Employment creation among Tunisians with no schooling or with primary education certificates was more rapid than their entry into the labor force, thereby contributing to a decline in unemployment among individuals with little education (Figure O.10). Meanwhile, employment among Tunisians with secondary and, particularly, tertiary education was not sufficient to keep up with their growing number in the labor force; this affected university graduates disproportionately (Figure O.10).

Trade, nontextile manufacturing, public administration, education, and health services were the main drivers of employment growth after the revolution. Estimated at 0.9 percent before the revolution, the average annualized growth rate of employment accelerated to 1.6 percent in 2011–17.

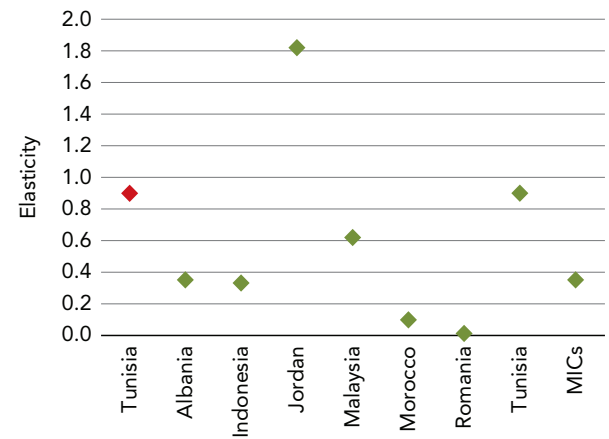
FIGURE O.7. Employment-to-Growth Elasticity Overall and by Sector and Subperiod, 2006–17



Source: Based on data of the Labor Force Survey (ENPE), INS; World Development Indicators, World Bank.

Between 2006 and 2011, the rate of employment creation was considerable in construction (4.5 percent). By contrast, in 2011–17, banking and insurance services (5.2 percent) and accommodation and food services (3.2 percent) were the sectors at the top of the ranking in the rate of employment creation. However, thanks to the large initial size, public administration, health and education services (+11,700 a

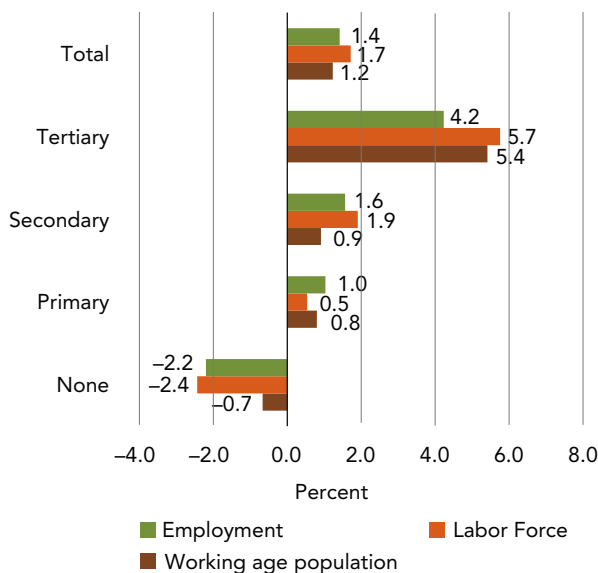
FIGURE O.8. Employment-to-Growth Elasticity, Tunisia, Comparator Countries, and the Average in Middle-Income Countries, 2011–17



year), trade (+11,550 a year), and nontextile manufacturing (almost +10,000 a year) contributed over 60 percent of net employment addition in 2011–17 (Figure O.11).

The increase in public sector hiring, accompanied by wage increases and the expansion of public transfers, has raised the fiscal deficit. To address the challenge of the insecurity

FIGURE O.9. Annualized Change in Employment, Labor Force, and Working-Age Population, by Educational Level, 2006–17



Source: Based on data of the Labor Force Survey (ENPE), INS.

FIGURE O.10. Employment Deficit, by Educational Level, 2006–17

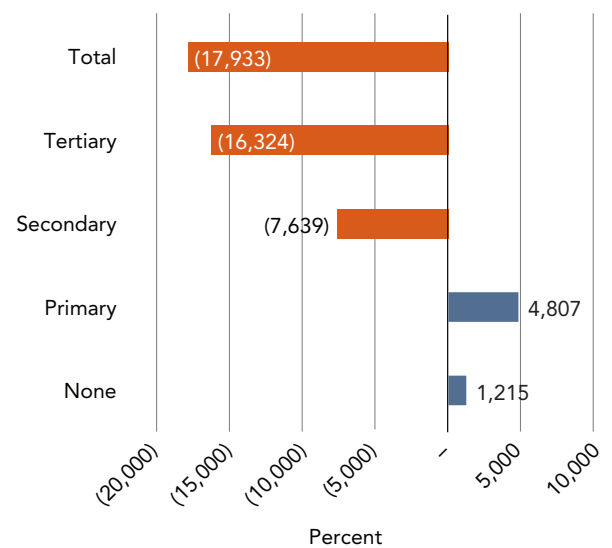
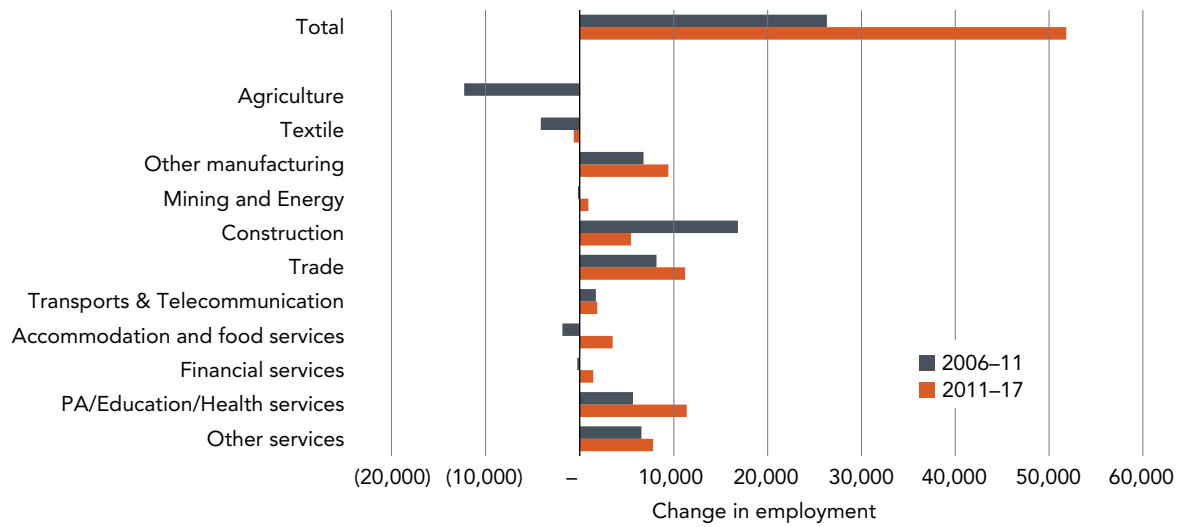


