

HUMAN CAPITAL, LABOUR MARKET FRICTION AND MIGRATION IN EGYPT, JORDAN, MOROCCO AND TUNISIA

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ABOUT THIS STUDY

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This study provides a snapshot of the current status quo in education systems, labour market frictions and migration. It will be used as a baseline for the definition of a robust research agenda that ultimately aims at providing sound recommendations for policy makers to improve developmental outcomes and, especially, on how to manage the dysfunction of labour markets, leading to endemic unemployment particularly among the youth.

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TABLE OF CONTENTS

ABOUT THIS STUDY	2
TABLE OF CONTENTS	3
ABOUT EMNES	3
LIST OF FIGURES	4
LIST OF TABLES	7
EXECUTIVE SUMMARY	9
Education systems in Jordan, Egypt, Morocco and Tunisia.....	9
labour market conditions in Egypt, Jordan, Morocco and Tunisia	10
strategic issues concerning regional migration.....	14
PRIORITY AREAS FOR FURTHER RESEARCH	16
II. Human capital, labour market frictions and migration in Egypt	17
Introduction	18
Education system: structure and key challenges	20
Characteristics of the Egyptian education system.....	20
Quality and Effectiveness of Education	32
Reform policies and action plans.....	36
Characteristics of the Labour Market	38
The institutional framework.....	38
The Egyptian labour market: an overview	39
Recent labour market trends	40
Migration	47
Conclusion and policy implications	49
III. Human capital, labour market frictions and migration in Jordan.....	51
Introduction	52
Education system: structure and key challenges	53
Characteristics of the Jordanian Education System.....	54
Quality and effectiveness of education	59
Characteristics of the labour market	61
The institutional framework.....	62
The Jordanian labour Market: An Overview	63
Recent labour market trends	78
Employment policies.....	84

Characteristics of youth.....	85
migration.....	87
Conclusion and policy implications	92
IV. Human capital, labour market frictions and migration in Morocco.....	93
Introduction	94
Education system: structure and key Challenges.....	94
Characteristics of the Moroccan Education System	94
Quality and Effectiveness of Education	101
Different Reform Policies and Action Plans.	106
Characteristics of the Moroccan labour market	107
The institutional framework.....	107
The Moroccan labour market: an overview	109
Recent labour market trends	120
characteristics of youth in Morocco	126
Migration.....	130
Emigration trends and the impact of Moroccan migrants and returnees	131
From an emigration country to an immigration destination	133
V. Human capital, labour market frictions and migration in Tunisia.....	136
Introduction	136
Education system: structure and key challenges	137
Characteristics of the Tunisian education system	138
Quality and effectiveness of education	147
Characteristics of Tunisian labour market.....	150
The institutional framework.....	150
Recent labour market trends	156
Characteristics of youth in Tunisia.....	160
Migration	174
Conclusion and main findings.....	182
BIBLIOGRAPHY	184
ABOUT EMNES	191

LIST OF FIGURES

Figure 1: Unemployment, youth total (% of total labor force – Ages 15-24).....	12
Figure 2: Unemployment, female (% of total labor force).....	14
Figure 3: Unemployment, Male (% of total labor force)	14
Figure 4: Distribution of number of schools by educational stages (2014/15).....	22
Figure 5: Graduates of intermediate technical institutes by gender 2014/2015	24
Figure 6: Distribution of investment by educational sector 2013/14.....	26
Figure 7: Trends in student population growth in Egypt	28
Figure 8: Distribution of secondary schools in Egypt	30
Figure 9: Distribution of MOE secondary schools by region.....	31
Figure 10: Quality of education: academic achievement	33
Figure 11: Estimated labour force (2004-2016)	42
Figure 12: Estimated numbers in employment (2004-2016)	43
Figure 13: Employment rate by gender distribution, 2016.....	43
Figure 14: Per centage change of total employment by region (2009-2013)	44
Figure 15: Annual Unemployment Rate (2004- 2016).....	45
Figure 16 : Capital expenditure of the Jordanian government on education between 2003 and 2014 in million JD	55
Figure 17: Schools, students, and teachers in 2014.....	56
Figure 18: Jordanian adult population (15+) by educational level (DoS, employment survey, 2015).....	58
Figure 19: Jordanian population according to the last census results.....	64
Figure 20: Refined economic activity rate by age group and gender for 2015	66
Figure 21: Not economically active Jordanian population for 2015 by category and gender (per centage distribution for 2015).....	66
Figure 22: Not economically active Jordanian population available for work and not seeking work by reason for not seeking work (% for 2015).....	68
Figure 23: Evolution of the number of employed persons (in thousand workers)	69
Figure 24: Number of employed persons by gender in 2015	69
Figure 25: Jordanian employed persons in 2016 by age	71
Figure 26: Share of employed Jordanians by economic activity average 2003-2013 (calculation based on CBJ, 2013 and 2014).....	73
Figure 27: Employment contribution of firms by size (data from DoS, 2014).....	77
Figure 28: Number of establishments versus employment contribution of private sector establishments by size	78
Figure 29: Jordanian employed persons by education and wage category in JD (percentage distribution for 2015)	79
Figure 30: Unemployment rate between 1994 and 2015	81
Figure 31: Remittances in million US\$ and as percentage share of GDP (data source: World Bank, WDI, 2017)	88
Figure 32: Remittances as share of GDP between 2010 and 2015.....	88
Figure 33: Foreign workers in Jordan (in thousands)	90
Figure 34: Foreign workers by economic activity (2015).....	91
Figure 35: Outflow of workers' remittances between 2010 and 2014 in US\$ millions	92
Figure 36 - Pre-Primary enrolment rate (%)	96

Figure 37 - Primary Net Enrolment rate	96
Figure 38 - Secondary net enrolment rate (%).....	97
Figure 39 - Tertiary Enrolment Rate (%).....	98
Figure 40 - Government expenditure on education as a per centage of GDP by level (%).....	100
Figure 41 - Evolution of the parity index by level of education (in %).....	104
Figure 42 - Evolution of trainee enrolments by type of training.....	105
Figure 43 - Population in Morocco since 1960.....	111
Figure 44 - Duration of unemployment (1).....	116
Figure 45 - Participation rate (15 to 64) for a sample of countries (in%)	118
Figure 46 - Participation rate by gender.....	120
Figure 47 - Employment by activity sector	124
Figure 48 - Net Moroccan Migrants in thousands.....	132
Figure 49 – Net Moroccan Migrants (% in 1000)	132
Figure 50 - Number of detected illegal border crossing to Europe	135
Figure 51: Expenditure on education institutions as a share of GDP and of overall government spending, 2012	140
Figure 52: Annual expenditure per student by educational levels*	141
Figure 53: Total number of students by level of education	142
Figure 54: Unemployment rate.....	154
Figure 55: Unemployment rate by sex	155
Figure 56: Distribution of graduates’ unemployment by the type of specialty (2006-2015).....	156
Figure 57: Variation in the labour force number of labour force and the working age population of 15 years and over	156
Figure 58: Share of active labour force by sex.....	157
Figure 59: Share of employed labour force by status in occupation.....	158
Figure 60: Share of employed labour force by sector of activity	159
Figure 61: Net job creation by sex	159
Figure 62: Distribution of youth by status and gender.....	161
Figure 63: Distribution of unemployed youth by educational level	161
Figure 64: Distribution of unemployed youth by gender and place of residence.....	162
Figure 65: Distribution of employed youth by work type (in %)	163
Figure 66: Distribution of employed youth by activity sector and gender	164
Figure 67: Distribution of employed youth by contract type.....	165
Figure 68: Distribution of employed youth by the type of work.....	166
Figure 69: Distribution of employed youth by qualification	167
Figure 70: Tunisian youth according to economic activity status	167
Figure 71: Duration in various labour market statuses and years of experience (as per centage of total duration).....	170
Figure 72: Youth population by stages of transition and sex.....	171
Figure 73: Flows of outgoing and incoming migrants (2009-2014).....	175
Figure 74: Distribution of emigrants by destination (2009-2014).....	177
Figure 75: Distribution of emigrants by reason	177
Figure 76: Distribution by educational level	178
Figure 77: Evolution of transfers of emigrants in MD (1990-2012).....	179
Figure 78: Evolution of created jobs (2002-2011).....	180

LIST OF TABLES

Table 1: Percentage of students enrolled in pre-university education by sector 2014/15.....	21
Table 2: Distribution of public educational expenditure by educational stage in 2014/15.....	27
Table 3: Annual estimates of labour force and unemployment rates (15+), (2012-2015)	41
Table 4: The total number of egyptians living abroad by region	49
Table 5: Number of schools, students, and teachers for 2014	56
Table 6: Number of students enrolled in higher education programmes	58
Table 7: Evolution of the HDI for Jordan between 1980 and 2014, selected years.....	60
Table 8: Average population rates from 1952 to 2014, selected years.....	65
Table 9: Employed jordanians by educational level.....	70
Table 10: Relative distribution of jordanian employees (15 years of age or older) by economic activity....	71
Table 11: Net created jobs by gender, nationality, and sector from 2011 to 2013.....	76
Table 12: Size group of employment and establishments in 2013.....	78
Table 13: Average wages of paid employees by sector and gender for 2013 (DoS, 2014).....	80
Table 14: Jordanian unemployed persons age 15+ years by sex and major age groups (per centage distribution for 2015) (survey data by dos, 2016).....	82
Table 15: Jordanian unemployed persons age 15+ years by sex and educational level (per centage distribution for 2015) (survey data by DoS, 2016)	83
Table 16: Jordanian unemployed persons age 15+ years by sex and duration of unemployment in months (percentage distribution for 2015) (survey data by DoS, 2016).....	83
Table 17: SWTS sample by economy activity.....	85
Table 18: Young wage and salaried workers by type of contract and duration (%).....	86
Table 19: State budget allocated to education and training (in thousands of current dirhams)	99
Table 20: State budget allocated to higher education (in thousands of current dirhams)	100
Table 21: Literacy rate by age groups and gender in 2012.....	102
Table 22: Progress and completion in education.....	102
Table 23: Legal population of morocco from the 1960 census to 2018 and its annual avg. growth rate ..	110
Table 24: Legal population of Morocco from 1960 to 2018, according to place of residence (urbanisation rate)	111
Table 25: Unemployment rate by gender.....	112
Table 26: Unemployment rate by areas	113
Table 27: Unemployment rate by age groups.....	114
Table 28: Unemployment rate by degree.....	115
Table 29: Participation rate by age	119
Table 30: Employment by sector	121
Table 31: The rural sector jobs.....	122
Table 32: Employment by sector in urban areas.....	123
Table 33: Projected jobs, created by sector plans	126
Table 34: Tunisia's HDI trends*	137
Table 35: Evolution of schools and enrolled students in private sector	144
Table 36: Net enrolment ratio (NER) by age groups (public sector).....	145
Table 37: Participation in vocational training (initial training).....	146
Table 38: Indicators of internal effectiveness (%).....	148
Table 39: Indicators of internal effectiveness in higher education (%) -public sector	149

EMNES Studies No 5 /May, 2018

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Table 40: Youth employment by sector according to 1-digit ISCO categorisation and sex	168
Table 41: Unemployed youth by duration of unemployment and sex (%).....	168
Table 42: the average number of labour market status changes per year.....	170
Table 43: Transition youth by sub-category and sex.....	172
Table 44: Transited youth by sub-category and sex.....	173
Table 45: Indicators on the transition paths of transited youth by sex.....	173

EXECUTIVE SUMMARY

Rym Ayadi and Emanuele Sessa

This study provides an overview of the main characteristics of education systems and labour markets in four Southern and Eastern Mediterranean Countries (SEMCs) – namely Egypt, Jordan, Morocco and Tunisia – and discusses the difficulties facing the young in their transition from school to the labour market and the pressure for them to migrate. The analysis focuses on the latest trends in youth education, employment, and migration with a special focus on gender gaps and regional inequalities, as presented in the four chapters by the country experts in this study.

EDUCATION SYSTEMS IN JORDAN, EGYPT, MOROCCO AND TUNISIA

Jordan, Egypt, Morocco and Tunisia have invested significantly in education since gaining independence, with some impressive results in terms of youth literacy, school enrolment, gender differentials and access to education in rural areas. In the four countries, taking into account public sources of funding only, roughly 5% of GDP and 20% of government budget was spent in education, translating into increasing levels of annual expenditure per student over the years, with substantial differences between levels of education worth noticing.

Enrolment rates in primary education stabilised above 90%, with shrinking gaps between girls and boys and urban and rural areas, the exception being Egypt where the gender gap is still high and the enrolment rate remains low in specific areas. The number of students enrolled in secondary and tertiary education also increased and stabilised, with the notable exception of Tunisia, where enrolment in higher education started to decline after the revolution in 2011. Furthermore, illiteracy and dropout rates decreased substantially, resulting in very high literacy rates for youngsters aged between 15 and 24 in countries such as Tunisia and Jordan. In Morocco, the dropout rate in primary education has fallen but remains quite high in secondary education.

That said, these improvements are mainly quantitative in nature and a lot still needs to be done to improve the quality of education and gear it towards what the economy needs to develop, especially considering the additional pressure for education systems and labour markets that current demographic trends demand (Ayadi and El Mahdi (2013)). The scores of Egypt, Jordan, Morocco and Tunisia in international tests such as TIMSS, PISA or PIRLS are substantially lower than the average in all subjects. In particular, low levels of graduate employment suggest that higher education does not equip young graduates with the learning outcomes necessary for a successful transition into labour markets, or that the latter were not ready to absorb the higher number of graduates resulting from increasing enrolment rates in higher levels of education.

Public education essentially remained free of charge in the four countries. As a result, there were important and increasing costs to sustain this position, representing an important drag on necessary investments in modernisation (e.g. high cost of teaching staff in Morocco). As a result, private education experienced a substantial growth in recent years, particularly so at the primary and secondary level; 5% of the total number of children in primary education in Tunisia, 8% in Egypt and up to 12% in Morocco are enrolled in private schools. The figures are similar for secondary education. In Egypt, private tutoring is reaching new heights, with private expenditure exceeding public expenditure.

Training and vocational education (TVET), a field in which the involvement of private actors is inherently beneficial, is organised and promoted by public bodies and is broadly seen as a second-best form of education. Overall, it proved relatively unsuccessful in linking education and employment, pointing to the need for fundamental reforms.

LABOUR MARKET CONDITIONS IN EGYPT, JORDAN, MOROCCO AND TUNISIA

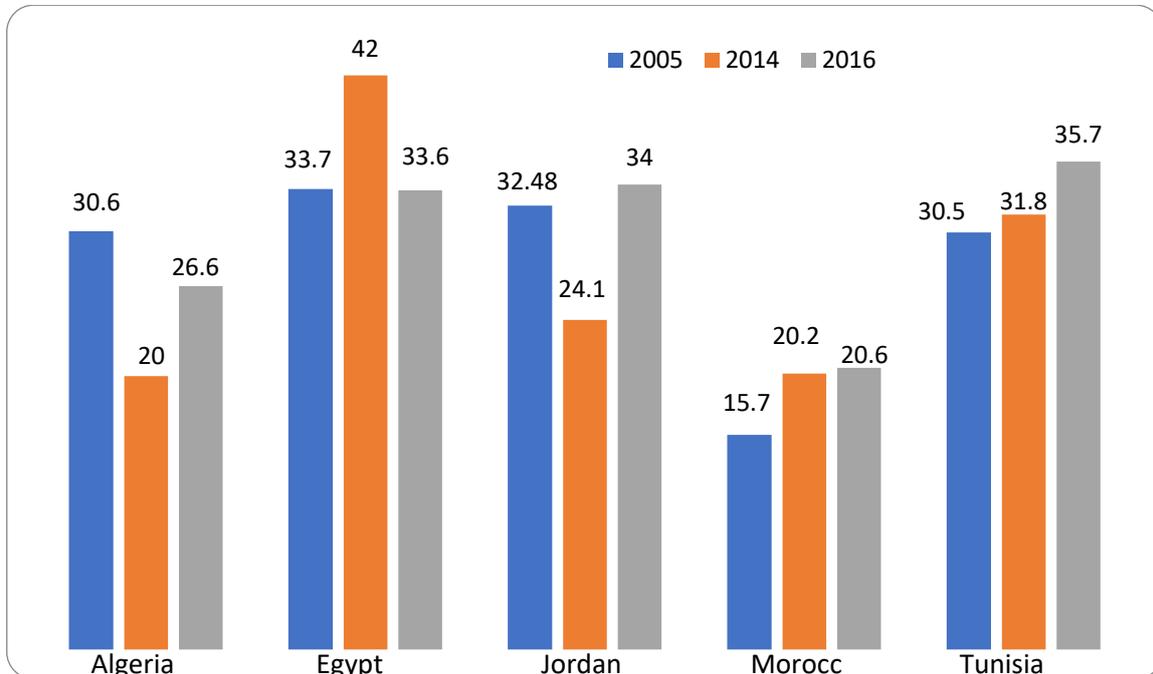
The most strikingly common feature of labour markets in the four countries under study is the high rate of unemployment – 16% in Tunisia, 13% in Jordan, 12% in Egypt and 10% in Morocco, according to the latest data published by the World Bank. That is twice

as much as the global average. Unemployment in these countries among other SEMCs can be considered structural and not cyclical, to the extent that it affects a very specific group of people – young, educated individuals searching for opportunities to enter the labour market – with substantial gender gaps. There is a positive relationship between high unemployment rates and the high number of educated new entrants to the labour market, resulting from the combination of expanding working age populations and enrolment in higher education.

The data available from censuses also shows that rates of participation in the labour force are substantially lower than the world average, hinting at the fact that unemployment is largely a matter of youngsters facing difficulties in entering the labour market, not of adults formerly employed having lost their jobs. The share of the population aged 15 or more that is economically active is estimated at 51% in Morocco, 49% in Egypt, 48% in Tunisia and 42% in Jordan. These figures hide important gender and regional gaps, with lower rates of participation for females, as compared to their male counterparts, particularly amongst middle-aged, educated women, and urban and rural divide.

In fact, youth unemployment rates in the four countries under study are two or three times higher than adult unemployment rates, reaching 34% in Jordan, Egypt and Tunisia and 21% in Morocco in 2016. Figure 1 shows that between 2005 and 2014, the four countries experienced increasing trends of youth unemployment, although with a certain heterogeneity. Morocco and Tunisia registered a steady increase in their rates of youth unemployment over the period, but the situation in the latter remained more stable and less problematic than in the former. Egypt experienced a surge in its youth unemployment rate, peaking at 42% in 2014, followed by a decrease back to the levels registered in 2005 in 2016. Jordan faced the opposite situation, with a sharp decrease in its rate, from 32% in 2005 to 24% in 2014, followed by a surge above 2005 levels in 2016. Tunisia experienced a sustained increase of youth employment, reaching more than 35% of the total labour force, making it the highest in the countries under investigation.

Figure 1: Unemployment, youth total (% of total labor force – Ages 15-24)



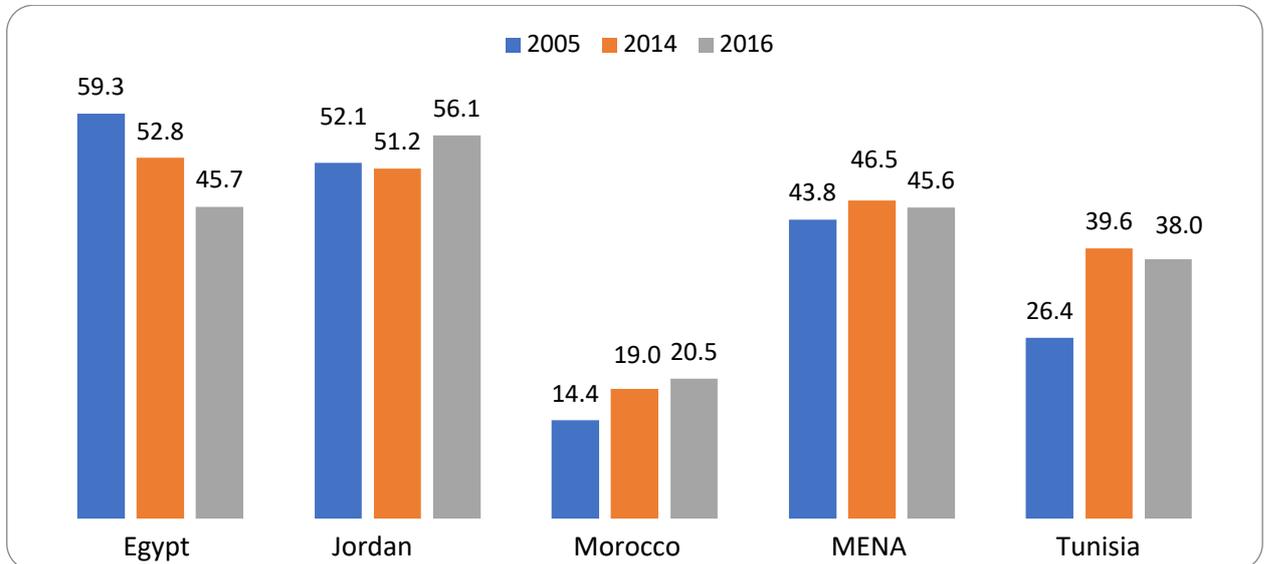
Source: OCDE

There is little doubt that conjunctural external and internal shocks related to the 2008 global financial and economic crisis and the 2011 political upheavals across the SEMCs contributed to the increasing trends in youth unemployment discussed above. However, the fact that education does not seem to be a guarantee against unemployment (Ayadi and Ramos (2017)) is a rather unique feature of labour markets in the SEMCs, as compared to benchmarking regions, pointing at structural problems, among which skills mismatches stand out. The latter refer to the discrepancies between the skills provided by education systems on the demand side and those requested by labour markets on the supply side, which complicate the transition of young graduates from education to employment. Hence, skills mismatches encompass problems on both the supply side, such as the inadequacy of university curricula and educational choices with the needs of the economy, and on the demand side, such as the weight of the public sector which provides up to 38% of total jobs in Jordan and 27% in Egypt for example, with important consequences for educational choices.

The results of the School-to-Work Transition Survey (SWTS), carried out by the International Labour Organisation in 2012-13, show that more than half of Jordanians aged between 15 and 29 years old (52%) fall into the category of transition not yet started. 76% of the interviewees had not started their transition to work as they were still students when the survey was conducted, but a consistent share of them (24%), turned out to be non-students with no intention to work - the overwhelming majority of whom were females. In Tunisia, more than half of female interviewees had not yet started the transition compared to one third of their male counterparts. The same substantial gap applies to the share of female and male interviewees having found stable employment, 15% for the former compared to 37% for the latter. As regards to the length of the transition from education to employment, the results of the survey show certain heterogeneity between countries. 33% of Jordanian interviewees having completed their transition have experienced a long transition, compared to around 25% of Jordanians and only 15% of Egyptians. Here again, the probability of women experiencing a short transition is lower than in the case of their male counterparts - 45% for the former compared to 56% for the latter.

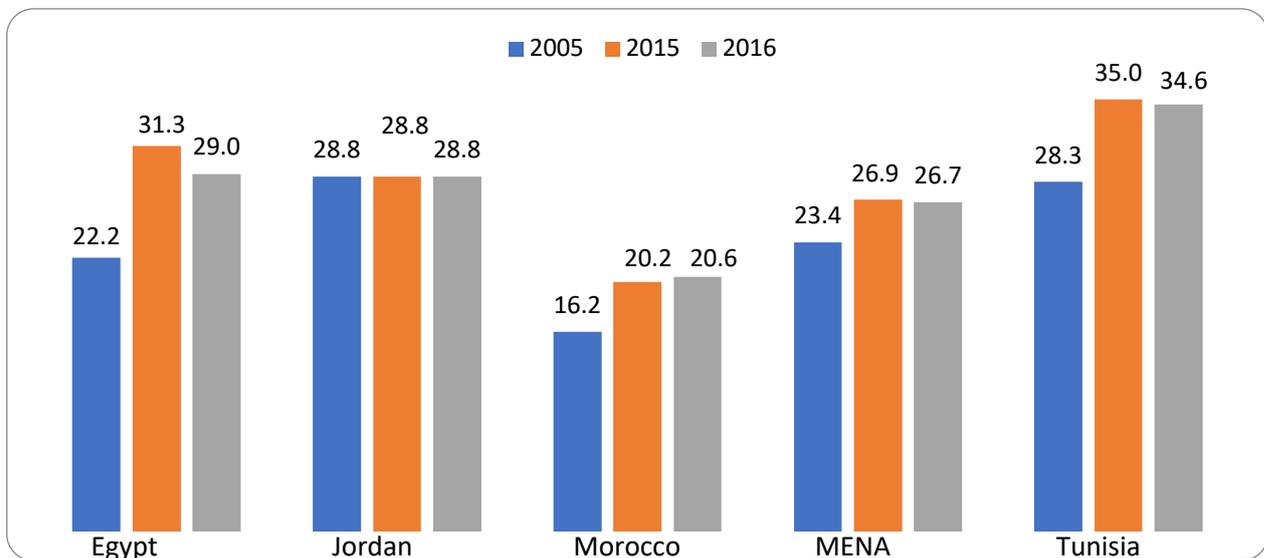
More broadly, concerning gender gaps, unemployment rates are substantially higher for females compared to their male counterparts in Jordan and Egypt, although the differential is much less pronounced in Morocco and Tunisia. However, in the four countries women are less likely to participate in the labour force, mostly due to lower participation rates among middle-aged educated women. Figures 2 and 3 show that the increase in registered unemployed in recent years affected males more than females in Jordan and Egypt, whereas in Morocco and Tunisia male and female unemployment followed similar trends. It is important to emphasise that, in the aftermath of 2011, labour markets in Egypt and Tunisia experienced more extreme variations than those in Jordan and Morocco, which were less affected by the political upheavals that shook the region and their consequences.

Figure 2: Unemployment, female (% of total labor force)



Source: OCDE

Figure 3: Unemployment, Male (% of total labour force)



Source: OCDE

STRATEGIC ISSUES CONCERNING REGIONAL MIGRATION

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EMNES Studies disseminate economic policy research to explore and assess the socio-economic drivers of the innovative, sustainable and inclusive development and growth models in the Mediterranean region.

The difficulties of transitioning from education to employment and the underlying issues of low returns to education and skill/education mismatches are broadly recognised as the main supply labour market factors pushing young from the SEMCs to emigrate, along with a number of issues related to the informal and precarious nature of most job opportunities in their home countries, such as poor working conditions and the lack of social security coverage. The persistent dissatisfaction concerning labour market conditions in their home countries, exacerbated by surging unemployment rates in relation to demographic trends, economic crisis and political upheavals, resulted in the dramatic increase of both migration flows and the share of youngsters in these flows.

A substantial share of youngsters emigrating in search of employment opportunities in countries such as France, with the main destination of emigrants from Morocco and Tunisia, or Saudi Arabia among other gulf countries, with the main destination of emigrants from Egypt and to a minor extent Jordan, are highly educated. This hints at the decision to migrate is in response to the lack of employment opportunities commensurate with the nature and level of skills obtained through higher education. David and Marouani (2017) pointed out that educated emigrants usually choose to stay in their host countries and that the higher the skills they acquire, the lower the probability of them returning to their home countries. This fact, more often than not is the result of the migrants' skills being more appreciated in the host country, representing a loss of skills for their home countries - the so-called 'brain drain' phenomenon.

This raises the question of returns to migration, virtually encompassing all the benefits or costs for the home country stemming from migration, but often reduced to the financial capital invested by migrants in their home country. Anda and Nordman (2014) analysed the skills acquired by migrants before and during migration and looked into how these skills were used upon return to their home countries, Egypt and Tunisia. The authors found evidence that the probability of being undereducated is lower among returning migrants. Anda and Marouani (2017) highlighted that migrations might have a negative impact on the productivity of Tunisia, as the probability of return amongst the highly skilled is low and there are no mechanisms in place to secure their contribution to the development of the country, as is the case in other countries such as India.

These results point to the policy issue of how to incentivise migrants to return to their home countries, in particular those whose skills are most needed, in order to maximise returns to migration. The considerable share of business owners and investors among migrants who did return to countries such as Egypt and Tunisia is revelatory of the potential for job creation of return migration in the two countries. In light of this, legal migration channels, facilitating the return of highly-skilled migrants to their home countries, should be established through dedicated bilateral and regional agreements.

PRIORITY AREAS FOR FURTHER RESEARCH

The regional overview of education systems, labour markets and migration issues in Egypt, Jordan, Morocco and Tunisia enabled us to shed light on the issue of low returns to education and to migration, dampening their perspectives of socio-economic development. On the one hand, education systems do not seem to provide young graduates with the appropriate skills to make a successful transition into the labour market. On the other hand, labour markets do not seem to provide highly educated new entrants with sufficient and sustainable job opportunities. The low return to education and skills mismatches are fuelling migration, but as long as migrants are better positioned to fulfil their potential in host countries than in home countries, the latter will not benefit from the higher skills acquired by the migrants in their host countries and the investment in their education before emigrating.

Further research focused on better understanding skills mismatches and estimating returns to education will need to consider the interrelation between the latter and migration. The latter has been increasingly used as a coping mechanism by young graduates facing high rates of unemployment, but in the absence of sound collaboration between host and home countries (such as labour matching), the sustainability of the current situation, labelled more often than not a migration crisis, is at risk. Home countries cannot rely on migration as a sustainable solution to the difficulties youngsters face in transitioning from education to employment. The quality of education systems must be improved along with and a structural transformation that favours a knowledge economy, able to absorb new, highly skilled entrants to the labour market. Host countries are already facing substantial challenges in integrating migrants into their societies and managing the increased pressure on their labour markets that these

represent, with more and more actors casting doubts about the sustainability of the situation.

In light of these considerations, it seems clear that the employment and migration crisis facing the Euro-Mediterranean region can only be solved through a strong collaboration between the EU and the SEMCs, based on a well-defined roadmap. Circular migration schemes could form the optimal strategy to reopen channels for legal migration. In such schemes, migrants must return to their home countries after working for a given period in a host country, with the possibility of coming back. This policy could prove beneficial for both the SEMCs and the EU. It would provide a solution to the reduction of working age populations in the EU on the one hand and the demographic pressure on saturated labour markets in the SEMCs on the other hand, while avoiding the social and cultural problems arising from permanent migration. Furthermore, circular migration schemes may create the conditions for those migrants involved to invest in their own education and to accumulate human capital, in addition to financial capital. SEMCs, in collaboration with the EU, should then find the best way to maximise remittances and attract the knowledge and skills of the diaspora back into their domestic economies, starting with the creation of an environment which is favourable to investment.

II. HUMAN CAPITAL, LABOUR MARKET FRICTIONS AND MIGRATION IN EGYPT

Marwa Biltagui

INTRODUCTION

Improving education is of great importance to the public. It can be said, that education reform policy has been one of the most essential topics during recent years in Egypt. Investment in education improves the quality of life for millions of people. Egypt contributed to the development of education in many Arab countries by sending educational missions, contributing to the educational systems and syllabus and receiving students from different Arab countries at both school and university levels. Nevertheless, in recent years, the Egyptian education system started to face some serious problems, especially the low levels of quality of education, the mismatch between the demand of the labour market and the supply of graduates, high rates of school drop outs and a great deal of misallocation of resources between pre-university and university education. The Egyptian educational process is supervised by a centralised system (Ministry of Education) with institutions having little control over decisions on the curriculum and programme development.

In Egypt, the government is responsible for offering free education at all levels. As a matter of fact, public schools and the governmental higher education institutes are overcrowded with high-class density, resulting in a declining teaching quality (Kozma, 2004). The pre-university education system is divided into public and private schools. Public schools include regular, experimental and technical schools. Technical education, which is provided in three-year and five-year programmes, includes schools in three different fields: industrial, commercial and agricultural. Private schools have smaller class sizes, with approximately 25 students per class. They are also significantly more expensive than public schools. Public experimental schools also charge fees but these are lower than for private schools. The class sizes for experimental schools range between 40-50 students per class. On the other hand, regular public schools are free, but they

have between 70-80 students per class (CAPMAS, Egypt in Figures, 2013). Higher education in Egypt consists of university and non-university education. University education comprises of 20 governmental universities, including Al Azhar University. In addition, there are 19 foreign and private universities (Biltagy, 2015).

In a post revolution context, educational decisions are part of the changing environment. This means that political transformation and variable policies will affect the Egyptian education system.

The mismatch between the outputs of the education system and the requirements of the job market represents one of the key causes of the high rate of unemployment in Egypt, which was officially estimated at 12.4% in the fourth quarter of 2016 (CAPMAS, Bulletin of Labour Force, 2016). Unemployment is particularly high among university graduates; this fact poses a number of economic, political and social threats. It is estimated that the unemployment rate in the 15-29 age range reached 27.3%.

Furthermore, it can be recorded that Egypt's labour market efficiency rank is 134th out of 137 countries. Moreover, Egypt ranks 70th out of 137 countries in hiring and firing practices, 98th out of 137 in flexibility of wage determination, 107th out of 134 in pay and productivity, 116th out of 134 in country capacity to attract talent and 131th out of 137 in female participation in the labour force (Global Competitiveness Report 2017/2018).

The main objective of this chapter is to provide an economic assessment of the education system in Egypt, in order to identify the major problems and find suitable solutions. This economic analysis will be supported by a general review of the Egyptian education system, with special emphasis on its structure. The results will give rise to innovative strategies to change curricula, to make sure that research serves the needs of social and economic development which is sustainable, and to enable students to develop their knowledge, values and skills that society needs for real progress. Moreover, this chapter tackles the characteristics of the labour market, the characteristics of the youth and migration framework in Egypt. Accordingly, this chapter is structured as follows: section one introduces the characteristics of the education system in Egypt and the key challenges, then a presentation of the reform policies and

action plans. The subsequent sections tackle three important points, i.e. the properties of labour market, the characteristics of youth and migration in Egypt.

EDUCATION SYSTEM: STRUCTURE AND KEY CHALLENGES

In the past, for a long period, the Egyptian education system was well positioned in the Middle East, where Egyptian teachers and professors set the educational standards and systems for other countries. Today, the Egyptian education system is characterised by a high level of absenteeism of teachers and students, in particular in public schools. This situation can be attributed to, on one hand, the low quality of teaching which leads students compensating for the lack of knowledge with private sessions and, on the other, the lack of teacher training which causes a serious problem, especially in pre-university education.

In what follows, the characteristics of the education system in Egypt, the quality and effectiveness of education and the main reform policies and action plans will be presented.

Characteristics of the Egyptian education system

The Egyptian educational structure consists of a kindergarten ¹ stage for two years, then primary and preparatory education (elementary stage of education). It is followed by secondary school, but a number of children do not complete this level of education because they prefer work rather than education, in order to support their families. These stages of education are called pre-university education. Then, the final stage in the formal education structure in Egypt is the higher education system.

Primary and secondary education

Educational enrolment rates have improved during the last few years. However, the enrolment rates remain low in specific areas (Upper Egypt governorates and rural areas in Lower Egypt governorates) and in groups (poor individuals) (EHDR, 2010). More specifically, primary education enrolment rate was 95.6% and secondary education enrolment rate 72.5% in 2010 (GCR, 2013).

¹ This stage of education is called pre-school education, which is an independent educational stage for children aged 4 to 5 years.

The number of students enrolled in primary, preparatory and secondary education amounted to approximately 19.28 million in 2014/15. The total number of schools amounted to approximately 510,000 and the total number of classrooms was 467,000² (CAPMAS, Egypt in Figures, 2016). Moreover, the total number of students enrolled in Al-Azhar pre-university religious education was 1.9 million students. Furthermore, the total number of students in integrated or experimental schools was 621,500. The total number of students in pre-university education was 21.2 million in 2014/15 (CAPMAS, Egypt in Figures, 2016).

The types of schools in Egypt consist of public schools, private schools and international schools, in which the curricula are taught in the mother language of the foreign countries. The Ministry of Education does not supervise these schools and they offer different certificates, for example, an International General Certificate of Secondary Education (IGCSE) and an American Diploma. In addition, Al Azhar religious schools provide another kind of education, which contains Quran and other Islamic studies; Al Azhar Al Shareef is responsible for the teaching staff and employees of Al Azhar schools (Biltagy, 2012).

