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Country Profile on Employment and Decent Work

Tunisia

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1. Introduction

Sustainable Development Goal 8 aims at promoting inclusive and sustainable economic growth, full and productive employment, and decent work for all. Several targets underlie these aims: sustained economic growth (8.1), high levels of economic productivity (8.2), promotion of productive activities (8.3), full productive employment and decent work for all (8.5), reduced number of youth not in employment, education or training (8.6), the eradication of forced labor, human trafficking and the worst forms of child labor $(8.7)^1$. The purpose of this country profile is to provide a general overview of the labor market and productivity in Tunisia and provide policy guidance to achieve the goals set by the 2030 Agenda for Sustainable Development. This country profile presents recent labor market trends and productivity in Tunisia. Topics such as population growth, labor force participation, employment, unemployment, informality, child labor are addressed. These issues are analyzed in light of recent economic growth, sector transformation and productivity changes in Tunisia. This profile primarily uses statistics and definitions from the World Bank and the International Labor Organization. However, in some cases where specific disaggregation were not available from international sources, national statistics data were used. This profile along with other employment country profiles are expected to be a first step in triggering a policy debate on how to achieve decent employment in the Arab region and to form an informative basis for future research.

2. Population trends and Demographic analysis

According to its National Income per capita (US\$3,690 in 2016), Tunisia is considered a middleincome country. In recent decades, the country has experienced a rise in important human development indicators including life expectancy, years of schooling and income. In 2015, the Human Development Index was equal to 0.725, 28% higher than its 1990 levels, placing Tunisia in the high human development category. Progress has also been observed in poverty reduction, which halved between 2000 (32.4%) and 2012 (15.4%). However, the consumption levels of many households remain just above the poverty line, leaving them vulnerable to demand shocks especially such as employment loss. Poverty reduction efforts and consumption level, based on durable sources of economic growth, if continued, could achieve target 8.1 (SDGs goal 8).

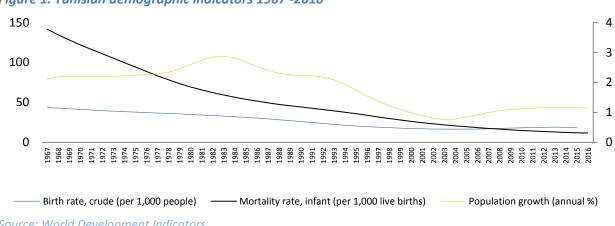
Until the 1980s, birth and mortality rates were relatively high in Tunisia². Since then, a progressive decline in both rates led to a fall in population growth rates to below 2% (Figure 1). For example, in 2003, the population growth rate was below 1% and rebounded slightly to 1.14% in 2016. This figure is 0.3 percentage points lower than the average in middle income countries but still almost double that of high income countries. Urban population growth has always outstripped total population growth, although the difference has been decreasing recently: in the 1960s the difference was 2 percentage whilst by the mid-2000s the difference was just 1 percentage point. Tunis and other

¹ The remaining targets and their respective indicators are available at:

https://sustainabledevelopment.un.org/sdg8

² According to the UN-department of economic and social affairs, population division infant mortality rates dropped from 66 per 1000 live births to almost 16 in 2015.

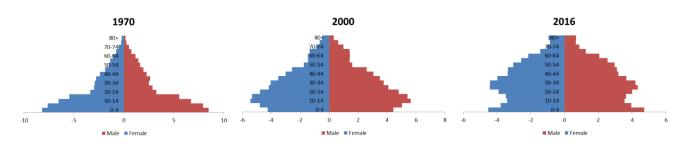
coastal cities attract the bulk of rural migrants, due to their size and economic dynamism. In Tunisia, demographic transition gradually took place and fertility dropped from more than 6 births per woman in the 1960s to around 2 in 2000. The evolution of the fertility rate is partially explained by a combination of different factors including economic growth, higher educational enrollment, higher emigration levels among younger cohorts and delayed marriages.





The age pyramids (Figure 2) reflect the demographic transformation in Tunisia. In 1970, the shape of the pyramid shows the high share of the young population due to high birth rates. In 2000, the decrease in the number of births resulted in a narrow base of the pyramid, while older cohorts became more populous. In 2016, the older cohorts represent an increasingly high share of the population although a rebound in the birth rate is observed as the 0-4 years old cohort share outstrips that of older cohorts. As a consequence of this demographic trend, there is a larger working age population, however, as will be noted below, there is no particular increase in the labor force. Similar to Lebanon, Morocco and Algeria, Tunisia's population is aging fast experiencing a "fast rate of ageing", with the share of people above the age of 60 will be around 14 percent by 2030 (UNDESA-Population Division).