FIGURE O.11. Annual Employment Creation, by Sector and Subperiod, 2006–17

Source: Based on data of the Labor Force Survey (ENPE), INS.

and social demands that followed the 2011 revolution, public sector hiring rose considerably. In 2012 the number of civil servants increased by over 88,000 (almost 20 percent) relative to 2011, and, in 2011–17, the number of civil servants rose by almost 200,000 (45 percent over the entire period) (INS 2017, 2019). The rise in the number of civil servants, together with wage increases and the scale-up in the cash transfer program, led to a rise in the fiscal deficit from an average of –2.4 percent of GDP in 2000–10 to –5 percent of GDP, on average, in 2011–19. The bloated wage bill crowded out other public expenditures; in 2020, it consumed about 75 percent of tax revenues, and it was almost three times the size of public investment and almost six times the amount of public spending on social programs (IMF 2021).

In addition, the current account deficits expanded as exports and investments declined, economic growth failed to pick up, and consumption increased. Because of political uncertainty, the insecurity associated with terrorist attacks, and the slow progress in structural reforms, the contribution of investment and net trade to GDP growth fell beginning in 2011. The average annual growth rate of exports

dropped to 3.6 percent in 2000–10 and to 1.0 percent in 2011–19, while the average annual growth rate of investments declined from 3.1 percent to –0.1 percent. Public and private consumption has recently become the driver of GDP growth, implying a shift of the economy to a less sustainable path of economic development as opposed to growth led by investment and trade. The deterioration in net exports, coupled with a decline in tourism receipts and a roughly constant flow of remittances, has recently expanded the current account deficit to more than 10 percent of GDP.

The COVID-19 pandemic has worsened the economic outlook. Tunisia's GDP declined by 8.8 percent in 2020. The largest reduction was observed in the services sector, particularly in accommodation and food service activities and in transport. The fiscal response to the economic downturn pushed up both the fiscal deficit and public debt in 2020. Estimates for the second quarter of 2021 indicate an increase of 16.2 percent relative to the same quarter in 2020, driven by accommodation and food service activities, textiles, oil refining, and construction. Recent estimates for Q3 2021 show only a small rise (0.3 percent) relative to the same quarter in 2020, as the positive effect of most sectors has faded.

Low Labor Market Participation among Women can be Attributed to Low Economic Growth, Assigned Gender Roles, Limited Childcare, and a Sizable Gender Wage Gap

Despite some progress, the labor force participation of Tunisian women has remained low. Women's participation has increased over time (Figure O.12, panel a). In 2017, 26.5 percent of working-age women participated in the labor market, an increase from 24.4 percent in 2006. The gender gap in the labor force participation rate narrowed by about 1 percentage point relative to 2006, thanks to a less rapid increase in participation rates among men relative to women (+1.5 percent vs. +8.6 percent among men and women, respectively, in 2006–17).

Labor force participation increases with educational level, and tertiary education is associated with a higher degree of labor market attachment over the life cycle. Individuals with higher educational attainment typically participate in larger numbers in the labor market and exhibit a greater degree of attachment to the labor market. Tunisian women are no exception. In addition to participating in the labor market, on average, almost as much as men (Figure O.12, panel a), women with tertiary education maintain an attachment to the labor market over the entire life cycle (Figure O.12, panel b). The association between tertiary education and labor market participation remained strong over the life cycle. Women with a university degree enter the labor market at older ages relative to less well educated women, and their participation rate increases rapidly and is over 80 percent by age 30. It rises further between ages 30 and 44 and hovers around 86 percent on average.³

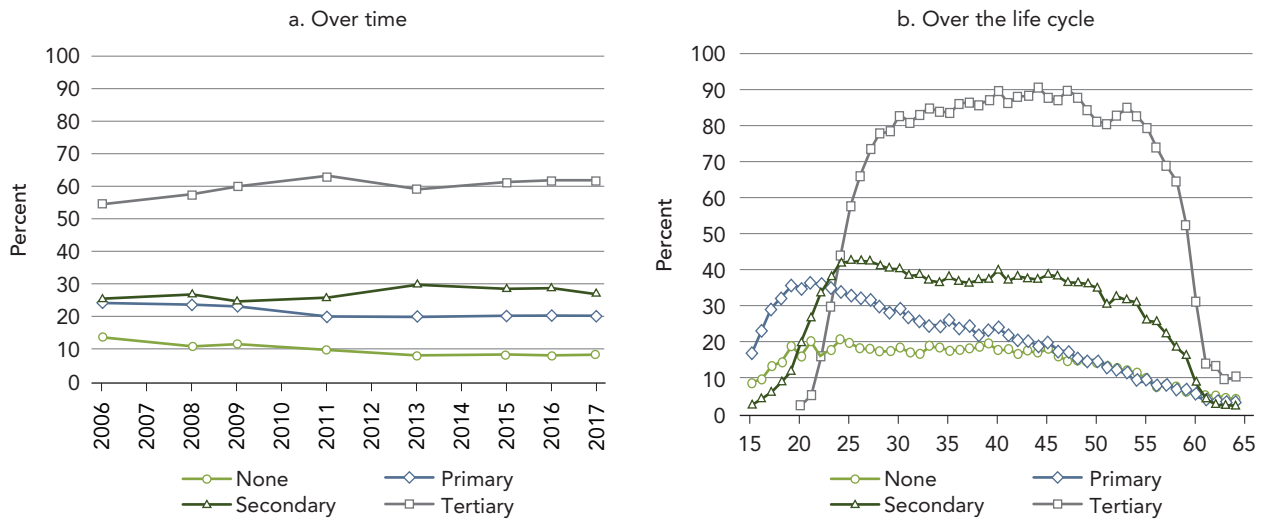
The increase observed in the average female participation rate is largely attributable to young cohorts of women with tertiary education. In 2017, fewer than 1 woman in 10 with no schooling participated in the labor market.