Table 1 illustrates that a large majority of students in different stages of education enrolled in governmental educational institutions. The percentage of students enrolled in governmental schools was 79.95% in 2014/15 and this percentage increases approximately to 91.6 % if Al Azhar religious education and the integrated education are included. This implies that the percentage of students enrolled in private schools represented only 8.4 % in the same academic year.

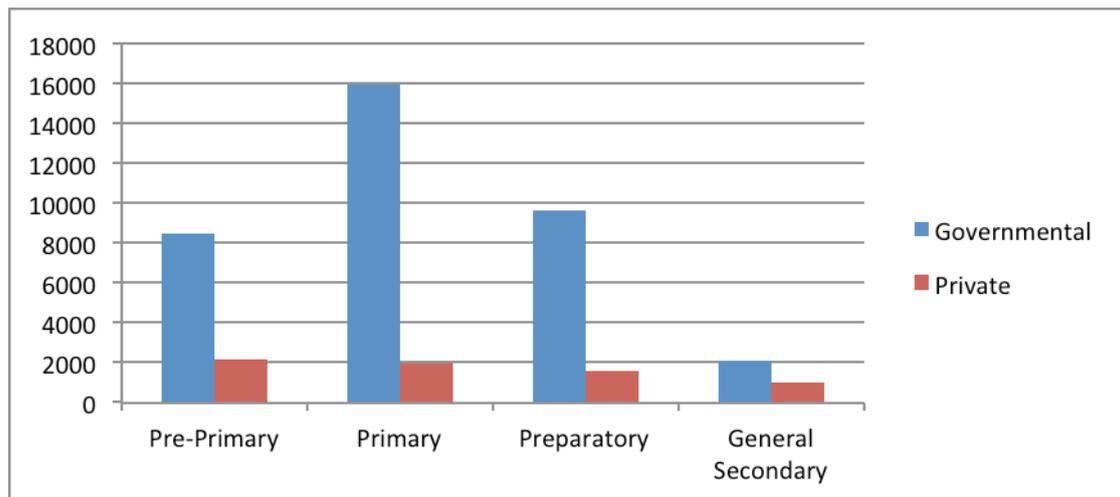
Table 1: Percentage of students enrolled in pre-university education by sector 2014/15

Sector	Percentage (%)
Governmental Schools	79.95
Al Azhar Religious Schools	8.83
Integrated Schools	2.8
Private Schools	8.4
Total	100

² These estimates include Single Class (mixed) and Improving Crafts for Girls.

Source: Author based on CAPMAS, Egypt in Figures, 2016.

Figure 4: Distribution of number of schools by educational stages (2014/15)



Source: Author based on CAPMAS, Egypt in Figures, 2016.

Technical and vocational training

Basic technical and vocational education and training (TVET) in Egypt is provided through secondary education in technical and commercial schools and post-secondary education in training institutions. Other forms of training include on-the-job training, and the re-training of people already in the labour force, who are both employed and unemployed. Each of these can be channelled through either private or government institutions.

Poor employment outcomes for technical and vocational students have led the government to reconsider the policy of streaming. Egypt’s governorate has adopted a new Education Strategic Plan for 2014-2030. “It includes Technical Education Development Programme, in which the initiative of ‘a factory in each school and a school in each factory’ is approved, as well as implementation of the Egypt-European Union Support to the Technical and Vocational Education and Training Reform Programme in

Egypt (Phase II) – known as TVET II. This programme envisions developing technical education, including reforming the Egyptian technical education curriculum in light of international models so as to prepare workers appropriately and fulfil the requirements of sustainable development” (OECD, 2015).

The technical education sector (about 1.6 million students) is comprised of technical and commercial secondary schools that offer a technical diploma for 3-year courses, and a technical diploma for 5-year courses. Limiting entry to general education meant that more students had to be directed to the technical and vocational stream. Furthermore, most of the students left education to directly enter the labour market. In addition, few of those who completed their course proved capable of competing for university places, providing only about 5% of university entrants, with the rest coming from general education.

The new technical education strategy 2011/12 to 2016/17 identified the need to develop technical education; the strategy’s key targets included improving infrastructure for schools and raising teaching standards. In the academic year 2014/15, out of the 3.2 million students enrolled in secondary school, 51.74% (1,645,750 students) were in Ministry of Education (MOE) administered vocational secondary schools, offering three-year technical diplomas, five-year advanced diplomas and specialisations in industrial, commercial and agricultural skills. In 2014/15, female students represented 44% of total enrolment in technical education (CAPMAS, Egypt in Figures, 2016).

Encouraging students into technical tracks at post-secondary level is a challenge; this may be attributed to the broader social assumptions about the importance of a university degree. The significant interest in the vocational education model includes a new emphasis on job experience and technical and vocational skills from an early age. The new plan places special attention on getting students out of the classroom and into job training, in collaboration with the private sector.

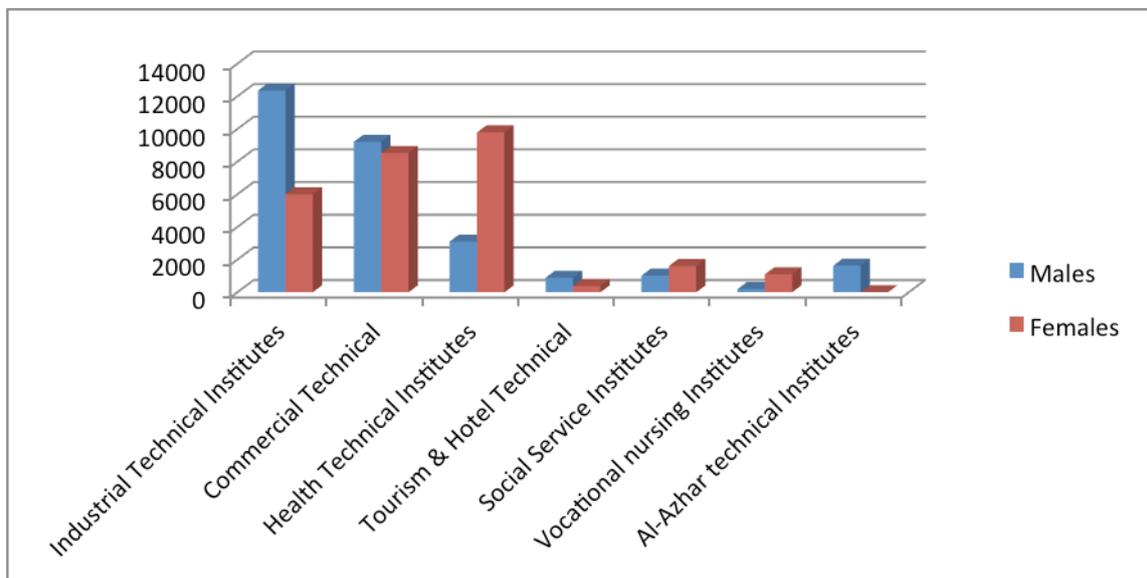
Higher education

Higher education in Egypt consists of university and non-university education. University education includes 24 governmental universities, including Al Azhar religious University. In addition, there are 19 foreign and private universities (CAPMAS, Egypt in figures, 2016). In 2014/15, the total number of students in foreign and private

universities was approximately 83,000 students (36,000 females and 47,000 males). On the other hand, the number of students enrolled in governmental universities was approximately 1.9 million students in 2014/15, including 304,000 students enrolled in Al Azhar University (CAPMAS, Egypt in Figures, 2016).

Non-university higher education includes higher education in some academies, faculties and institutes, for instance, the Police Academy and the Military College. These institutes are supervised by the Ministry of Interior and the Ministry of Defence. Moreover, non-university higher education includes higher institutes, under the direct supervision of the Ministry of higher Education. The total number of graduates of higher institutes and some academies in 2013/14 was approximately 52,000³ (12,600 females and 39,400 males). Figure 5 illustrates that the total number of graduates of intermediate technical institutes in 2014/15 was around 55,900 (27,400 females and 28,400 males) (CAPMAS, Egypt in Figures, 2016).

Figure 5: Graduates of intermediate technical institutes by gender 2014/2015



Source: Author based on CAPMAS, Egypt in Figures, 2016.

³ These estimates include Police Academy records (542 students).

The pre-university education system is highly centralised under the direct supervision of the Ministry of Education (MOE). MOE plays the essential role in forming the educational process and formulating the curriculum and textbooks. The MOE is responsible for educational policy, planning, budgeting, assessment of the educational process and supervision. This poses constraints on teachers to stick rigorously to the curriculum set by the ministry⁴. Technical and vocational education and training is provided through two channels; technical and vocational schools under the supervision of MOE and intermediate technical institutes under the supervision of the Ministry of Higher Education (MOHE). There are two levels of technical education, either three years programmes that prepare middle-level technicians or five years programmes, which present high-level technicians. In general, vocational education suffers from low status, poor quality and minor funding.

Similarly, the higher education system is controlled mainly by the MOHE in addition to some other governmental institutions, for example, the Ministry of Finance and Supreme Council of Universities. This kind of centralised control represents a main challenge for the Egyptian education system (Biltagy, 2013).

Indicators of public education investment

- Efficiency indicators, performance and expenditure on education

The performance of the education sector in Egypt is poor, despite increasing funds allocated to this sector. Government expenditure on education has grown remarkably during the last 10 years. The amount of the government's budget⁵ directed to education increased from L.E. 40 billion in 2009/10 to L.E. 64.5 billion in 2012/13 (Biltagy, 2015). Moreover, the new budget in 2014/15 assigned L.E. 94 billion and 355 million to the education sector, with an increase of L.E. 11 billion compared to the amount devoted

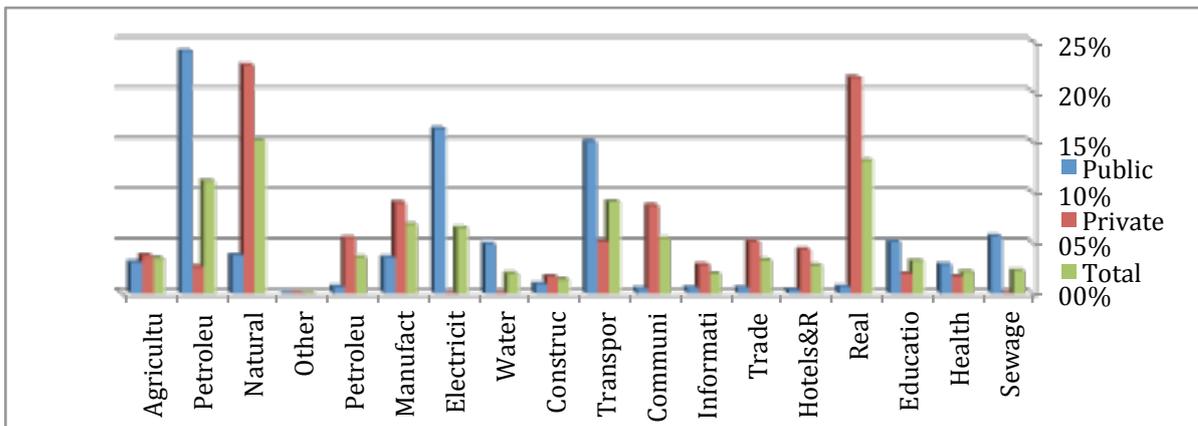
⁴ All public and private schools follow the specific curriculum set by the MOE, but governmental schools are more rigid, i.e. allowing little flexibility in planning of lessons. In addition, government supervisors visit classrooms from time to time to ensure fulfillment of the designed plans.

⁵ As a per centage, the amount of the total public expenditure directed to education decreased from 16% in 2004/05 to approximately 12% in 2009/10, and this per centage remained stable at 12 % in 2014/15.

to education in 2013/14 (MOF, 2014). As a percentage of GDP, government spending on education reached 4.4% in 2006, decreased to 3.7% in 2009/10 and amounted to 4% in 2014/15 (ENCC, 2009; 2010 and MOF, 2014).

Nassar and Biltagy (2016) stated that “The percentage of public expenditure on education to the total public expenditure was 11.7% in 2010/11 and 2013/14. However, the percentage of public expenditure on pre-university education to the total expenditure on education has increased from 66.4% in 2010/11 to 68.1% in 2013/14, while the percentage of public expenditure on university education to the total expenditure on education has remained constant in 2011/12- 2012/13 (21.4%) and reached 22.4% in 2013/14. As a percentage of GDP, the public expenditure on education was 3.4% in 2010/11 and 4.1% in 2013/14. Moreover, regarding regional expenditure on education, it was concluded that the lowest allocations directed to the educational directorates located in Upper Egypt, while the highest allocations directed to educational directorates in the Lower Egypt”. Figure 6 demonstrates that, the total investment on the education sector was relatively low.

Figure 6: Distribution of investment by educational sector 2013/14



Source: Author based on Ministry of Planning, 2013/2014.

“Egypt’s public spending on education is high as compared to international standards. Relative to other countries with comparable incomes, its spending on

education as a proportion of total public spending (19%) is topped only by Jordan’s. As a share of GDP, Egypt’s spending is comparable to the Organization for Economic Cooperation and Development (OECD) average of 5% and higher than the 4% average of lower middle income and MENA countries. Problems in education thus stem more from ineffective and inefficient spending than from a lack of resources.” World Bank (2005).

In Egypt, spending on education is biased against pre-university education. Table 2 gives evidence of that bias; the number of students enrolled in pre-university education represents a large percentage of the total number of students enrolled in the education system, however, public expenditure on pre-university education of the total expenditure on education was 71.8% in 2014/15. On the other hand, higher education share was 21.2% of the total public educational expenditure on education in the same academic year (CAPMAS, Egypt in Figures, 2016). It is estimated that the per capita expenditure on education reached about 5000 Egyptian pounds in 2014/2015.

Table 2: Distribution of public educational expenditure by educational stage in 2014/15

Item/ Stage	Pre-University Education	Higher Education	Other Aspects of Expenditure on Education	Total
Public Expenditure on Education (in billion)	67.8	19.9	6.6	94.3
% of Total Public Expenditure on Education	71.8	21.2	7	100

Source: CAPMAS, Egypt in Figures, 2016.

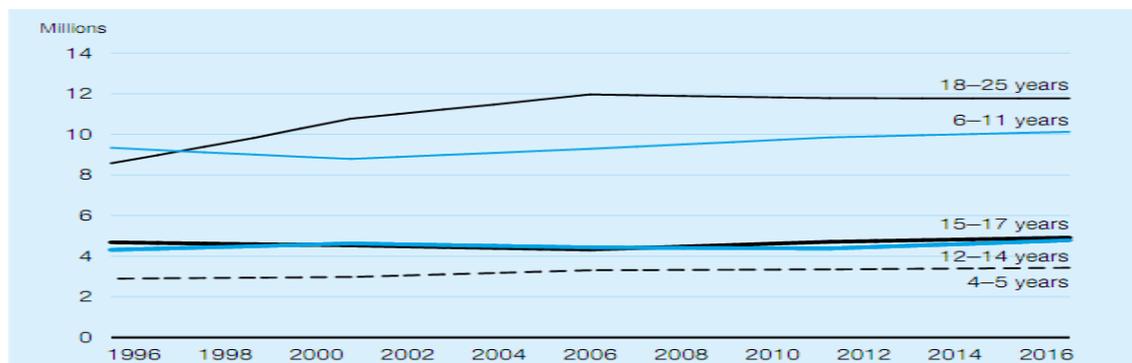
According to the structural allocation of public educational expenditure, it can be said that there is a strong bias towards current expenditure against capital expenditure, which leads to multi-school shifts, high-class density (overcrowding), poor facilities and shortage in the number of schools. This leads to the creation of an environment which goes against the learning process. Moreover, the wages and salaries represent a high percentage of the total public current educational expenditure. Regarding the regional allocation of public educational expenditure, it is obvious that there is a bias against some governorates, especially Upper-Egypt governorates (for example, Asyout, El Menia

and Beni-Suef) and also rural areas in Lower-Egypt governorates, compared to urban ones, which affects the quality of education. These disadvantaged governorates suffer from low levels of educational attainment because of limited financial resources, in addition to the low quality levels of education.

- Trends and analysis

As mentioned above, most students from primary to university levels are enrolled in governmental institutions. World Bank (2005) mentioned that the pre-university population (4–17 years old) will grow at an average of less than 1% per year from 2007 until 2016, while the population in the university stage (18–25 years old) will continue to grow at an average of more than 2% per year. Figure 7 demonstrates that student population growth is not significant, especially at the pre-university stage.

Figure 7: Trends in student population growth in Egypt



Source: MOE, *The National Plan for Education for All 2002/2003 – 2015/ 2016*.

Bray (2009) has explained the concept of the shadow education system. In Egypt, the shadow education system, in terms of private lessons, has increased heavily in recent decades in almost all stages of education. The shadow education system can be explained by the informal education market in which students act as consumers, and teachers or professors, act as suppliers (Chubb and Terry, 1988). The informal education

market in Egypt includes different types of private tutoring; the first type is private lessons provided by teachers and professors at students' homes, or in specialist educational centres in the afternoon or in the evening. These lessons consist of one student or a small number of students. The second type is called sections, which consist of larger number of students and, accordingly, these sections are not highly expensive (Hartmann, 2008).

Biltagy (2013) ascertains that, on average, the annual expenditure on education by families is L.E. 3706.1, which represents 16.7% of the total annual expenditure of households in all parts of Egypt. It is estimated that, the volume of household expenditure on education was L.E. 55.73 billion in 2011/2012.

In fact, educational reform has been at the top of the government's agenda since the beginning of the 1990s. However, the education sector still faces many problems i.e. the quality of education is low and is unequally distributed among regions and areas, especially among Upper and Lower Egypt and in urban and rural areas, leading to inequality of educational outcomes (World Bank, 2007). Herrera (2006) ascertains that each education system confronts different challenges that have overlapping interests and effects. In Egypt, the [government](#) recognises that there are real challenges in the education sector, for example, the need to significantly improve the governance and efficiency of the education system, increase institutional autonomy and significantly improve the quality and relevance of educational programmes.

- Gender equality assessment

In Egypt there is a gender gap in education. The current total population is approximately 91 million (as of 2017). The enrolment rate in primary education is 95.4%, with 96.1% boys and 94.7% girls. Some studies have indicated that female enrolment ratios are as much as 20% lower than for males, with higher dropout rates. The most alarming indicator is that 2.8 million children between the ages of 6 and 18 have never enrolled in school or have dropped out. This represents 8.1% of children in that age group. These children do not typically live in urban environments and often are wage

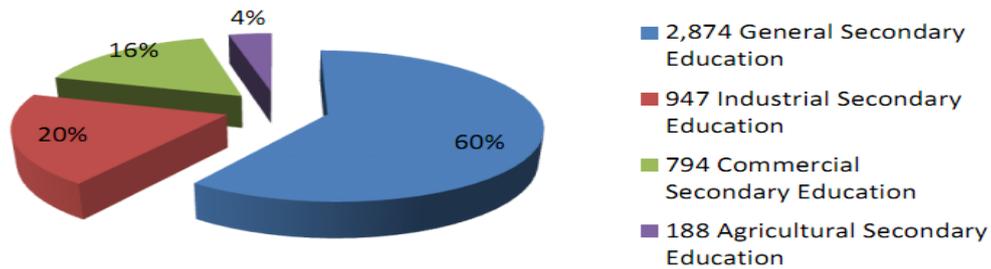
earners for their families and come from poor households. The Survey of Young People in Egypt 2009 (SYPE 09) demonstrates that 40% of young in the poorest quintile are severely educationally deprived; while, less than 2% of young in the richest quintile suffer from severe educational deprivation.

Training programmes, technical and vocational training

As mentioned above, the Egyptian secondary school education system offers two main tracks: one that is academic and the other that is technical. The former typically leads to university via the general secondary school, and the vocational route usually via the technical secondary school level. The Egyptian economy has not been able to create enough jobs for university graduates or graduates of the Technical Vocational Education and Training (TVET). The unemployment problem in Egypt is dangerous since the unemployment rate increased from 9.4% in 2009 to 12.4% in the fourth quarter of 2016. The high rate of unemployment may be attributed to the wide skills mismatch between what is demanded by the labour market and what is provided by the education and training systems. The fact is that neither university education nor TVET have offered a serious level of skills development that qualifies the young for jobs in the formal sector. It can be said that Egypt is suffering from deficiencies in its education and training system.

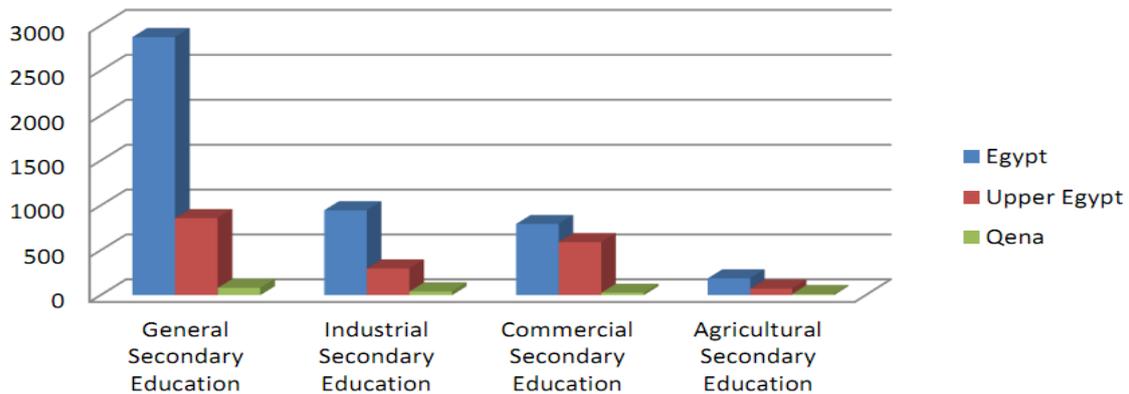
Nevertheless, with globalisation and high levels of technological development, TVET has stopped being an educational tool that targets youths associated with relatively lower academic performance or low socio-economic status. Instead, it has become a basis for development. International experience indicates that TVET lies at the core of the lifelong learning approach that is so necessary in unstable economies and in a complex and competitive specialised environment. Technical and vocational training can also contribute to closing the gap between an unproductive traditional curriculum and school dropouts, and the increasingly technological skills necessary for market-driven youth employment.

Figure 8: Distribution of secondary schools in Egypt



Source: Author based on MOE, the Statistical Summary of Pre-University Education 2012 – 2013.

Figure 9: Distribution of MOE secondary schools by region



Source: Author based on MOE, The Statistical Summary of Pre-University Education 2012 – 2013.

Figure 9 clarifies that the distribution across Egypt favours general secondary schools, or the academic path to university education. This focus of educational resources ignores the potential of a well-developed TVET system that would contribute substantially to productive employment and help resolve the mismatch between labour market requirements and necessary skills. The most important point is the very low

availability of the TVET Agricultural component throughout the primarily rural and agricultural region (Upper Egypt).

Quality and Effectiveness of Education

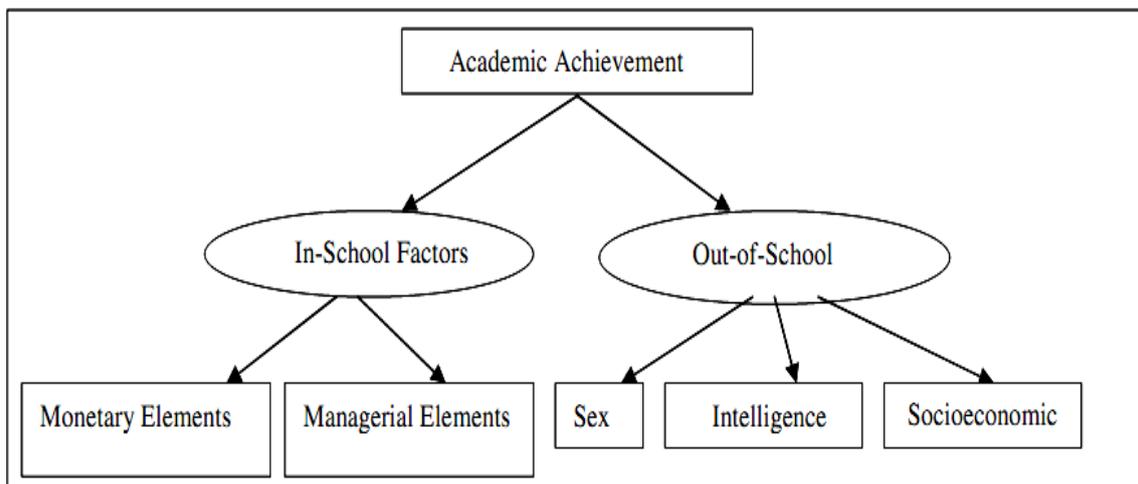
“To define the concept of quality of education, it is important to specify five dimensions of quality: learners, environments, content, processes and outcomes (UNICEF, 2000). The World Declaration on Education for All in 1990 noted that the poor quality of education needed to be improved and recommended that education should be for all with relevant quality. This means that, expanding access alone would be insufficient for achieving sustainable development. The Declaration also considered quality as a prerequisite for achieving the equity goal; accordingly, emphasis should be given to improve the quality of education” (Biltagy, 2012).

Biltagy (2012) stated that the goals of an educational institution should include: student satisfaction consistent with professional standards; continuous improvement of the educational service and efficiency in providing the educational service. Total Quality Management (TQM) can be seen as an educational reform programme or a reorganisation plan for an institution. In other words, TQM is an approach to achieve quality by emphasising continuous improvement (Parker and Slaughter, 1992).

“Governments must work to ensure basic education of quality for all, regardless of gender, wealth, language or location. There are a number of requirements to achieve quality of education (UNICEF, 2000 and UNESCO, 2009): students should have a good health and nutrition; teachers should be well-trained and the techniques of learning should be new; facilities and learning materials should be adequate; curriculum should be relevant and depends on the skills, knowledge and experience of the teachers and students; the environment should be healthy and safe in order to encourage learning. Moreover, the family support for learning is extremely significant and the assessment of learning outcomes should be defined in an accurate way. In education, high levels of quality mean high levels of academic achievement among individuals. This means that, quality of education is an important input of school achievement (Heyneman and Loxley, 1983). Figure 10 shows that there are two types of factors that affect academic achievement; namely, in-school and out-of-school factors. The first type includes monetary and managerial elements. Monetary elements consist of many factors like school budget per student, textbooks per student (cost of books), teacher salaries and

the availability of reading material at school. Moreover, managerial elements include the number of hours of homework, time spent in libraries, the degree of association between parents and teachers and the educational levels of teachers. On the other hand, out-of-school characteristics include sex, socioeconomic status and degree of intelligence of an individual” (Biltagy, 2012).

Figure 10: Quality of education: academic achievement



Source: Author’s elaboration based on Heyneman and Loxley (1983).

Based on Fuller (1986), Biltagy (2012) stated that “There are many factors that explain the differences of school quality among countries. For example, quality of education differs depending on the national income of the country. This means that, as GDP per capita increases, the resources allocated by government to education sector increase as well. Furthermore, the size of education sector relative to other sectors in the economy affects the level of quality of education. The allocation of priorities in education sector affects the school quality i.e. if the priority is to increase enrolment rates, then, this may decrease the quality of education because the resources are devoted to other purposes regardless of quality. This means that, it is difficult to foster both goals at the same time”.

Main challenges of the Egyptian education system

More specifically, the Egyptian education system faces many challenges, especially regarding efficiency. Internal inefficiency is due to inadequate resources devoted to the education system, in addition to bad management of these resources, insufficient school buildings, the bad conditions of existing schools, overcrowded classes and unqualified teachers. Alternatively, the inconsistency of the relationship between labour market requirements and qualifications of graduates is the main reason of external inefficiency. The internal inefficiency of the education sector in Egypt has two dimensions; quantitative and qualitative. Quantitative factors include illiteracy rates, enrolment rates, class density, students per teacher and expenditure on education. Qualitative aspects are related to the poor quality of the education sector in Egypt. Moreover, the curriculum remains one of the most important problems i.e. the curriculum diminishes the creativity of students (EHDR, 2010).

It can be said that the five-year strategic plan (2007/2008 - 2011/2012) of the MOE addressed, to some extent, each of the major inefficiency issues. These included high levels of unqualified staff, low salaries of teachers, few incentives for teacher to improve their performance, difficulties of implementing new technologies and innovations and a highly centralised system (MOE, 2003 and World Bank, 2007).

The worsening position in the quality of primary education is one of the main reasons for Egypt's low ranking⁶ in the global competitiveness index (GCI) in 2015-2016. Regarding GCI, Egypt drops by 24 positions to 118th place (out of 148 countries) in 2013-2014, compared to 94th position (out of 142 countries) in 2011-2012 (GCR, 2013). In 2015/16, Egypt's rank was 116th out of 140 countries (GCR, 2015/16). This evidence of terrible deterioration can be attributed to the continued unstable environment due to the revolutions and the period of transition.

⁶ According to the Global Competitiveness Report 2015- 2016, Egypt was the worst in the world in quality of primary education. Its position was 139th out of 140 countries across the world and its rank was 2.1, in which the rank 1 = extremely poor, among the worst in the world and the rank 7 = excellent, among the best in the world.

Moreover, the Egyptian education system suffers from bias against the poor. According to SYPE 2009, individuals who never enrolled and who dropped out before completing their basic education emanate from the poorest households living in rural areas. Educational enrolment rates have improved during the last few years. However, enrolment rates remain low in specific areas (Upper Egypt governorates and rural areas in Lower Egypt governorates) and in groups (poor individuals) (EHDR, 2010).

Furthermore, the low quality levels in higher education represent a problem, due to the growing number of unqualified graduates, who are unable to meet the requirements of the labour market. Elwan (2010) ascertains that, there are many factors that led to low quality levels in higher education especially in some areas, for example, unavailable facilities for some faculties, overcrowded universities and low levels of per capita expenditure. More specifically, the per capita government spending on higher education is very low (about \$413 per student). This amount is very low if compared to other countries with high quality levels of education, like the U.S. (\$22,000 per student) or Australia (\$14,000 per student) (ENCC, 2010 and EHDR, 2010).

Another challenge for the higher education system is to improve the quality and relevance of its educational programmes. In that regard, a national conference on higher education reform was held in February 2000, and a declaration for action originating from the conference identified 25 specific reform initiatives, which were to have been implemented through three phases until 2017. In August 2004, the Higher Education Enhancement Project (HEEP) strategic priorities were adjusted to become responsive to the requirements of quality and accreditation. Furthermore, a Strategic Planning Unit (SPU) was established for the MOHE to ensure the sustainability of planning and project monitoring during the three reform phases (MOHE, 2009).

Higher education faces additional specific challenge, i.e. limited funds devoted to scientific research. The percentage of public spending on scientific research was 0.8% in governmental universities and 1.9% in private universities in 2009/10 (IDSC, NHESP, 2011).

To sum up, the main challenges of the Egyptian education system are:

- High rates of poverty lead to high rates of illiteracy. It can be said that poverty is one of the most fundamental problems that hinder any development in Egypt. Education at school, college or university is considered an investment that generates benefits over time. Such benefits include: skills improvement, more job opportunities and higher future earnings for any individual. People with more education - defined as higher number of years of schooling - generally get higher wage rates than those with fewer years of schooling and are more likely to find appropriate employment opportunities (Haveman and Wolfe, 1995).
- The Egyptian education system is very centralised, with a standard curriculum and schedule determined by the MOE and MOHE.
- Absence of incentives for government employees to perform in an efficient manner. They are underpaid and have limited resources and poor facilities.
- Lack of proper training for existing and new employees. Moreover, the disconnection between policy and practice is the greatest challenge in improving the education system in Egypt.
- Students are examined on a regular basis i.e. tests depend mainly on memorisation, particularly, the third year of secondary school (Thanawya Amma); this critical stage determines the future educational path of the students.

Reform policies and action plans

The Egyptian government realised the significance of the problems facing the educational sector and started to take serious actions to decrease the constraints on educational development, aiming at developing and enhancing the performance of the educational sector. The main questions that arise here are: What are the available opportunities to overcome the fundamental challenges in the Egyptian education system? What are the strategic action plans that can be identified in order to make the education system more effective?

The reform policy includes some essential components, i.e. increasing resources devoted to the education sector, especially in rural areas (Biltagy, 2013), decentralisation, community involvement and teacher professional improvement (World Bank, 2002). Gillies (2010) demonstrated that there are different dimensions of educational reform policy in Egypt, i.e. technical, institutional and political dimensions. Technical factors include capacity building activities, increased access to different levels of education, especially the basic stage, and paying more attention to female education, particularly in the poorest areas. The institutional elements consist of the legislative framework for administrative and financial decentralisation⁷. The Ministry of Finance in 2006 developed financial decentralisation in some governorates, but with close assessment and supervision. Regarding political aspects, it can be said that the continuity in leadership has limited the flow of new ideas and reforms that might have arisen in response to personnel changes. However, there is a positive relationship between political stability and implementation of reform.

The actions plans could be summarised in the following points:

- The reform should address examination and assessment methods. Teachers and professors will not use new teaching methods if the examinations continue to emphasise memorisation. They will not spend time designing a new curriculum that concentrates on problem solving and critical thinking if the assessment methods still test the ability to memorise. However, if the exams are redesigned, to pay attention to inventive thinking and composite problem solving, then textbooks, the curriculum and teaching methods will be changed automatically.
- In turn, changes in assessment methods, textbooks and techniques of teaching require significant professional improvement of teachers. It is vital to enhance the techniques of teaching in Egypt, by giving teachers and professors high-level training courses, in addition to reforming wages policy for this category.
- Another important component of educational reform policy is decentralisation. Decentralisation allows more decisions to be made easily; this implies that each educational institution could create its own plan, which gives local managers more control and ability to achieve the intended objectives.

⁷ See Lauglo (1995) for different forms of decentralisation.

- The participation of the civil community and other business leaders is very important for improving the education sector.
- McNeely (1995) emphasises the important role of international organisations and calls attention to increasing benefits of international donors (agencies and other international non-governmental organisations). Actually, Egypt is a key receiver of foreign support in terms of building capacity through many channels, like training and funding.
- One more factor that can play an important role in educational development is using technology in the educational process and supporting new methods of teaching, such as e-learning.

The following section presents an overview of the Egyptian labour market, its institutional framework, recent labour market trends (labour force, employment and unemployment rates) and characteristics of the Egyptian youth.

CHARACTERISTICS OF THE LABOUR MARKET

The institutional framework

Abdelgouad (2014) stated that “In Egypt, some labour market institutions are responsible for planning and coordinating activities aimed at promoting employment. The principal ones are”:

1. The Ministry of Manpower and Migration (MOMM) is responsible for facilitating the match between labour supply and demand, helping to increase the employability of the labour force, and monitoring labour market demand. It runs its own training centres that focus primarily on training school dropouts and laid-off workers. MOMM also runs an employment Information Programme that prepares labour market statistics and publishes the Monthly Vacancy Bulletin. Once a year, it also organises an enterprise census, to collect information on training needs from all enterprises with more than ten workers. The Ministry collaborates with employers and workers through the Supreme Council for Human Resources Development and also directly shapes training policies, whilst

encouraging private enterprises to set up their own training centres and providing them with methodological guidance and certification.

2. The Supreme Council for Human Resources Development is the main body responsible for coordinating the training policies of all ministries. It is headed by the Minister of Manpower and Migration and includes high-level representatives from all other relevant ministries. The Council meets four times a year and announces national training needs. The different ministries are supposed to integrate such announcements within their training programmes, in order to adapt them to labour market requirements.
3. The Information and Decision Support Centre (IDSC) to the Cabinet of Ministers has developed the National Youth Employment Programme. In addition, the IDSC is currently conducting a labour demand analysis, based on newspaper advertisements.
4. The Social Fund for Development (SFD) is a semi-autonomous governmental agency under the direct supervision of the Prime Minister. It was created in 1991, as a joint initiative between the Egyptian Government, the World Bank and UNDP, with the task of mitigating the negative effects of economic reform on the most vulnerable groups of people. It runs several employment programmes and promotes economic development in backward regions.
5. Moreover, one of the newly established organisations according to labour law regulations is the National Council for Wages, which was established based on Decree No. 983 of 2003; This Council is responsible for setting minimum wages.