Source: World Development Indicators

Source: World Development Indicators

The dependency ratio (proportion of individuals between the age of 0-14 and over 65³ year old to those between 15 to 64 years old) in the Tunisian population declined from 96% in 1970 to 46% in 2016 as Tunisia's vast population of young dependents became of working age (Table 1). Tunisia has a relatively low dependency ratio compared to other countries in the region. For example, in 2015, in Morocco and Algeria the ratio is above 50%; in Egypt and Jordan it is over 60%; and in Yemen and Palestine it is over 75%. This difference is explained by the fact that Tunisia has a lower share of young dependents because its demographic transition is at a more advanced stage.

Years	Youth	Elderly	Total
1970	89%	6.8%	96%
1980	77%	7.2%	84%
1990	64%	8.4%	73%
2000	46%	10.6%	57%
2010	34%	10.8%	45%
2016	35%	11%	46%

Table 1. Dependency ratio 1970 -2016

Source: World Development Indicators.

The Economic Dependency Rate that corresponds to the number of dependents (the unemployed, inactive individuals, young and the elderly) per employed person, has declined from 2.8 in 1991 to 2.2 in 2016. Between those years, the employed population grew annually by 1.9% on average. All categories of the dependent population increased except for individuals below 15 years old, which decreased by 0.5% (Table 2). The EDR is similar to the one observed in Morocco (2.2) but lower compared to Jordan, where there are more than 4 dependents per person employed.

Table 2. Economic Dependency Rate – 2000 - 2015

	1991-2016
EDR	2.46
Unemployed, total	2.5%
Inactive, total	1.8%
Population ages 0-14	-0.5%
Population ages 65 and above	3.0%
Employed workers	1.9%

Source: World Development Indicators

In 2012, there were 1.22 million Tunisians living abroad, which represents just over 11% of Tunisia's total population. Emigration, especially for skilled individuals, is an attractive option for Tunisians due to the lack of domestic employment opportunities, which will be explained in detailed below. Usually, France is the main destination of Tunisian emigrants (55%) and Europe in general which host around 84.5% of the Tunisian abroad. This is followed by Libya in the Maghreb region (5.6%) and Saudi Arabia among GCC countries (1.4%). This high level of migration resulted in fair amount

³ We used the 65-above and not 60-above for old dependends in line with the UN- Department of Economics and Social Affairs , Population División.

of remittances for Tunisia: 4.3% of Tunisian GDP in 2016. However, this share is still considered lower than remittances to Morocco (6.9%), Jordan (11.3%), Palestine (14.6%) and Lebanon (16%). On the other hand, the recent immigration of Libyans, a result of political upheaval, has made Tunisia a host country also: it is estimated that between 600,000 and 1 million Libyans live in Tunisia. This might further decrease the dependency ratio in Tunisia because Libyan immigrants are predominantly of working age.

3. Labor Force Participation

In the last three decades, the labor force participation rate has stabilized at around 47%, which is more than 10 percentage points lower than lower middle-income country average. This rate is lower than in Oman (69%) and Saudi Arabia (54%), higher than in Jordan (40%) and Palestine (43%) and similar to the level observed in Morocco and Egypt (49%). This low rate could be explained partially by the very low participation rates of women compared to men. Since 1991, the gap has shrunk due to a slight increase in female participation (from 20% to 25%) and a decline in male participation (from 75% to 71%)⁴. The gap troughed in 2005 when the male participation rate fell to 67%. Further, a downward trend was observed in the case of young individuals that also have a lower participation rate compared to the rest of the population (Figure 3).

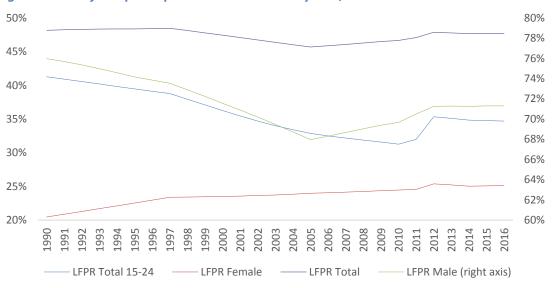


Figure 3. Labor force participation rates: total and youth, 2000-2016

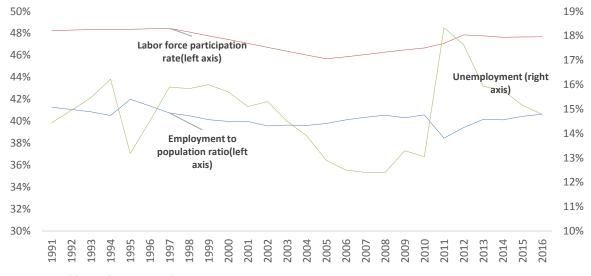
Source: ILO-WDI

In spite of low participation rates, demographic trends have served to increase the size of the workforce. Between 1990 and 2016, the average annual growth rate of the total population has been lower (1.22%) than the average labor force growth rate (1.9%) and the average working age population growth rate (1.9%).

⁴ Tunisia has one of the highest female participation rates in the region, similar to Morocco (24.7%) but higher than Saudi Arabia (20%), Palestine (17%) and Jordan (14%).