This compares with over 2 women in 10 with primary education, almost 3 women in 10 with secondary education, and over 6 women in 10 with tertiary education. The latter is close to the average rate among men (68.3 percent). Over the past decade, participation rates have declined among women with no schooling or primary education, while they have increased among well educated women, particularly among women with tertiary education (+7 percentage points). The additional key element has been the change in the composition of educational attainment among the working-age population. The share of women with tertiary education in the female working-age population rose by over 8 percentage points, from 8.9 percent in 2006 to 17.1 percent in 2017. At the same time, the share of women with no education declined from 32 percent to 27 percent.

Weak labor demand, assigned gender roles, the limited availability of affordable childcare services, and gender gaps in the ownership of productive assets are plausible drivers of the persistently low labor participation among women. Weak economic growth has not generated a sufficient pull to draw women into the labor force and overcome societal gender roles. Conservative gender role attitudes continue to prevail, with 7 Tunisian men and women in 10 agreeing with the statement that a “preschool child suffers if the mother is working.” Consistent with these views, women spend, on average, more than 6 hours a day on care and other unpaid work because few children ages under 3 attend daycare. Among children ages 3–6, daycare attendance strongly correlates with income; only 17 percent of children in the poorest quintile attend daycare, compared with 71 percent among the most affluent quintile. This may reflect cost and affordability constraints among poor families. Monthly fees for daycare amount to over 30 percent of the median wage of working women with primary education. Moreover, gender gaps in access to property, finance, and other productive

³The average rate among men is about 68 percent and about 97 percent among men ages 30–44 with university degrees.

FIGURE O.12. Female Labor Force Participation Rates, by Educational Level Over Time and Over the Life Cycle, 2006–17



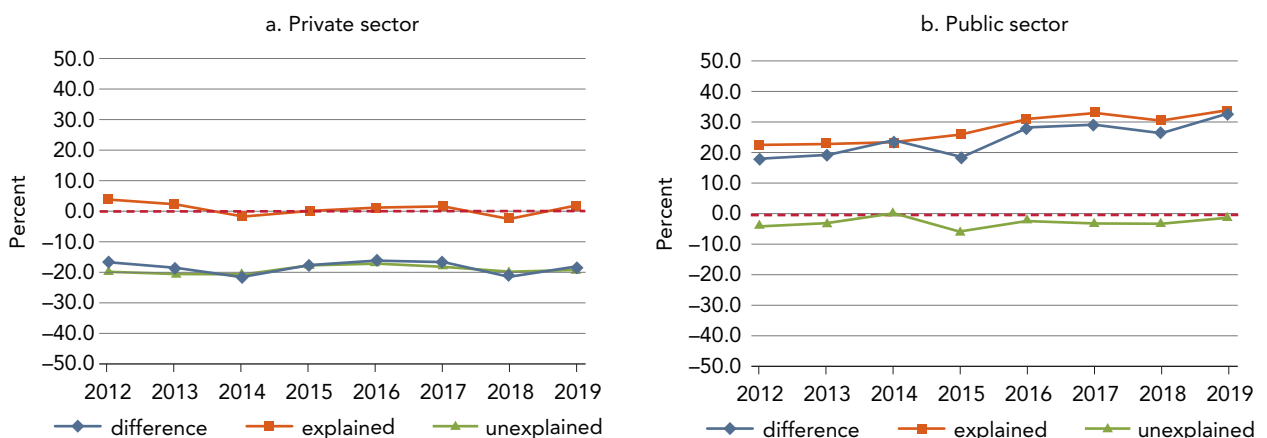
Source: Based on data of the Labor Force Survey (ENPE), INS.

assets, which are partly linked to gender biases in the legal code, restrict women’s ability to operate businesses.

In addition, in the private sector, a sizable wage gap in favor of men contributes to reducing women’s incentives to join the labor force by reinforcing assigned gender roles. In 2019, women employed in the private sector earned, on average, about 18.5 percent less than men per hour worked, a rate that has remained roughly stable since 2012 (Figure O.13, panel a). Although women’s observable characteristics

reduce the gap, the contribution is relatively small, and the overall gender gap is negative. Most of the wage gap is caused by a different wage structure between men and women and to unobserved characteristics that would, on average, make men more productive than women. As housework and family care activities compete for women’s time with work in the labor market, the wage gap might keep some women out of the labor market or push some women to look for less competitive and less remunerative career paths and greater flexibility at work.

FIGURE O.13. Oaxaca-Blinder Decomposition: Mean Gender Hourly Wage Differential, by Sector and Characteristics, 2012–19



Source: Based on data of the Labor Force Survey (ENPE), INS.

By contrast, in the public sector, women enjoy a wage premium, largely thanks to their productive characteristics. In 2019, women employed in the public sector benefited from an hourly wage premium of about 33 percent with respect to men, which had increased from about 18 percent in 2012 (Figure O.13, panel b). Differences in observable

characteristics between men and women exert a positive effect on the gap. The fact that women in the public sector are more well educated than men and are largely employed in high-end occupations, such as managers and professionals, push the gender gap in favor of women. By contrast, the unexplained component has a modest effect in favor of men.

Access to Public and Private Formal Jobs is Difficult for Some Demographic Groups, but Conditional Wage Gaps are Small

Vulnerable groups are more highly exposed to informality and less likely to land a public sector job or a formal job in the private sector. Women are more likely to obtain jobs in the public sector (32.4 percent) or formal jobs in the private sector (33.6 percent) (Table O.3). Youth ages 15–24 are more likely to work informally for a wage relative to prime-age workers and less likely to be employed as civil servants. Older workers ages 65 and above contribute to nonwage employment, particularly informal jobs, more than to wage employment. Tertiary education is key to access public sector jobs. Almost 1 worker in 2 employed in the public sector holds a university degree, compared with 21.6 percent of formal wage workers and 7 percent of informal wage workers. Workers with tertiary education though also contribute a large share of formal nonwage employment. Young and less well educated workers face difficulties in accessing public and private sector formal jobs and are therefore not protected against risks covered by social insurance (health, old age, unemployment, disability, and so on).