The Egyptian labour market: an overview

Overall, economic growth rates rose over the period 2003-2008 (7%) and declined to 5.4% average growth during the 2006-2011 period (prior to revolution). Economic growth in 2011 declined to 1.8% and further below afterwards. The economy is gradually improving, with the annual rate of GDP growth reaching 4.1% in 2016/2017 (CAPMAS, Egypt in Figures, different issues).

A new entrant to the labour market from amongst the youth sector is considered to be one of the current economic constraints. Young people aged 15–24 account for nearly 22% of the Egyptian population. This places significant pressure on the labour market, with around 600,000 new entrants per year. The main feature of female employment in Egypt is the popularity of unpaid family worker employment status, comprising 26.4% per cent of the total number of employed women, who are mostly concentrated in the agricultural sector in rural areas. More than one-half of employed women are wage and salaried workers (56.9%) and 13.5% are own-account workers (self-employed with no employees). The share of female employers (3.3%) is much smaller than that of male employers (19.1%). On the other hand, the percentage of men and women in Egypt who are self-employed is 30.9% and 16.8%, respectively (CAPMAS, 2012).

A fundamental characteristic of Egypt's labour market is the role of the government and public sector, as compared to the private sector, in providing employment opportunities. Together, the government and public sector provide more than one-quarter of total jobs (23.0% and 3.7%, respectively). The private sector is divided into companies that operate inside or outside establishments (informal sector), which provides approximately 46.5% of jobs in Egypt.

Recent labour market trends

Table 3 illustrates the annual estimates of labour force and unemployment rates for individuals (15+) during the period (2012-2015). It shows that, the total number of labor force in 2015 was approximately 28.4 million, compared to 27 million in 2012. Moreover, the total number of employed individuals was approximately 24.8 million in 2015, compared to 23.6 million in 2012.

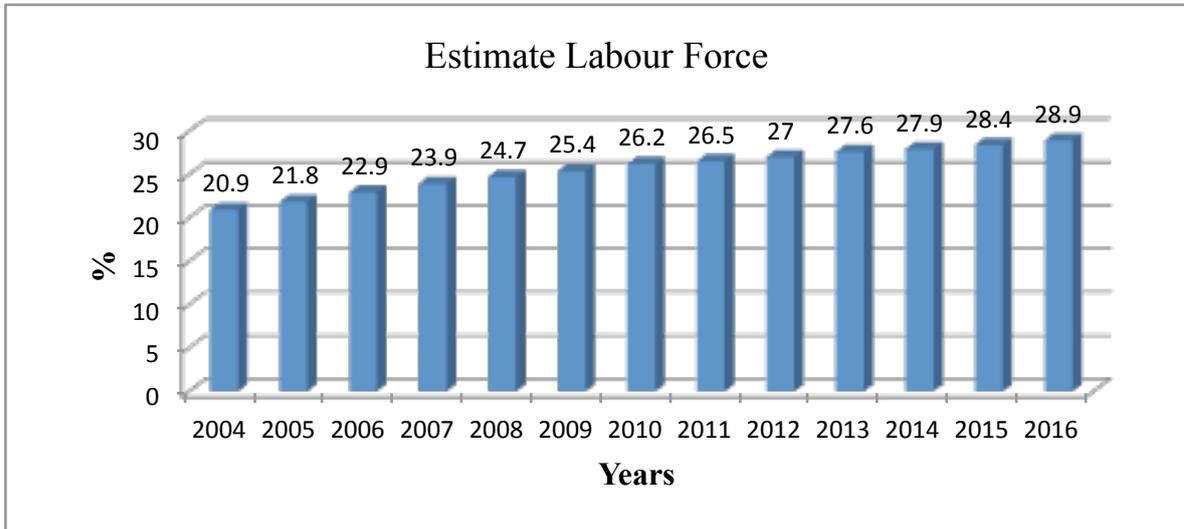
Table 3: Annual Estimates of Labour Force and Unemployment Rates (15+), (2012-2015)

Item	2012	2013	2014	2015
<u>Labour Force</u>				
Males	20874	21166	21316	21726
Females	6147	6456	6629	6705
Total	27021	27622	27945	28431
<u>Employed People</u>				
Males	18932	19082	19264	19694
Females	4664	4891	5035	5085
Total	23596	23973	24299	24779
<u>Unemployed People</u>				
Males	1942	2084	2052	2032
Females	1483	1565	1594	1620
Total	3425	3649	3646	3652
<u>Unemployment Rate (%)</u>				
Males	9.3	9.8	9.6	9.4
Females	24.1	24.2	24	24.2
Total	12.7	13.2	13.0	12.8

Source: Author based on CAPMAS, Egypt in Figures, 2017.

Figure 11 presents the estimated labour force during the period (2004-2016). It ascertains that the percentage of labour force increased gradually during the specified period, increasing from 22.9% in 2006 to 26.5% in 2011 and reaching 28.9% in 2016 (CAPMAS, 2017).

Figure 11: Estimated labour force (2004-2016)

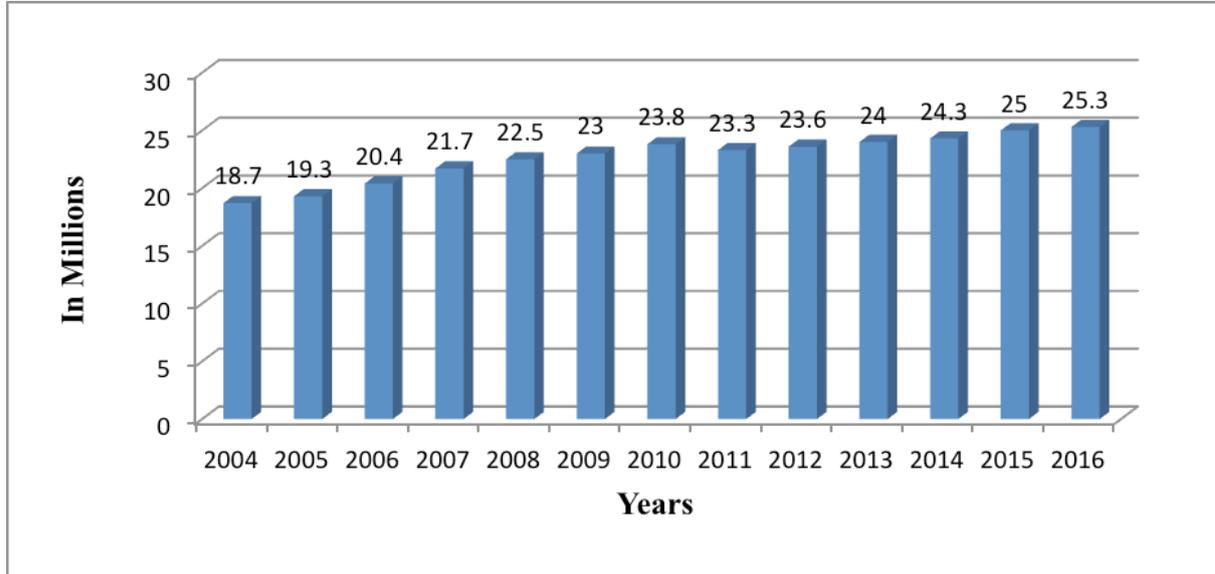


Source: Author based on Bulletin of Labour Force Survey, 2017.

- Employment rate

During the period (2004-2016), the employment rate was 40.3% in 2004 and it increased to 47% in 2008, decreasing to 42.3% in 2011 because of the Egyptian revolution. Again it increased to 44.5% in 2013 and in 2016 stabilized at 40.8% per cent (78.9% for males and 21.1% for females) (Bulletin of Labour Force Survey, 2017).

Figure 12: Estimated numbers in employment (2004-2016)



Source: Author based on Bulletin of Labour Force Survey, 2017.

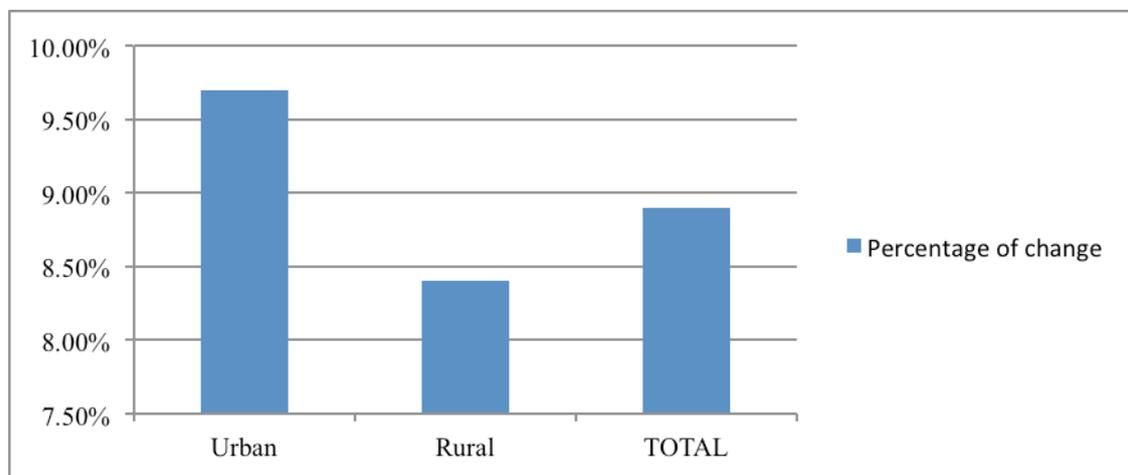
Figure 13: Employment rate by gender distribution, 2016



Source: Bulletin of Labour Force Survey, 2017.

Employment conditions are much more sensitive to economic trends and crises. Comparing the Egypt Labour Market Panel Survey (ELMPS) 2006 and 2012, there has been a large increase in irregular work. Public sector growth has deteriorated, and the private sector has stimulated the economy. Employment in the private sector continues to be dominated by small firms and informal work. Figure 14 presents the percentage change of total employment in urban and rural areas (2009-2013). It is concluded that the percentage change of total employment was 9.7% and 8.4% in urban and rural areas, respectively.

Figure 14: Per centage change of total employment by region (2009-2013)



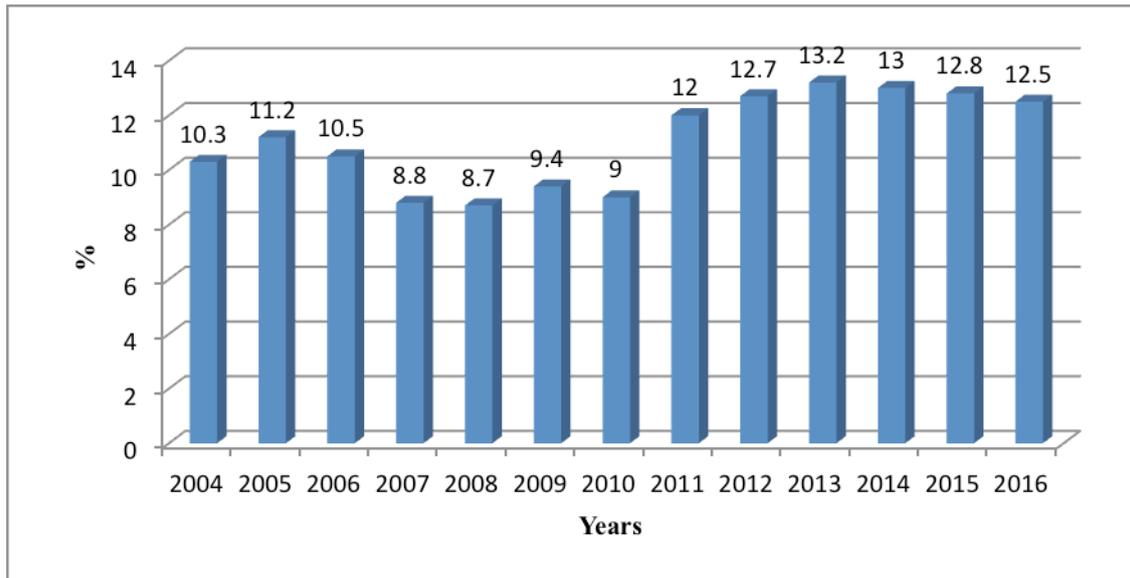
Source: Author’s calculations based on CAPMAS, Labour Force Sample Survey 2009, 2013.

- Unemployment rate

Unemployment in Egypt affects a very specific group of people, i.e. young, educated and new entrants. Unemployment includes very few people who were employed and lose their jobs, but mostly people looking for formal work for the first time. There is a positive relationship between the unemployment rate and the number of educated new entrants to the labour market. Women are less likely to participate in the labour force, mostly because of decreasing participation rates among middle-aged educated women. Furthermore, women are also considered to be an increasing proportion of the unemployed. . Figure 15 shows the annual unemployment rate during

the period (2004- 2016). It is clear that this rate reached its minimum in 2008 (8.7%) whilst it reached its maximum in 2013 (13.2%).

Figure 15: Annual Unemployment Rate (2004- 2016)



Source: Author based on Bulletin of Labour Force Survey, 2017.

- Youth characteristics in Egypt

Young people entering the labour market in Egypt face a number of severe constraints. The Egyptian economy has suffered from the ramifications of two major events; continuous political instability following the January 2011 revolution and the slowdown in global growth, subsequent to the 2008 economic crisis. These two events have had a serious negative impact on job creation in the country. At the same time, the large number of youths, who comprise about one-fifth of the population and add approximately 600,000 new entrants to the labour market each year, puts further stress on the Egyptian employment situation and its already limited opportunities.

The Egyptian government has long had youth employment on its agenda. The Youth Employment National Action Plan (2010–15) outlined Egypt’s strategy towards

better jobs for youth. The action plan identified three priority areas, including technical education and vocational training, enterprise development and labour market policies and programmes.

Despite an increase in educational attainment among both young males and females, approximately one-sixth of youths in the labour market are unemployed (15.7%). By including those who are not working yet and are available to work but not actively seeking work, increased the youth unemployment rate to 22.8%. In Egypt, high rates of unemployment are concentrated on young women and the more highly educated. In 2014, the unemployment rate of young females was more than five times that of young males (38.1% versus 6.8%). The unemployment-to-population ratio is 11.9% among young females, compared to 5.2% among their male counterparts.

Almost half of unemployed young people have completed university-level education or above (44.5% of the unemployed). The second largest group of unemployed is technical vocational education and training graduates (38.4% of the unemployed). Moreover, 30% of the unemployed youth refused a job because the candidates felt the prospective job did not match their level of qualification.

The youth unemployment rate increases with each additional level of educational attainment; tertiary-level graduates have the highest rate at 34.0%, compared to only 2.4% among the young with less than primary-level education. For young females the highest unemployment rate is among those with general secondary-level education, with 76%; the rates then decrease as the education level increases, with 56% for young females above the intermediate level and 46.9% for female university graduates. On the other hand, unemployment rates among male youths are quite low, with 23% of them being university graduates.

Most young working women are unpaid family workers. More specifically, almost 28.9% of female working youths are unpaid family workers, compared to 14.2% of male working youths. Young females are much less likely to complete their transition to a stable and/or satisfactory job than males. While 51.7% of young men have transitioned to stable and/or satisfactory employment, only 16.3% of young women have completed their transition.

Low-quality jobs and informal employment are serious challenges facing working youths in Egypt. A majority of young employees (75.7%) have no contract and, thus, remain vulnerable; 81.1% of young workers are in “irregular work” and more than one-third (39.5%) work more than 50 hours per week.

Another aspect of job quality has to do with how well the job matches the qualifications of the young worker. In Egypt, almost one-half of working youths (47.7%) are in occupations that do not match their education, i.e. overeducated or undereducated. The consequence of over-education is that young workers perform a job below their level of educational qualification and then they receive lower earnings. The under-education of workers can have a negative impact on worker productivity and, thus, on the output of the firm as a whole.

After proposing a general overview of the Egyptian labour market, the following section will tackle another vital issue, i.e. the migration framework in Egypt.

MIGRATION

Migration is an important phenomenon for the development of Egypt. According to official estimates, the number of Egyptian migrants abroad is approximately 2.7 million. About 70% of them reside in Arab countries and the remaining 30% mostly live in Europe and North America. An estimated 2.7 million Egyptians abroad contribute actively to the development of their country through remittances (US\$ 7.8 in 2009), the circulation of human and social capital, as well as investment (IOM 2010).

Clemens (2010) stated that when migration is suitably regulated, it can improve the efficiency and well-being of the overall international economic system. Moreover, migration can, in certain circumstances, be an important force in correcting international inequalities, thereby actually reducing international salary differences between host and home countries. Aside from this global effect, migration is also an effective means of improving an individual’s income, health, education and living conditions.

Migration involves costs, both for the countries of origin (breaking of family structures, destruction of emotional ties, loss of dynamic sectors of the population, waste of social capital, etc.), as well as for the recipient countries (funding of policies for social integration of migrants, the effects deriving from greater ethnic and cultural

heterogeneity, etc.). Furthermore, in certain conditions, when migration becomes a wide-spread and intensive phenomenon, it can feed a vicious circle which promotes a regressive dynamic of depopulation and the desertion of productive activities in the migrants' communities of origin. In these cases, young people plan their future in relation to the opportunities provided by migration, rather than seeking work and professional promotion in their own communities. All these costs need to be considered and, to the extent that is possible, minimised through adequate policies, both in countries of origin and in host countries (Alonso, 2011).

- Outward and inward migration in Egypt

De Bel-Air (2016) stated that: "As of late 2013, an estimated 4.3 million Egyptians were living abroad. The vast majority of Egyptian expatriates resided in Arab countries (86 per cent), many in Saudi Arabia (around 1.3 million). Despite the political instability in the country, about 700,000 Egyptians continued to seek livelihoods in Libya, down from an estimated 1 to 2 million before the revolution. Undocumented workers were many among Egyptians migrants to Libya, as well as to Jordan and to Saudi Arabia".

According to the 2006 census, there were 184,070 foreign nationals (Arab countries 43% and 32% from Europe) residing in Egypt, which represented 0.3% of the total population. De Bel-Air (2016) stated that "in 2013, 15,655 foreign residents held a labour permit, 94% of them employed in the private and investment sector. Arabs, Europeans and Asians each made up about a third of the foreign work force in the sector, with Palestinians constituting the largest group (15% of all foreign workers and 55% of Arabs). Bangladeshis and Indians made up respectively 37% and 26% of all Asian workers. Most foreign workers (4,053) were in the "legislators, senior officials and managers" occupational category (28% of all foreigners employed in the private sector in 2013), followed by the "technicians and associate professionals". Pinpointing the profile of Egyptian migrants is a challenge, even if studies acknowledge that in general, Egyptian emigrants are most often young men belonging to rural rather than urban areas. Their educational and occupational levels, however, differ by country of destination".

According to the 2017, the total number of Egyptians living abroad was approximately 9,471 million. Table 4 ascertains that the majority of Egyptians (65.85%) residing abroad are concentrated in Arab countries, followed by the North and South

America per cent (16.7%) and then European countries (13.2%), whilst the percentage of Egyptians living in the Asian region is only 0.15%.

Table 4: The total number of Egyptians living abroad by region

The Region	The No. of Egyptians living abroad	%
Arab Region	6236050	65.85
Europe Countries	1249755	13.2
Asian Region	14001	0.15
Australia	340000	3.6
North and South America	1584601	16.7
African Region	46267	0.5
Total	9470674	100

Source: Author based on CAPMAS, Census 2017.

CONCLUSION AND POLICY IMPLICATIONS

As mentioned above, the quality of education at school or university level in Egypt is low and unevenly distributed, leading to a growing market for private tutoring. Consequently, families bear a high cost of education, i.e. private lessons. However, Egypt has the capability and competence to change the challenges facing the education sector into opportunities. ***This can be done through many action plans***, for instance, increasing resources devoted to the education sector especially in rural areas, through decentralisation, community involvement, professional improvement for teachers and using technology in all fields of educational process.

The challenges mentioned above can help shed light on some possible solutions. ***Many matters should be taken into consideration by policy makers in order to develop and enhance the educational process in Egypt.*** First, the content of textbooks and curriculum should be developed, i.e. changing the traditional way of teaching from the memorisation approach to one that focuses on training, developing skills, problem solving, brain storming and critical thinking. Second, provide teachers with high levels of specialist training that will help enhance their performance in school. Moreover, school

administrators and supervisors should go through training courses themselves, to guarantee the implementation of new teaching methods (UNESCO, 2010/11).

In order to achieve educational reform, it is necessary to reach an education system of quality for all. Education reform, according to the MOE, includes a new cadre for teachers, which was established in 2007, training courses for teachers, a continuous improvement of existing schools, a comprehensive system of educational assessment, providing a technology infrastructure in all schools and using the information management system in the educational process. Of course, this plan has not been well implemented because of the unstable environment in Egypt due to the 2010 revolutions.

Moreover, the National Authority for Quality Assurance and Accreditation of Education was established in 2006. Plans include sustainable educational reform, maximising access for early childhood care and education, achieving lifelong education, continuing professional development, activating a decentralisation programme, allocating more resources to schools in poor areas and giving more incentive programmes for schools in poor and rural areas, in order to attract skilled teachers who can improve the educational process (EHDR, 2010).

The over-centralisation of authority in Egypt's educational system is one of the main obstacles to reform. Accordingly, Egypt should take planned and transparent steps to achieve a more effective balance between institutional self-regulation and overall public control of the structure, quality and cost of its education system. Furthermore, it is necessary to give a boost to technical and vocational education, in order to raise its status and quality and to provide incentives for greater numbers of students to participate in this kind of education.

Concerning higher education and training pillar, the rank of Egypt is 111th out of 140 countries in the global competitiveness index 2015-2016 (GCR, 2015/16). The key recommendations for improving higher education include developing the research system, providing incentives for research partnerships combining universities and other research institutes in Egypt and allocating funding to research teams and projects on a competitive basis and, finally, formulating an education system to fulfil the needs of the labour market.

To sum up, the long-term economic, political and social benefits from educational reform in Egypt are very clear. Up until now, progress in implementing education policy reforms has been limited. This may be attributed to a lack of long-term vision by policy makers and a gap between the minority who executes policy and the majority whose children are educated in the poorly educational system. So, all institutions, political parties and other Egyptian civil organisations should play a role in encouraging an effective policy focus on the education sector.

The main challenges related to the employment and labour market can be summarised in certain aspects, for example, job creation has been one of the most noticeable challenges facing Egypt in the past, economic performance has varied heavily during this time, but even in periods of high growth, employment has not been strong enough to absorb new labour market entrants, the increase in productivity levels has been minimal in Egypt and the increase in the informal sector, especially, for females has been significant. Finally, there is the mismatch between the demands of the labour market and the supply of graduate education.

Active labour market policies include the Youth Employment National Action Plan (NAP) 2010-2015, which was launched by The Ministry of Manpower and Migration (MOMM) and the International Labour Organisation (ILO). In addition, boosting public projects and promoting SMEs are considered very important for the national employment program

III. HUMAN CAPITAL, LABOUR MARKET FRICTIONS AND MIGRATION IN JORDAN

Alshyab Nooh and Abulila Ziad

INTRODUCTION

Like most of the developing countries, Jordan suffers from a range of economic problems that are challenging the government's ability to stimulate economic growth, maintaining price stability, and reducing unemployment. This is particularly difficult for Jordan, due to its limited natural resources.

One of the top priorities is currently to create new job opportunities, to decrease the high unemployment rate that is particularly dramatic considering that Jordan has high population growth and a young population. During the period 2000-2014, unemployment never went below 11.5%. By the fourth quarter of 2016, the unemployment rate had increased to 15.8%.

Creating new jobs is particularly urgent for Jordan, considering that:

1. the demographic shift has led to an increase in the number of labour market entrants,
2. mismatch between education outputs in various stages and labour market requirements and demand,
3. the competition of foreigners to Jordanian workers in certain professions:
4. the reduced public sector hiring, as a result of restructuring policies in Jordan, and
5. the reduced demand for Jordanian workers in the Gulf countries.

Overall, unemployment figure in Jordan signal the need to create job opportunities and to invest in the private sector in order to progressively change the

existing social contract, according to which the state still employs a large share of the population; 38% of those employed was working for the public sector, according to the Jordan's National Employment Strategy 2011-2020, while the employment survey by the Department of Statistics indicates that the private sector only provides 54.5% of jobs. The situation is further aggravated by the high population growth (more than 2% per annum over the last decade, according to the Jordan Economy Profile, 2015), by an unbalanced dependency ratio of 1:4 (figure for 2013, as of NCHRD, 2014), and by the massive inflow of refugees, mostly from Syria.

To provide a picture of the standing between human capital, the labour market, and migration in Jordan, this chapter starts with a discussion about the main characteristics and the quality of the education system. After that, the main features of the labour market will be reviewed and the most recent labour market trends will be addressed. A critical review will follow of labour market mismatches, of youth characteristics, and of the importance of migration for Jordan. Policy implications conclude the chapter.

EDUCATION SYSTEM: STRUCTURE AND KEY CHALLENGES

In Jordan, there are three stages in the educational cycle: the pre-school (kindergarten) cycle of maximum 2-years duration, the basic education cycle of 10-years duration, and the secondary education cycle of 2-years duration. According to data by the Ministry of Education, in 2014, the total number of students in basic and secondary schools, both private and public, was 1,846,963, i.e. 27.7% of total population.

According to the Education Act No. 3 of 1994, the Ministry of Education is responsible for school education in Jordan and for the supervision of all private educational institutions, in order to ensure compliance with the provisions of the law. According to the Higher Education Law No. 41 of 2001, the Ministry of Higher Education and Scientific Research is responsible for higher education, both for public and private sector institutions.

The first public university was the University of Jordan, which was established in 1962. Al-Ahliyya Amman University, which was established in 1989, was the first private university. Overall, at present, there are a total of 10 public universities, 17 private

universities, and 51 community colleges, plus the World Islamic Sciences and Education University.

Despite the limited financial resources, investment in education and higher education has been, since its establishment, among the top priorities for the country. This has enabled Jordan to achieve significant progress in terms of diversity and quality of study programmes, as well as the preparation of graduates from higher education institutions.

Since the early 1970s, graduates from Jordanian universities have gained a good reputation across the MENA region, so that there has been a sustained demand for them by the labour markets of neighbouring countries and, in particular, from the Gulf countries. It can be estimated that by the end of the 1970s almost one third of the Jordanian workforce was employed abroad (Robins, 2004). Since this period, worker migration has represented a particularly striking phenomenon for Jordan and a cornerstone of its economy. In 2014, remittances accounted for almost 18% of GDP and decreased to 14% in 2015. Remittances are a very important source of capital for Jordan and have had a major effect on its economy. For a deep analysis of the phenomenon, see Alshyab (2012).

Characteristics of the Jordanian Education System

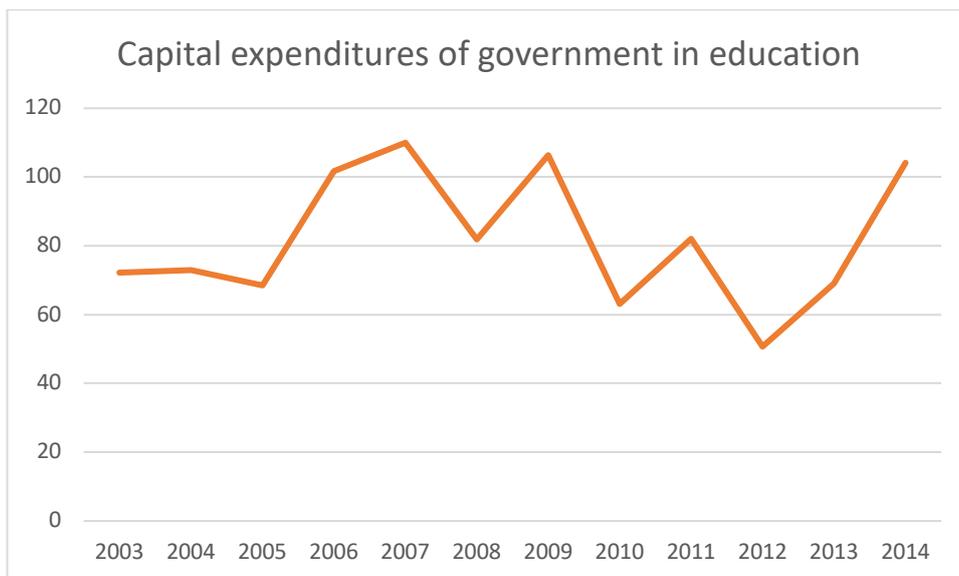
- Public investment in education

A valid proxy to assess public investment in the educational system is the capital expenditure of the government on education. Figure 16 presents the evolution of this variable between 2003 and 2014. It indicates that capital expenditure on education has been fluctuating, specifically during 2006 and 2007 where capital expenditure on education witnessed an increase, before declining in 2008, increasing in 2009, and dropping again in 2010 and 2012. After then, expenditures started to increase remarkably, back to and above the level they reached in 2006-2007.

The percentage of government capital expenditure on education out of total government expenditure on education (capital and current expenditure) during the

period 2003-2015 was 13.4%. In 2015, the percentage of government capital expenditure on education accounted for 0.6% of the GDP at current prices.

Figure 16 : Capital expenditure of the Jordanian government on education between 2003 and 2014 in million JD



Source: Ministry of Finance, 2015

Public and private education

The demand for education is very high in Jordan. In 2015, the illiteracy rate stood at 6.7%, which is quite low, also as a regional and international comparison (Jordan Department of Statistics, DoS, 2015). The education sector in Jordan has witnessed a remarkable development during the past two decades: during the year 2014, the number of schools reached about 6614, divided into 3732 governmental schools, 174 UNRWA schools, and 2708 private schools.

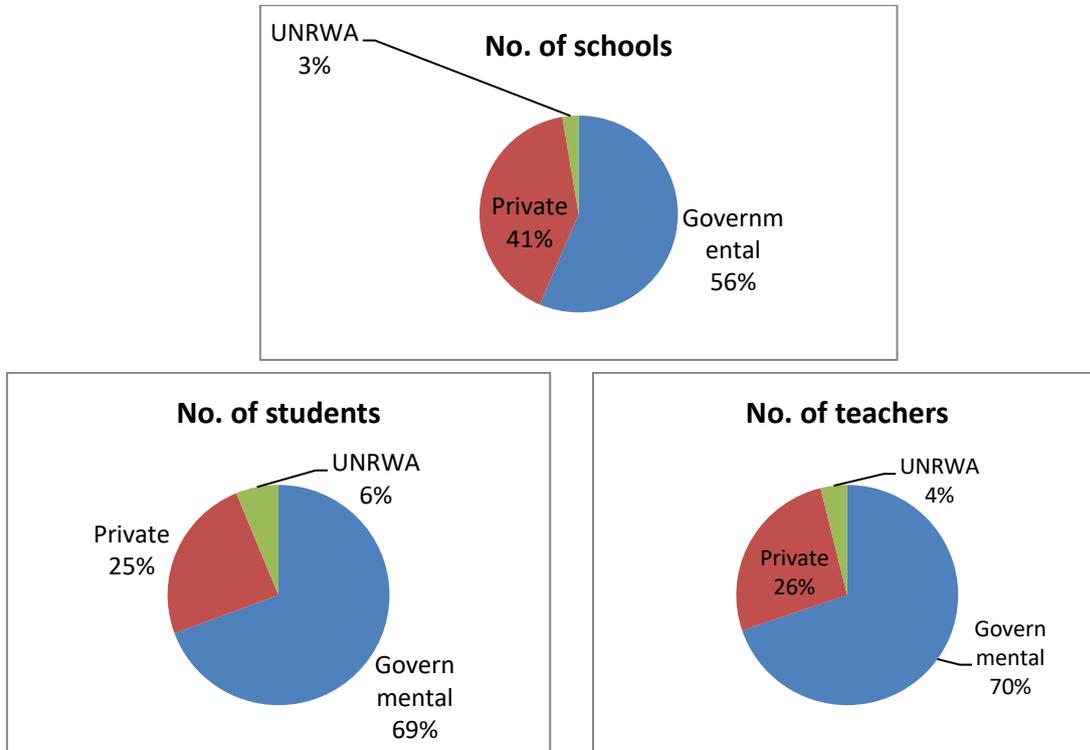
Table 5: Number of schools, students, and teachers for 2014

Schools	No. of schools	No. of students	No. of teachers	Students per teacher
Governmental	3732	1280899	80187	16
Private	2708	451139	30295	15
UNRWA	174	114925	4435	26
Total	6614	1846963	114917	16

Source: DoS, 2014

Thus, public schools are 56% of the total number of schools (Figure 17). The total number of student in schools was 1,846,963, 69% of whom were in governmental schools, 6% in UNRWA schools, and the remaining share in private schools. The total number of teachers is 114,917, 70% of which were working in public schools.

Figure 17: Schools, students, and teachers in 2014



Source: DoS, 2014

According to DoS estimates for 2014, 68.1% of school teachers were female. On average, there were 6 students per teacher and 25 students per class. In general, 49% of school pupils were girls and the percentage of students in basic and secondary school stages of total population was 27.7%. Data is from the Jordan Department of Statistics (DoS) for 2014.

- Higher education

The higher education sector has recently experienced remarkable growth, too; according to the Ministry of Higher Education, in 2014 there were 10 public universities, 18 private universities, and 51 community colleges (awarding a diploma after two years of study). The number of higher education institutions has increased as a result of the sustained demand for higher education, which is mainly seen as a key to entering the labour market, either in Jordan or abroad.

In 2014, the total number of students enrolled at higher education institutions was, in general, 321,409, which was around 5% of total population (Table 6). Thus, overall, almost 33% of total Jordanian population is enrolled in education. Most higher education students (86%) enrolled in bachelor programmes. Slightly more than half of bachelor students was female (52%).

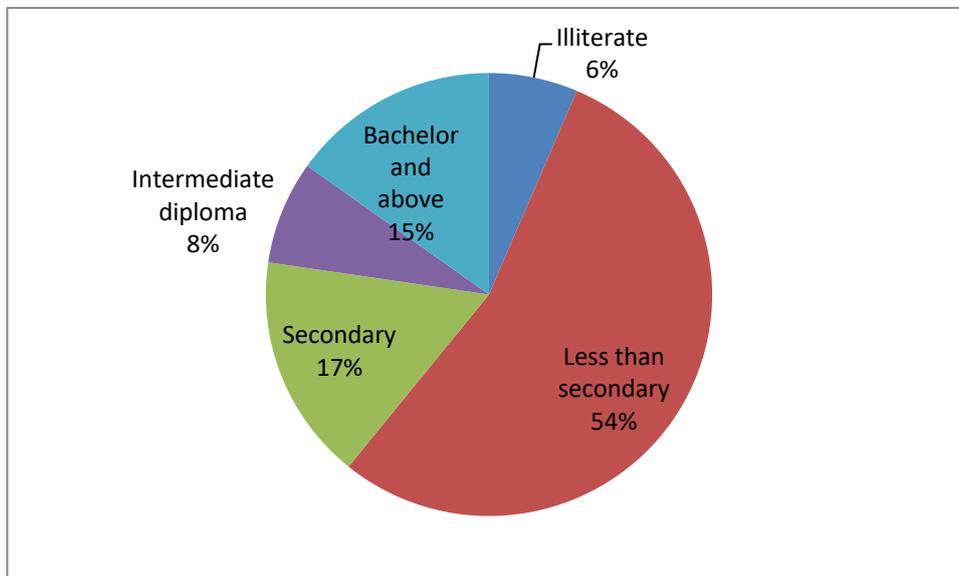
Table 6: Number of students enrolled in higher education programmes

Higher education enrolment	
Community colleges	26455
Bachelor	277088
Higher diploma	1806
Master	13383
PhD	2677
Total no. of students	321409

Source: DoS, 2014

The Employment and Unemployment Survey of 2015 by DoS estimated 40% of Jordanian adult population (15+) to have achieved secondary education and above (Figure 18).