4. Employment and Unemployment

Between 1991 and 2007, a negative trend of unemployment, employment-to-population ratio and the labor force participation rate was observed. This hints that the drop in unemployment was due to the higher decrease in labor force participation relative to the decrease in employment. Since 1990, the unemployment rate has fluctuated around 15%, reaching a trough of 12% in 2007. The political turmoil in 2009-2010 affected the economic performance and lead to an increase in the number of unemployed between 2011 and 2016. Unemployment reached a peak of 18% 2011. For the same period(2011-16), an increase of labor force participation rate was observed (up to 47%), while employment to population declined to 38%. (Figure 4).





Similar to other countries in the ESCWA region, men have experienced lower unemployment levels than women (12% against 21% in 2016). In both cases, even if unemployment has declined, between 2011 and 2016, it did not reach the pre-revolution levels. In the case of women, between 1990 and 2016, an upward trend is observed both in participation and employment rates. Female unemployment reached a trough of 15.6% in 2004 rising back up to 27% during the revolution and dropped to 21% in 2016(Figure 5)⁵. In recent years females have achieved higher education enrollment and attainment; however, they seem to be affected by limited accessibility to employment as a consequence of skills mismatching, cultural and social norms. In 2014, more than two third of the unemployed with higher education are women. Besides, unequal pay and the assignment to household work deter women from participating in the labor market. Another factor affecting women's participation rate and employment levels resides in their educational choices: they are overrepresented in social services and health studies which determine the employment

Source: World Development Indicators

⁵ Female unemployment in Tunisa is above the Arab world average (18%). It is twice the female unemployment of Morocco and Lebanon (10%) and the similar to Egypt and Jordan (23%).

sector (education, health, public administration, agriculture and textile). As a consequence they are underrepresented in critical occupations for the economy such as engineering, technology and architecture.

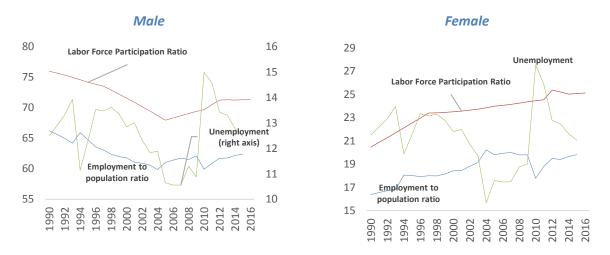
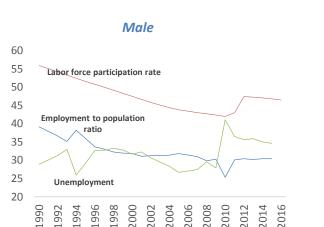


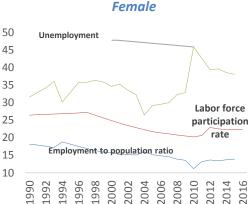
Figure 5. labor market indicators by sex

Source: World Development Indicators

The decline in labor force participation rate between 1990 and 2010 (15pp) is more important for young men (15pp) compared to older men (8pp). In the case of young females, participation and employment rates decline steadily between 1990 and 2010, following the opposite overall trend of all females in the labor market (Figure 6). The low labor force participation rate among females and the high unemployment rate among young individuals could be considered the main challenges facing high and productive employment for all (target 8.5 SDGs goal 8). There is indeed an important difference between young individuals and the rest of the population; in 2016, total unemployment was 14.7%, while young female and male unemployment levels were 38% and 34%, respectively.







Source: World Development Indicators

Overall, unemployment in Tunisia has remained at high levels due to the combination of different factors: lower economic growth in recent years; the increasing qualifications of the labor force whose skills do not match with the actual labor demand; the low absorption capacity of the labor market which is characterized by small firms with a limited capacity to create skilled jobs; the high costs of firing employees on long term contracts, which pushes firms to opt for flexible and short-term contracts; and better working conditions in the public sector than in the private sector⁶. Besides the institutional and the market related issues, employment creation also continued to be hindered by the political uncertainty resulting from the 2011 revolution and by the terrorist attacks in 2015 which damaged the important tourism sector and repelled foreign investment⁷.

The share of unemployed youth in Tunisia, also explains the high unemployment rate observed at the national level. On the one hand, the problem resides on the high number of graduates that supersedes employment creation (In 2014 a total of 100,000 individuals were expected to graduate from tertiary education, a figure that doubles the average job creation in recent years⁸) On the other hand, the quality of education has low standards and performance, affecting the school to work transition. The reasons lay behind the insufficient instruction of life skills, the low quality of teachers, and the lack of career counseling and of continuing education. At the same time, young individuals suffer of high long-term unemployment rates: 36% of unemployed youth in 2012 (more than 80% and 60 % in Egypt and Morocco, respectively). Besides, in 2011 the length of the transition from school to work was estimated at 6 years, which correspond to difference between the average school leaving age and the average age when 50% of youth are in employment⁹.