Informal employment is associated with a higher risk of poverty. Poverty is a household-level concept and therefore requires a shift to a household perspective. Household members can be informally or formally employed, and households with more than one employed member may exhibit a different degree of informality. Besides households with no employed members, which, in Tunisia, accounted for about 22 percent of all households in 2015, about 56 percent of households were completely formal, 26.8 percent fully informal, and 16.8 percent mixed, that is, with some members holding a formal job and others an informal job. Relative to the national average of 15.1 percent, the poverty rate among fully formal households was considerably lower, at 9.5 percent, whereas completely informal households were significantly more likely to be poor (26.7 percent), and the rate among mixed households was estimated at 12.4 percent.

Although a large share of the public wage premium is explained by differences in the characteristics of workers in the public and private sector, unobservable characteristics and a different wage structure also play a role. In 2012–19, wage workers in the public sector were paid, on average, about twice the amount paid per hour worked to workers in the private sector. After controlling for differences in their characteristics, such as age, educational level, sex, type of occupation, industrial sector, and type of contract, about 40 percent of the gap is, on average, associated with unobservable characteristics or a different wage structure in the two sectors.⁴ By contrast, about 60 percent is, on average, accounted for by differences in characteristics, with occupation and other job characteristics playing the largest role, followed by educational level.

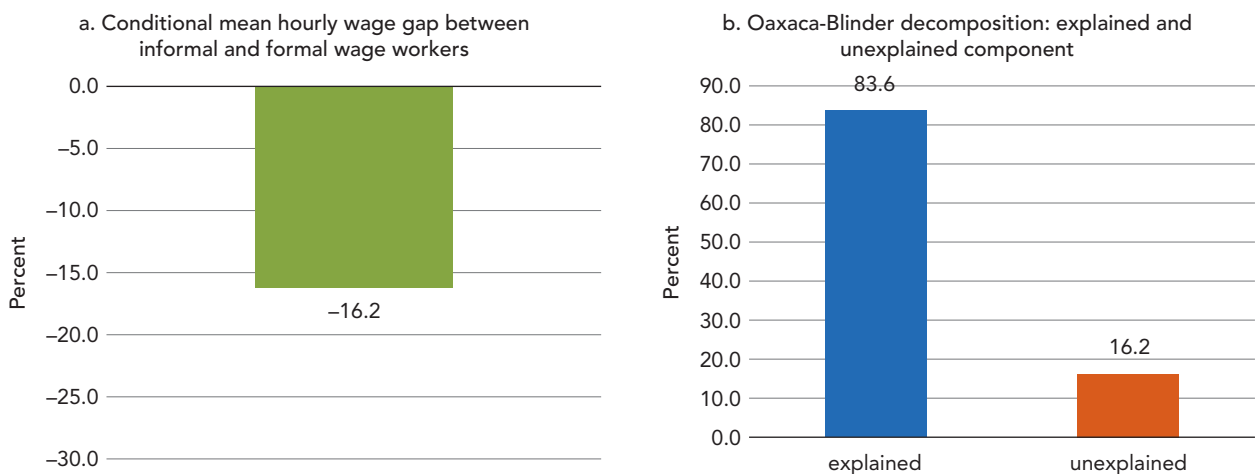
In the private sector, formal wage workers make, on average, 16 percent more than informal workers per hour worked, largely thanks to their characteristics. The conditional formal-informal hourly wage gap is estimated at 16.2 percent, on average, in 2019. About 84 percent of the difference is attributable to differences in observable characteristics (Figure O.14). In particular, job characteristics, including place of work, type of contract, enterprise size, and type of occupation, as well as educational level, together, explain over 90 percent of the explained component.

⁴In addition, measurement errors in self-reported wages can contribute to the unexplained component of the wage gap.

TABLE O.3. Distribution of Public Sector, Formal, and Informal Workers, by Demographic Characteristics, 2019

	Public wage workers	Formal wage workers	Informal wage workers	Formal nonwage workers	Informal nonwage workers
Sex					
Women	32.4	33.6	23.0	17.7	15.7
Men	67.6	66.4	77.0	82.3	84.3
	100.0	100.0	100.0	100.0	100.0
Age group					
15–24	3.1	10.0	21.1	2.4	8.3
25–34	21.0	28.8	29.2	17.1	17.7
35–44	34.1	31.3	24.6	33.5	25.9
45–54	29.0	20.1	15.2	24.3	23.6
55–64	12.1	8.7	8.5	16.8	17.7
65+	0.8	1.1	1.5	5.9	6.8
	100.0	100.0	100.0	100.0	100.0
Educational level					
No education	4.6	5.6	11.5	3.4	14.3
Primary	15.6	34.3	43.0	29.1	45.5
Secondary	34.4	38.5	38.5	36.8	33.7
Tertiary	45.4	21.6	7.0	30.7	6.5
Not stated	0.1	0.1	0.0	0.1	0.1
	100.0	100.0	100.0	100.0	100.0

Source: Based on data of the Labor Force Survey (ENPE) 2019.

FIGURE O.14. Oaxaca-Blinder Decomposition: Mean Hourly Wage Differential between Formal and Informal Wage Workers in the Private Sector, 2019

Source: Based on data of the Labor Force Survey (ENPE), INS.

Little Economic Growth, the Skills Mismatch, and Shortsighted Active Labor Market Policies are Key Drivers of the High Unemployment Rate among University Graduates, Who Leave the Family Nest Late

About 1 youth in 3 is unemployed, with a peak among university graduates. About 1 youth ages 15–29 in 3 is unemployed, a rate that peaked at 38.2 percent in 2011 and then hovered around 33.0 percent. In 2017, youth unemployment rates increased with educational level from 16.2 percent among youth ages 25–29 with no education to 51.0 percent among youth in the same age-group with tertiary education. Young women ages 25–29 with university degrees face a higher chance of unemployment relative to young men in the same age-group (57.5 percent vs. 40.3 percent). Youth living in the more deprived areas of the country, namely, the North-West, Center-West, and southern regions, face a higher probability of unemployment. This underutilization of human capital implies that some of the public investments in education are not carrying over to employment opportunities and are particularly detrimental among youth, who are thus missing the opportunity to develop and grow at an age that heavily influences future outcomes.