Figure 18: Jordanian adult population (15+) by educational level (DoS, employment survey, 2015)



Source: DoS, employment survey, 2015

Quality and effectiveness of education

- Training programmes

Concerning, then, active labour market intervention, Jordan is putting considerable efforts into facilitating the creation of small enterprises, in particular through microfinance schemes, in enhancing the employability of the young, and in supporting Vocational Education and Training (VET). VET started in Jordan in 2006 and is guided by the Jordan National Employment-Technical and Vocational Education and Training (E-TVET) Strategies, which were first released in 2008 and every five years thereafter by the Ministry of Labour. A general problem of spreading vocational training in Jordan, however, has essentially to do with the hitherto discussed unproductive bias, the culture of shame, and widespread aversion to manual jobs. In addition, or, better, as a corollary, vocational training has so far failed to systematically reach females and has been predominantly attended by foreign workers (Fortuny and Al Hussein, 2010). Further, trainings are mostly administered in a pretty academic way, thus putting much emphasis on exams and on school-like skills, rather than on practical skills and competencies (Seyfried, 2008). In general, VAT is organised, promoted, and administered

by public bodies, with only a marginal role played by private entities (Fortuny and Al Hussein, 2010).

- Human capital development

The Human Development Index (HDI) is an indicator published by the United Nations Development Programme (UNDP) measuring economic and social development of countries. Technically, the HDI is the geometric mean of normalised indices for each of the three dimensions; education, health, and real per capita income.⁸ The Human Development Index can be further broken down into several sub indicators, the most important of which are (for the purpose of analysing Jordan) the Health Index (HI), the Index of Education (EI), and the Adult Literacy Index (ALI).

Human development is obviously also significantly linked to economic growth. Recent decades have seen significant progress in the areas of health, education and improvement of the average per capita gross income. According to the HDI, states are classified into three levels, namely; high human development (HDI between 0.8 and 1.0), medium human development (0.5-0.799), and low human development (below 0.5).

In 1980, HDI for Jordan was 0.62, so that the country was classified as a medium human development country. Until 2000, the index rose to 0.71. However, the improvement in the index should not generate too much optimism as, in terms of ranking, Jordan was 70th in 1990, 100th in 2013, and in 2014 77th out of the 281 countries in the world. Breaking down the HDI into its sub-indexes, Jordan's improved score can mainly be attributed to the improvement in its Education Index. Table 7 shows the development of HDI and of the further indicators in each decade between 1980 and 2014.

⁸For more information, see UNDP's homepage, <http://hdr.undp.org/en/content/human-development-index-hdi> (stand of 05.05.2016)

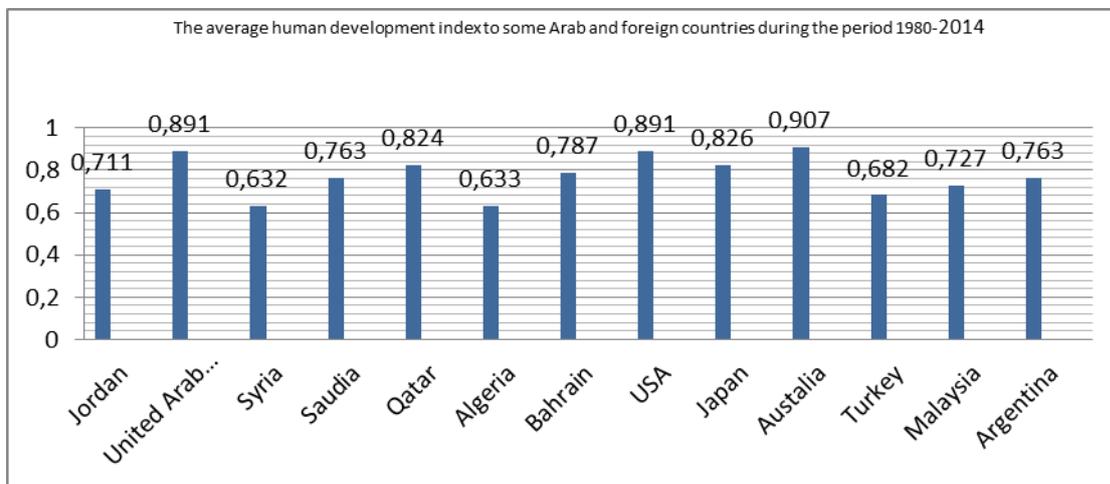
Table 7: Evolution of the HDI for Jordan between 1980 and 2014, selected years

Year	Income index	Health index	Education index	Human development index
1980	0.66	0.71	0.44	0.592
1990	0.63	0.77	0.5	0.63
2000	0.66	0.8	0.67	0.710
2010	0.71	0.82	0.7	0.744
2014	0.71	0.83	0.7	0.745

Source: UNDP, 2014

Looking at the average HDI score of Jordan between 200 and 2014 by regional comparison (Figure), it emerges that Jordan outperformed Syria, Algeria, and Turkey, whereas it laid behind oil rich countries such as UAE, Saudi Arabia, Bahrain, and Qatar (which have, among else, a higher per capita income).

Figure 19: Average HDI for selected Arab and other countries



Source: UNDP, 2014

CHARACTERISTICS OF THE LABOUR MARKET

The following section reviews the main characteristics and trends of the labour market in Jordan. In particular, the institutional framework with the most important legislation regulating the labour market in the country and the main trends with labour demand and supply, are discussed. A main result that emerges from the demand side analysis is that the public sector is still the main employer, despite comprehensive restructuring aimed at reducing its size. From the supply side, one striking fact that emerges is the low labour market participation rate, especially among females. This section further provides an overview of job creation potential in the country, as the demographic change reveals the urgency of effective job creation policies.

The institutional framework

The labour market in Jordan is regulated by three main documents:

- Labour Law No 8 of 1996 and its amendments
- Social Security Law No 7 of 2010 (temporary law);
- Civil Service Regulations No 30 of 2007 and its amendments (the last one was in November 2014)

Important issues of labour regulation include the existence of a probation period of a maximum of three months, the list of reasons for extraordinary termination of contract, and sickness leave regulation. The legal working time is forty-eight hours during a six day week and annual paid leave is for fourteen days per year and twenty one days after a five year of employment. Maternity leave is fully paid for ten weeks (and is compulsory for six weeks) and can be extended unpaid for a maximum of one year.

Among the amendments to the Labour Law, that of August 2002 should be mentioned. The amendment has extended the coverage of the labour law to some categories of workers in the agriculture sector that were previously excluded, regulated and strengthened the supervising authority by the Ministry of Labour for private employment offices recruiting foreign domestic workers, reinforced protection of workers from dismissal for economic and technical reasons, regulated working hours,

and addressed the modalities of interaction between employers' and workers' organisations (Bitar for ILO).

The social contract in Jordan had been long based on public sector employment and this has reflected in a stronger focus being placed by the legislators on public sector employment. In other words, for a long time labour market legislation did "not fully address current realities, and the institutions responsible for designing and implementing employment policy need(ed) to enhance their capacity further (for example, the public employment services)" (Majcher-Teleon and Ben Slimène, 2009).

Wages are regulated for the private sector by the National Tripartite Wage Committee, which fixes a minimum wage for all workers in the private sector. Public sector wages are a responsibility of the Civil Service Bureau, in general, and of the Ministry of Municipal Affairs and of the Jordanian Armed Forces, respectively, for employees in the municipalities and in the army. The minimum wage is currently set to 190 JD, even though less than 8% of Jordanians are actually earning less than 200 JD per month (DoS, 2015).

The Jordanian labour Market: An Overview

- Labour supply

The latest population census (Jordan Population and Housing Census, 2015) was run in 2015 by the Jordan Department of Statistics (DoS). According to it, total population was 9,531,712 inhabitants, 53% of which were males and 47% females. The census further revealed 4.02 million youths, i.e. almost 42% of the total population is under 18 years of age. For the purpose of the present analysis this fact points to the urgency of creating new jobs for the new working generations to come.

- Demographics

According to the 2016 census, the Jordanian population was estimated to be 9.5 million, 6.6 million being Jordanians and 2.9 non Jordanian residents. Thus, it emerged that around 30% of population was non Jordanian. In particular, Jordanian citizens were namely 6,613,587 persons, versus 1.3 ml Syrians, 0.6 ml Egyptians, 0.6 Palestinians, 130,000 Iraqis, 31,167 Yemenis, 22,700 Libyans, and 197,385 foreigners with different nationalities.

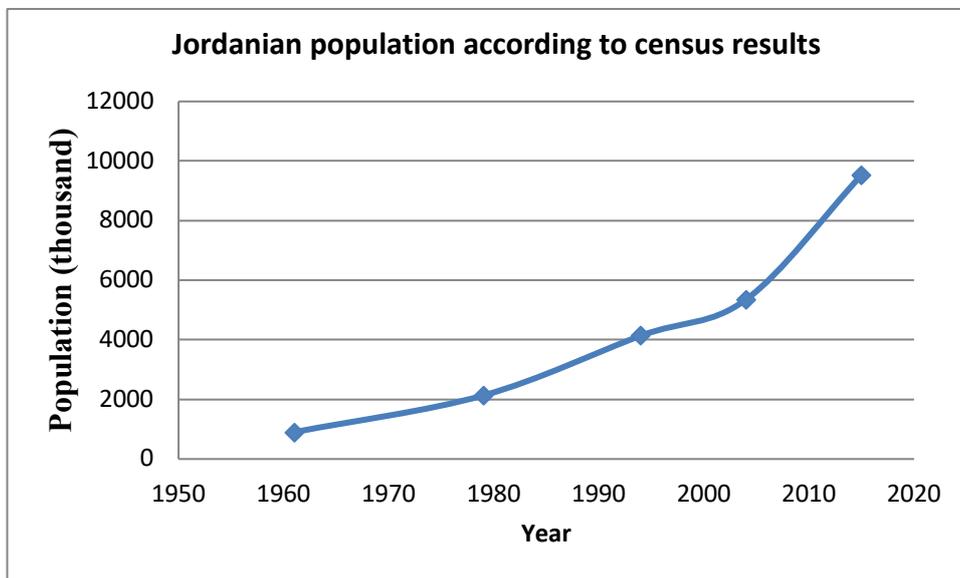
The population was divided into almost 2 ml households, with average household size being 4.8 members. Average household size declined from 6.7 persons in 1979, to

6.1in 1994, and to 5.36 in 2004 (data retrieved from previous Jordan Population and Housing Census).

According to the 2015 census, the population was mostly concentrated in Amman and in the other two big cities, Irbid and Zarqa: slightly more than 4 ml inhabitants lived in the capital Amman, i.e. 42% of the total population, vis a vis 18.6% in Irbid and 14.3% in Zarqa. The governorates of Mafraq and Balqa followed with more than 5% each, whereas each of the remaining governorates hosted between 1% and 3% of total population.

The census showed that within only 55 years the population in Jordan increased by more than 10 times. Estimates for 2030 predict that the population will reach 10.1million and, in 2050, 15 million inhabitants (Higher Population Commission-Jordan, 2014). The main reason for such a rash increase of population is the massive (forced) migration, in particular from Syria, Iraq, Libya and Yemen, which has added to the per se high population growth. Namely, annual population growth during the period 2004-2015 was 5.3%.

Figure 19: Jordanian population according to the last census results



Source: DoS, census data, 2016

Looking at the composition of the Jordanian population by age groups, it emerges that Jordan has a young population, despite the decrease in (still sustained) fertility rates. According to the Higher Population Commission-Jordan (2014), Jordan is, thus, expected to reach the so called ‘demographic opportunity’ by 2030. This is defined as a stage during which the growth of the working age population (15-64 years) becomes significantly higher than the growth of the dependent category (below 15 and above 64), which decreases the dependency ratio. The ‘demographic opportunity’ would, thus, open the way for an increase in the labour force, in per capita income, in savings and investment, as well as in an improvement in health and education levels. This further emphasises the need to take into special consideration job creation, investment in human capital, returns on education, and existing mismatches of the labour market.

- Labour force and labour force participation rate

Looking at the demographic determinants of the labour force, Jordan has a quite young population and reveals a sustained albeit decreasing fertility rate. As it emerges from Table 8, population growth has witnessed a clear decreasing trend.

Table 8: Average population rates from 1952 to 2014

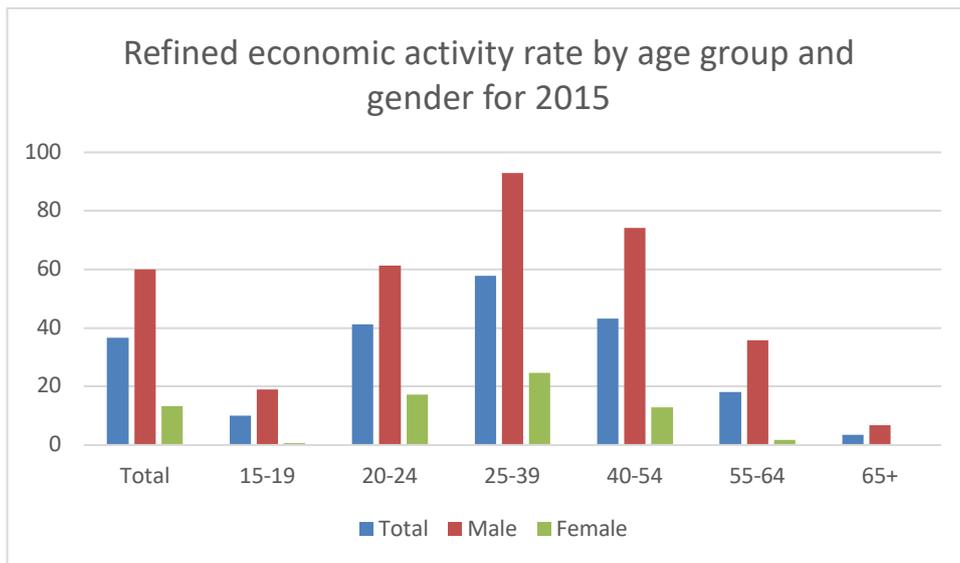
<i>Period</i>	Average population growth rates
<i>1952-1961</i>	4.8%
<i>1961-1979</i>	4.8%
<i>1979-1994</i>	4.4%
<i>1994-2004</i>	2.6%
<i>2004-2014</i>	2.2%

Source: DoS, census data, 2014

The share of economically active population in Jordan is quite low, even in regional comparison (Fortuny and Al Hussein, 2010). According to a survey by the Jordan Department of Statistics (DoS), in 2015 the refined economic activity rate was around 36.7%, 60% for males and 13.3% for females. Participation rate of females in the labour market is, thus, in general quite low in Jordan and the gap between genders is sustained

for all age groups. Figure 20 presents the result for 2015 of the survey conducted by the Jordan Department of Statistics regarding participation in economic activities by gender and age groups.

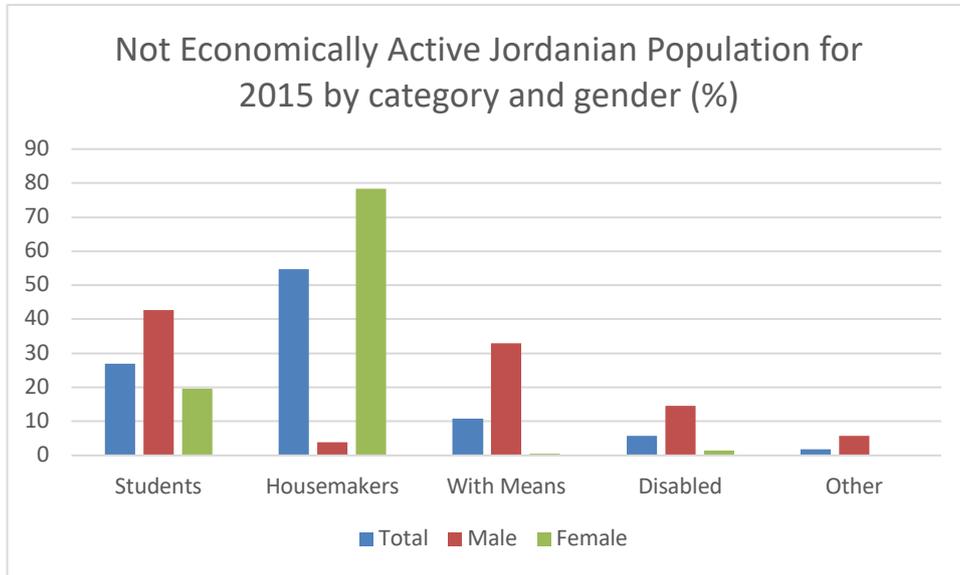
Figure 20: Refined economic activity rate by age group and gender for 2015



Source: Survey data from DoS, 2016

Figure 21 categorises Jordanians not belonging to the labour force. It emerges that female non participation is essentially linked to their role of homemakers, whereas the main male groups of non-seeking jobs are students and people with means.

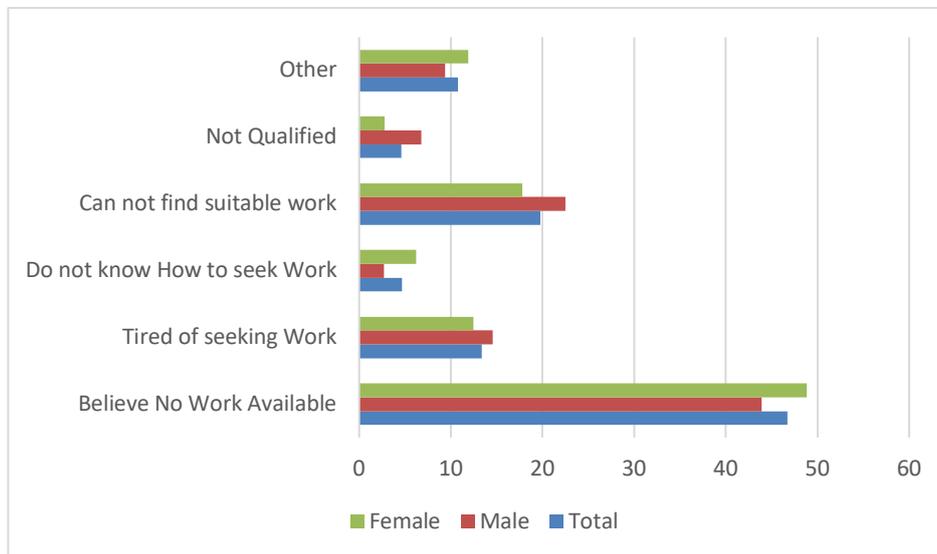
Figure 21: Not economically active Jordanian population for 2015 by category and gender (per centage distribution for 2015)



Source: Survey data from DoS, 2016

A further fact that emerges from the survey run by the Jordan Department of Statistics (DoS) in 2015 (Figure 22), it that the main reasons for not being available for work have to do with the perceived non availability of jobs and/or of suitable jobs. This is closely linked to the so called ‘culture of shame’ ("aib") (Alshyab, 2012).

Figure 22: Not economically active Jordanian population available for work and not seeking work by reason for not seeking work (% for 2015)

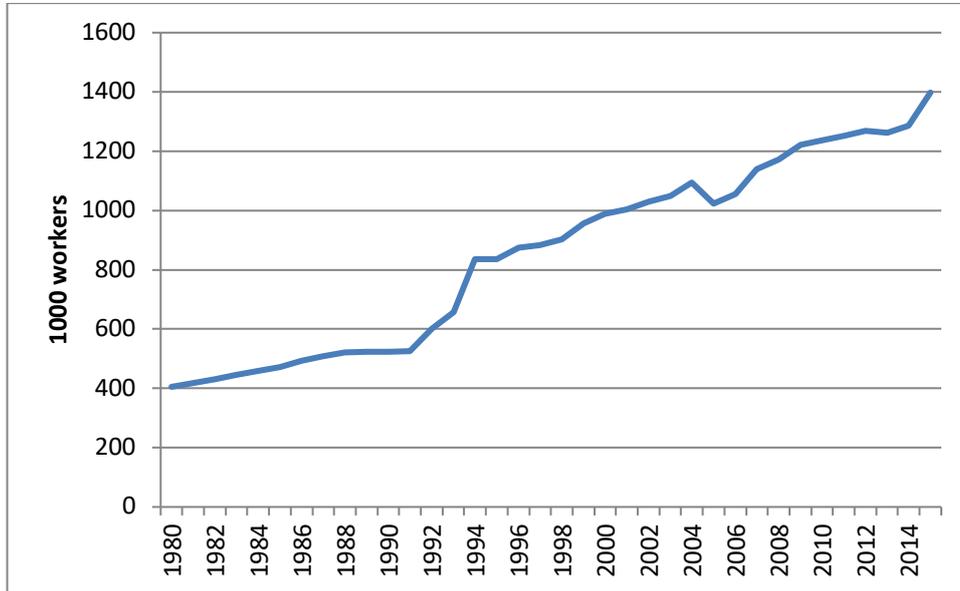


Source: Survey data from DoS, 2016

- Labour demand

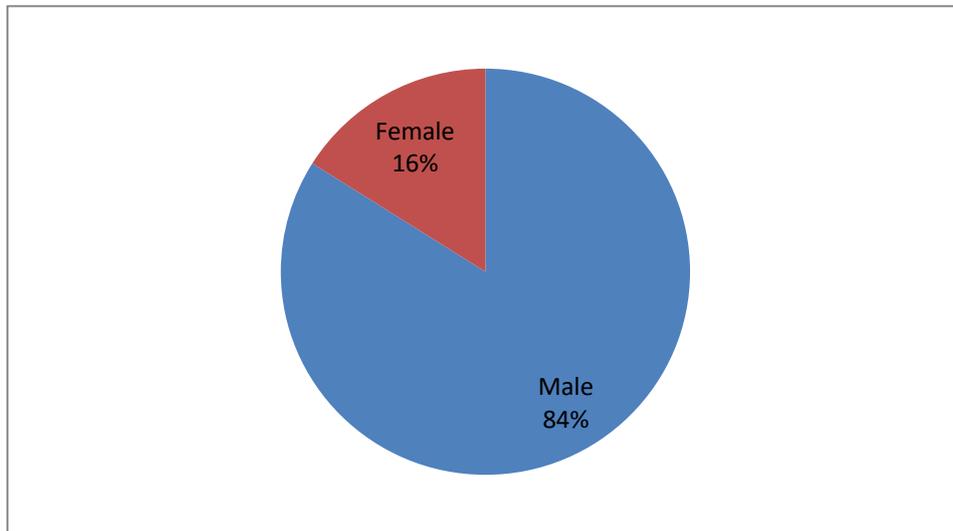
The total number of workers employed in Jordan has been increasing at a slow pace: in 2015 there were 1.398 million employed in Jordan, 84%, of which (1,173 ml) were males and the remaining 16% (0.224 ml) were females (Figure 23 and 24). In 2015, the rate of the total number of employed to the total number of the population (employment rate) was 31.9% (53.4% for males and 10.3% for females). The low share of employed females was in tune with the low labour force participation rate and high female unemployment.

Figure 23: Evolution of the number of employed persons (in thousand workers)



Source: DoS, 2015

Figure 24: Number of employed persons by gender in 2015



Source: DoS, 2015

- Characteristics of the employed

It further emerges from the survey of DoS for 2015, that employed Jordanians by educational level were almost equally split between less than secondary education (50.8) and above (48%). Further, around 26% of the employed Jordanian population had a bachelor degree and above, whereas the share of employed women with a bachelor degree was more than double (58%). This fact may be interpreted twofold: on the one hand, women need to be more qualified to have access to the labour market (and this may be supported by the higher enrolment rate to higher education programmes of females than males), and, on the other hand, this may reflect gender related aspects linked to the widespread aversion to manual jobs (the so called ‘culture of shame’). This second interpretation may be further supported by the low participation rate of females in the labour market.

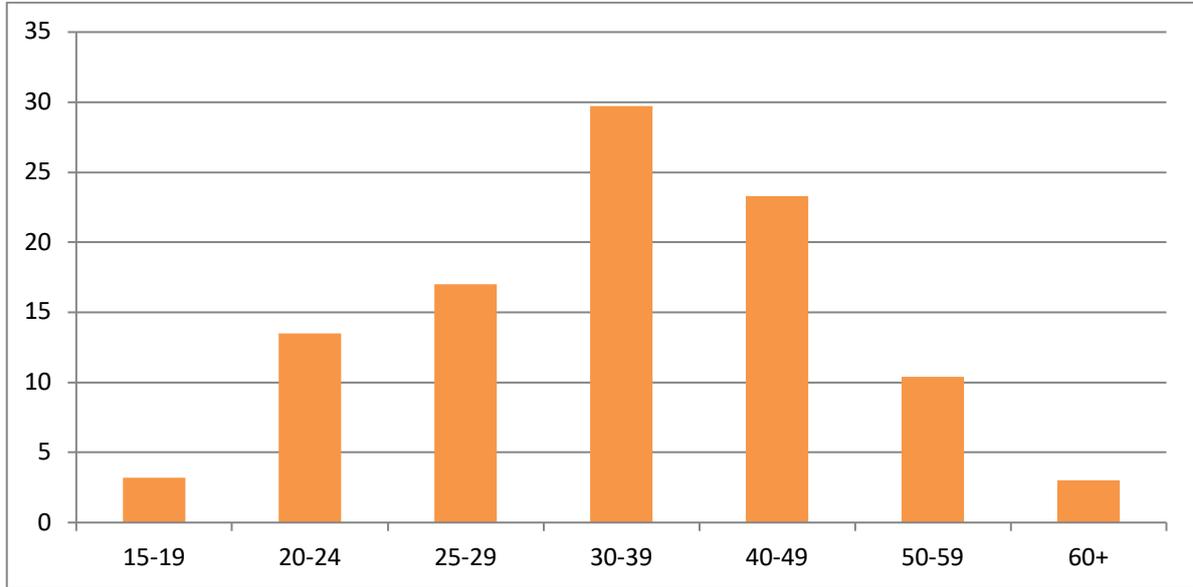
Table 9: Employed Jordanians by educational level

Employed by educational level	% of overall total	% out of female respondents	% out of male respondents
Illiterate	1	0.8	1
Less than secondary	50.8	13.4	57.6
Secondary	12	6.6	13
Intermediate diploma	10	20.9	8.1
Bachelor	26.1	58.3	20.3
Total	99.9	100	100

Source: DoS Employment Survey, 2015

Figure 25 presents the percentage distribution of employed persons by age group for 2016. The main bulk of workers (53%) was between 30 and 50 years of age. Workers of more than 50 years of age were less than 14%.

Figure 25: Jordanian employed persons in 2016 by age



Source: DoS, 2017

- Employment by sector

The relative distribution of employed Jordanians by sector of economic activity is represented in.⁹ The presented data on employment stem from household surveys performed by the Jordan Department of Statistics (DoS).

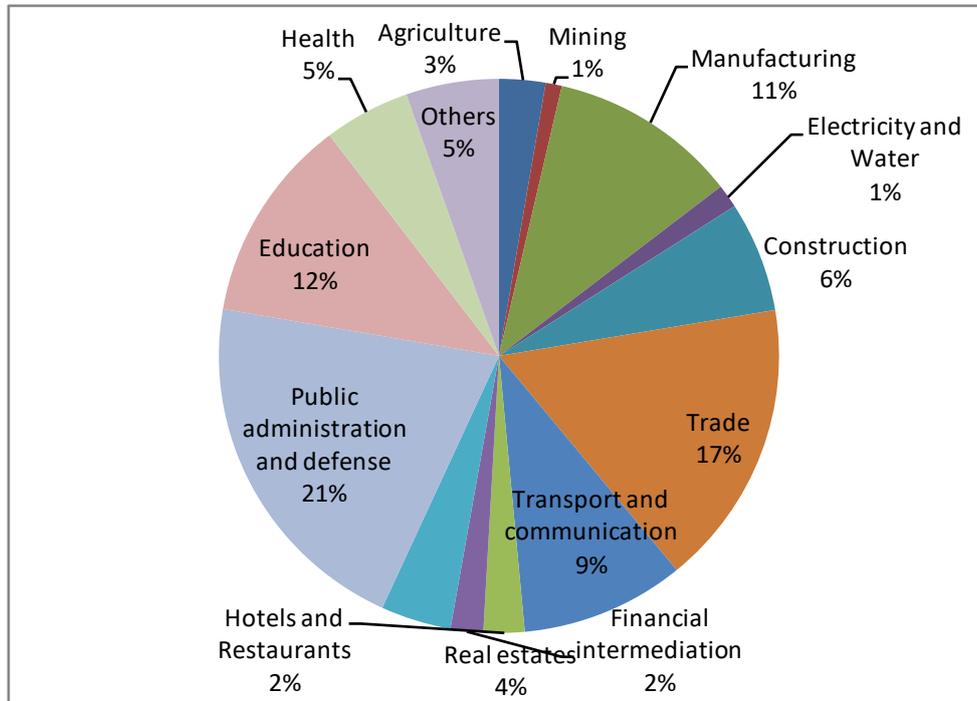
⁹ Concerning the data presented in Table 10, it should be noted that according to the revision of the International Standard Industrial Classification of All Economic Activities (ISIC), there were minor differences in data classification before and after 2009. Thus, the corresponding data entries have been aggregated according to the previous revision of ISIC (revision no. 3.1), to ensure comparability of data between 2003 and 2013 (<http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=27>).

Table 10: Relative distribution of Jordanian employees (15 years of age or older) by economic activity

Economic Activity	average from 2003 to 2013	2010	2011	2012	2013	2014
Agriculture, hunting and forestry	2.7	2.0	1.7	2.0	2.0	1.8
Mining and quarrying	0.9	0.9	0.9	0.8	1.0	0.8
Manufacturing	10.9	10.4	10.2	9.7	9.9	10.2
Electricity and water	1.4	1.0	1.1	1.0	0.8	0.9
Construction	6.4	6.4	6.0	6.0	6.4	6.6
Wholesale and retail trade, repair of motor vehicles and personal	16.7	16.1	15.4	15.5	15.7	15.3
Transport, storage and communication	9.5	10.1	9.6	9.1	9.2	9.6
Hotels and restaurants	2.4	2.2	2.4	2.4	2.5	2.5
Financial intermediation	1.9	1.6	2.0	2.0	1.9	2.1
Real estate, renting and business activities	4.1	4.1	4.2	4.5	4.2	4.1
Public administration, defense and social security	20.9	24.1	24.8	25.5	26.2	26.2
Education	11.9	12.1	12.8	12.6	12.1	11.9
Health and social work	5.0	5.1	5.0	5.1	5.0	4.9
Other community, social and personal service activities	4.7	3.0	3.0	2.9	2.5	2.4
Private households with employed persons	0.4	0.4	0.5	0.6	0.3	0.4
Organizations activities beyond the scope of territorial jurisdiction	0.3	0.4	0.3	0.3	0.3	0.4

Source: DoS, 2014

Figure 26: Share of employed Jordanians by economic activity average 2003-2013



Source: CBJ, 2013-14

Source DoS, 2014 Figure 26 compares the distribution of workers per economic activity in 2014 with the average for the period 2003-2013. There are no significant changes: the only changes towards the respective average levels are an increase in public administration, a decrease in agriculture, and a slight decline in wholesale and retail trade.

In general, it emerges that the public sector was the most important employer in Jordan: between 2000 and 2013, only public administration and defence has employed 21% of the Jordanian working force. Adding part of education (12%) and health sector (5%), a share of 38% public sector employment can be proxied. As a comparison, government services have generated, on average, over the same period around 13% of GDP.

Wholesale and retail trade employed a share of around 16.7% of Jordanians, hotels and restaurants 2.4%, whereas both sectors together contributed only 10% of GDP. Manufacturing employed a share of almost 11% and contributed 18% of value

added creation. Transport, storage and communications offered work to 9.5% and generated 16% of output, whereas construction employed 6.4% of workers and created 5% of GDP, being a labour intensive industry. The financial sector, including business services and real estates, a highly capital intensive sector, generated 20% of output employing only 6% of the total Jordanian workforce.

Concerning the agricultural sector, roughly 3% of Jordanian workers managed to generate a comparable share of GDP (3%-4%). This result, however, did not take into account the number of foreign agricultural workers, as well as the number of informal workers, that are particularly high in this sector. In 2014, 324,335 foreign workers held a working permit in Jordan: 108,406 of them (almost 33%) were officially employed in agriculture.

As an overall result, comparing employment share with value added, it emerged that the more labour intensive sectors are construction, trade, and agriculture, in the sense that they require a large number of workers per unit of output.

In this perspective, the productivity in the public sector is also low, as this sector also absorbed a large number of workers for producing a proportionally lower output share. This fact is also known as disguised unemployment and is a typical policy in the whole MENA region. In general, labour cost is relatively high in Jordan, as compared to countries with a similar per capita GDP. As mentioned, the labour force is on average highly educated and skilled and labour productivity (measured as value added per worker) is on average US\$ 14,000 - high, if compared to that of countries with a similar per capita GDP (World Bank, 2013).

- Informal employment

Measuring the size of the informal economy and, in particular, its contribution to employment and to employment quality are difficult, though crucial topics. The informal economy has several negative effects on a country, as it reduces fiscal revenues and, in addition, may bias the administration of welfare provisions towards subjects that are active in the informal economy. However, on the other hand, the job generation from informal activities cannot be overlooked and States should be concerned in finding ways to integrate informal activities to become part of the formal economy.

There are different definitions of the informal economy and one of the most comprehensive and thus widely applied definitions is the one formulated by the International Labour Organisation (ILO) (1993), which states that the informal economy is constituted by *“units engaged in the production of goods and services with the primary objective of generating employment and income to the persons concerned”* and these

units are essentially either (1) informal own account enterprises, i.e. enterprises that are non-registered in any form of the national legal system or (2) enterprises of informal employers, i.e. enterprises non registering all of part of its employees.

Therefore, informal economic units may range from micro enterprises, family business, and own account activities. Workers in the informal economy may actually be employees of informal economic units, domestic workers without working contracts, occasional, temporary and part time workers without a fixed employer and working contract, as well as non-registered workers (ILO, 1993).

In Jordan, the first official survey on informality was run in 2008 by the DOS: the study specifically targeted female employment in the informal sector and was concentrated on the Greater Amman area, where 3500 households were considered. The results revealed a significant contribution of informal activities in female employment (Al Budirate, 2009). A survey by UNDP, published in 2013, estimated in 2010 the number of workers in the informal sector in the Jordanian labour market to be 487,861, versus a total of 744,724 workers in the formal sector. The survey (UNDP, 2013) thus accordingly concluded that informal employment approximated 44% of the total employment in Jordan. The survey reported informal employment to be widespread among economic activities, but to be particularly high in agriculture, in construction, in wholesale and retail trade and repair of motor vehicles.

A further important investigation of informality in Jordan and on other SEMCs, was run in 2011 by World Bank. In general, the results revealed a relationship between the size of the informal sector, natural resources and manpower. In particular, countries with abundant labour and natural resources (Iran, Syria and Yemen) were characterised by high rates of informal employment (80-90% of labour force vis a vis an informal sector output of 20-25% of GDP). On the other hand, countries poor at natural resources and with lower unemployment rates (Jordan, Tunisia and Morocco) informal activity employment made up a lower percentage of the labour force (45% to 67% workers not contributing to social security), but generated a larger share of output (36% to 40% of GDP) (World Bank, 2011).

Relying on the Multiple Indicator-Multiple Cause (MIMIC) methodology, a study by the IMF (Abdih, 2011) estimated the size of the informal sector in the Jordanian economy to represent 26% of GDP. The massive inflow of Syrian refugees, that do not hold a working permit and thus were not allowed to work in Jordan, can be expected to have an impact on the size (both in terms of job creation and of output) of the informal economy: nevertheless, there is still no definitive evidence on that (Abdih et al., 2014).

- Job creation

In 2013, 53.646 new jobs were created, 77% of which were by the private sector (Table 11). This clearly signals the importance of investing and of stimulating the private sector. The share of job creation by the private sector further increased, compared to 65.1% in 2011 and 67% in 2012.