5. Education and its impact on the labor market

The decrease in the labor force participation rates of younger cohorts since 2000 is a result of more schooling. In 1985 individuals between 15 to 19 years old had, on average, 5.6 years of schooling. In 2010 the same cohort had 9 years of schooling¹⁰. The difference is close to 4 years for other cohorts, except for those over 65 years old (Figure 7).

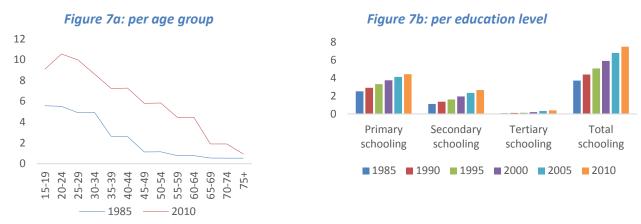
⁶ OCDE (2015). Tunisie. Un programme de réformes a l'appui de la compétitivité et de la croissance inclusive. Série "Politiques meilleures"

⁷ Fondation européenne pour la formation (2017). Tunisie. Evolution en matière d'éducation de formation et d'emploi 2016.

⁸ Haouas, I.; Sayre, E.; and Yagoubi, M., "Youth Unemployment in Tunisia: Characteristics and Policy Responses". Topics in Middle Eastern and North African Economies, electronic journal, 14, Middle East Economic Association and Loyola University Chicago, 2012.

⁹ Banque Mondiale, Ministère de l'Emploi et de l'Insertion Professionnelle des Jeunes (2009). Dynamique de l'emploi et adéquation de la formation parmi les diplômés. Volume I : Rapport sur l'insertion des diplômés de l'année 2004.

¹⁰ This cohort had on average 9.8 years of schooling in Jordan, 9.4 in Libya, 7.4 in Algeria and 6.9 in Morocco.





Source: World Development Indicators

There are higher enrollment rates at every level, both for men and women. Since the 1990s, universal education was already achieved in primary level and the access to secondary education has been increasing progressively. Up until the 1990s, boys had higher enrollment rates than girls, but since 2000 this situation was reversed. The same is observed at the tertiary level; however, women have an even greater lead over men. As a consequence of higher enrollment rates and aside from the population between 15-19 years of age, the average completed years of education has increased between 1985 and 2010 at every level: from 2.5 to 4.4 years in the case of primary education, it has more than doubled at secondary education and even though the average remains low at the tertiary level, it has quintupled.

Important differences were observed when looking at unemployment by education level. In 2015, individuals without education had the lowest unemployment rate (5.5%) than those with tertiary education (26.8%). Between 2009 and 2015, unemployment decreased for individuals without a diploma or with only a primary education, while it has increased for those with diplomas. This negative correlation between education and employment opportunities results from the lack of harmonization between the educational attainments and the private sector requirement. Many highly-skilled individuals see migration as an alternative, whilst others prefer to wait for opportunities in the public sector where working conditions are better and wages are higher.

	2009	2010	2011	2012	2013	2014	2015
No diploma	6.1	5.7	8	5.8	4.7	10.3	5.5
Primary	10.4	9.2	12.4	12.2	9.9	10.8	8.8
Secondary	14	13.7	20.6	21	16.5	15.6	16.3
Tertiary	21.9	22.9	29.2	26.1	29.2	20.2	26.8
Total	13.3	13	18.3	17.6	15.9	14.8	15.2

Table 3. Unemploymen	t rate by diploma,	2009-2015
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Source: INS 2016

In summary, the labor force is more skilled today than in previous decades. The lack of skilled work in Tunisia has given rise to a mismatch between the supply and demand for labor and a decrease in

the employment levels of skilled individuals. The school-to-work transition is thus indeed a key challenge.

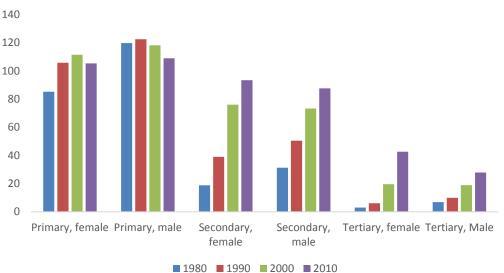


Figure 8. School enrollment per education level 1980 - 2010

Source: World Development Indicators

In spite of higher enrollment rates, in 2013 almost 18% of individuals between the ages of 15 to 29 years old are "Neither in Employment nor in Education or Training" (NEET). BY definition, this situation is explained by a combination of different factors, such as dropout rates, lack of skills, and cultural or religious context. Young women are more exposed to this situation than men given their assigned domestic tasks (Table 4). This situation must be tackled in order to achieve target 8.6 (SDGs goal 8) related to the substantial reduction of NEET.