Modest job creation, especially in high-end jobs, is one of the key drivers of unemployment among university graduates. Although the rate of employment creation accelerated after the revolution, it was not sufficient to absorb the large number of university graduates. Overall the number of employed increased by about 53,000 a year, on average, but almost 65,000 additional youth graduated each year (the average between academic years 2012/13 and 2017/18) (Figure O.15). This compares with an average annual increase in the number of youth ages 25–34 with university degrees of about 4,200. Taking into account the occupational composition of employment, the deficit is striking. In 2011–17, the number of high-end jobs, including the jobs as managers, professionals, technicians, and

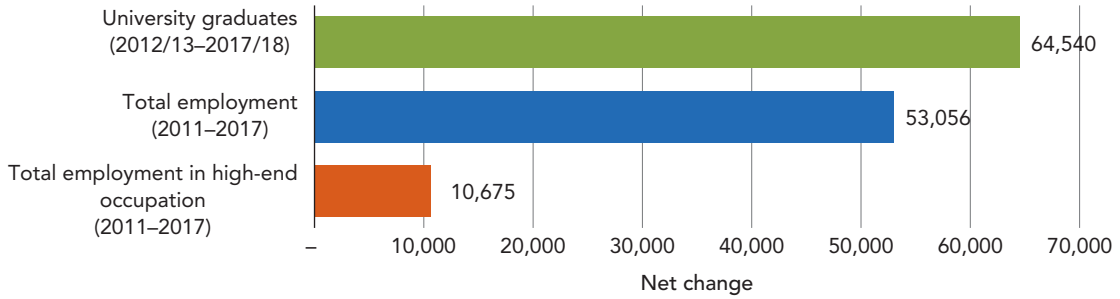
associate professionals that university graduates aspire to obtain, rose by fewer than 11,000 a year.

University graduates select curricula that are not in line with private sector demand. About 4 university graduates in 10 obtained degrees in the humanities or in social sciences (including commerce and law), about 2 in 10 in science, and almost 2 in 10 in engineering and construction in academic year 2017/18 (Figure O.16).⁵ Graduates in the social sciences and law face more challenges in obtaining jobs given the decline in the number of workers in associate professional jobs in the same fields. And the increase in the number of wage jobs, such as science, engineering and health professionals, has been limited. Graduates in the humanities continue to expect to land jobs in the public sector given the expansion of hires in their field.

In addition, most active labor market policies consist of wage subsidies that provide temporary employment opportunities to beneficiaries at the cost of significant deadweight loss and substitution effects. The large majority of active labor market policies target university graduates and consist of wage subsidies (Boughzala 2019). The goal of wage subsidies is to stimulate the demand for labor by subsidizing the cost of labor to firms. This can support young workers, whose productivity might be initially low or unobserved. If the cost of hiring certain groups of workers is lower, employers might be more keen to employ these workers. In Tunisia, given the large supply of university graduates, the relative price of the labor of this

⁵Young women predominantly graduate in the humanities, and a smaller share enroll and graduate in the sciences, mathematics, statistics, engineering, construction, and information technology (TLMPS 2014).

FIGURE O.15. Change in the Number of University Graduates, Employed, and Employed in High-End Occupations, Circa 2011–17



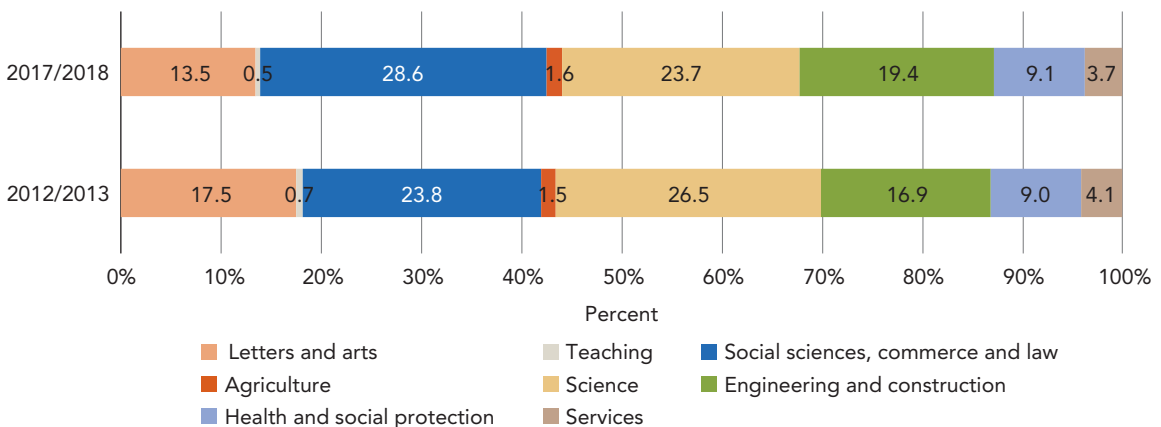
Source: Based on data of the Ministry of Higher Education and Scientific Research and the Labor Force Survey (ENPE), INS.

group should adjust downward. However, the existence of collective wage agreements limits the possibility of such adjustments, thus potentially incentivizing the hiring of youth informally. In this context, wage subsidies can play a role in making the formal employment of youth more attractive to employers as well as mitigating social discontent. Yet, wage subsidies might also provide a competitive advantage to a subset of firms and contribute to an uneven playing field. Recent evaluations in developed and developing economies indicate that, in general, wage subsidies are an effective tool for increasing employment rates among eligible individuals, but mainly as a way to provide work experience in the short term as opposed to permanent employment, particularly among the long-term unemployed (Card et al. 2018; Mckenzie 2017). The downside includes deadweight losses, that is, the risk of subsidizing jobs that would have been created anyway, and

substitution effects, that is, the possibility that employers substitute nonsubsidized workers with subsidized workers. Evaluations in several European countries indicate that deadweight and substitution effects can amount to around 90 percent (Martin 2000).