Table 11: Net created jobs by gender, nationality, and sector from 2011 to 2013

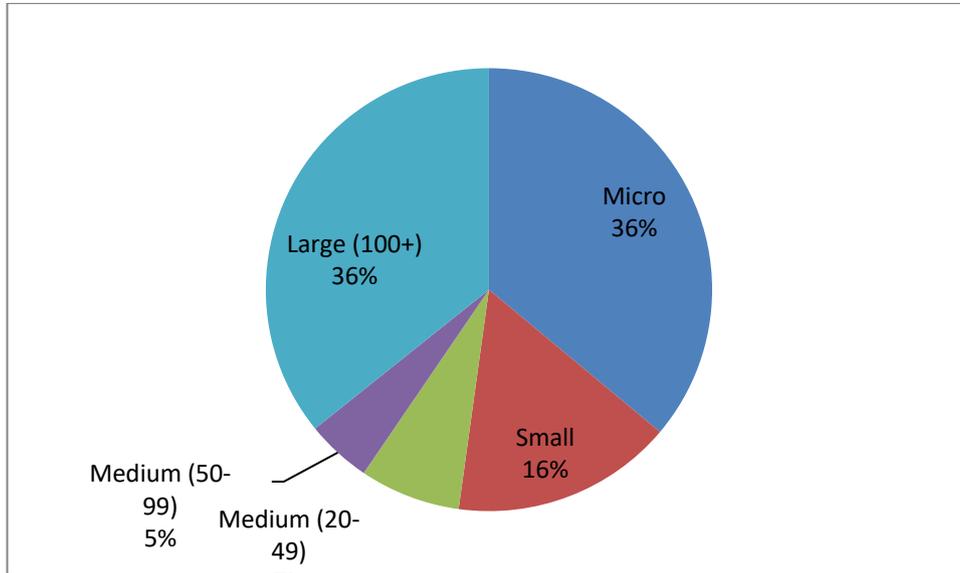
	2011		2012		2013	
	%	No.	%	No.	%	No.
Gender						
Male	63.8	34376	71.0	35408	65.8	35292
Female	36.2	19537	29.0	14497	34.2	18353
Nationality						
Jordanian	89.8	48417	86.8	43314	76.5	41042
Non Jordanian	10.2	5497	13.2	6590	23.5	12603
Sector of work						
Public	33.8	18248	32.4	16171	21.4	11487
Private	65.1	35114	67.0	33419	77.0	41321
Non gov. institutions	1.0	551	0.6	315	1.6	838
Total	100	53913	100	49905	100	53646

Source: DoS, 2014

- Employment contribution of MSMES

In total, as the employment survey for 2014 by the Department of Statistics shows, the private sector provides only 54.5% of jobs. Looking at the contribution to employment of private sector establishments, it emerges that MSMEs generate 64%, enterprises with less than 5 employees provides 36% of jobs.

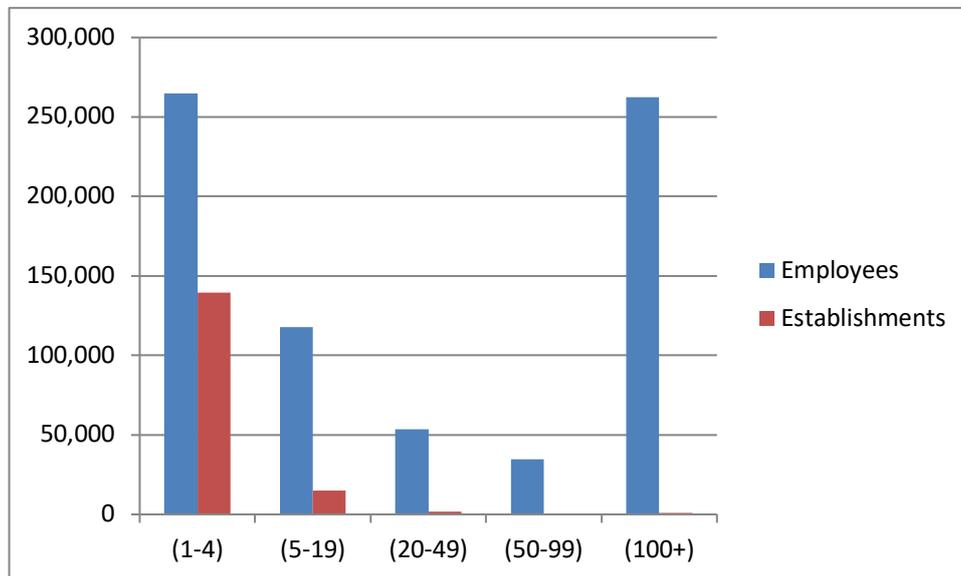
Figure 27: Employment contribution of firms by size



Source: DoS, 2014

Figure 28 compare the employment contribution and the number of private sector establishments by size of employees. 89% of private sector establishments are microenterprises (i.e. with less than 5 employees) and they contribute 36% of private sector employment, 9% of firms are small sized (i.e. with less than 20 workers) and employ a share of 16%. 1% of firms are small firms (between 20 to 100 workers) and small firms create 12% of private sector jobs, and large companies, representing 0.5% of establishments, generate 36% of jobs.

Figure 28: Number of establishments versus employment contribution of private sector establishments by size



Source: Employment Survey, DoS, 2014

Table 12: Size group of employment and establishments in 2013

	(1-4)	(5-19)	(20-49)	(50-99)	(100+)	Total
Employees	264,807	117,893	53,610	34,691	262,535	733,536
Establishments	139,540	14,969	1,740	511	743	157,503

Source: Employment Survey, DoS, 2014

Recent labour market trends

- Mismatches of labour demand and supply

The educational level in Jordan is very high, however, considering the high unemployment rates among graduates and the wage differential by educational level (Figure 29), returns on education can be questioned.

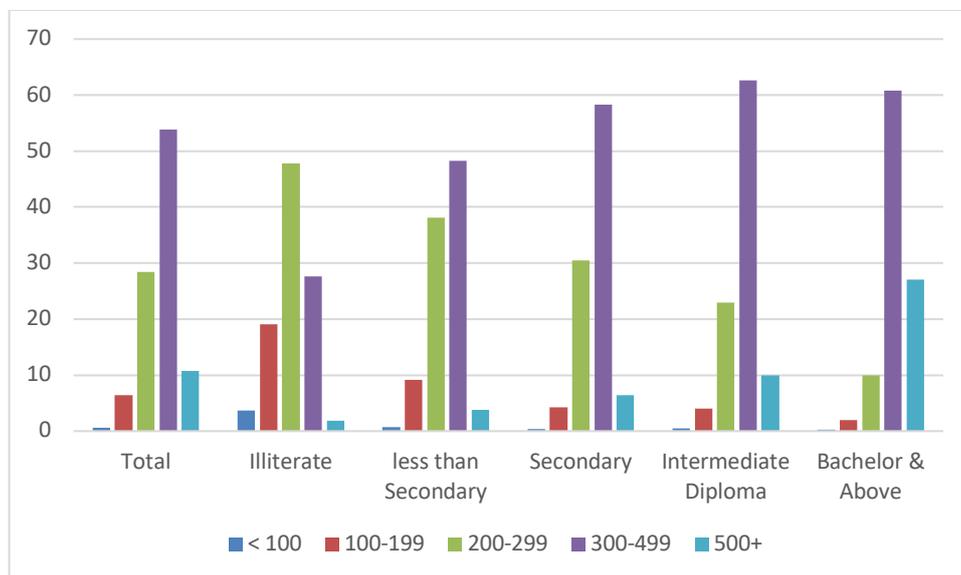
In general, returns on education are defined as the relative increase in per capita income per year derived from working in a competitive market to work as a result of

increased school years. Returns on education can be, among else, used as an indicator for productivity in an economy.

From what emerges from the DoS survey for 2015, having a bachelor degree or above increases the chances of a salary within the highest category, but the large bulk of bachelor graduates still perceives a wage of between 300 and 499 Jordanian Dinar, similarly to what happens for individuals with an intermediate diploma and secondary education only.

As the Jordan National E-TVET Strategy (2014) points out, there are "too many academically qualified Jordanians, while the market asks for lower skilled labour and technicians." This mismatch is aggravated by the fact that the profile of university graduates is not providing the practical skills required by the labour market: "Their education does not match the demands of industry, even in the corresponding professions as the skills learned are too academic and not sufficiently practical" (Jordan National E-TVET Strategy, 2014).

Figure 29: Jordanian employed persons by education and wage category in JD (percentage distribution for 2015)



Source: survey data by DoS, 2016

- Gender gap and wage differentials

The labour market in Jordan is influenced by the social contract that sees employment policies as a way of redistributing rent and gaining loyalty. This is a typical feature of all SEMCs and, in this way, i.e. by "using labour markets as means to distribute rents and to buy political quiescence, Arab government have essentially undermined the labour markets' primary function, which is to efficiently allocate human capital to its most productive uses and to signal the kind of human capital investments that are needed" (Assaad, 2014). It is clear that with a similar status quo, there is a great resistance to changes that may make some privileged groups worse off.

Distorted investment in education and the continuation of disdain towards manual jobs, even in times of high unemployment rates, have been clearly reinforced by state-generous employment policies. This is valid for Jordan but is a broad generalisation amongst the SEMCs. As it emerges from Gallup's World Pool for 2012, the preference for employment in the public sector is still very common in the whole region and in Jordan covers more than 65% of young adults (15-29) and surpasses 70% of people over 30.

In general, there are differences between the average wages paid by the public and private sectors. Different conditions of employment may also influence job seekers, as the public sector is more attractive in terms of job security, shorter working hours, and provides medical insurance (Dougherty, 2010). Overall, according to the Jordan Department of Statistics (Table 13), in 2013 wages in the public sector were clearly larger than wages in the private sector, both for males and females, by roughly 22.5%. Despite this trend, Dougherty further points out that the private sector pays higher wages for male university graduates (Dougherty, 2010). Actually, a central objective of the National Employment Strategy (NES) is linked to the alignment of wages between the two sectors.

Table 13: Average wages of paid employees by sector and gender for 2013

	Male employees	Female employees
Public sector	545 JD	473 JD
Private sector	445 JD	386 JD
Total	476 JD	429 JD

Source: DoS, 2014

Further, there is a gender based wage differential: as presented in Table 13, wages of male employees in 2013 were on average 11% higher than wages for female employees. A similar trend is consistent for all major occupational groups, except for sales workers, with a 294 JD average wage for female and 279 JD for male employees (DoS, 2014).

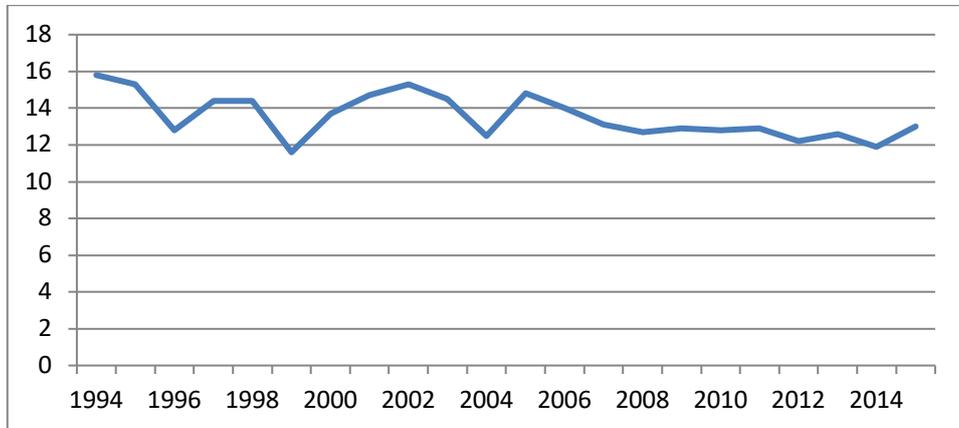
Looking further at the gender distribution across wage groups, it emerges that a slightly higher share of female employees than males earn between 300 and 499 JD per month. Actually, as a corollary to the low participation rate of females, is the fact that women would rather exit the labour force than have a job that does not meet their qualifications and/ or wages expectations. Similarly, falling participation rates of females have also been observed as a response to lower public sector hiring, both in Jordan and among the SEMCs (Assaad, 2014).

- Unemployment rate

According to Jordan's Department of Statistics (2015), in the year 2014 unemployment in Jordan was 11.9% and gender differences within it were pronounced, with a 10.1% unemployment rate amongst males and 20.7% amongst females. Youth unemployment was assessed in the same year to be 30.6%, with male youth unemployment being 26.3% and female youth unemployment reaching 53.3%.

In the third quarter of 2015, unemployment increased to 13.8% (11.1% for males and 25.1% for females) (CBJ, 2015). On average, in 2015 total unemployment was 13%, male unemployment 11% and female 22.5% (DoS, 2016). Further, in the last quarter of 2016, unemployment was estimated to be 15.8%. (DoS, 2017). Over the last twenty years, the unemployment rate has never been below 11% (Figure 30).

Figure 30: Unemployment rate between 1994 and 2015



Source: DoS, 2016

Further, by breaking down unemployment by gender and age group (Table 14), a very low unemployment rate emerges amongst females over forty. This is due to the large amount of women leaving the labour force by that age. Looking at the female participation rate, 87.2% of women between 40 and 54 are not economically active, as well as more than 98% of the over 55s (data source: DoS, 2015).

Table 14: Jordanian unemployed persons age 15+ years by sex and major age groups (per centage distribution for 2015)

		Male	Female
Total	6073	4183	1890
Percentage	100	100	100
15-24	48.3	51.3	41.8
25-39	41.1	35.1	54.6
40+	10.5	13.6	3.7

Source: DoS, 2016

Unemployment amongst university graduates is also very critical. According to the survey by DoS for 2015, unemployment among graduates reached 40.3%, with 24.4% amongst male graduates and 75.5% amongst female graduates (Table 15). This is a problem of mismatch between the skills taught and the real needs of the labour market and, s in addition, this related to the culture of shame, that implies that *"once graduated, many Jordanians prefer to wait for a suitable job instead of accepting an employment below their level"* (Jordan National E-TVET Strategy, 2014).

Table 15: Jordanian unemployed persons age 15+ years by sex and educational level (per centage distribution for 2015)

		Male	Female
Total	6073	4183	1890
Per centage	100	100	100
Illiterate	0.5	0.7	0
Less than Secondary	43.4	60.8	4.7
Secondary	6.5	8.1	3.2
Intermediate Diploma	9.3	6	16.6
Bachelor & Above	40.3	24.4	75.5

Source: DoS, 2016

Considering the average duration of unemployment (Table 16), the DoS survey reveals that for 2015 slightly more than one fifth of the unemployed managed to find a new occupation within one month, whereas job seeking took between 7 months and 2 years for almost 50% of the unemployed who found a new job.

Table 16: Jordanian unemployed persons age 15+ years by sex and duration of unemployment in months (percentage distribution for 2015) (survey data by DoS, 2016)

		Male	Female
Total	6073	4183	1890
Percentage	100	100	100

<= 1	21.6	23.2	17.9
2 to 3	7.1	6.3	8.7
4 to 6	8.6	8.6	8.6
7 to 12	25.6	27.2	22.1
13 - 24	22.7	22.7	22.7
25+	14.5	12	20

Overall, figures for unemployment in Jordan signal the need for creating job opportunities and to invest in the private sector in order to progressively change the existing social contract, according to which the state is still employing a large share of the population (according to the Jordan's National Employment Strategy 2011-2020, 38% of those employed will be working for the public sector), whereas relying on the employment survey by the Department of Statistics, the private sector only provides 54.5% of jobs. The situation is further aggravated by the high population growth (more than 2% per annum over the last decade, according to the Jordan Economy Profile, 2015), by an unbalanced dependency ratio of 1:4 (figure for 2013, as of NCHRD, 2014), and by the massive inflow of refugees, mostly from Syria.

Employment policies

Since the beginning of the 1990s, Jordan has put considerable efforts into reforming its economy. The reforms were inspired by the precepts of the Washington consensus and aimed at creating a modern and efficient business environment conducive to sustainable economic growth. Labour market challenges were addressed, too: new legislation was introduced (Labour Law, Social Security Law, and Civil Service Regulation) and a new National Employment Strategy for 2011-2020 was launched. The National Employment Strategy is a comprehensive document addressing the most important problems of the labour market and formulating a roadmap for the creation of high quality jobs and productivity improvements. A very important part of the National Employment Strategy to increase employability is vocational training. According to the Employment-Technical and Vocational Education and Training (E-TVET) Strategy, which is fully aligned to the National Employment Strategy, vocational training should aim at developing and implementing a "demand-driven, career and business-oriented education and training system" that "enables Jordanians to fulfill their career aspirations and

contributes to economic growth and social development” (Jordan National E-TVET Strategy, 2014).

To better understand the challenges faced by the Jordanian labour market when it comes to youth and youth employability, the next section reviews the main characteristics of young job aspirants in Jordan.

CHARACTERISTICS OF YOUTH

Jordan has a young population: according to the Jordan Department of Statistics, 68% of the population is below 29 years of age and almost 30% is between 15 and 29. Further, as this report has shown, the youth unemployment rate is dramatically high. Thus, improving youth employability and reducing youth unemployment are utmost priorities for the countries. In this regard, the authorities have been active in developing policies to support youth: emphasis has been placed on training and education, but several further initiatives and programmes have been developed to help integrate young people into the labour market.

With the aim of better understanding the school-to-work transition (SWTS) of Jordanian youth, the International Labour Organisation (ILO) run a large scale survey covering a sample of 5,405 youths, i.e., between 15 and 19 years of age (SWTS Jordan, 2014). Overall, the findings revealed a very low youth participation rate: 60.6% of Jordan’s youth are, according to the ILO survey, economically inactive. The youth inactivity rate is particularly high for young females, 80.7% of which were inactive (Table 17).

Table 17: SWTS sample by economy activity

Main economic activity status of SWTS sample	Total	Male	Female
Employed	29.9%	47.2%	11.2%
Unemployed	9.5%	10.8%	8.1%
Inactive	60.6%	42.0%	80.7%

Data source: SWTS Jordan, 2012-13

Low labour force participation amongst the young can only be partially explained by the high share of Jordanian youths who are still involved in education and by the low propensity to combine work and study. More specifically, education was the dominant reason for inactivity for almost 70% of respondents (69.6%) and for 92.1% of males and 57% of females. Family and household care was the second most frequently mentioned reason which was, however, only mentioned by female respondents (32.1% of inactive females versus 0.3% of inactive males). Considering only employed youths, the majority are represented by wage and salaried workers (93.8% are employees, with the remaining share being self-employed, i.e. employers, own-account workers and contributing family workers). This share is even higher for female respondents, who are virtually all employees (98.7%).

Table 18 specifies the type of contract for employed youths: overall, 34% of employed youths work without a written contract. The proportion of those working without an official contract is higher for males (36.6%) than for females (23%) and in urban areas (38.7%) rather than in rural areas (13.6%). Differentiating working contracts by duration, 85% reported having an unlimited contract. A related aspect is the informality of youth, which was less common in Jordan than in the other MENA countries participating in the SWTS survey.

Table 18: Young wage and salaried workers by type of contract and duration (%)

	Type of contract		Type of contract (by duration)	
	Written	Oral	Unlimited	Limited
Total	66.0	34.0	85.0	15.0
Male	63.4	36.6	86.8	13.2
Female	77.0	23.0	77.1	22.9
Rural	86.4	13.6	80.4	19.6
Urban	61.3	38.7	86.0	14.0

Data source: SWTS Jordan, 2012–13

The distribution of employed youths by sector reflects the distribution of the overall employed population: more than one third of male employed youths were active in public administration and defence (35.0%), followed by wholesale and retail trade (18.7%) and manufacturing (9.4%).

Young working female respondents were mostly active in the education sector (33.4%), followed by human health and social work activities (15.2%). This reflects the prevailing work related to culture and mentality, according to which not all sectors and all types of works are deemed to be acceptable for females.

Concerning the stages of transition from school to work, the SWTS survey revealed that more than half of the Jordanian youth (52.2%) falls into the category of transition not yet started. This reflects the low labour force participation rate amongst the young: in particular, most youths (76.2%) who did not start the transition by the time of the survey were students (47.4% males and 52.6% females), while the remainder (23.8%) were non-students with no intention of working (96.4% of which were females).

The analysis of the labour market in Jordan, however, cannot be complete without addressing the topic of migration: since the 1970s, there has been a large number of Jordanians working abroad and, at the same time, a large number of foreign workers competing in Jordan for job opportunities. The characteristics of migration in the country are thus discussed, as follows.

MIGRATION

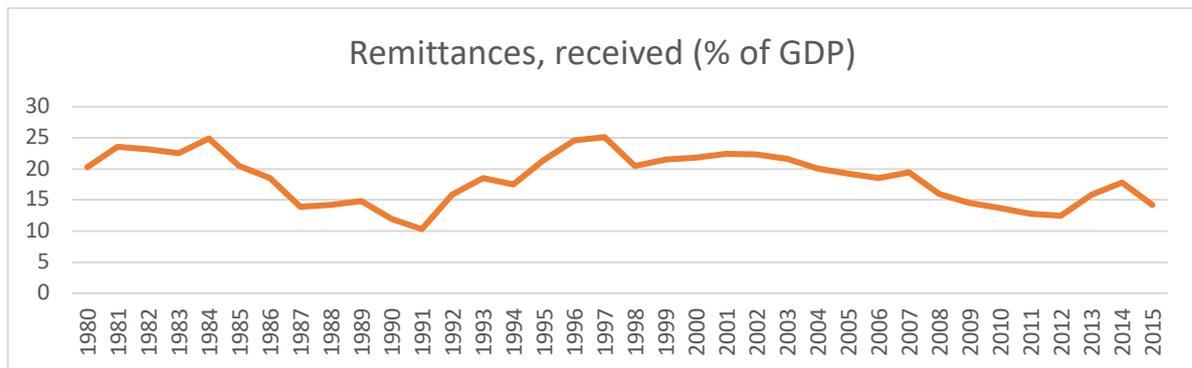
Since the early 1970s, labour migration has been a very important issue for the Jordanian economy. The oil boom of the early 1970s led to an increase in the number of Jordanians working abroad, especially in the Gulf countries. This also increased the need within the Jordanian labour market for foreign workers, particularly in the most labour-intensive sectors.

Thus, Jordan has a longstanding tradition of work related migration. One of the consequences of the oil boom was the increased demand for labour from the Gulf countries. The circulation of oil revenues enabled the Gulf States to massively spend on infrastructure developments and to sustain high levels of consumption. The needs of the expanding petrol industry increased the demands for foreign workers.

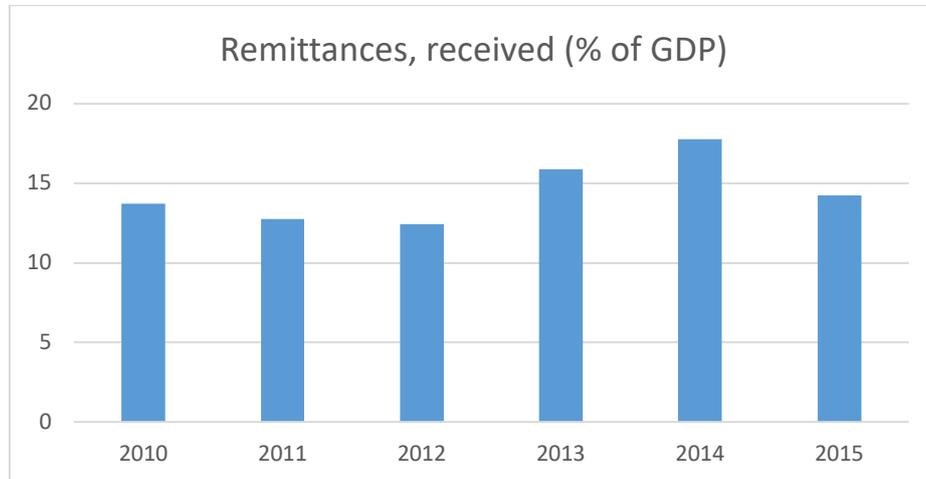
The situation of a country like Jordan which lacked natural resources, industrial development and where, in addition, the traditional agricultural sector was starting to contract, increased incentives from the beginning of the 1970s for Jordanians to accept work abroad. It can be estimated that by the end of the 1970s almost one third of the Jordanian workforce was employed abroad (Robins, 2004).

In 2001, roughly 400,000 Jordanians were working abroad. Unofficial estimates indicate that in 2011 around 670,000 Jordanians were residing abroad, 80% of which were in the Arab Gulf States. Estimates for the numbers of Jordanians working abroad report of 1 million expatriate workers in 2014 (Jordan Households International Survey, 2014). As a result, remittances significantly increased during the 1970s and grew in 1984 to 24.8 % of GDP. In 2014, remittances represented almost 18% of GDP. They decreased to 14% in 2015 (Figure 31 and Figure 32).

Figure 31: Remittances in million US\$ and as percentage share of GDP



Source: World Bank, WDI, 2017

Figure 32: Remittances as share of GDP between 2010 and 2015

Source: World Bank, WDI, 2017

Workers' migration represents a cornerstone for the Jordanian economy. Not surprisingly, during the 1970s, a large number of migrant workers were Palestinians with Jordanian nationality, whose decision to migrate was facilitated by their homeland situation, as well as by the existence since the 1950s of Palestinian migrant communities in the Gulf. (Alshyab, 2011).

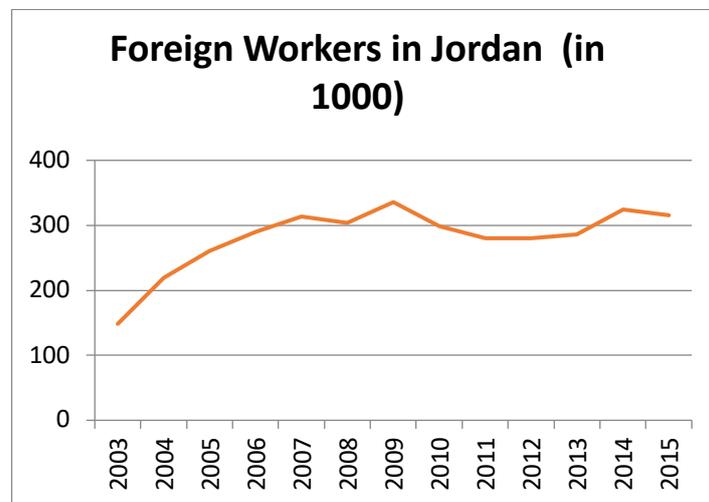
Inflow of migration and outflow of workers' remittances

The Jordanian labour market began to absorb foreign workers in the early 1970s. Since then, the importance of foreign workers for the Jordanian economy has started to increase, also as a consequence of the oil boom and the increase in the amount of Jordanian work related migration to the Gulf countries. This further reinforces the existing rentier mentality in Jordan, in the sense of disdain towards production and work as a symbol of status. A similarly distorted work ethic is also associated with the widespread culture of "aib" (i.e., shame). Arab workers feel ashamed and typically refuse in their home country to do work in their home country that is perceived by their society as being humble. It is a widespread tendency to opt for a less remunerated office job or even for unemployment, rather than for a relatively better

paid but humbler and less prestigious working activity (Alshyab, 2011). The same disdain, however, does not exist for expatriate workers: Arab workers abroad are typically willing to undertake activities that they would not, in all likelihood, accept in their country of origin.

As Figure 33 shows, the number of foreigner workers in 2015 reached around 315,045, which equates to 23% of employed Jordanians. Most of the foreign workers (64.9%) are Arabs, mainly from Egypt (specifically, 61% of all foreign workers are from Egypt). Almost half of the foreign workers (47%) live in the capital city, Amman. The vast majority of foreign workers consist of young people: The percentage of foreign workers in the age group (25-35) was about 69% on average for the last six years. 93% of the expatriate workers have secondary school education and below, which confirms the fact that most of them have a low skills profile and, therefore, work in agriculture and services.

Figure 33: Foreign workers in Jordan (in thousands)



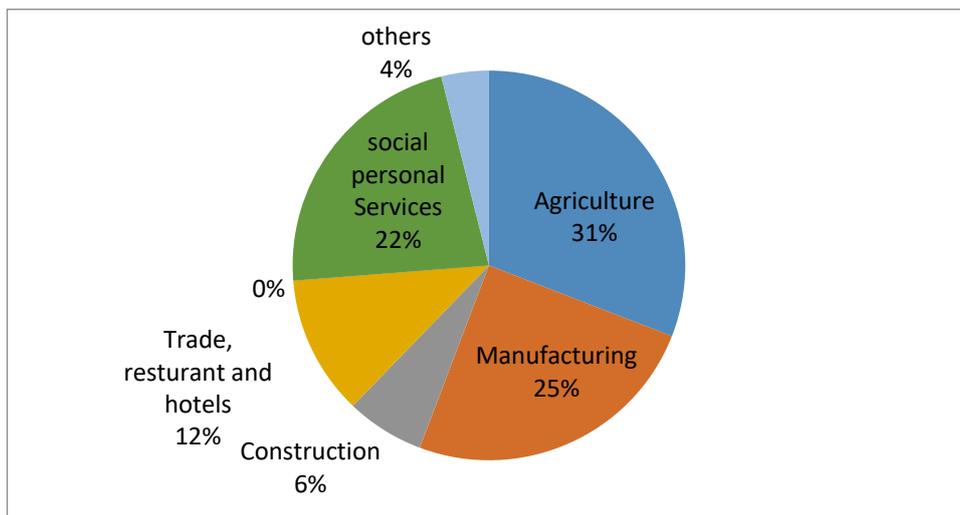
Source: Labour Department of Jordan

As the data released by the Jordanian Labour Department reveals, the number of migrant workers has been fluctuating over the last years. The data shows a decline in the number of foreign workers from 298,342 in 2010 to 280,263 in 2011. This number then

dropped to 279,798 in 2012 and rose again in 2013 to 286,197 and to 324,410 in 2014. In 2015, the number of foreign workers in Jordan decreased to 315 045. During the period 2003-2015, the average rate of growth in the foreign workforce in Jordan was 7%.

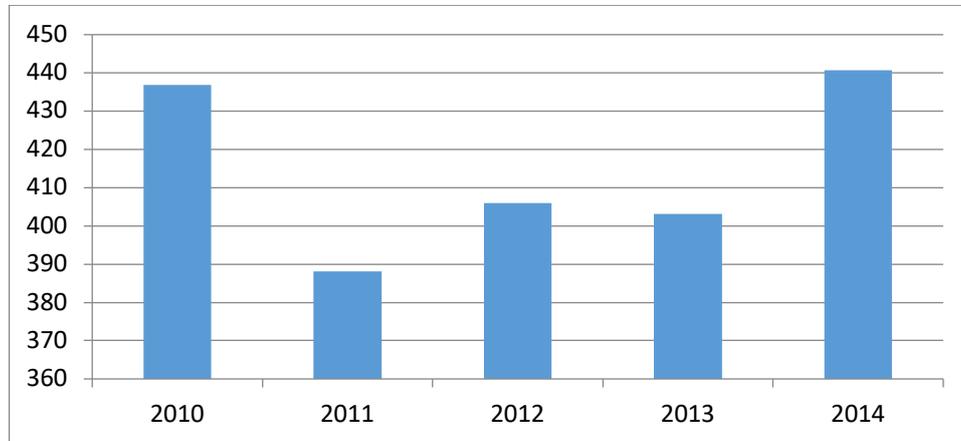
The distribution of foreign workers by economic activity reveals that 30.9% work in agriculture and fishing, followed by the manufacturing sector, which employs 24.8% of foreign workers. Social personal services and generally activities in which households are the employers, represent a further 22% of foreign worker employment, trade, restaurant and hotels 12%, and construction 6%.

Figure 34: Foreign workers by economic activity (2015)



Source: authors' calculation based on DoS data, 2016

Figure 35 shows the outflow of remittances from Jordan to the respective countries of workers' origin. On average for the last five years, they represented a share of less than 1.4% of GDP. Hereby, it should be noted, however, that informal channels are in general very important to transfer remittances. Thus, official estimates both of in and outflows of remittances typically underestimate the phenomenon.

Figure 35: Outflow of workers' remittances between 2010 and 2014 in US\$ millions

Source: Central Bank of Jordan, 2014

CONCLUSION AND POLICY IMPLICATIONS

The present chapter provides an overview of the main characteristics of human capital and the challenges of the labour market in Jordan. In general, the analysis has revealed that, in spite of considerable efforts and significant results achieved, there is still much to be done to reduce unemployment and improve the employability of specific groups within society.

In particular, females, youths and young graduates are facing dramatically high unemployment rates. This is particularly challenging when considered together with the sustained population growth. This points to the structural weakness of the private sector and distorted investment in education.

A further peculiarity of the Jordanian labour market is the low participation rate, especially for females. This can be interpreted as a consequence of the widespread rentier mentality and of the culture of shame (Alshyab, 2012).

In general, high unemployment, in particular among young graduates and low participation rate signals the need for reforming the educational sector and for strengthening and improving vocational training. In this regard, Jordan is implementing the Employment-Technical and Vocational Education and Training (E-TVET) Strategy. That

said, vocational training is perceived as a second class education and female participation in it is scarce.

The analysis has further revealed the existence of mismatches and imbalances in the Jordanian labour market: on the one hand, wages in the public sector are significantly higher than in the private sector and, on the other hand, females on average earn significantly less than males. Alignment of wages and gender wage equality are already among the objectives of the National Employment Strategy 2011-2020 (NES).

However, in addressing the standing between education, human capital, and unemployment it is important to include migration: in Jordan, there is both a large number of (highly qualified) Jordanians working abroad and of foreign workers. Hereby, the challenge for the authorities is to strike a balance between attracting remittances and avoiding the brain drain, but also to make sure that foreign workers are complementary and not substitutes for the Jordanian labour force.

IV. HUMAN CAPITAL, LABOUR MARKET FRICTIONS AND MIGRATION IN MOROCCO¹⁰

Najat El- Makkaoui, Yeganeh Forouheshfar and Sara Loukili

INTRODUCTION

The link between education and economic activity is well established in the economic literature. Education and investment in human capital is considered the main contributor to economic growth in many growth models, particularly in endogenous growth models such as Romer (1986) and Lucas (1988), where education and investment in human capital is a growth factor. Such models support public policies facilitating training and providing access to education.

This chapter first discusses the main characteristics and the quality of the education system in Morocco, followed by a description of past and future reforms. Then, features of the labour market and its most recent trends are presented. Lastly, we provide an overview of youth characteristics and migration patterns in Morocco.

EDUCATION SYSTEM: STRUCTURE AND KEY CHALLENGES

Characteristics of the Moroccan Education System

The public education system is managed by the Moroccan Ministry of Education and the private system is run by private companies or by educational agencies, such as the Agency for French Education Abroad (AFEA). Higher education runs under the supervision of the Ministry of Higher Education and Executive Training and is composed of public and private institutions.

¹⁰ Earlier unpublished research was provided by Abderrazak El Hiri and Abdelhamid Skouri, associate researchers at UEMF team.

Schooling became compulsory for all Moroccan children between the ages of 6 and 13 in 1963 and, since 2000, the duration of compulsory education has been extended to 9 years. Schools are organised in a three cycle 6-3-3 model, culminating in the baccalaureate exam that is the gateway to university.

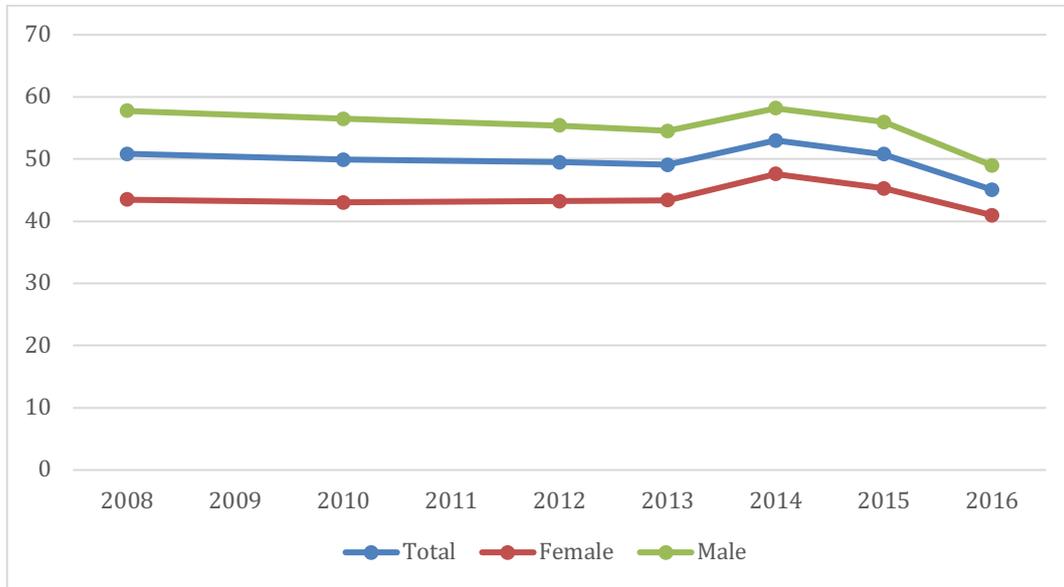
Trends in enrolment rates

Over the last two decades, Morocco has made considerable efforts to accelerate enrolment rates through three successive campaigns – the National Charter of 1999-2009, 'Plan d'Urgence' of 2009-12 and, most recently, the Action Plan of 2013-16. The results of these reforms have been globally positive, yet net enrolments remain relatively low, especially at secondary and tertiary levels.