	Women	%	Men	%	Total	%
15-29	1,429,403	100	1,466,279	100	2,895,682	100
In school	567,222	39.7	535,683	36.5	1,102,905	38.1
Working	258,202	18.1	601,021	41	859,223	29.7
Unemployed	174,559	12.2	240,256	16.4	414,815	14.3
NEET	429,420	30	89,320	6.1	518,740	17.9

Table 4. Neither in Employment nor in Education or Training, 2013

Source: ILO

6. Informal employment

Informality can be defined either as a characteristic of productive units, based on size or bookkeeping, or as an employment characteristic. The former case corresponds to the informal sector, the latter is referred to as informal employment. In the case of informal employment, contributions to social security are generally used as a distinctive criteria. In the case of Tunisia, informal employment comprises of workers without any contribution to the *Caisse Nationale de Sécurité Sociale* (CNSS) during at least one quarter in the last twelve months. As such, in 2015,

informal employment, as a share of total employment, was 32%, which is equal to 1.1 million workers. 21% of those in wage employment and 61% of those in self-employment work informally (Table 5).

	Informal		Informal wage-		Informal self-	
	employment to	otal	employmer	nt	employment	
Year	Total	%	Total	%	Total	%
2005	1.001.355	34	434,000	22	567,755	63
2006	989,655	33	419,213	20	570,042	60
2007	954,801	31	446,065	21	508,736	54
2008	931,673	30	416,301	19	515,372	53
2009	895,869	28	378,975	17	516,894	52
2010	901,900	28	341,669	15	560,231	54
2011	773,903	24	298,354	13	475,549	51
2012	844,477	26	344,290	15	500,187	52
2013	961,792	29	423,862	18	537,930	54
2014	990,269	29	404,979	17	585,590	56
2015	1.092.640	32	507,451	21	586,289	61

Table 5. Share of informal employment. 2005-2015

Source: Centre de Recherches et d'Etudes Sociales

Between 2005 and 2011 a downward trend is observed in the informal sector. After 2011, the informal employment share rebounded from 24% to 32%. This rebound is a result of measures implemented in the aftermath of the revolution that included the appointment of public officers that were not previously covered by social security. On the other hand, active labor market programs for individuals looking for their first job increased the number of persons that declared themselves as unemployed so that they could benefit from those initiatives¹¹. The higher rates that followed 2011 show the counter-cyclical nature of the informal sector, which tends to increase during economic slowdowns. Youth and females are more likely to occupy informal jobs: 84% of individuals between 15 to 19 years old and 42% for those between 20 and 24 years old are females. Young females (below 40 years old) in informal employment outstrip young men by 20 percentage points.

7. Child labor

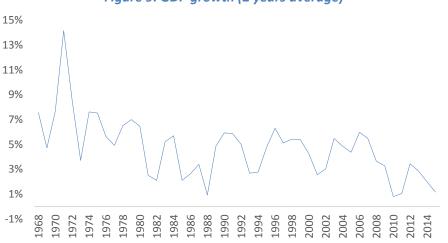
Child labor comprises individuals involved in economic activities or household chores. If children are between 5 and 11 years, a one hour of economic activity or 28 hours of household chores is considered as child labor; in the case of children between 12–14 years old, 14 hours of economic activity or 28 hours of household chores constitutes child labor. In 2016 the estimated number of child laborers (5 to 14 years old) was 50,364, corresponding to 3% of the total population. Children

¹¹ Fondation européenne pour la formation (2014). Les politiques de l'emploi et les programmes actifs du marché du travail en Tunisie.

are generally involved in seasonal agriculture, smuggling, drug trafficking, domestic work, handicraft work, street vending, and garbage scavenging. However, through the enforcement of laws and regulations, progress has been made in terms of eliminating the worst forms of child labor including sexual exploitation, forced labor in agriculture and involvement in armed activities¹².

8. Output growth and productivity

Growth rates in Tunisia have experienced a downward trend in recent decades. The annual average growth rate between 1970 and 2016 was 4.6%. This performance was fueled by a public sector spending, an open economy that bolstered exports and foreign investment and high investment in education and health. In the 1970s and the 2000s the average growth rate was below this level. In the 2010s, the average has been just 0.58% due to the effects of the 2011 revolution. Economic growth potential was hindered by an oversized government that hampers the emergence of a competitive private sector with its accompanying high value-added activities. High regulation, public monopolies and low institutional capacity act as also as bottlenecks for private sector growth. We address these bottle-necks in order to posit issues facing the achievement of higher levels of economic productivity, as stated by target 8.2 of SDGs goal 8.







Okun's law states a negative relationship between economic growth and the unemployment rate; it shows how above a certain threshold of output growth the number of unemployed diminishes. The coefficient changes from one period to another or from one country to another as it depends on institutional characteristics of the labor market, productivity growth and labor force participation. In Tunisia the correlation has the expected negative sign for the period between 1991

¹² United States Department of Labor, Bureau of International Labor Affairs (2015). Child Labor and Forced Labor Reports. Available at https://www.dol.gov/sites/default/files/images/ilab/child-labor/Tunisia.pdf.

and 2016¹³. However, during the 1990s the correlation was positive showing that economic growth was not providing new jobs, yet growth became less inclusive. However, in the 2000s and 2010s this correlation became negative again.