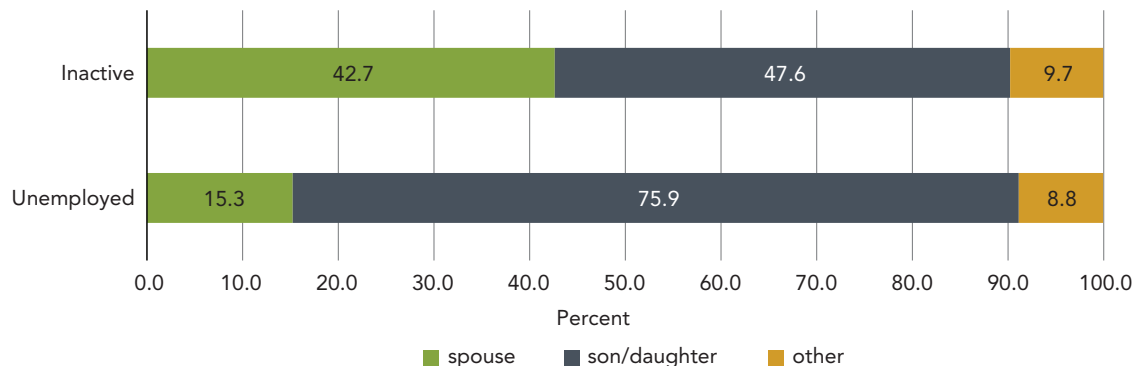
Although the public sector does not pay a wage premium to university graduates, it does offer a range of attractive nonmonetary benefits. On average, a university graduate ages 25–34 employed in the public sector is paid about 120 percent more than a counterpart in the private sector. The large wage gap though fades away after controlling for differences in youth productive characteristics. University graduates in the public sector are paid more largely thanks to their occupation, type of contract, place of work, and access to social security. Although there are also unobservable characteristics and a wage structure that favor wage

FIGURE O.16. The Distribution of Graduates, by Field of Study and Academic Year, 2012/13 and 2017/18



Source: Based on data of the Ministry of Higher Education and Scientific Research.

FIGURE O.17. Distribution of Unemployed and Inactive Youth Ages 25–34 with Tertiary Education, by Relation to the Household Head, 2015



Source: Based on data of the 2015 Household Budget Survey (EMNVB), INS.

workers in the public sector, this component contributes only about 10 percent to the wage gap. Although, conditional on observable characteristics, no evidence of a large public sector wage premium among university graduates is detected, there are other benefits associated with public sector jobs, such as job security, guaranteed salary increases, allowances, a wide range of annual leave options, long maternity leave, and flexible working hours, that could make these jobs more attractive.

And university graduates are supported by their families while they look for jobs. The majority of unemployed youth ages 25–34 with tertiary education live with their families of origin (about 76 percent in 2015). The pool of inactive

youth is more evenly split between youth who live with their parents (47.6 percent) and young women who are married and live with their spouses (42.7 percent) (Figure O.17). This is largely attributable to the sex and age composition of the pool of inactive youth with tertiary education, which includes a larger share of women, particularly women in their early 30s, relative to the pool of unemployed youth. Most unemployed youth complain about lack of jobs, whereas inactive youth report household duties as the reason they do not engage in the labor market. The large majority of both unemployed and inactive youth have never worked before, and those who have worked in the past have only done so for short periods of time, typically up to six months in the year preceding the survey.

Returns to Tertiary Education are Declining in the Private Sector and Rising in the Public Sector

Returns to education are sizable and higher in Tunisia compared with middle- and high-income countries. In 2019, workers with primary education enjoyed a premium of about 12.6 percent per hour worked relative to workers with no schooling (Figure O.18). Secondary education yielded an additional premium of about 9.1 percent (21.7 percent – 12.6 percent) relative to primary education, and tertiary education a premium of 26.1 percent (47.8 percent – 21.7 percent) relative to secondary education. In line with evidence from developing countries (Psacharopoulos and Patrinos 2018), returns do not increase monotonically with the level of education. In addition, in the case of Tunisia, returns to education are well above those observed in middle- and high-income countries, particularly in tertiary education.⁶

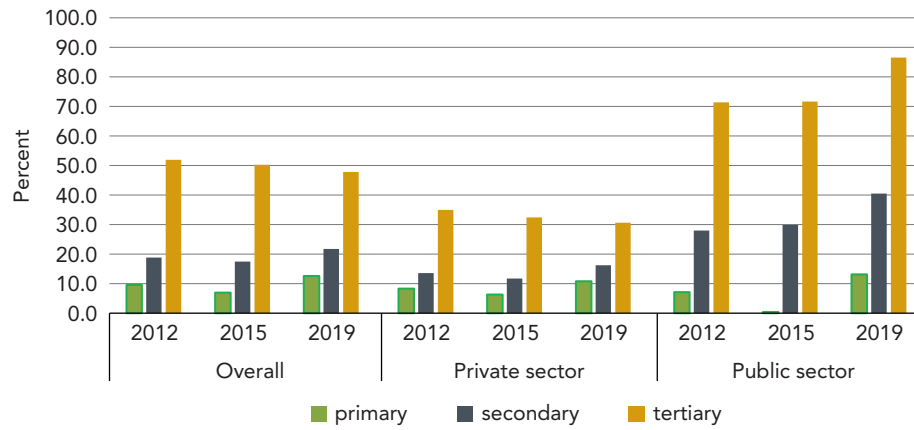
In the private sector, returns to tertiary education have declined over time. In the private sector, returns to tertiary education relative to secondary education declined from about 21 percent in 2012 to 14 percent in 2019 (Figure O.18). The premium associated with secondary education on top

of the premium of primary education hovered around 5 percent–6 percent. By contrast, returns to primary education increased from about 8 percent to almost 11 percent. This seems to be consistent with an increasing supply of working-age individuals with university degrees that is not matched by an equally large growth in the demand for this type of educational attainment. In addition, some graduates might look for jobs that require a lower skill level than their skill level and thus contribute to reducing the returns to tertiary education. Marouani and Minh (2021) find that the share of medium- and low-skill jobs performed by workers with tertiary education increased at the expense of high-skill jobs.

By contrast, returns to tertiary education have modestly increased in the public sector, and they are about three times higher in the public sector than in the private sector. While the returns to primary education are not considerably different between the public and private sectors, holding a secondary education certificate pays more in the public sector (27.4 percent more than primary education in the public sector relative to 5.4 percent more than primary education in the private sector in 2019) (Figure O.18). The gap is larger in the case of tertiary education and has increased over time: public sector wage workers with tertiary education enjoy a premium of about 46 percent relative to those with secondary education per hour worked, which compares with a premium of about 14.4 percent in the private sector.

⁶Comparing returns to education is a complex task because of differences in data and methodology. Psacharopoulos and Patrinos (2018) calculate average returns to education among low-, middle-, and high-income countries based on existing studies. In middle- and high-income countries, based on evidence on 1990–2014, private returns to tertiary education (using the Mincerian approach based on data from online annex 2 in Psacharopoulos and Patrinos 2018) are estimated at 13.5 percent and 10.2 percent, respectively. Returns to primary (secondary) education are estimated at 5.9 percent and 7.7 percent (8.1 percent and 8.0 percent) in middle- and high-income countries, respectively.