Pre-school facilities in Morocco are mostly run by the private sector and the emergence of public pre-schools only started in 2003, following the work done by COSEF (Commission Spéciale Education-Formation) mostly in rural areas with the goal of promoting pre-schooling for children aged from 4 to 5. In 2016, the net enrolment rate at pre-primary level was 45%, with boys having higher rates than girls (48% versus 41%). As illustrated in Figure 37, the pre-school enrolment rates have not increased since 2008 but the gender gap is declining slightly. In spite of all the reforms, in 2016 more than 56% of children did not go to a pre-school. In ten years, the number of pre-schooled children in rural areas has declined from 32.86% in 2007 to 28.42% in 2016. These low enrolment rates are due to various factors, notably the absence of pre-school facilities close to children's homes, poverty and families' inability to pay the pre-schooling fees, the absence of toilettes in pre-school facilities and children being recruited to fulfil parents' tasks.

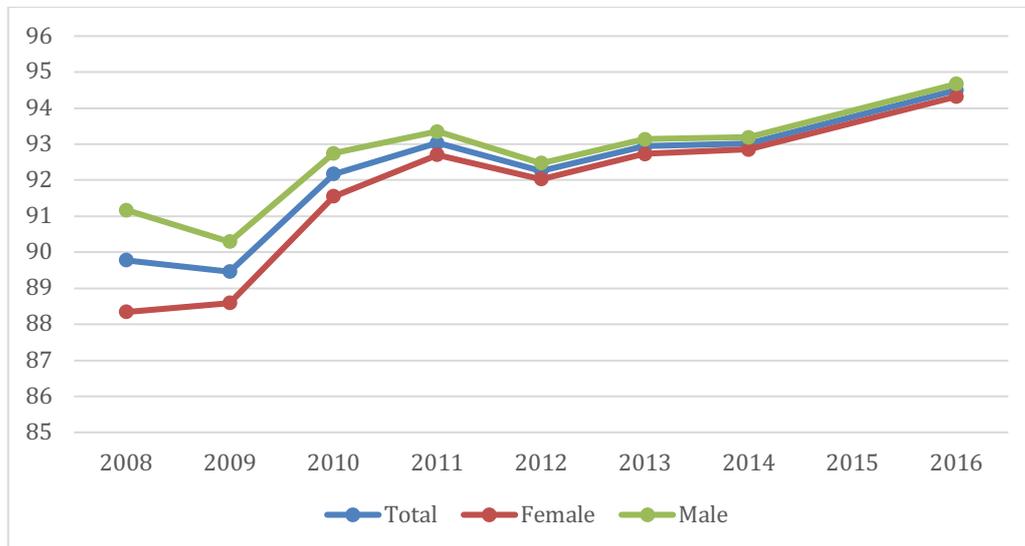
Figure 38 represents the net enrolment rates for primary level, that have increased significantly during the past decade, especially along with the implementation of the 'Plan d'Urgence' of 2009- 12. Moreover, the gender gap has been mostly nonexistent since 2013, which proves the success of the implemented reforms. The demographic change has contributed to a decline in the number of pupils in primary schools since 2006. The reforms from 2008 to 2011 mainly targeted primary schooling and, together with demographic change, they have led to an increase in per student expenditure in primary schools.

Figure 36 - Pre-Primary enrolment rate (%)



Source: UNESCO

Figure 37 - Primary Net Enrolment rate

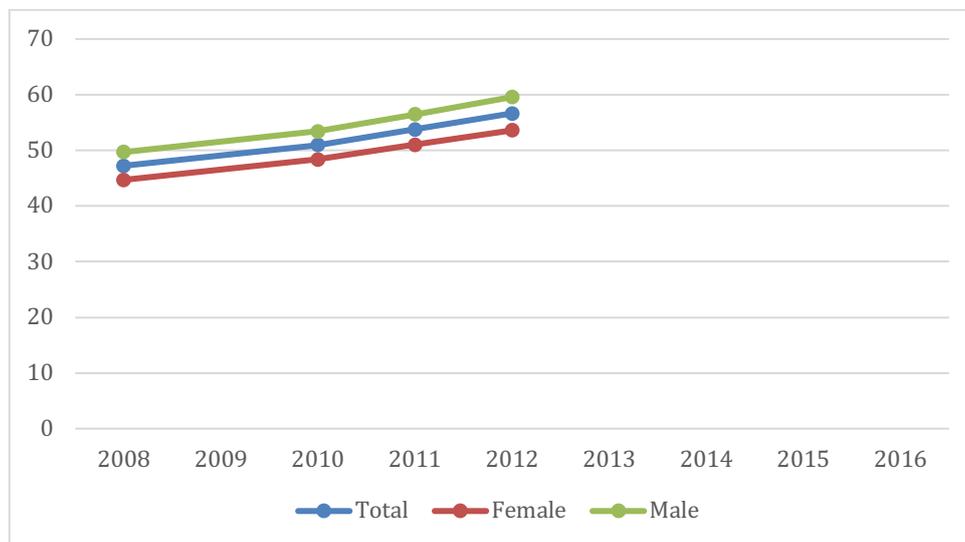


Source: UNESCO

By the end of primary school, students are required to pass "Certificat d'études primaires" to be eligible for admission to lower secondary school. The net enrolment rates in secondary schools have risen in the past decade, from 49.6% in 2008 to 53.6% in 2012, however this rate remains very low given the fact that lower secondary education is compulsory (Figure 39).

One factor that affects enrolment is school accessibility; between 2000 and 2013 the number of primary schools have grown from 5940 to 7458, that is equivalent to 124 new primary schools per year; for middle schools, the increase is from 972 in 2000 to 1751 schools in 2013 - that is 60 new middle schools on average per year. For high schools, the number has grown from 543 to 1000 in this period, which is equivalent to only 35 new high schools per year. These numbers highlight lower accessibility of secondary education relative to the primary level and justify, to some extent, the difference in enrolment rates.

Figure 38 - Secondary net enrolment rate (%)

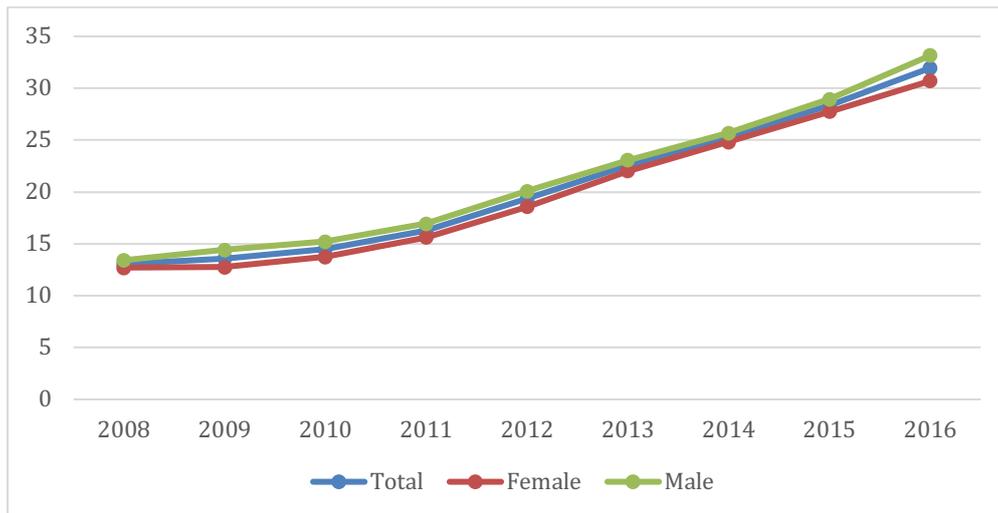


Source: UNESCO

Figure 40 represents the tertiary enrolment rate that continued to increase steadily since 2008, reaching 32% in 2016. There is no significant gender gap among

those who enrol in higher education, even though males are subject to a slightly higher enrolment rate (33.2% versus 30.7% for females).

Figure 39 - Tertiary Enrolment Rate (%)



Source: UNESCO

Government expenditure on education

Moroccan expenditure on education has significantly risen in the past decade, especially through the 2009-12 reforms. As detailed in Table 19, the State budget for education and professional training has increased by more than 37 billion dirhams between 2001 and 2013, from about 24.8 billion dirhams in 2001 to more than 61.7 billion dirhams in 2011 before falling to 56.7 billion dirhams in 2013. This increase reached its peak between 2009 and 2011, the period of implementation of the so called 'Plan d'Urgence' reforms of 2009-12, with the largest budgets allocated for Education and Training in this period.

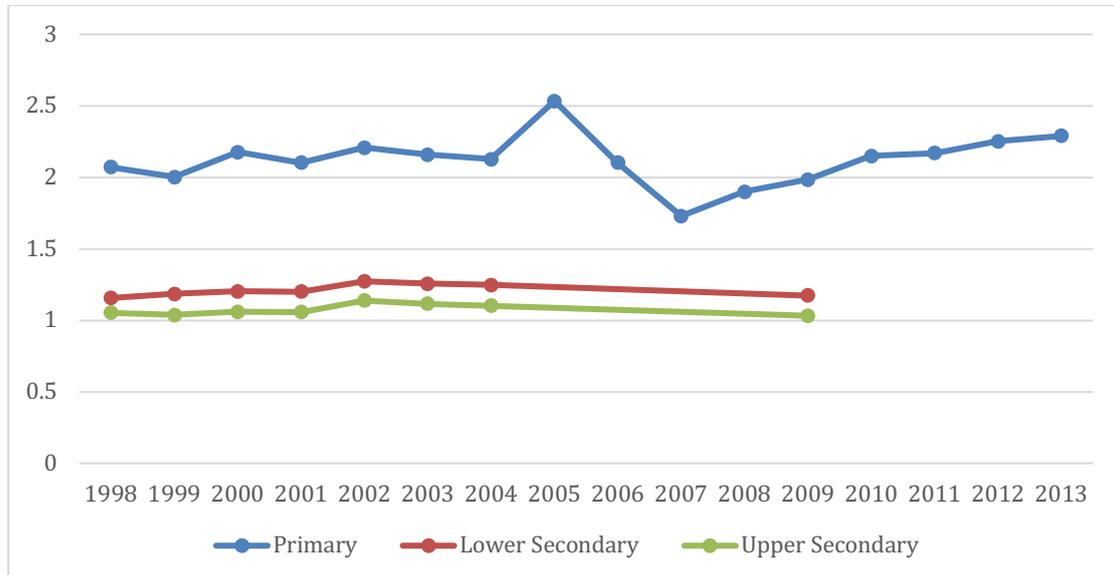
Table 19: State budget allocated to the education and training system (in thousands of current dirhams)

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Budget	24769	26928	29034	29771	32444	33128	35704	38836	49162	59049	61799	59190	56712
Annual variation	-	8.70%	7.80%	2.50%	9.00%	2.10%	7.80%	8.80%	26.60%	20.10%	4.70%	-4.20%	-4.20%
Share of Government's budget	34.00%	35.10%	36.60%	35.00%	34.60%	34.90%	33.70%	31.70%	33.60%	36.70%	37.20%	32.50%	30.30%
Share of GDP (%)	5.80%	6.00%	6.10%	5.90%	6.10%	5.70%	5.80%	5.60%	6.70%	7.70%	7.70%	7.10%	6.60%

Source: La mise en œuvre de la Charte Nationale d'Éducation et de Formation 2000-2013 Acquis, déficits et défis, Analytical Report, INE-CSEFRS (2014)

The distribution of this budget among primary, middle and high schools is displayed in Figure 41, and reflects that a higher share of expenses is dedicated to the primary level.

Figure 40 - Government expenditure on education as a per centage of GDP by level (%)



Source: UNESCO (Different with Government report of 2014 cf table19)

Regarding tertiary education, the budget allocated by the State has more than doubled during the period 2001-2013. As detailed in Table 20, this budget stood at 4.18 billion dirhams in 2001 and has increased steadily ever since, to reach 9.66 billion dirhams in 2013.

Table 20: State budget allocated to higher education (in thousands of current dirhams)

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Higher education budget	4186	4272	4203	4286	5190	5360	5522	6216	7524	8293	8062	8804	9660
Annual variation		2.05%	-1.62%	1.97%	21.09%	3.28%	3.02%	12.57%	21.04%	10.22%	-2.79%	9.20%	9.72%

Source: La mise en œuvre de la Charte Nationale d'Education et de Formation 2000-2013 Acquis, déficits et défis, Analytical Report, INE-CSEFRS (2014)

The unit costs of school education: expenditure per student

There is a significant increase in operating costs per pupil in primary education. Indeed, the efforts made at the primary level were very important, since the cost per pupil rose from 2986 dirhams in 2001 to almost 5000 dirhams in 2011 (according to Analytical Report, INE-CSEFRS, 2014). The analysis of the demographic evolution indicates that the population of children of primary school age has declined since 2006, which has contributed to the increase in unit cost in primary education. The increase in the public budget for education between 2008 and 2011, which mainly targeted the primary level, has also contributed to the further increase in unit costs in this cycle.

The cost per pupil in middle schools increased slightly from 4595 dirhams in 2001 to 5401 dirhams in 2011. On the other hand, the evolution of the unit cost at high school level tends to fall. The number of pupils enrolled in high school has risen sharply since 2006 and this increase is more substantial than the one for the teachers during this cycle.

In terms of professional training, the analysis of the evolution of unit costs shows a significant reduction in the cost per trainee. The cost per trainee in the “Office for Professional Training and Promotion of Work” decreased initially between 2001 and 2004, from 14,101 constant dirhams to 9720 constant dirhams. This decline continued and reached 5686 dirhams in 2013. This represents a decrease of 59 per cent in training costs per trainee between 2001 and 2013. The continuous increase in the capacity of the Public Professional Training and the efforts made to modernise the management of this system has led to this effective reduction in costs per trainee. The number of trainees has increased from 54,240 trainees in 2002 to more than 300,000 in 2014 and the number of institutions managed by this system has increased from 184 to 329 in the same period.

Quality and Effectiveness of Education

The Moroccan school system education cycle is identified with low literacy and attainment rates, in particular for women of 15 years of age and older (59.13%) and for those aged 65 years old (17.66%) (see Table 21). Middle and high school completion has grown significantly, to 62.5% and 33.9% respectively. There are, however, still some 1.2 million children outside of secondary education. There also remain obstinate problems regarding the enrolment of females in rural areas. The number of repeaters in primary is fairly high and close to 12%. This makes pupils stay in schools longer than they are

supposed to (Table 22). Primary to secondary transition rates are lower among females, which highlights the gender gap in educational opportunities.

Table 21: Literacy rate by age groups and gender in 2012

Literacy rates in 2012	Total	Male	Female
15-24 years	91.22	94.63	87.78
15 years and older	69.43	80.38	59.13
65 years and older	32.75	49.73	17.66

Source: UNESCO

Table 22: Progress and Completion in Education

	Total	Male	Female	Year of observation
School life expectancy ISCED 1-8 (years)	11.79	12.3	11.25	2012
Percentage of repeaters in primary (%)	9.68	11.81	7.31	2016
Survival to the last grade of primary (%)	92.63	92.09	93.2	2015
Primary to secondary transition rate (%)	88.73	91.14	86.16	2015

Source: UNESCO

- **Higher education**

University funding is mainly provided by the State. In the public universities the number of students enrolled has risen from 293,600 in 2009 to 543,400 in 2014 (i.e. an 85% increase) and, across the higher education system as a whole, the increase has been from 364,400 to 610,700. This rise corresponds with the period of the so called, 'Plan d'Urgence' reform, launched in 2009-2012. The growth in the number of students corresponds to the increasing number of high school graduates - 57.3% in 2012 versus 44.5% in 2005.

Higher education is inefficient. In 2006, around 64% of students abandoned their studies and left university without a certificate; this drop out mainly happens in the first three years of being an undergraduate, with 25% dropping out in the first year. Thanks to the Emergency Programme (Plan d'Urgence), which led to the creation of 9 new universities and 27, 500 new teaching posts, the drop-out rates have decreased and, by 2012, reached 18% in the first year. Moreover, the reforms have led to better integration with the labour market (The number of vocational courses doubled overall).

- **Private education**

The private sector is the dominant provider at pre-school level (91.6% of the 740,000 children enrolled) and accounts for 11.8% at primary school, 6.6% at middle school and 7.7% at high school. Private primary school enrolment has more than tripled in less than 15 years, from 4% in 1999 to 14% in 2013. Although 14% remains a small proportion of pupils enrolled in school, this percentage has increased over a short period of time. The percentage of pupils enrolled in private primary education has more than tripled in 13 years (between 2000 and 2013), with an average annual increase of 8% in the proportion of children attending private primary school. .

Keeping the same pace of growth in private education as in the years 2000 – 2013, the proportion of primary school pupils in the private sector could reach a third of total students within ten years.

The number of children enrolled in public primary education has almost constantly decreased since 2000. For example, in 2013, the number of children enrolled in primary school (3,475,190 pupils) fell for the first time below the 2000 level (3,497,926 pupils), when the Charter for the development of private schools was introduced whilst, at the same time, the total number of pupils enrolled in primary education (private and public) increased by 10%.

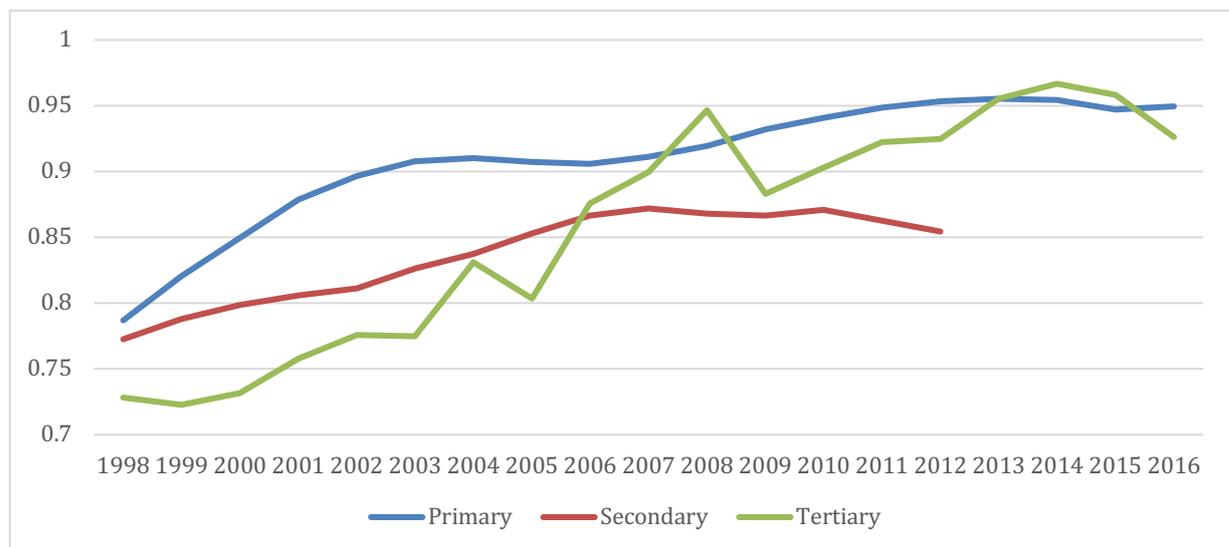
The increasing popularity of private schools is probably due to parents' doubts regarding the quality of public schools. The present demographic dividend in the country that leads to higher investment in education, accompanied by mistrust in public schools, will contribute to the dominance of private schools in the future.

- **Gender equality assessment**

Efforts have been made over the last ten years to promote girls' enrolment rates. The main focus of the reforms was on primary education, as the educational climate in Morocco was strongly marked by high illiteracy rates and under-education of girls and women, particularly in rural areas.

Figure 42 represents the gender parity index which increased between 1998 and 2016 throughout all levels of education. But, it still remains low and below the threshold of 92% for secondary education (Figure 42).

Figure 41 - Evolution of the parity index by level of education (in %)



Source: UNESCO

- **Technical and vocational education training (TVET)**

As in most countries of North Africa, TVET is often seen as a second-best form of education. It is, however, extremely important as a means of equipping a segment of the country's youth with workplace-orientated skills and enhanced employment prospects. The TVET system has been growing at 9.5% a year since 2003 and, by 2010, had 290,000 students.

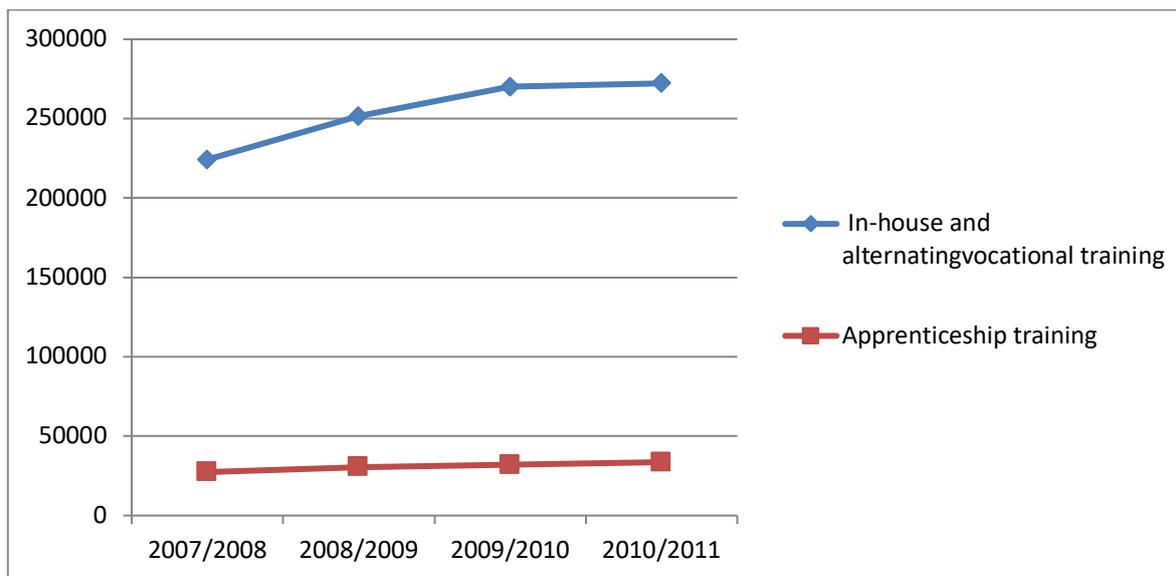
To improve the quality of the education system and training, Morocco has undergone different reforms; since 1999, with an ambitious Charter for the development of education and training and in 2008 also with the Emergency Plan for vocational training.

The vocational training system has extended considerably.

The main indicators of the TVET system (2010/2011):

- 4 levels of training (S, Q, T and TS)
- 305,846 trainees, including 42% girls: 229,372 in the public sector and 76,474 in the private sector

Figure 42 - Evolution of trainee enrolments by type of training



Source: Ministry of employment and vocational training

- **Overall Quality of education:**

Morocco participates in the 'Trends in International Mathematics and Science Study' (TIMSS) and 'Progress in International Reading Literacy Study' (PIRLS) evaluations.

The results of these evaluations are not very promising. Morocco ranks poorly in comparison to other countries: 45th out of 45 in literacy (PIRLS 2011) and 49th out of 50 in science (TIMSS 2011).

According to the '*Programme National d'Evaluation des Acquis*' (PNEA), which is a national large scale assessment for students in the fourth, sixth, eighth, and ninth grades, in 2011 Morocco displayed the lowest performance after Yemen. This highlights the very low quality of education in Morocco, compared to other countries in the region.

Different Reform Policies and Action Plans.

The government has launched several reforms to improve the access of education and to reduce regional differences in the provision of education. The history of educational policies in Morocco can be divided into four phases:

Phase 1 (1956 to 1960): The state adopted unification reforms, and promoted teaching in Arab of the education system which was inherited from the colonial period.

Phase 2 (1960 to 1982): Consolidation and expansion of the national education system. The State set two objectives: the generalisation/unification of schooling programmes and skills in training programmes.

Phase 3 (1982 to 1999): reversing the relative educational approach, in a context of crisis and adjustment (Structural Adjustment Programmes). The lack of investment in education reflected the difficulty in supporting the growing educational demands of a school age population, following the baby booms of the 1960s and 1970s. The decrease in enrolment rates in primary education between 1983/84 and the early 90s particularly affected rural areas. During this phase, no investments were undertaken to modernise the educational system, nor programmes for enhancing consistency with the new requirements of the labour market and international trade. The government was under pressure from the scarcity of financial resources, and this situation ended its monopoly over the public educational sector, allowing the private sector to invest in education, particularly in higher education. This period was also characterised by the adoption of the "Arabisation" of public education at primary and secondary levels, but not at the higher level.

Phase 4 (1999 to present): this phase has been highlighted by various reforms to the education system as a component of political and economic reforms initiated in the late 20th century. These reforms are composed of three successive campaigns – the National Charter of 1999-2009, 'Plan d'Urgence' of 2009-12 and the Action Plan of 2013-16.

The Adoption of the National Charter for Education and Training has identified three objectives; first, accelerating the development of an educational system and quality training; second, implementing the integration between the different components of the education and training system in its economic and socio-cultural context; finally, strengthening the process of decentralisation and the establishment of new management modes, based on greater efficiency in governance and continuous performance improvements.

Currently, the country is undergoing a reform called '**The strategic vision of the 2015-2030**' which was introduced by the Higher Council for Education, Training and Scientific Research and funded by the State. The main goals of the reform are: to promote national and sectorial solidarity, to create universal funding with the participation of the State, private sector, local authorities and other partners and to instigate enrolment fees accompanied by an automatic waiver for low income families.

CHARACTERISTICS OF THE MOROCCAN LABOUR MARKET

The institutional framework

Labour market regulations are essential to promote equity and efficiency in the labour market. In Morocco, the regulatory and institutional features of the labour market include the minimum wage laws, hiring and firing regulations, the matching process between supply and demand for labour, the structure of non-wage labour costs, and the role of trade unions. As early as 1936 Morocco adopted, minimum wage legislation that sets different wages floors for urban and rural labour markets, and for different age categories. Minimum wages are revised according to a formal price indexation mechanism, specifically, once the consumer price index increases by 5 per cent.

Morocco has comprehensive and rather restrictive labour market regulations, particularly regarding firing procedures in the private sector workforce. These regulations

are well enforced, through the active role of the administration and the trade unions. For instance, individual layoffs due to economic purposes are prohibited. Moreover, downsizing for economic reasons is subject to prior approval by the regional authorities. The only way for an employer to dismiss a worker is for disciplinary measures. Even then, the law provides the possibility for a dismissed worker to lodge an appeal before the court which will review the employer's decision. The procedure is so complicated that firms seek to avoid it, often through costly direct agreements with the laid off worker, in order not to face long judicial procedures. In addition to its rigidity, the main flaw of the current legal framework resides in the unpredictability and inconsistency of the jurisprudence over time and across space, since the court (judge) is granted important leeway.

The country has recently adopted a set of active labour market policies in order to improve the job matching process for young skilled workers. These policies are mainly based on regional public institutions in charge of improving the matching process between labour demand and young skilled labour supply, and specific labour tax deductions favouring their employment.

It should be noted that, in addition to minimum wage regulations and firing legislation, there are numerous mandatory social contributions that also affect the private labour demand function. Therefore, to launch high economic growth, sustainable and creative wealth creation, and to give the necessary visibility to investors, Morocco needs to set up a set of sectorial plans, including adequate labour market regulations, to modernise traditional activities and to develop innovative sectors. Although data is very limited, the contribution of different sectorial plans to employment must be analysed through performance indicators (ex post), provided by the ministries of supervision, based on the assessment process. Furthermore, these sectorial plans can have a significant impact on job creation and their success depends on how they are implemented; workers should follow the training programmes adapted to the new professional profile requirements.

With respect to policies appertaining to training and employment mismatch in the late 1980s Morocco introduced, "a voluntary policy for managing the school's transition to employment in the private sector". This active labour market policy includes two components: the first is the organisation of the function of intermediation by a

leading operator; the second are "active policy measures for the labour market to facilitate access to employment in the private sector." The main two goals were: facilitating access to paid employment in the private sector and to encourage self-employment. Subsequently, three programmes have been implemented to achieve these goals: the integration programme "*Idmaj*", the qualification programme "*Taehil*" and entrepreneurship promotion programme "*Moukawalati*". The first two are associated with the first objective: to promote access to employment in the private sector, while the "*Moukawalati*" programme is associated with the encouragement of self-employment.

In order to investigate the effectiveness of active employment programmes, one should:

- Not only recognise young unemployed graduates in urban areas but also laid-off workers, independent, unpaid workers (apprentices and family workers in rural areas) which includes a majority of women and youth;
- Not only recognise large companies but also SMEs that account for most of the economic fabric, and also not beneficiaries including those in the informal sector;
- Strengthen public labour programmes and the fight against poverty as the National Initiative for Human Development, insofar as they allow for the creation of jobs in rural areas by reducing rural underemployment, and in favour of urban unskilled workers.

The Moroccan labour market: an overview

To conduct an analysis of the labour market in Morocco, one needs to highlight certain specificities relating to population and economic growth in past decades. The Moroccan population is characterised by its significant share of youth and growing urbanisation. This growing share of young amongst the population will increase the pressure on the labour market since the unemployment rate is highest amongst the young. The Moroccan population is certainly growing, but growth rates are declining, as shown in table 23 below. Thus, Morocco has a small window to benefit from its currently young, but rapidly ageing, labour force.

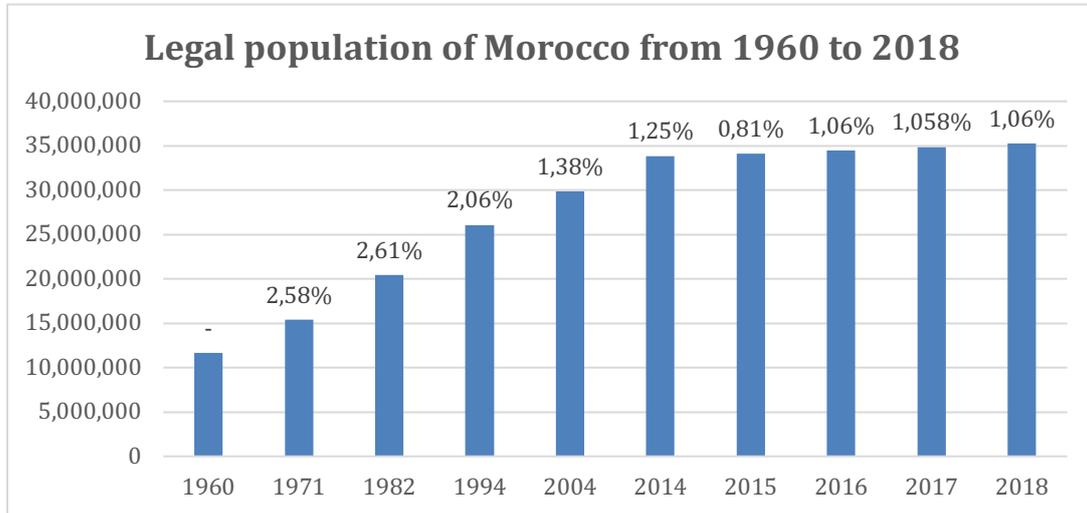
Table 23: Legal population of Morocco from 1960 census to 2018 and its annual average growth rate

Years	Population	Rates (in %)
1960	11 626 470	-
1971	15 379 259	2,58
1982	20 419 555	2,61
1994	26 073 717	2,06
2004	29 891 708	1,38
2014	33 848 242	1,25
2015	34 125 000	0,81
2016	34 487 000	1,06
2017	34 852 000	1,058
2018	35 099 124	0,71
Global growth since 1960	22 860 530	1,502

Source: High Commission for Planning

Figure 44, below, represents the evolution of the Moroccan population, highlighting its fast demographic transition. Thus, the annual growth rate has decreased from 2.58% in 1971 to 1.25% in 2014 and remained more or less constant afterwards. As shown in Figure 44, the Moroccan population has grown steadily between 1960 and 2014 and stabilised afterwards; the population growth rate is now close to 1% which is a signal for a strong and rapid demographic transition.

Figure 43 - Population in Morocco since 1960



Source: HCP, 2018

Table 24: Legal population of Morocco from 1960 to 2018, according to place of residence (urbanisation rate)

Year	Urban	Rural	Total	Urbanisation rate
1960	3389613	8236857	11626470	29,1
1971	5409725	9969534	15379259	35,1
1982	8730399	11689156	20419555	42,7
1994	13407835	12665882	26073717	51,4
2004	16463634	13428074	29891708	55,1
2014	20432439	13415803	33848242	60,3
2015	20752000	13373000	34125000	60,8
2016	21155000	13332000	34487000	61,3
2017	21561000	13292000	34852000	61,9
2018	21968000	13251000	35220000	62,4

Source: High Commission for Planning. RGPH 2018

According to Table 24, the urbanisation rate has more than doubled between 1960 and 2018. This growth rate is likely to exert pressure on the labour market and on employment policies. It is essential to study the urbanisation process and demographic transition, in order to tackle unemployment issues, particularly youth unemployment.

- **Unemployment rate**

According to the national employment survey (Table 25), there was a general downward trend in the unemployment rate between 1999 and 2011, before increasing slightly in 2012. The decline in the unemployment rate is due to job creation and an increase in youth enrolment in education and training curricula.

Table 25: Unemployment rate by gender

Year	Male	Female	Total
1999	14,1	13,2	13,8
2000	13,6	12,8	13,4
2001	12,3	12,2	12,3
2002	11,1	12,1	11,3
2003	11,2	12,4	11,5
2004	10,7	11,1	10,8
2005	11	11,3	11,1
2006	9,7	9,7	9,7
2007	9,8	9,8	9,8
2008	9,5	9,8	9,6
2009	9	9,5	9,1
2010	8,9	9,6	9,1
2011	8,4	10,2	8,9
2012	8,7	9,9	9
2013	9,1	9,6	9,2
2014	9,7	10,4	9,9
2015	9,4	10,5	9,7
2016	8,9	10,9	9,4

Source: National Employment Survey, High Planning Commission 2016

Moreover, at the national level, unemployment is higher for women. The unemployment rates in urban areas are significantly higher, where on average it reached 16.5%, against an average of 4.01% in rural areas for the period between 1999 and 2016.

Table 26: Unemployment rate by areas

Year	Urban	Rural	Total
1999	22	5,4	13,8
2000	21,4	5	13,4
2001	19,5	4,5	12,3
2002	18,3	3,8	11,3
2003	19,3	3,4	11,5
2004	18,4	3,1	10,8
2005	18,4	3,6	11,1
2006	15,5	3,7	9,7
2007	15,4	3,8	9,8
2008	14,7	4	9,6
2009	13,8	4	9,1
2010	13,7	3,9	9,1
2011	13,4	3,9	8,9
2012	13,4	4	9
2013	14	3,8	9,2
2014	14,8	4,2	9,9
2015	14,6	4,1	9,7
2016	13,9	4,2	9,4

Source: National Employment Survey, High Planning Commission 2016

The lowest unemployment rates in rural areas are largely due to the predominance of precarious jobs (under-employment and unpaid work) that are particularly held by women. In Morocco, the productive potential of young people is not

sufficiently utilised. In fact, the average unemployment rate of the 15-34 age group was 16.84% during the period 1999-2015, against an average of 4.14% for the ages group of 35 years and older.