	1991-2016	1991-2000	2000-2009	2010-2016		
Correlation	-0.54	0.20	-0.62	-0.39		
Source: WDI						

Table 6. Unemploy	yment and a	output growth:	1990 – 2014
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Employment-output elasticity shows that economic growth has created new jobs only to a limited extent: between 2007 and 2015 this figure was 0.41%. Differences are observed across sectors; the elasticity is positive in the service sectors showing that output growth translated into higher employment growth, while the opposite is observed in the agriculture sector. The higher correlation in the case of industry is the result of a minor increase of the added value between 2007 and 2015, while employment grew at a higher rate.

Table 7. Emplo	oyment-output	elasticity:	2007-2015
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Total	0.41			
Agriculture	-0.36			
Industry	69.5			
Services	0.62			
Source: WDI				

According to table 7, output in Tunisia shows a limited capacity of employment creation, a situation aggravated in the aftermath of the revolution. Different factors coexist such as labor market rigidities, the mismatch between the supply and the demand for labor, the low productivity growth and the low added value of production. Similar problems related to employment creation are observed in Morocco where employment elasticity between 2002 and 2014 diminish. The same situation takes place in Jordan when comparing employment creation in the 1990s to the last decades, employment elasticity of growth is low, especially in industry and agriculture.

9. Labor productivity

On GDP per person employed (a proxy measure of labor productivity), Tunisia performed worse than other countries in its region. In 1991 Algeria's GDP per person employed was more than double that of Tunisia. This gap has since closed by a third: while in Algeria GDP per person employed has

¹³ Empirical studies of the validity of Okun's law in Tunisia show that in the 1990 there was a little negative correlation between the two variables but that after the revolution the an inverse relationship is observed (El Andari and Boaziz (2015). Is the Okun's law valid in Tunisia? MPRA Paper n° 67998). Using other estimation methods of the coefficient, other studies find that Okun's law is invalid in Tunisia for the 1990-2005 (Moosa, I.A(2008), Economic Growth and Unemployment in Arab Countries: Is Okun's Law Valid, Journal of Development and Economic Policies, vol 10, pp 7-24)

remained broadly the same between 1991 and 2016, Tunisia's figure has risen by over 50%. The country lags behind Jordan but labor productivity is higher compared to Morocco.

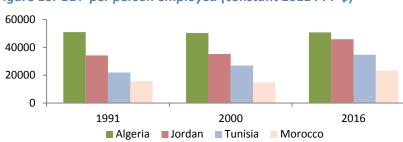


Figure 10. GDP per person employed (constant 2011 PPP \$)

Source: World Development Indicators

Between 1996 and 2010 labor productivity growth was relatively higher due to high economic growth and low employment growth. After 2010, GDP per person employed growth has slowed down as GDP and employment have exhibited similar growth rates. As the economy is concentrated in low valued added activities and low-quality jobs, labor productivity is low. In recent years, employment growth has relied upon growth in the services and public sectors. The country has specialized in low-cost, low value-added tourism, with small profit margins. However, low productivity levels are largely explained by the perseverance of subsidized and protected public firms, which lack productive efficiency.

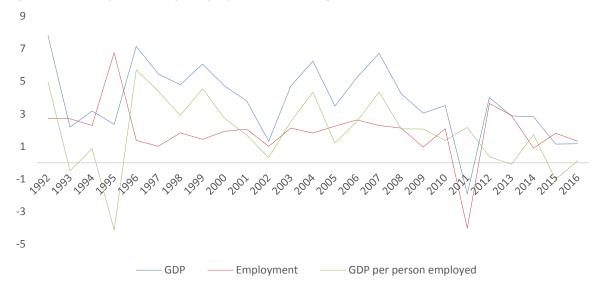


Figure 11. Labor productivity, employment and GDP growth 2000-2016

Source: WDI

Compared to fast growing countries, also total factor productivity in Tunisia has been very low (1.3% between 1990 and 2010, against 2.6% in the 1990s in Korea). As a consequence of this low performance, total factor productivity has contributed to a lesser extent to economic growth

compared to factor accumulation (capital and labor). Even if investment and employment have contributed the most to output growth, their recent evolution has also been limited. As explained before, employment creation has been limited and Tunisia experienced high unemployment with low labor participation rate. On the other hand, investment has been low, especially domestic private investment that focused on real estate against productive activities. Besides, foreign direct investment has concentrated on the energy sector (60% of total FDI between 2006 and 2012) and in the case of industrial investment, it has opt for low value added production (electric cabling, construction materials, textile)¹⁴. In the case of textile, for instance, firms have a limited capacity to compete with more competitive countries and thus depend on public subsidies.