FIGURE O.18. Returns to Education, Overall and by Sector, Wage Workers
Ages 15–64, 2012, 2015, and 2019



Source: Based on data of the Labor Force Survey (ENPE), INS.

Lack of Firm Dynamism, Possibly Associated with Limited Contestability in Product Markets as Well as Cronyism, is a Headwind on More Rapid Productivity Growth and Employment Creation

Microenterprises dominate the panorama of firms. In 2019, of over 780,000 enterprises registered with the tax authority, about 87 percent were single-person firms, that is, own-account workers or microproduction units with no formal employees. About 10 percent of the enterprises employed between 1 and 5 formal employees; 2.3 percent were small firms (with between 6 and 49 employees); 0.3 percent medium-size firms (with between 50 and 199 employees); and the remaining 0.1 percent were firms with 200 or more formal employees.⁷ This pattern is in line with evidence from 16 developing countries, in which the share of firms with fewer than 10 employees ranges between 50 percent and 95 percent (Merotto et al. 2018), as well as OECD economies, where the share of firms with fewer than 10 employees is, on average, around 90 percent (OECD 2017). In 2003–19, the size distribution of registered firms did not change significantly. There was a modest increase in the share of microfirms, from 96.5 percent in 2003 to 97.2 percent in 2019. This is associated with the rapid growth in the number of self-employed, from about 373,500 (85.2 percent) in 2003 to over 679,700 (86.9 percent) in 2019, whereas the share of small, medium, and large firms declined modestly because of the less rapid growth in their number relative to microenterprises (Figure O.19).

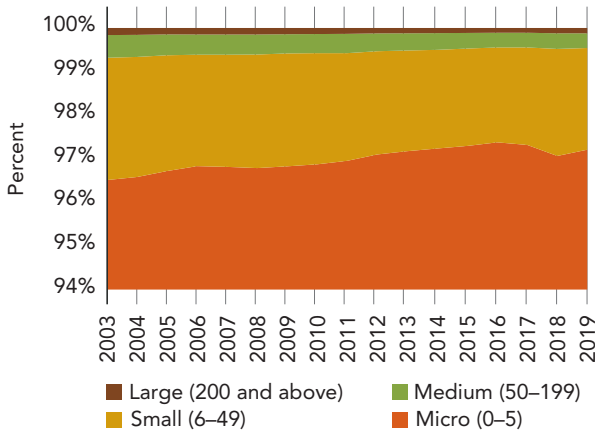
Microenterprises contribute almost 50 percent of total employment. Although medium and large firms make up a small share of production units, they account for about 25 percent of total employment (and 27 percent of wage employment as of 2019) (Figure O.20). Small firms contribute about 22.3 percent to total employment (and

23.5 to wage employment), and microfirms account for about 45.8 percent of total employment (and 41.8 percent of wage employment). Overall, about 1 worker in 2 is employed in firms with fewer than 10 workers. This is considerably different compared with available evidence from both developing and OECD countries. For example, the top 1 percent of the largest firms account for more than one-third of the jobs in the formal private sector in more than half of the 16 developing countries surveyed by Merotto et al. (2018). And, in OECD countries, firms with fewer than 10 employees contribute, on average, less than 30 percent of employment (OECD Structural and Business Demography Statistics database).

The private sector features high entry and exit rates, particularly among microenterprises and small firms, and exits are not necessarily linked to performance. The share of firms entering the market is sizable, particularly among small firms. About 9.0 percent of firms with fewer than 6 employees (as a share of all firms of the same size) entered the market in 2019, which compares with 1.0 percent and 0.4 percent among firms with between 6 and 49 and with 50 or more formal employees, respectively (Figure O.21, panel a). Small firms also create the most jobs thanks to the large number of small entrant firms, but they are also more likely to exit the market. The share of firms exiting the market is considerably larger among firms with fewer than 6 workers (3.1 percent in 2019) relative to large firms (0.1 percent in 2019) (Figure O.21, panel b). Historical data confirm this pattern over a long period (1996–2010). Almost 1 registered self-employed individual in 6 in 1996 exited the market after 14 years, compared with less than 20 percent of firms with 1,000 employees or more (Rijkers et al. 2014). Moreover, there is little correlation between measures of firm performance and firm exits, and, in a few cases, there is an indication that productive firms may have exited (World Bank 2021d).

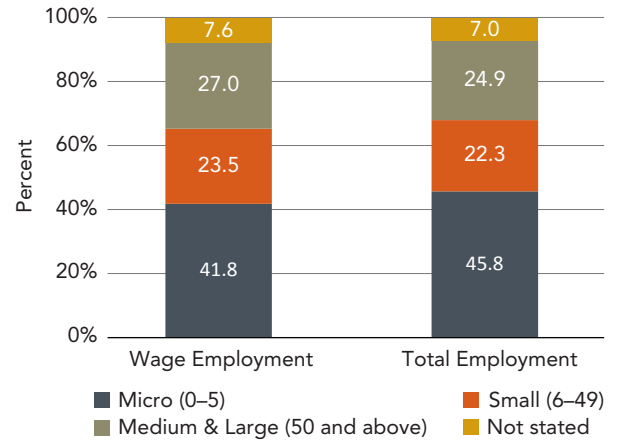
⁷In addition, almost 520,000 informal own-account workers were estimated to be active in 2019 according to labor force survey data. This means that the distribution of firms is further skewed to the left, with over 98 percent of firms falling in the micro category. No information is available on the number of firms operating without registering with the tax authority.