Table 27: Unemployment rate by age groups

Years	15 – 24	25 - 34	35 - 44	45 and +	Total
1999	20,3	20,7	7,4	2,9	13,8
2000	19,6	20,5	7,3	2,6	13,4
2001	18,5	18,9	6,4	2,2	12,3
2002	17,1	17,3	6,1	2,1	11,3
2003	16,4	17,7	7	2,5	11,5
2004	16,7	16,5	6,7	2,2	10,8
2005	17	16,8	6,5	1,5	11,1
2006	16,6	14	6	2,3	9,7
2007	17,2	14,4	5,9	2	9,8
2008	18,3	13,5	5,2	2	9,6
2009	17,9	12,7	5,4	1,9	9,1
2010	17,6	12,8	5,4	2,1	9,1
2011	17,9	12,9	5,2	1,8	8,9
2012	18,6	13,2	5	1,9	9
2013	19,3	13,2	5,6	2,3	9,2
2014	20,1	13,9	6,1	3	9,9
2015	20,8	13,9	5,5	3	9,7
2016	22,5	13,5	4,8	2,7	9,4
2017	26,1	15,6	5,4	2,4	10,2

Source: National Employment Survey, High Planning Commission 2017

The higher education graduates show a stronger unemployment rate than other graduates.

Over the period 1999-2017, the graduate unemployment rate averaged 22.7%. This high rate is synonymous with the mismatch between the skills acquired in high levels of

education and the skill set required for available jobs in the labour market. It is also the result of the inability of the national productive system to create jobs that can absorb the mass of graduates whilst lowering (drastically) the amount of jobs created by the government which was, until recently, the main employer of highly trained graduates.

Table 28: Unemployment rate by degree

Years	Without diploma	Graduate : middle level	Graduate : High level	Total
1999	8	26,9	27,6	13,8
2000	7	26,7	28,9	13,4
2001	6,3	24,1	26,8	12,3
2002	5,5	22,2	26,5	11,3
2003	5,5	22,1	27,2	11,5
2004	5	21,1	26,7	10,8
2005	5,2	21	26,6	11,1
2006	4,8	18,7	19,5	9,7
2007	4,9	18,1	20,8	9,8
2008	4,7	18	19,5	9,6
2009	4,4	16,7	18,3	9,1
2010	4,5	16	18,1	9,1
2011	4	15,4	19,4	8,9
2012	4	15,3	18,7	9
2013	4,5	15,1	19	9,2
2014	4,7	15,5	21,1	9,9
2015	4,1	15,6	21,2	9,7
2016	3,7	14,1	22	9,3
2017	3,9	15,1	23,2	10,2

Source: National Employment Survey, High Planning Commission 2017

- **Employment rate**

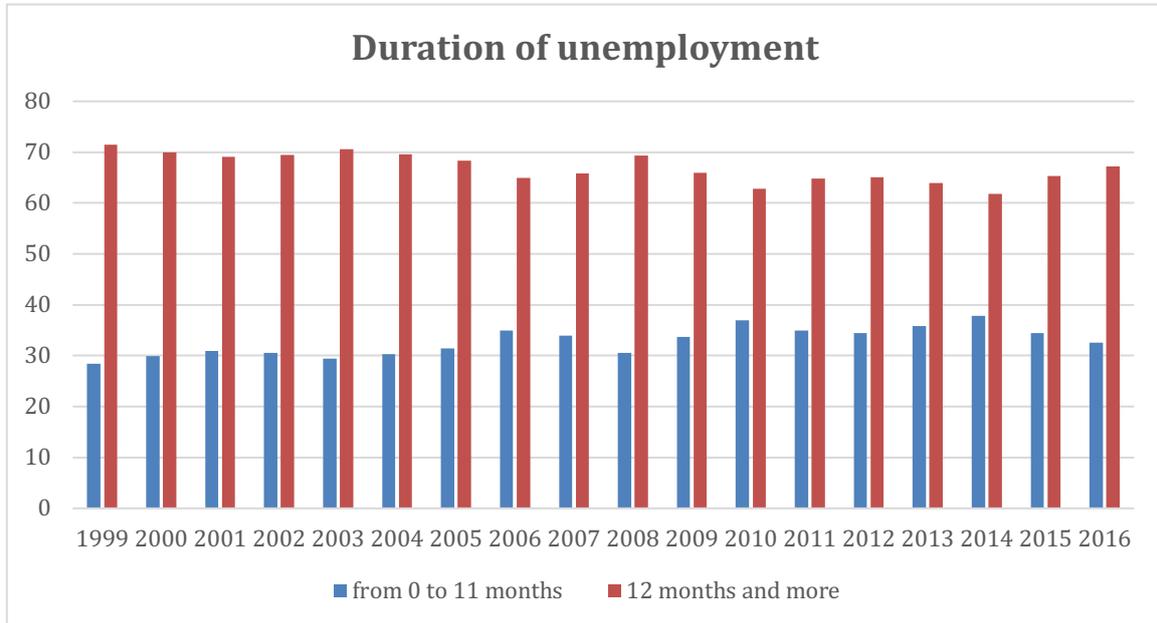
According to the High Commission for Planning, the Moroccan labour force is not qualified, as 61.2% of employees are without a degree (the remainder is distributed as follows: 27.2% have an average level of education and only 11.6% hold a higher degree). Unemployed diplomas are very active in agriculture (83.5%) followed by the construction sector (63.4%), industry (51.2%) and services (42%). Unemployed diplomas receive more women (71.9%) than men (59.7%).

In 2016, the unemployed active labour force was estimated at 1,105,000¹¹. The unemployment rate revealed the share of the unemployed in the labour force aged 15 and over (relative ratio of the number of unemployed to that of workers aged 15 years) and was estimated at 9.9%. Nearly 80% of the unemployed labour force was located in urban areas.

Figure 45 and Figure 46 show that long-term unemployment (more than one year) remained a persistent and severe problem. It reached 60% of the total unemployed.

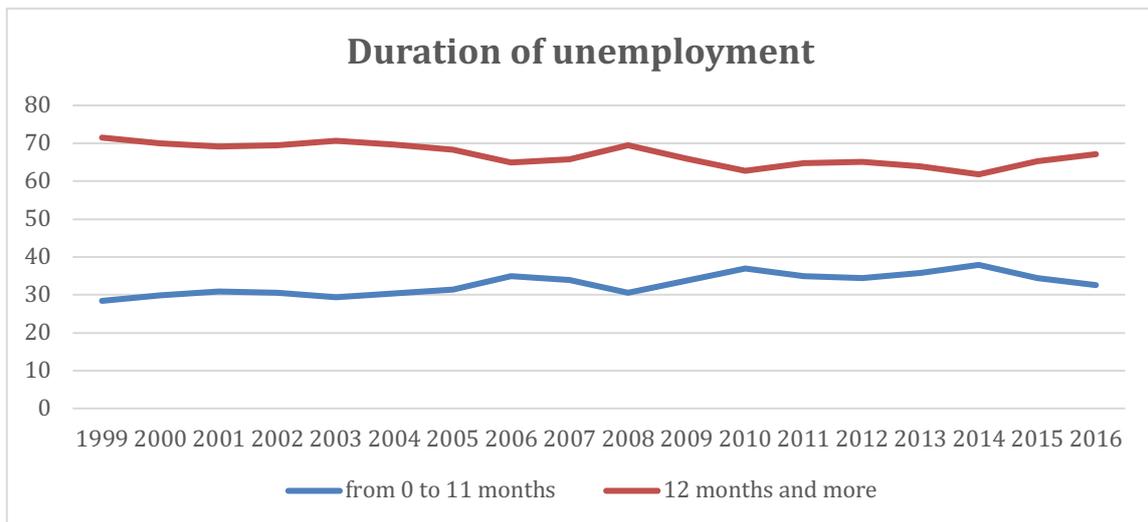
¹¹ HCP, unemployment statistics, 2016, https://www.hcp.ma/Emploi-chomage-activite_r123.html

Figure 44 - Duration of unemployment (1)



Source: High Planning Commission, National Employment Survey 2016

Figure 46 - Duration of unemployment (2)

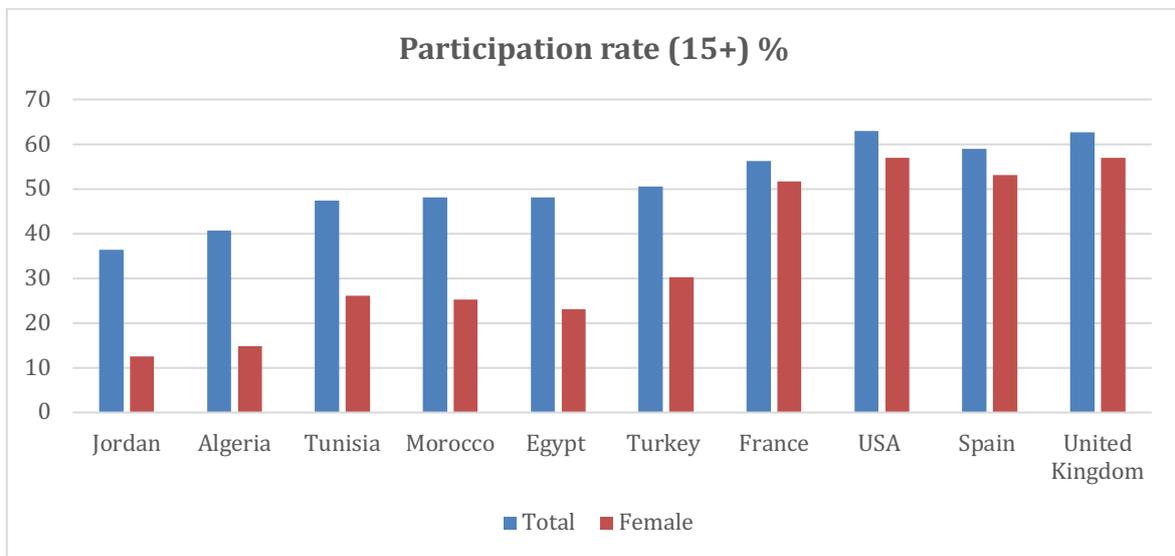


Source: High Planning Commission, National Employment Survey 2016

- **Participation rate**

The participation rate, which measures the degree of involvement of the population in the labour market, recorded a lower level relative to a set of countries (figure 47).

Figure 45 - Participation rate (15 to 64) for a sample of countries (in%)



Source: World Bank, 2014

There is a significant difference in the participation rate according to age. The young (15-24) and seniors (45 plus) participate least in the labour market. At the national level, participation rate has declined since 1999 (54.5% in 1999 to 46.7% in 2017).

Table 29: Participation rate by age

Year	15 - 24	25 – 34	35 - 44	45 and more	Total
1999	48,2	64,8	64,2	45,8	54,5
2000	45,8	63,5	63,3	45	53,1
2001	42,8	62	62,5	44,4	51,4
2002	42	62,2	61,4	43,8	50,9
2003	43,7	64	62,1	44,8	52,3
2004	42,7	64,1	63,1	45,5	52,2
2005	41,1	63,7	62,4	40,4	51,5
2006	40,1	62,5	63,4	46,1	51,3
2007	39,6	62,8	62,8	45,9	51
2008	38,9	62,4	62,4	45,6	50,6
2009	37	61,8	61,5	45,9	49,9
2010	36,2	61,8	61,6	45,4	49,6
2011	35	61,8	61,9	44,8	49,2
2012	33,5	60,7	61,4	44,6	48,4
2013	32,3	61,6	61,4	44,4	48,3
2014	32,6	61,3	60,4	43,7	48
2015	30,5	61,1	60,3	43,2	47,4
2016	27,5	60	61,6	44,2	47
2017	28,2	60,4	61,3	42,7	46,7

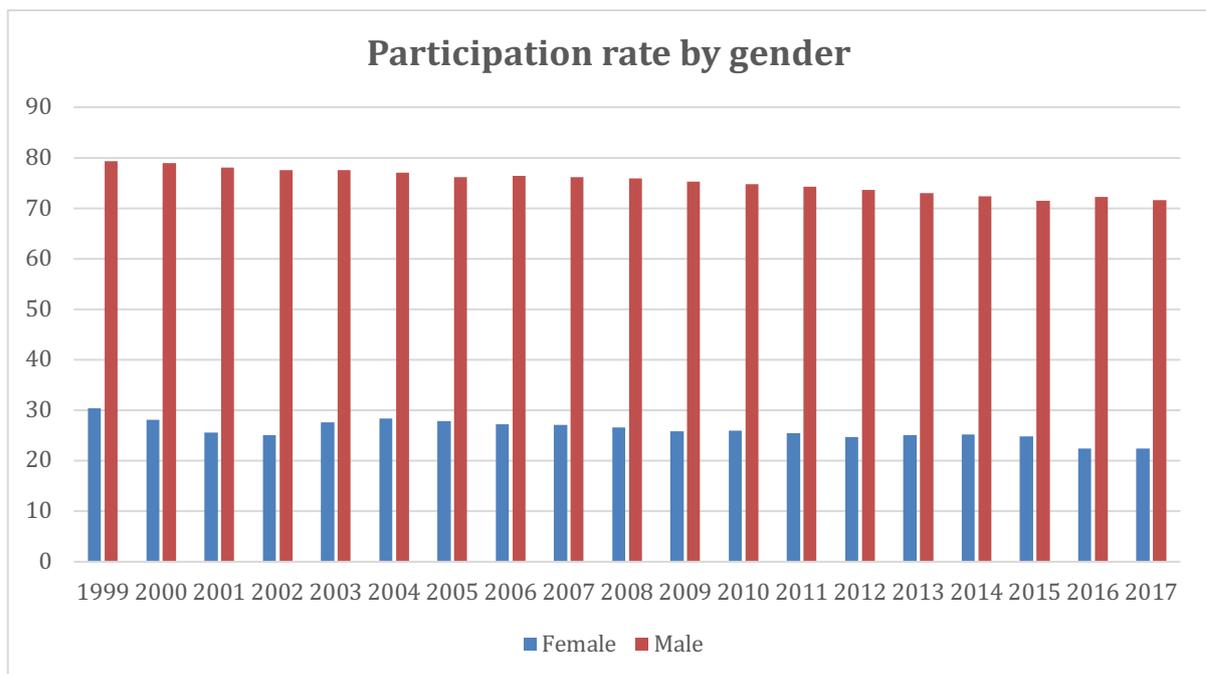
Source: National Employment Survey, High Planning Commission 2017

The fall in the participation rate affects all age groups, but the lowest participation rate is recorded in the 15-24 age group. This weakness is explained partly by the extension of the school term (in the hope of strengthening the market position of employment) and also by the withdrawal from the labour market because of integration difficulties. The decline in the participation rate results in an increase in the dependency ratio.

As for the participation rate by gender, Figure 48 shows that the female employment rate was lower than men throughout the period from 1999 to 2017. In fact, in 2017, while males registered a 71.6% participation rate, for females it was only 22.4%.

It is also worth mentioning that the male participation rate witnessed a slight decrease between 1999 and 2017, suggesting a higher participation rate for females in the labour market (as seen in figure 48).

Figure 46 - Participation rate by gender



Source: National Employment Survey, High Planning Commission 2017

Overall, in the short-term, the observed decline in the participation rate is more related to developments in the labour market. In fact, data for the period 1999-2017 shows that the rate increased when new jobs were on the rise and vice versa. Discouragement of the workforce following the drop in job creation would be likely to reduce the unemployment rate.

Recent labour market trends

According to the High Commission for Planning, employment in Morocco is unqualified, as 61.2% of employees are without a degree (the remainder is distributed as

follows: 27.2% have an average level of education and only 11.6% hold a higher degree). Unemployed diplomas are very active in agriculture (83.5%) followed by the construction sector (63.4%), industry (51.2%) and services (42%). Unemployed diplomas receive more women (71.9%) than men (59.7%).

Employment dominated by the private sector

As far as industry is concerned, employment in Morocco remained dominated by the private sector, 90% of the total (12). Furthermore, during the period from 1999-2017, the share of public and semi-public employment showed an overall downward trend. This was due to several factors, including the desire of the authorities to reduce the share of public wages in GDP, in the context of a general reform to consolidate the public finances. The private sector share in employment increased, but not sufficiently to accommodate the large mass of graduates seeking employment.

Table 30: Employment by sector

Years	Public - Semi Public	Private
1999	10,8	87,6
2000	10,3	88
2001	10,6	87,9
2002	10,1	88,7
2003	9,4	89,2
2004	9	89,7
2005	8,6	90
2006	9,8	88,9
2007	9,2	89,3
2008	9	89,6
2009	9,2	89,5
2010	8,5	90,2
2011	8,7	90
2012	9,1	89,5
2013	8,7	89,9
2014	8,7	90,1
2015	8,4	90,3

2016	8,1	90,2
2017	8,9	89,5

Source: National Employment Survey, High Planning Commission 2017

It should also be noted that job creation in the public and semi-public sector occurs much more in urban areas than rural areas, as shown in the following tables:

Table 31: The rural sector jobs

Year	Public - Semi Public	Private
1999	2	97,6
2000	1,9	97,8
2001	1,9	97,8
2002	1,8	98
2003	1,5	98,1
2004	1,8	97,9
2005	1,9	97,7
2006	1,8	97,7
2007	1,6	97,7
2008	1,6	97,7
2009	1,5	97,9
2010	1,6	97,9
2011	1,9	97,7
2012	1,9	97,6
2013	1,9	97,6
2014	1,7	97,8
2015	1,8	97,8
2016	1,8	97,6
2017	2,6	96,9

Source: National Employment Survey, High Planning Commission 2017

Jobs in the public and semi-public sector accounted for an average of 1.8% of the total in rural areas, against an average of 17.3% in urban areas during the period 1999-2017.

Table 32: Employment by sector in urban areas

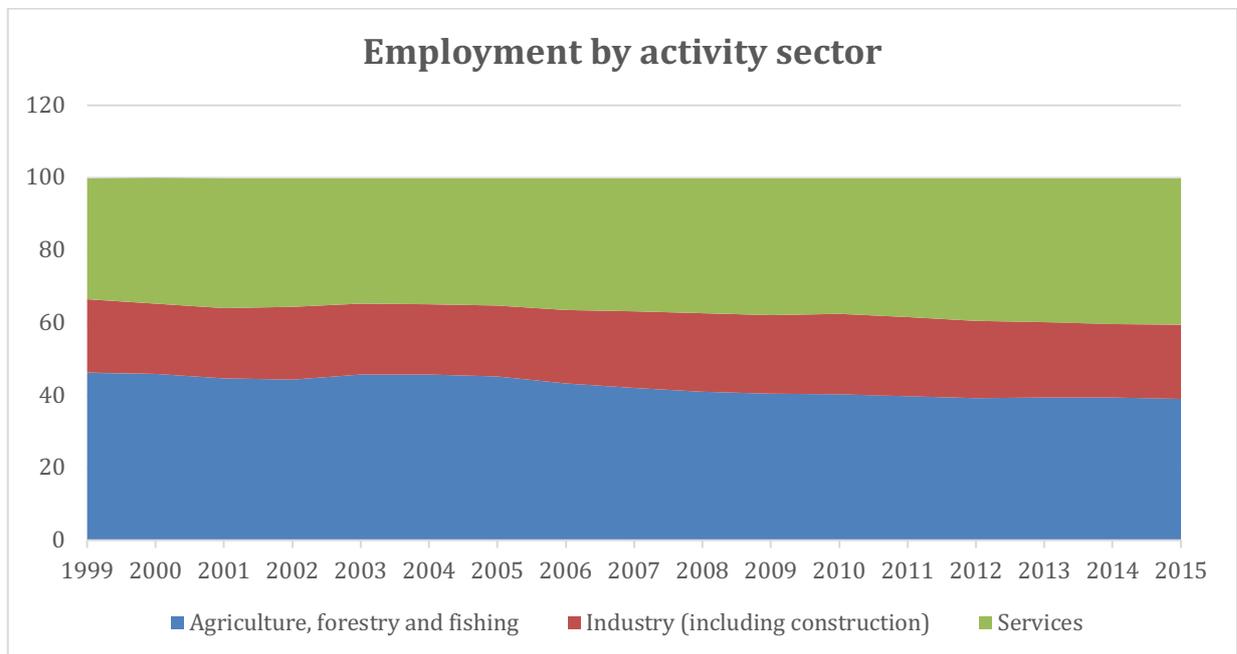
Year	Public - Semi Public	Private
1999	21,1	75,8
2000	20,1	76,7
2001	20,2	76,9
2002	19,1	78,6
2003	18,5	78,9
2004	17,5	80,1
2005	16,4	81,1
2006	18,7	79,1
2007	17,3	80,4
2008	16,7	81,1
2009	17	81
2010	15,6	82,4
2011	15,5	82,4
2012	16,1	81,7
2013	15,5	82,3
2014	15,4	82,4
2015	14,8	82,9
2016	14,1	83,2
2017	14,3	83,4

Source: National Employment Survey, High Planning Commission 2017

Jobs created mainly in the service sector

Figure 47 indicates that, in terms of job creation, the employment rates for the service and agriculture sectors stood at the same level between 2011 and 2017. However, the situation in the industry sector remained stable and the job creation in this sector is considered to be relatively low compared to other sectors of activity.

Figure 47 - Employment by activity sector



Source: National Employment Survey, High Planning Commission 2015

The job creation dynamic in Morocco resulted from an active labour market policy (ALMP) adopted with the aim of improving traditional activities and innovative sectors. The starting point of the “voluntary policy for managing the school's transition to employment in the private sector” as an ALMP, was to contain the gap between training and employment and graduate unemployment, as it begun to upsurge in the late 1980s. This active policy encompasses two components: the first is the organisation of the

intermediation function by a leading public operator (ANAPEC); the second is the introduction of "active policy measures of the labour market that facilitate access to employment in the private sector." The desired outcomes are chiefly:

- Facilitating access to paid employment in the private sector; and
- Encouraging self-employment.

As we have mentioned previously, three main programmes have been implemented to achieve these outcomes: the integration programme "*Idmaj*", the qualification programme "*Taehil*" and entrepreneurship promotion programme "*Moukawalati*". The first two are associated with the first objective: to promote access to employment in the private sector, while the "Moukawalati" programme is associated with the goal of encouraging self-employment through the creation of very small, small, and medium sized enterprises (TPE, PME)

As indicated by the table below, as a defined horizon, the total expected additional jobs for the entire sector plans amounted to 3,260,000. The result implies the creation of over 320,000 jobs a year. This should be enough to absorb the additional demand for jobs, estimated by the HCP to be nearly 250,000 people per year by 2030. Moreover, these sectoral plans are expected to have a significant potential impact on job creation. Achieving this objective requires the assistance of training programmes that can be adapted to the needs of these new professional profiles. .

Table 33: Projected jobs created by sector plans

Sector plan	Start date	Horizon	Expected jobs creation	Jobs creation until 2012 with respect to goals
Green Morocco	2008	2020	150000	-12000 ¹²
National pact for the emergence industrial	2009	2015	220000	-20000 ¹³
Touristic plan	2010	2020	470000	+48000 ¹⁴
Rawaj plan	2010	2020	450000	+28000 ¹⁵
Logistical strategic	2008	2015	61600	+5000 ¹⁶
Halioutis	2009	2020	115000	-
Artisanal plan	2007	2020	117500	-
Digital plan	2009	2013	26000	-
Export plan	2009	2018	300000	-

Source: Ministry of Employment and Social Affairs, Diagnostic Study on the employment situation in Morocco. Prior to the formulation of the national employment strategy in 2014

CHARACTERISTICS OF YOUTH IN MOROCCO

The investment in human capital is, today, one of the major themes of public policy in countries around the world. It is recognised as the remedy to the problems of slowing economic growth, rising unemployment and income concentration. The accumulation of human capital, especially for the young would indeed increase productivity gains which are, in turn, conducive to growth and employment, in the medium and long term.

The referenced definition of youth is the age group of 15 to 24 years¹⁷. This is the definition adopted by the High Planning Commission reporting that in Morocco, the transition to adulthood is not completed before 24 years¹⁸. Various considerations, among others being the social context, led to extending the definition of "youth" to cover

¹² Sector: Agriculture

¹³ Sector: Industry

¹⁴ Sectors: "Hospitality" and "transport, storage and communications"

¹⁵ Sector: Commerce

¹⁶ Sector: Transportation, storage and communication

¹⁷ According to several international definitions, including that of the United Nations Organisations

¹⁸ Kingdom of Morocco, High Planning Commission, 'Youth in Figures', in 2012.

the age group 15-29 years¹⁹. The Ministry of Youth and Sports in Morocco retained under the Integrated National Strategy for Youth states, however, that this age category can be extended beyond 29 years, in order to bring to the underprivileged inclusive and supportive social and economic policies²⁰. These questions and many others are all the more relevant in the actual context of rapid demographic transition characterised by:

- Fertility declines, with the shift from 5.52 children per woman in 1982 to 2.19 children per woman in 2016
- Urbanisation: between 2004 and 2017, the rate of urbanisation in Morocco increased from 55.1% to 61.9%
- The increase of celibacy and rising age of first marriage
- The ageing population: the number of people aged 60 and over has increased in the past 10 years, from 8% to 9.2% of the total population.

This demographic transition is accompanied by a dynamic of economic, social and cultural change. Actually, although there is a significant increase in the workforce - primarily due to the demographic weight of youth - the slow economic growth model, low job creation, as well as the professional and social integration difficulties (vulnerability, inactivity, unemployment, insecurity, celibacy, etc) are some of the challenges the young face when entering the job market.

The analysis of socio-demographic youth characteristics in Morocco, in view of these issues, gives an idea of the size of the challenges for professional integration. To account for these features, we referred to the results of work done by the High Planning Commission (HCP), the largest institution of economic and social information in Morocco, as well as work carried out by international organisations. Emphasis will be placed on the following aspects:

Socio-demographic characteristics of Moroccan youth

The activity of the youth population

The youth employment situation

The unemployment situation among young people

The education situation

¹⁹ World Bank, "Promoting opportunities and youth participation" in May 2012.

²⁰ Kingdom of Morocco, the Ministry of Youth and Sports, "National Strategy for the Integrated Youth", 2015-2030

The relationship between these aspects is obvious and helps to define the overall picture of the demographic and socioeconomic profile of the youth population in Morocco.

Activity of the population

The results of the general census of population and housing in 2014, carried out by the HCP, showed that the labour force aged 15 and over, represented nearly 35% of the total population, 53.4% of which live in urban areas. The participation rate by age group is higher for the age groups 25 to 34 and 35 to 44 - 61.3% and 60.4% respectively. Statistics regarding the environment and gender show that nationally, the participation rate averages around 48.0% and that this rate is higher in rural areas, only 57.2% against 42.1% in an urban environment. Furthermore, women suffer less from inactivity - 25.3% compared to men, 72.2%.

Youth employment

In Morocco, youth employment is at the intersection of pressing issues that are of great public interest and to policy makers. The results of the general population census of 2014 highlighted that the employed accounted for 31.45% of the total population and 90.12% of the total workforce. The importance of this average should be assessed based on the type of business carried out by the population. At the spatial distribution of employment, the census shows that people employed in urban areas accounted for 50.47% of the working population, with an employment rate of 35.9% against 49.53% in rural areas, where the employment rate is around 54.7%. Finally, in terms of gender distribution, it is noted that the employment rate is around 65.3% for males against only 22.6% for females; showing that the sex ratio is 50.9%, where females are in a disadvantaged position compared to males. In terms of employment, a number of economic, social or family related considerations explain this situation.

Finally, it should be emphasised that the promotion of employment is a priority and that efforts have been made in recent years to improve and strengthen the promotion of employment measures, to strengthen the training to match - employment and support for business creation. Along with these efforts, the authorities continue to strengthen the legal framework of labour, the promotion of social dialogue and the improvement of social protection. It is in this context that the national strategy for

employment is inscribed until 2025. This strategy is a response to the challenges of graduate unemployment and youth unemployment in urban areas. It focuses on the following objectives:

- Better integration of employment in national and cross-sectorial policies and strengthening the creation of productive and decent jobs
- The development of human capital through upstream actions to improve the performance of initial training systems for fundamental, technical, professional and higher levels and to increase the employability of the workforce,
- The monitoring of targetting devices within the active employment policy and improving the functioning of the labour market through the development of programmes to support micro-enterprises and support for self-employment, generating income activities and public works
- Improving the governance of the labour market, through the institutionalisation of the National Employment Strategy and the establishment of an "inter-ministerial Committee on Employment" with the mission to determine the general orientation of employment policies and monitoring their implementation and to refine practical measures for the promotion of employment, promoting employment opportunities and to improve active employment programmes.

Youth unemployment

To better reflect the situation regarding youth unemployment in Morocco, we propose trying to examine it across four dimensions: (i) the residence of the unemployed individual, (ii) the duration of unemployment, (iii) the age group of the unemployed and (iv) the degree. The consideration of the duration of unemployment in Morocco shows the significance of unemployment that is greater than one year, although this length of unemployment is recorded as being on a downward trend over the last fifteen years, compared with unemployment shorter than one year.

Situation of education and training

Morocco has made significant efforts in education and training, which has helped to significantly increase enrolments, which were extended from 5.888 million students in

2004/2005, to 6.642 million in 2014/2015. This movement was accompanied by an improvement in enrolment and a decrease in the illiteracy rate (10 years) at the national level, by sex and in different regions of the country. Girls, in fact, account for over 46% of students enrolling today. Moreover, the urban public sector education system accounted for 56.8% in 2014/2015, showing a decline compared to the 2004/2005 school year, reflecting the efforts undertaken for rural areas. However, public secondary education is still dominated by literary and scientific sections, which absorb more than 95% of the student body. The share of secondary technical education has not changed in relative terms during the period. Finally, enrolment in higher education has increased by 2.33 during this period, advancing from 290,000 to 677,000 students. Although Morocco has shown significant advances in education and training in the last 10 years, there are still many issues the country needs to tackle, namely adjusting the training curricula to match labour market needs.

Migration

Migration trends have changed significantly since the beginning of the 21st century, primarily going from a South to North movement to a Global movement. According to the International Organisation for Migration, in 2015, the number of international migrants rose from 232 million in 2013 to 244 million. In fact, South-South migration trends continued to grow, compared to South-North movements, as more South born migrants were living in the Global South, in comparison to the numbers of South born migrants living in the Global North²¹. Migration dynamics are more and more diversified, particularly since the economic crisis of 2008, which sparked many returning migrants and the geopolitical crises that resulted in massive refugee movements, mainly across the Global South. Moreover, IOM highlights that refugees are mainly hosted in developing South countries: in 2015, Turkey hosted 2.2 million refugees, followed by Lebanon with 1.2 million and Jordan with 630,000²².

These trends are also relevant in the case of Morocco. Since the 1960s, Morocco evolved to be a prominent emigration country. However, this trend began to slow down with the introduction of visas in Spain and Italy in the early 1990s and, after the 2008

²¹ International Organisation for Migration, the UN Migration Agency, "IOM releases Global Migration Trends 2015 Factsheet", posted 04/19/16, last visited 04/12/18 <https://www.iom.int/news/iom-releases-global-migration-trends-2015-factsheet>

²² International Organisation for Migration, the UN Migration Agency, "IOM releases Global Migration Trends 2015 Factsheet", posted 04/19/16, last visited 04/12/18 <https://www.iom.int/news/iom-releases-global-migration-trends-2015-factsheet>

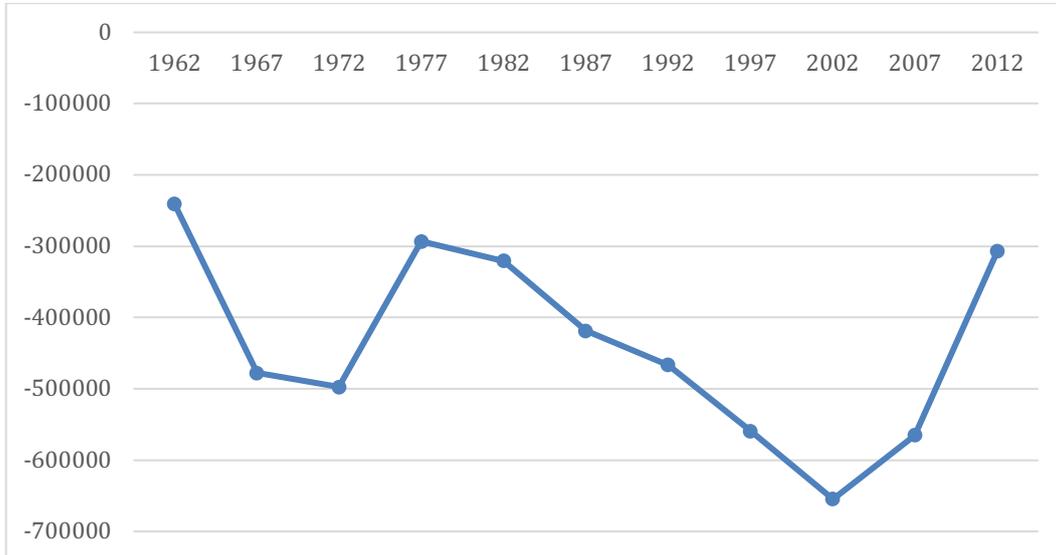
crisis, many Moroccans became return emigrants. Moreover, Morocco has become an immigration country in the recent years, with the arrival of refugees from sub-Saharan Africa and Syria, and the settlement of many mainly transiting emigrants who couldn't get to Europe. In fact, there is a noticeable increase in the number of sub-Saharan and European migrants whom have chosen Morocco to work, to study or start businesses. These recent events, drove Morocco to rethink its immigration policy and to begin to shift slowly from a primarily emigration source to a transit and destination country.

Emigration trends and the impact of Moroccan migrants and returnees

Since the 1960s, Morocco gradually became an emigration country, with most of its diaspora choosing Europe as its destination. Although the first emigration trends consisted mainly of an emigration of labour which was needed to rebuild Europe after the Second World War and during the great thirty years of growth, Moroccan emigrants have become more diversified. Moreover, substantial Moroccan emigrants have also chosen oil-rich Gulf countries, Arab countries, Israel and Canada. According to Berriane, Haas and Natter (2015)²³, in the early 1970s, some 120,000 Moroccan migrated to Libya, whilst several tens of thousands went to oil-rich Gulf countries on temporary work contracts. After the creation of the State of Israel, Moroccan Jews massively migrated to Israel, to France and Canada where most Jewish and non-Jewish Moroccans settle in French speaking Quebec. During this period, Morocco's migration policy mainly consisted of concluding labour recruitment agreements with Belgium, France, Germany, Italy, Spain, Qatar Saudi Arabia and the United Arab Emirates. The following figures show the evolution of the total number of Moroccan migrants in thousands from 1962 to 2012 and in percentages from 2000 to 2017.