10. Employment and sector transformation

During the last four decades, the Tunisian economy has undergone a sectoral transformation. In 1975 agriculture represented more than 37% of total value added. In 2013 this sector only represented 15% of total value added. The opposite trend is observed in the service sector: its share of total value added increased from 28% to 50% in the same time frame. The share of value added represented by industrial activity has remained stable in recent decades at around one third (Figure 12). Between 2000 and 2015 value added in textile industry decreased from 30% to 17% of the manufacturing sector, while mechanics and electronics industry went from 18% to 32% and to 20% in the case of agroindustry. In 2015, the market-related services represented 30% of total value added value in the service sector, followed by commerce (23%) and transports (16%). This subsectors represented, respectively, 27% 19% and 21% in 2000.

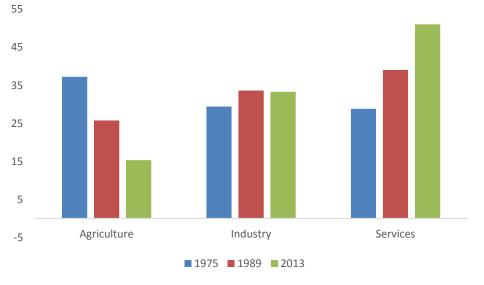


Figure 12. Value added as a percentage of GDP per sector (average 1980s and 2000s)

Source: WDI

¹⁴ World Bank. 2014. The unfinished revolution: bringing opportunity, good jobs and greater wealth to all Tunisians (English). Washington, DC: World Bank Group.

The economic transformation is reflected by the recent trends of the employment transitions. The services sector provides roughly half of all employment (48% in 2007 and 51% in 2016), while the share of agricultural employment has decreased from 18% to 14% and industrial employment has remained stable around 33%. In 2016, education, health and public administration services represented 37% of total employment of total services, followed by commerce with 26%. In manufacturing, textiles represented 37% of sector employment and electronics and mechanical industry 24%. While employment in agriculture decreased by 10% between 2007 and 2016, it increased in the same period by 51% in electronics and mechanical and in agro-alimentary industry. Construction employment increased by 23% and in the service sector, commerce increased by 30% and real state service by 57%¹⁵. Trade, real estate and the public sector are the largest contributors to the growth in employment of those with a tertiary education. In other sectors, mechanical and electronics industries and construction and public works are important contributors to employment.

The transition of employment from agriculture to other sector did not change the pattern of economic growth, neither the trend of productivity. The sectoral shift away from agriculture has not changed the fact that 75% of labor is employed in below average productivity sectors. The reallocation of labor has taken place from low productivity agriculture to low productivity activities in other sectors, with the exception of labor movement to transport and telecoms, hotels and restaurants, electronics and mechanical industry and business services that contributed positively to productivity, even if in a limited extent.

11. Public Sector employment

Public sector employment, which includes education, health and administrative services, represents, on average, 19% of total employment. Between 2007 and 2010 the public sector's share of employment declined. However, since 2010 a significant increase is observed due to the aforementioned measures adopted after the 2011 revolution. Social insurance benefits provides an additional incentive that many workers prefer to look for employment opportunities in the public sector. Higher salaries in the public-sector lead to higher reservation wages for skilled labor. This exacerbates the unemployment problem with skilled laborers because private firms are not willing or able to such higher reservation wages.

¹⁵ Author's calculations based on figures of the *Institut National de la Statistique* (<u>www.ins.nat.tn</u>).

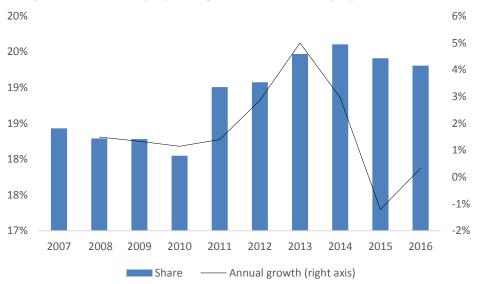


Figure 13. Public employment growth and total employment share, 2007-2016

Source : Institut National de la Statistique

12. Social insurance and social safety nets

Since its independence in 1956, Tunisia has progressed towards the universal provision of social welfare. The legal coverage understood as the legislative mandates to provide insurance to a particular type of beneficiary is currently equal to 95%. However, effective coverage has been lower than this.

The Social Protection System combines social insurance and social assistance programs that target specific categories. Civil servants and non-agriculture workers are covered by the *Caisse Nationale de Prévoyance et de Protection Sociale* (CNPPS) and the *Caisse Nationale de Sécurité Sociale* (CNSS), respectively. They enjoy better coverage than other types of workers. In particular, public workers have larger coverage rates and more generous benefits.

The extension of social insurance to the private sector was possible through the exports promotion programme. The horizontal extension of social insurance coverage has taken place through the creation of specific programs targeting agriculture workers, self-employed and low-income workers (who pay lower contribution rates but receive lower risk coverage).