FIGURE O.19. Trends in the Distribution of Registered Private Sector Firms, 2003–19



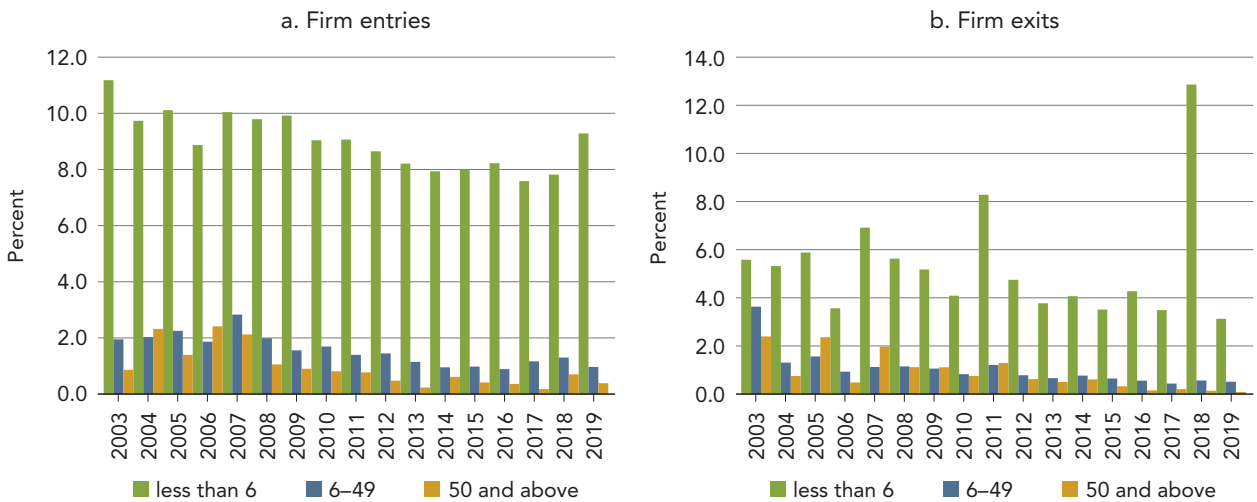
Source: Based on data of the National Business Registry (RNE), INS.

FIGURE O.20. Distribution of Wage and Overall Employment, by Firm Size, 2019



Source: Based on data of the Labor Force Survey (ENPE), INS.

FIGURE O.21. Share of Registered Firms Entering and Exiting, by Size and Year, 2003–19



Source: Based on data of the National Business Registry (RNE), INS.

TABLE O.4. Transition Matrices of Formal Firms Across Employment Size, 2016–20

Size in 2016	Size in 2020			
	Micro & small (1–19)	Medium (20–99)	Large (100 and more)	Total
Micro & small (1–19)	91.4	7.5	1.2	100.0
Medium (20–99)	2.0	96.2	1.9	100.0
Large (100 and more)	0.0	2.2	97.8	100.0

Source: Based on data of the Enterprise Survey, World Bank.

Firm growth is limited. After entry, the majority of registered firms do not grow, that is, they do not employ more workers, even in the long run. For example, less than 4 percent (only 2 percent) of all firms with 10–49 employees in 1996 were employing 50–99 (more than 100) workers by 2010 (Rijkers et al. 2014). Transition matrices based on the 2020 round of enterprise surveys confirm this pattern.⁸ In 2016–20, virtually all medium and large firms did not grow, whereas 1.2 percent of small firms managed to turn into large firms (Table O.4).⁹ Over the same time, no small firm in the Arab Republic of Egypt, Jordan, Lebanon, Malta, Morocco, or West Bank and Gaza grew to a large firm (World Bank 2021d).

Limited contestability and competition in product markets might be one of key culprits behind limited firm and employment growth. The observed high entry and exit rates do not necessarily indicate market dynamism, particularly in the case entry and exit rates are mainly driven by what happens to small firms, as observed in Tunisia, and a large part of the market is occupied by incumbent firms. Market contestability refers to the costless possibility of entering and exiting markets, whereby the potential competition pushes firms to strive for productivity growth to survive in the market. Contestable markets may increase

productivity, wages, and employment growth.¹⁰ Product market regulations, in particular, affect the costs that firms have to sustain when they enter the market and the degree of competition among incumbents. A recent data collection and analysis effort across countries in the region (World Bank 2021d) has examined a number of indicators that capture distortions induced by the presence of the state in product markets, including the scope and governance of SOEs, public procurement, government involvement in business operations (price controls, command and control regulations), and the simplification and evaluation of regulations that relate to contestability. In the case of Tunisia, SOEs have a significant presence, with at least one SOE in 40 of 44 sectors and subsectors for a total of 195, even in sectors where there is an unclear economic rationale for the presence. Furthermore, legal and regulatory deficiencies do not ensure competitive neutrality, which is key to level the playing field between SOEs and private sector peers. For example, SOEs in commercial sectors benefit from support not available to private competitors and financing guaranteed by the state, and both commercial and noncommercial SOEs are shielded from competition by regulation, such as limits on foreign direct investment and price controls (World Bank 2021a).

⁸The matrices are constructed using recall data on size at the time of the enterprise survey (2020), three fiscal years before (2016), and at the time the business was established. Firms that entered or exited within this time cannot be accounted for.

⁹Firm size and age are correlated. Separate transition matrices by firm age in 2016 would therefore provide superior information. However, the small sample does not allow estimates of statistically meaningful transitions by age-group.

¹⁰World Bank (2021d) summarizes three channels through which more product market contestability can generate more and better jobs. First, competition provides an incentive to firms to upgrade their capabilities and innovate to become more efficient, contributing to productive efficiency. Second, it shifts the market toward more efficient producers, contributing to allocative efficiency. Third, it pushes less-efficient firms out of the market and attracts more-efficient firms to enter and grow (market selection). As firm productivity increases, the jobs the firms create become more productive. This process leads to the reallocation of workers from less-productive to more-productive jobs within firms, across firms, and eventually across sectors (structural change). As low-productivity firms leave the market and high-productivity firms enter the market and grow, aggregate productivity increases. As long as more-productive jobs are associated with higher wages and better working conditions, the quality of jobs improves.

In addition, cronyism and political connections remain a distinctive feature of the Tunisian private sector landscape. About 28 percent of formal firms report that they have a political connection in Tunisia, a figure considerably higher than the average in the Middle East and North Africa region as well as in middle-income countries. In addition to the presence of numerous SOEs across many sectors, political connections can undermine market contestability and fair competition in a number of ways with respect to private firms that lack such networks. For example, politically connected firms can benefit from easier access to credit, can

access sectors with barriers to entry or where the existence of privileges can deter unconnected firms from entry, and can often create jobs in exchange for economic privileges they receive from politicians. In Tunisia, politically connected firms are found to have abused entry regulations for their own gain and to be more likely to avoid import tariffs (Rijkers 2017a, 2017b). Politically connected firms in the Middle East and North Africa region are more likely to be part of a business organization and to have access to external finance relative to firms in other regions (World Bank 2021d).

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