The vertical extension of social insurance to other categories, such as the poor, the inactive, the disabled and other individuals with low contribution capacity, was done via the introduction of noncontributory programs. The *Programme National d'Aide aux Familles Nécessiteuse* (PNAFN) provides cash transfers to poor eligible families and gives access to health facilities, while the *Assurance Médicale Gratuite* (AMG) consists on health care waivers in public facilities to families below an income threshold. Despite efforts to extend social protection to vulnerable sections of the population and those with less employment stability, it is important to address the shortcomings and negative incentives that social assistance schemes create for firms and individuals, who often try to avoid the payment of contributions attached to social insurance protection.

			Benefits					
		Beneficiaries	Medical benefits	Sickness and Maternity Benefits	Death	Old age pension	Family Allowance	Work Injury
Social insurance	Caisse Nationale de Prévoyance et de Protection Sociale	Civil servants						
	Caisse Nationale de Sécurité Sociale	Private sector workers						
	Régime des Salariés Agricoles Amélioré	Agriculture workers						
	Régime des Travailleurs Non Salariés	Self-employed						
	Régime des Travailleurs à Faibles Revenus	Low income workers						
Social assistance	Programme National d'Aide aux Familles Nécessiteuses	Low income households						
	Assurance Médicale Gratuite	Low income households						

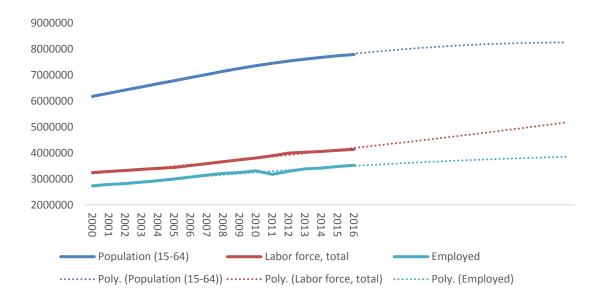
Table 8. Social protection system: regimes and benefits

Source: Centre de Recherches et d'Etudes Sociales Green cases represent available programs, otherwise the colour is pink.

13. Expected jobs required by 2030

Assuming no significant changes in labor force participation rates, we project an employment scenario for the coming years in Tunisia. Figure 14 plots the current labor force, the total population of the age bracket of 15 to 64-year and total employment between 2000 and 2015, together with projections up to 2030. These projections are calculated in a way that if we plan to reduce unemployment to its natural rate of 5% (i.e. to employ 95% of the future labor force), Tunisia will need to create almost 8 million jobs between 2017 and 2030. This corresponds to an annual average increase of 570,000 jobs, which is 8 times what the economy has been creating in recent years.

Figure 14. Labor market projections Public employment growth and total employment share, 2007-2016



14. Main policy challenges

- Create sufficient sources of employment: As these projections show, the main challenge faced by Tunisia currently and in the coming years is related to employment creation. Using a very strict criterion of 5% unemployment, the number of jobs required is high. However, this requires contrasts with the Tunisian economy's limited ability to create jobs in previous years. Although there has been a positive relationship between growth and employment creation, the economy has generally been unable to absorb the growing labor force.
- Promote high value-added activities: as the economy in Tunisia is manly concentrated in low value-added activities the possibility of creating enough employment to absorb the increasing labor force in high value-added activities is limited. Eliminating institutional constraints to invest and develop in high value added activities can lead to high growth rates and the absorption of more high skilled labor.
- Create decent jobs in the formal sector: informal employment, measured as the percentage of employees that do not contribute to social security, affects one third of the workforce. Thus, the challenge is not only about the quantity but also the quality of employment. As mentioned in the analysis previously, the highest unemployment is among those who are educated and ready for quality jobs. The issue is more severe when it comes to the employment of the educated females.
- Increase labor force participation rates: women in particular have very low participation rates; only a quarter of women are economically active. This issue is largely a result of cultural expectations with regard to household roles.

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- Address the high level of youth who are "neither in Employment nor in Education or Training": in 2013 this situation affected 18% of young people and 30% of young women. The reason behind the lack of access to education, high level of drop outs and lack of employment opportunities must be identified and addressed.
- Improve coordination between the demand and the supply for labor and reduce labor market frictions: the above analysis shows that a skills mismatch has led to high unemployment rates among skilled workers. Employers and educational institutions must coordinate in order to train the labor force according to market needs. Currently, the generous working conditions of public sector jobs create an incentive to queue for these jobs leaving the investment returns of education low.
- Female unemployment is still a major issue: Female unemployment in Tunisa is above the Arab world average (18%). Female unemployment reached a trough of 15.6% in 2004 rising back up to 27% during the revolution and dropped to 21% in 2016(Figure 5).
- Revise social assistance and social insurance programs: the existing social protection system that combines social assistance and social insurance schemes may be creating bad incentives for employers and employees that prefer to avoid social contributions. This situation negatively impacts social insurance funds and increases informal employment.