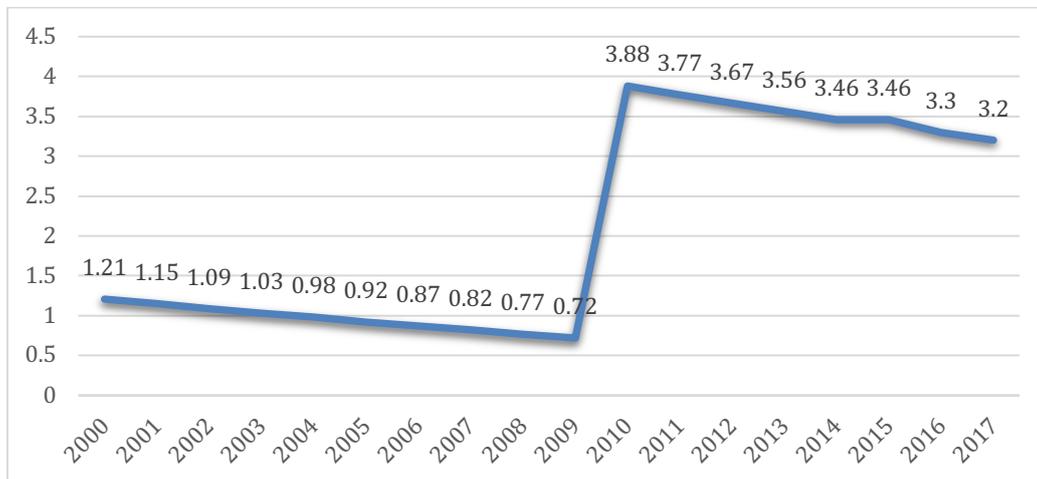
²³ Mohamed Berriane, Hein de Haas & Katharina Natter (2015) Introduction: revisiting Moroccan migrations, *The Journal of North African Studies*, 20:4, 503-521, DOI: [10.1080/13629387.2015.1065036](https://doi.org/10.1080/13629387.2015.1065036)

Figure 48 - Net Moroccan Migrants in thousands



Source: World Bank, 2012²⁴

Figure 49 – Net Moroccan Migrants (% in 1000)



Source: Index Mundi, 2017²⁵

²⁴World Bank, 2017, Net Migration (Morocco) <https://data.worldbank.org/indicator/SM.POP.NETM?locations=MA>

²⁵ Index Mundi, Historical Data Graphs per year, Last visited 04/13/18 <https://www.indexmundi.com/g/g.aspx?c=mo&v=27>

Today, the Moroccan diaspora is still mostly concentrated in Europe. A significant proportion of them are active in the European Labour Market with secondary or tertiary education. In fact, migration patterns have changed mostly for women, as there are more women travelling autonomously instead of with, or to join, their spouses. The number of women migrating independently has risen in recent years either to work in agriculture, care or to pursue higher education degrees. Moreover, another trend is highlighted by the return of Moroccan migrants after the 2008 economic crisis and the deindustrialisation of most European economies, hence the decrease in the need for manual labour. It should be noted that the phenomenon of returning migrants is not solely triggered by the 2008 economic crisis, since many Moroccan were steadily returning well before then. A study by Gubert and Nordman (2008)²⁶, looking at the impact of returning migration and small enterprise development in the Maghreb (Morocco, Tunisia and Algeria), concluded that a sizeable number of returnees invested in business and projects upon return. They conclude that returnees are highly likely to create small or medium businesses, becoming self-employed and generating jobs. Hence, migrants play a dual role in their country of origin's economy through remittances, which constitute an important part of Morocco's foreign currency reserves, and business creation.

From an emigration country to an immigration destination

Whilst Morocco is primarily identified as an emigration country, it has always been a destination for mainly European and Sub-Saharan migrants to pilgrim, study, work or settle. In fact, since 1970s, Morocco has offered scholarships for French speaking Sub-Saharan students to study, although many end up leaving. Recently, these trends picked up in pace, attracting more attention to the phenomenon of Moroccan immigration. Starting with the rising numbers of refugees, Morocco has received mostly sub-Saharan refugees since the 2000s and, as of 2011, Morocco now hosts substantial numbers of Syrian refugees. It's worth mentioning that most sub-Saharan migrants also used Morocco as a transit point prior to getting to Europe, mostly in the early 2000s. A study by Lahlou, (2015), highlights that the number of other nationalities accessing Europe through Morocco decreased from 20,000 annually in the early 2000s to about 7,300 in

²⁶ Flore Gubert and Christophe J. Nordman, "Return Migration and Small Enterprise Development in the Maghreb", (2008), IRD, DIAL, Paris. <https://cdn.uclouvain.be/public/Exports%20reddot/demo/documents/GubertNordman.pdf>

2014²⁷. This significant decline in transiting emigration is mainly due to migrants' settling in Morocco and to the joint policy of control of irregular emigration attempts with the European Union. In fact, through the MEDA programmes I (1996-201) and II (2001-2006), which were deemed successful, Morocco received financial and legal support to aid the EU in inhibiting the flow of illegal emigrants. In June 2013, Morocco, the European Union and six-member countries, signed a joint declaration establishing the mobility partnership programme "Sharaka" which aims to:

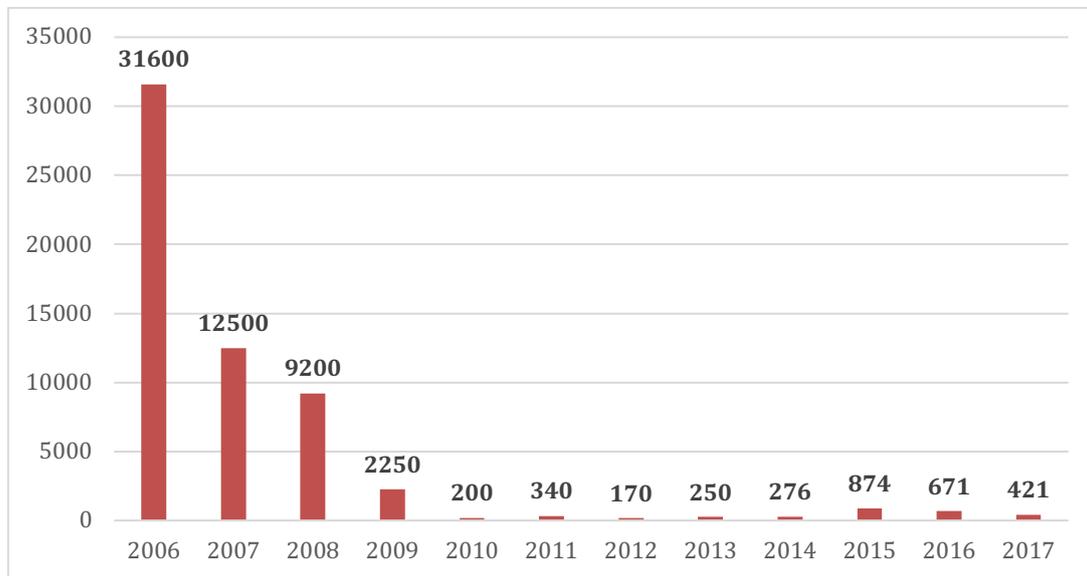
- Manage the movement of people for short-term stays, migration and migration for work reasons
- Strengthen cooperation on migration and development
- Fight irregular immigration, human trafficking networks and trafficking in persons, and to promote an effective policy on return and readmission with respect for fundamental rights, and the dignity of the persons concerned.
- And, respecting international instruments relating to the protection of refugees duly ratified²⁸.

Although immigration to Morocco is not a new trend, legislation 02-03 was only introduced in 2003, especially in the aftermath of the Casablanca terrorist attacks. This legislation was the first of its kind in Morocco to tackle illegal migration, especially from Sub-Saharan Africa. This law was also in collaboration with the EU, in order to hinder the numbers of illegal migrants to Europe before leaving the African continent. The diagram below shows the number of illegal border crossings to Europe through the West African route: data was retrieved from FRONTEX, European Border and Coast Guard Agency. Migrants on this route were mainly crossing from Morocco and Senegal. Thanks to Moroccan legislation and the cooperation with the European Union on the illegal migration issue, namely through the Morocco-EU agreements. Despite the 02-03 legislation, numerous documented and undocumented migrants have chosen to settle permanently in Morocco. In 2013, a more human rights-based migration policy was introduced, initially to grant legal residency status to nearly 18,000 sub-Saharan and European residents.

²⁷ Mehdi Lahlou, (2015) " Morocco's Experience of Migration as a Sending, Transit and Receiving Country", Istituto Affari Internazionali, New-Med Research Network <http://www.iai.it/sites/default/files/iaiw1530.pdf>

²⁸ Conjoint-Declaration establishing partnership of mobility between the Kingdom of Morocco, the European Union and its member countries, <http://www.sharaka.ma/assets/Uploads/Mobilite-Declaration-UE-Maroc-Juin-2013.pdf>

Figure 50 - Number of detected illegal border crossing to Europe



Source: FRONTEX, European Border and Coast Guard Agency²⁹, 2017

Whether Morocco is following in Turkey’s footsteps, shifting from an emigration country to being an immigration destination is bound with facing up to its current human development and economic issues. The previously discussed issues vis-à-vis education, training and labour market policies are only part of the challenges that Morocco faces. In order to face the illegal migration phenomenon and transition towards a migrant friendly country, Morocco needs to reinforce its legal arsenal, through cooperation with the EU, and to provide proper socio-economic circumstances as it pretends towards economic activity, social protection and health care, adapting its culture to the presence of large immigrant communities, and providing an adequate legal framework. In fact, although there have been significant efforts to tackle the issue of illegal and/or undocumented migrants in Morocco, the 2014 campaign only documented about 17,916 out of 27,332 applications³⁰.

²⁹ FRONTEX : The European Border and Coast Guard Agency, <https://frontex.europa.eu/along-eu-borders/migratory-routes/western-african-route/>

³⁰ Françoise De Bel-air, (2016) “Migration Profile: Morocco,” Migration Policy Center – European University Institute, Issue No.5, pp.1-15, accessed April 4th, 2018, http://cadmus.eui.eu/bitstream/handle/1814/41124/MPC_PB_2016_05.pdf?sequence=1&isAllowed=y

V. HUMAN CAPITAL, LABOUR MARKET FRICTIONS AND MIGRATION IN TUNISIA

Rihab Bellakhal, Iyad Dhaoui, Wajdi Kthiri and Jamel Trabelsi

INTRODUCTION

Tunisia, like many other countries in the South Mediterranean region, is investing in education, in particular in higher education, which is considered as a priority (1.57% of GDP allocated in higher education in 2014). The number of higher education graduates increased significantly, reaching 61,296 graduates in 2013-2014 compared to only 11,664 in 1993-1994³¹. In 2014-2015, the number of enrolled students in higher education was about 292,291 from which 63% were female. The percentage of women within the total of students increased rapidly in recent years; this percentage was about 23 per cent in 1972 and 41 per cent in 1991³².

Alongside the increase in this number, the unemployment rate of youth graduates in Tunisia rose significantly, especially after the revolution, reaching 30 per cent in 2015. Between 2005-2014, more than 50 per cent of job seekers who enrolled in employment offices were university graduates. According to statistics from the Tunisian National Institute of Statistics, women are more affected by unemployment than men; over the period of 2016-2017, the unemployment rate of graduate women was twice that of their male counterparts (40.6 per cent in 2017).

While the unemployment problem in Tunisia is not a new phenomenon, it is becoming persistent, because the economy is unable to create sufficient jobs for the rapidly growing number of youth graduates, especially women. Tunisia's youth are not only struggling economically; they are marginalised and economically excluded. Many graduate young women and men see little chance of ever finding work and starting their careers.

³¹ Source : Tunisia NIS

³² Source : Tunisia NIS

This chapter highlights the main characteristics of the Tunisian education system and labour market and the difficulties facing the country's youth in transition from school to the labour market. Particular interest will be paid to the migration process in the country. The analysis is based on a description of the trends in youth education, unemployment and transition to the labour market and migration, with special focus on the gender gap and regional inequality.

EDUCATION SYSTEM: STRUCTURE AND KEY CHALLENGES

Since the early 1990s Tunisia has launched a structural adjustment programme with macroeconomic reforms leading to more integration in the global economy. This environment has led to steady growth, with an annual average of 4.6 per cent between 1990 and 2010 - healthy economic activity and social progress - followed by a sharp recession during a difficult transition following the 2010 revolution. However, tangible social progress has been experienced over two decades. At a world level and according to the HDI 2017, Tunisia is ranked 97th out of 188 countries. Between 1990 and 2015, Tunisian's HDI value rose from 0.567 to 0.725, an increase of 27.8 per cent or an average annual increase of about 1 per cent. The expected years of schooling increased by 4.2 years and the mean of schooling by 4.3 years. Tunisia's GNI per capita increased by more than 87% during the same period.

Table 34: Tunisia's HDI trends*

	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP\$)	HDI value
1990	68.8	10.4	3.4	5.467	0.567
1995	71.5	11.6	4.1	5.894	0.607
2000	73.2	13.1	4.9	7.252	0.654
2005	74.2	14.1	5.8	8.474	0.688
2010	74.6	14.5	6.6	10.023	0.714
2011	74.6	14.6	6.7	9.714	0.715
2012	74.6	14.6	6.8	10.074	0.719
2013	74.7	14.6	6.8	10.255	0.720

2014	74.8	14.6	6.8	10.404	0.721
2015	75.7	14.6	7.1	10.249	0.725

**The HDI trends are based on consistent time series data and new goalposts.*

Source: PNUD, Human development report 2016.

Characteristics of the Tunisian education system

Education is a high priority in Tunisia. It is free and accessible to everyone and is compulsory between the ages of 6 and 16. It is also a duty jointly assumed by individuals and the community. The national strategy is to provide access to quality education at all levels (pre-schooling, basic and secondary), and also overlooks private schools based on equity and special needs. Basic education lasts nine years divided into two cycles. The first cycle lasts six years (primary education). It aims to make students acquire skills and knowledge relating to expression and oral comprehension, reading and calculation. It contributes to the improvement of their personal development, their artistic sense, as well as their civic education. The second cycle lasts three years (preparatory school). It aims to help students develop the capabilities that allow them to improve their intellectual and practical skills; some pupils may be given alternative training at vocational training centres. Basic education is sanctioned by the "High End of Studies in Basic Education". Secondary education lasts four years, completing the required nine years of compulsory schooling. The first year is a common curriculum for all students, followed by three years of one of seven specialisations. Students have the choice between academic or technical tracks. At the end of the secondary level, students take the national Baccalaureate exam. With the Baccalaureate diploma, students focus on entering university level or joining the workforce after completion.

On the other hand, technical and vocational training programmes can be divided into two types. The first type, called initial training, is offered to young students after dropping out of the general education system. The second type, called continuing training, is generally offered for adults who are employed (full or part-time) by the highest educational attainment. The Ministry of Vocational Training and Employment (MFPE), through the Tunisian Agency for Vocational Training (ATFP), administrates an ongoing vocational programme by setting standards, licensing training providers and also

maintaining quality control. Vocational training aims, in synergy with the sectors of education, higher education and employment, to qualify applicants for vocational, social and cultural training, to develop the professional capacities of workers and to equip economic enterprise with the means to improve its productivity and to increase its competitiveness. Also, vocational training aims to enable learners to acquire the knowledge, skills and abilities required to perform a job or occupation requiring qualifications, and to ensure the adequacy of this knowledge, skills and abilities with the economic and technological changes and with the evolution of the jobs. From the beginning of the 90s, the Tunisian vocational and training system has undergone several reforms, followed by strengthening collaboration, expanding partnership and adhesion to principal international commitments. Tunisian employment and vocational training programmes were developed gradually over several years and have undergone several reforms since the 1990s, especially following international commitments signed by Tunisia.

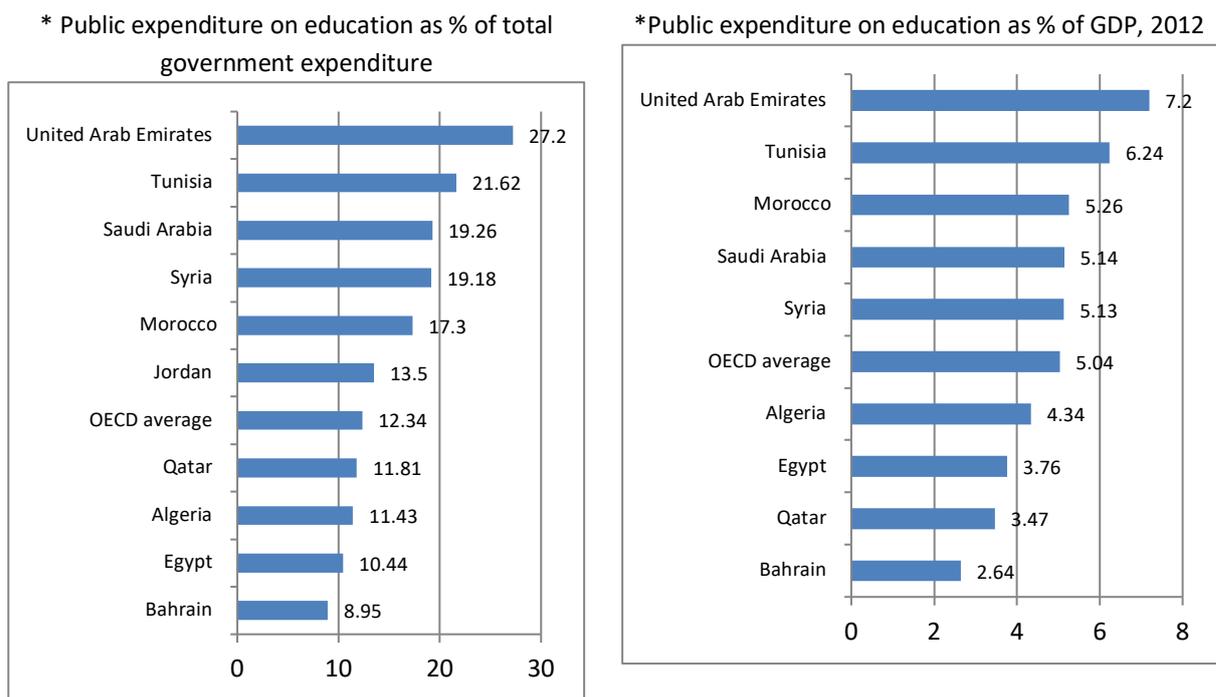
In 2006, Tunisia established the three cycle-degree system (LMD) of the bachelor degree, the master degree, and the doctorate in the 3-2-3 structure. This profound change was fully in place by 2012. The LMD system is still relatively new and has received mixed reviews. The objective of the reform is to set up a clearer presentation of degree courses by field of study. It also aims to harmonise the curricula and academic architecture in Tunisia, in accordance with other countries, such as the accreditation of courses. The LMD reform also helps to facilitate and to increase national and international mobility of students and academic staff.

Indicators of public education spending

In past decades, Tunisia has further increased efforts to improve the state of education in the country, despite the economic crisis of 2008/2009 and the political change after 2010-11. In 2013, Tunisia allocated 21.6% of total government expenditure to education, a share that was roughly double the OECD average, surpassed only by resource allocations in the United Arab Emirates. Tunisia pays a bigger share of around 6.2 % of its overall national wealth towards education, which is above relative spending in OECD countries. In 2014/2015, Tunisia spent a substantial proportion of its national resources - s more than 20 per cent of total government expenditure - on all levels of

education. As of 2015, public education expenditure, as a percentage of GDP, stood at 6.4 per cent.

Figure 51: Expenditure on education institutions as a share of GDP and of overall government spending, 2012



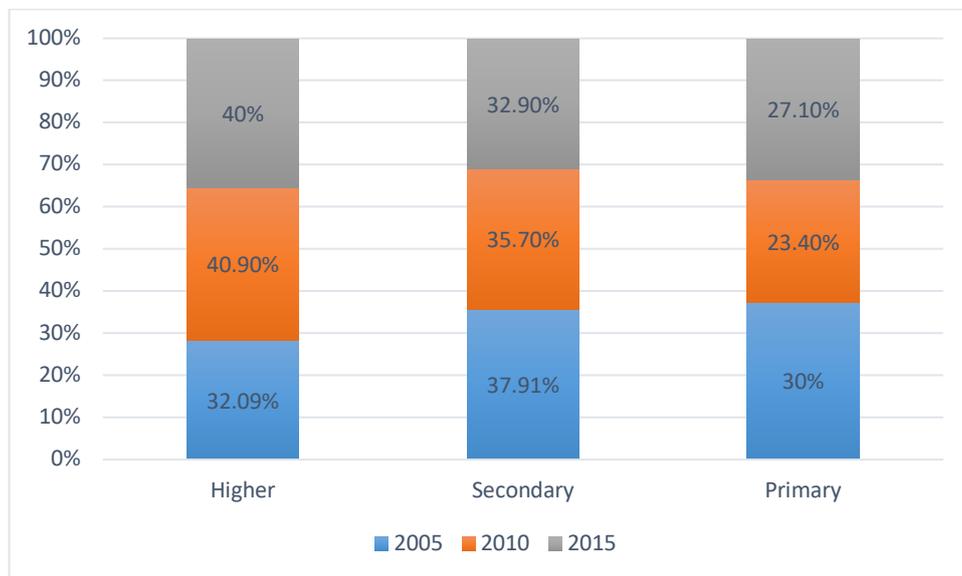
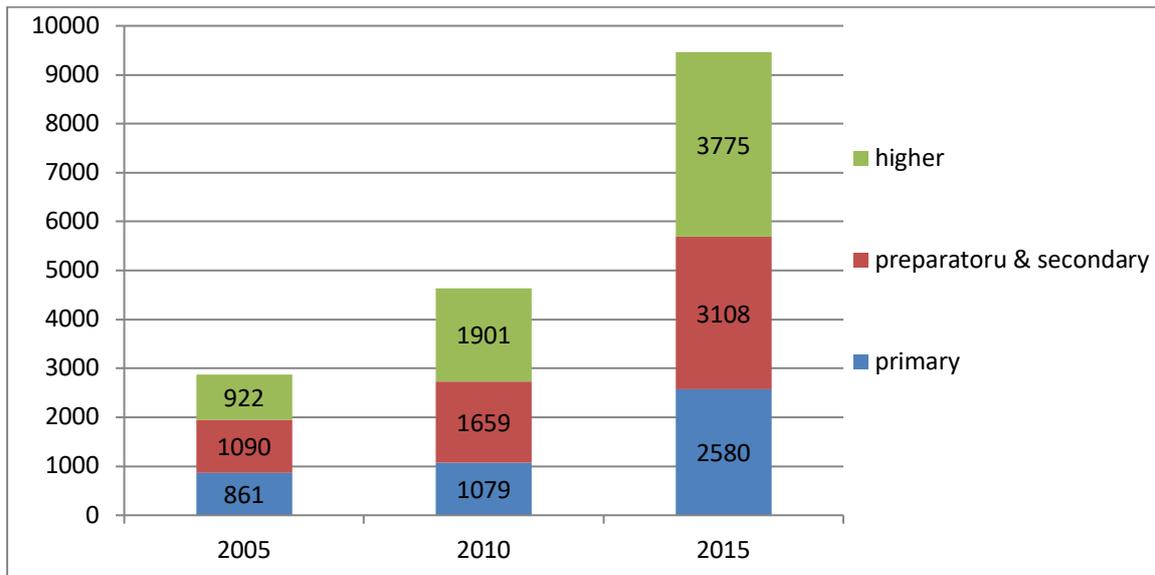
Source: World Bank Indicator, UNESCO UIS, OECD data

Tunisia spending per student increased from 2874 DT to 9464 DT³³, at constant prices, between 2005 and 2015, from primary through to tertiary education. The rate of per student expenditure for higher education is four times higher than per student expenditure at the primary level and around twice that of per student expenditure at the preparatory and secondary level. Another important indicator is the expenditure per student to the GDP per capita. This indicator can be interpreted as the resources spent on school-age population relative to a country's ability to pay. In primary education,

³³ 1 Dinar=0.38€

expenditure per student to the GDP per capita (constant price, 2010=100) decreased from 16.7 per cent in 2005 to 15.4 in 2015. In the preparatory cycle, it increased from 20.9 per cent to 31.7 per cent. In tertiary education, it increased from 50.1 per cent to 62.9 per cent.

Figure 52: Annual expenditure per student by educational levels*



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Constant prices (2010=100).

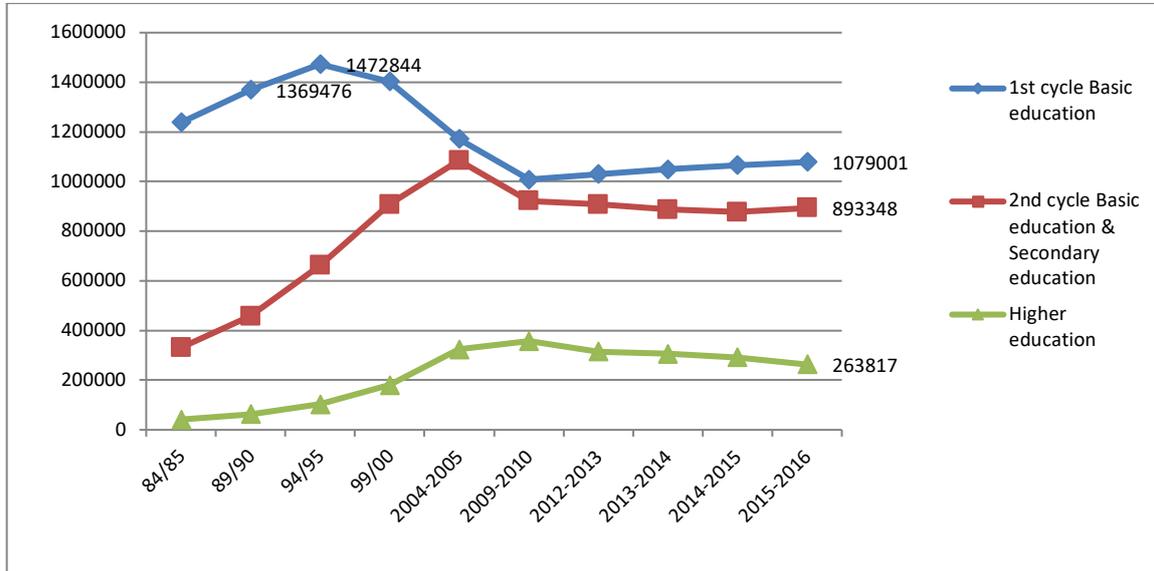
Source: study calculation from Ministry of Education and Ministry of Higher Education and Scientific Research.

Trends in enrolment

Over recent decades, education in Tunisia has undergone several structural changes, rapid institutional development and a significant increase in student numbers. According to the Ministry of Education Statistics, the number of primary, preparatory and secondary schools increased, successively, from 3774 to 4575 and from 546 to 1409, between 1990 and 2016. Private education is of growing importance in Tunisia. Technical education did not demonstrate remarkable progress compared to other cycles, however. In 2013, there were only 109 computer rooms and 140 specialised rooms. The number of establishment was 87 in 2016, compared to 80 in 1995.

Higher education in Tunisia has expanded rapidly during the past two decades. In the academic year 2015/2016, universities were among 13 including the virtual university, involving 203 institutions of higher education, of which 172 institutions were under the direct supervision of the Ministry of Higher Education. Higher education, though, is also within the network of the 25 higher institutes of technological studies (ISETs), which fall under the responsibility of a Directorate-General for Technological Studies. The number of private establishments has rapidly expanded, reaching 66 institutions of higher education in 2016.

Figure 53: Total number of students by level of education



Source: Ministry of Education and Ministry of Higher Education and Scientific Research.

In 2005, some 2,255,897 students attended Tunisian basic and secondary educational establishments, constituting an increase of about 23.45 per cent since 1990. After that, the number of students started to decrease but from 2013 it began to increase slightly. In 2016, the total number of registered students was 1,079,001 in primary schools and 893,348 in preparatory and secondary schools. Primary private schools took 60,313 pupils in 2016, an overall growth of 800 per cent since 1991. At secondary level, 58706 pupils were enrolled in 2016. Technical establishments only received 12,292 pupils in 2016. Thus, technical education in Tunisia is disappointing on several levels. The majority of pupils resort to this alternative in desperation. The access to this type of education is assimilated to pupils who fail, because those who are oriented toward technical education are mainly repeaters and expellees from the 7th and the 8th year of general basic education. In many developed countries (Germany, Finland, etc.), technical education is an integral part of the education system and is regarded as a pillar of the economy that fosters the competitiveness of enterprises.

In tertiary education, between 2005 and 2009, the total number of public university students rapidly increased, more than tripling from approximately 102,000 to

360,000. From the mid-2000s, the number began to decline below the 2009 peak. In 2015, it reached 263,817 students enrolled at different levels of higher education.

The public education sector serves the majority of Tunisian people and students. The private sector has experienced significant growth over the past two decades, with a marked acceleration since 2010. This growth is particularly striking at the primary level. The number of primary private schools has experienced rapid development - from 25 in 1991 to 324 in 2016. The number of preparatory and secondary schools increased from 264 to 346, during the same period.

Table 35: Evolution of schools and enrolled students in private sector

	90/91	95/96	00/01	05/06	10/11	15/16
Primary education						
Schools	25	35	41	59	109	324
Students	7546	8897	10511	13990	24953	60313
% of total	0.5%	0.1%	0.8%	1.2%	2.4%	5.3%
Preparatory and secondary school						
Schools	264	340	304	281	291	346
Students	67700	68468	53011	58860	54914	58706
% of total	12.2%	8.6%	5.2%	5.2%	5.5%	6.2%
Higher education						
Universities	-	-	21	-	39	65
Students	-	-	530	3487	15054	30686
% of total			0.23%	1.02%	4.2%	10.4%

Source: Ministry of Education and Ministry of Higher Education and Scientific Research.

The number of pupils enrolled in private establishments rose from 13,990 to 60,313. In secondary school, the 346 private schools serve 6.2% of secondary students. Since the beginning of the 2000s, the country has witnessed the development of private higher education institutions. In 2016, private higher establishments served 30,686 students, equivalent to 10.4% of the student population.

From another perspective, changes in the number of students at all levels of education have improved enrolment rates for different age groups, as shown in the table below:

Table 36: Net enrolment ratio (NER) by age groups (public sector)

NER	2005/2006			2010/2011			2015/2016		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
6-year-old child	98.9	99.0	99.0	99.3	99.3	99.3	99.5	99.5	99.5
6-11 age group	97.0	97.1	97.1	98.0	98.6	98.3	99.0	99.2	99.1
6-16 age group	89.8	90.8	90.3	91.7	93.7	92.6	93.1	95.7	94.3
12-18 age group	72.6	77.7	75.1	75.4	82.3	78.8	76.7	85.9	81.2

Source: Ministry of Education.

Measures taken by Tunisia to ensure the free education and the compulsory schooling of 6-16 year olds have enabled the State to achieve very satisfactory schooling rates - now close to 100%. The net enrolment rate (NER) for children of primary school age increased from 97.1 per cent in 2006 to 99.1 per cent by 2016. Survival to the final grade was also very high. The NER in secondary school is low and increased from 75.1 per cent to 81.2 per cent over the same period. While male and female enrolment was comparable at primary school level, the male-female gaps in enrolment at secondary level was much more pronounced, showing an advantage to girls, at 85.9 per cent, over boys, at 76.7 per cent.

Despite a long educational tradition, the gross enrolment rate in tertiary education has remained fairly low. In higher education, the gross enrolment rate is generally lower than rates for the primary and secondary levels. With a gross enrolment rate of 33.7 per cent in 2013, Tunisia was above Egypt (32.9%) and above Algeria (33.3%); but compared with France (59.5%) and Spain (85.9%) a gap was observed.

Gender Equality Assessment

In all cycles of education, parity between girls and boys is a reality. Higher education statistics for the academic year 2014/2015 showed that the number of female students expressed as a percentage of the total number of students was 63.45 per cent in the public sector and 43.83% in the private sector. The number of female graduates, expressed as a percentage of the total number of graduates, was 66.5 per cent in the public sector in 2015.

Technical and vocational training (VET)

In 2013, the network of the Tunisian Agency for Vocational Training (ATFP) was composed of 136 vocational training centres, including 47 Sectoral training centres (CSF), 61 Training and learning centres (CFA), 14 Training centres for young rural women (CFJFR), 11 Centres for training and promotion of self-employment (CFPTI), and 1 Aeronautic training centre. Some vocational training programmes were provided by other public structures, such as the Agency for the promotion of agricultural training (AVFA), the Ministry of National Defence and the National Office of Tunisian Tourism, while others were provided by private centres.

These various structures make it possible to improve participation in basic vocational training. The table below gives an overview of participation in vocational training in 2013:

Table 37: Participation in vocational training (initial training)

	Public	Private	Total
New registrants	52745	12679	95424
Participants in vocational programmes	81253	17997	99250
Vocational training graduates	27004	2747	29751

Source: Ministry of vocational training and employment, « La formation professionnelle en chiffres », 2013.

In 2013, there were 99,250 young people enrolled in the various training centres, of them 81253 were enrolled in public structures, equivalent to 82 per cent. The majority of those enrolled in the public training centres continued training in structures under the responsibility of the Tunisian Agency for Vocational Training (95.8%). 58.5 per cent of those enrolled in private sector pursue training leading to an unapproved diploma. Professional promotion is one of the main duties of the National Centre of Continual Training and Professional Promotion (CNFCPP), largely concerning workers (with levels of education ranging from the third year of secondary education to the holders of a Diploma of Higher Education) wishing to improve their qualifications. Continuous training courses are provided in two modes: evening courses and distance learning, as part of an agreement with higher education institutions and vocational training centres. The professional promotion system is made up of 6 job promotion Institutes (IPST), as well as a distance training device, called open school of workers. The number of workers enrolled in evening courses reached 1945 in 2013, compared with 3194 in distance learning.

Quality and effectiveness of education

Outputs (graduates)

In 2013, those receiving certificates and diplomas of technical and vocational training reached 29,751, including 27,004 from the public sector and from which 36% were female graduates. The distribution of students in VET by diploma showed that around 77 per cent obtained a Certificate of Professional Competence (CAP), 26.7%, a Professional Technician Certificate (BTP), Apprenticeships, a Certificate of Competence (CC), and a Qualified Technician Certificate (BTS), with respectively, 26.7%, 26.6%, 24.5%, 10.6% and 11.5%. The main areas of study were electricity and electronics, textile and clothing, general engineering and steel construction, building and construction, transportation, driving and vehicle maintenance, farming and public works vehicles.

Outcomes

The outcomes of an education system describe the degree to which goals are reached. They often include the competencies, skills and qualities that a student will

need, particularly in regard to labour market access and employment. There are many outcome indicators that have been used in various national and international reports. The table below gives an overview of the trends at the primary, preparatory and secondary levels.

Table 38: Indicators of internal effectiveness (%)

	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
Primary education						
Promotion rate	92.6	91.7	91.5	92.2	91.9	98.93
Repetition rate	6.1	7.3	7.5	6.7	7.1	0.03
Dropout rate	1.3	1.0	1.0	1.1	1.0	1.04
Preparatory education (lower education)						
Promotion rate	75.8	73.4	72.1	72.9	72.9	76.1
Repetition rate	14.8	17.6	17.4	16.5	16.8	14.7
Dropout rate	9.4	9.0	10.4	10.5	10.4	9.2
Secondary (upper) education						
Promotion rate	73.0	74.4	71.3	71.1	72.0	69.4
Repetition rate	15.4	15.5	16.8	16.2	16.6	17.8
Dropout rate	11.6	10.1	11.9	12.7	11.4	12.8

Source: Ministry of Education.

The promotion rate in primary education increased from around 80 per cent in the mid-90s to 91.9 per cent in 2014. In addition, 90.8% of pupils completed their first basic cycle in 2012, compared to 86% in 2006/2007, and it is clear that girls were better off than boys in completing their primary cycle. Thus, 96.7% of pupils reached grade five, with a higher value for girls than boys. The repetition rate declined by more than half; from 17 per cent to 7.1 per cent over the same period. In 2014, the repetition rate for males was 8.8 per cent and for females 5.3 and the rates have been declining in recent years for both gender. The dropout rates in 2014 were 1 per cent. Also, dropouts were higher for boys, with 1.2 and 0.8 respectively. The dropout rates have been falling since 2010. The highest drop-out rates still concern the 6th primary year level (2.5%).

At the preparatory and secondary levels, promotion rate is still low despite progress in recent years. It was only about 72 per cent in 2014. Concerning the rate of completion of secondary school, in 2013 52.2% of pupils finished their cycle, compared to 11.5 per cent in 1994. A very important finding that should be raised concerns the widening gap in the completion rate from 1994 to the detriment of boys. In 2013, 52.2% of girls completed high school, compared with only 28.4% of boys. The repetition rate remained more or less constant around 16 per cent. The dropout rates increased from approximately 9 per cent in the mid-90s to 11.6 per cent in 2014 and they were higher among boys. The students most affected by repetition and dropout were those in the fourth year (27.8% and 18.4%, successively).

Despite all investment, Tunisia still ranks poorly in comparison to other countries and the situation does not look promising. The Tunisian education system is characterised by selectivity. But this selectivity does not guarantee quality training for students who succeed in continuing their studies. Most of them reveal obvious weaknesses, especially in the area of languages and mathematics, which are reflected in the difficulties they face in communicating, writing and solving problems. Table 39 below provides an idea of promotion, repetition, and dropout rates in higher education between 2010 and 2015.

Table 39: Indicators of internal effectiveness in higher education (%) - public sector

	09/10	10/11	11/12	12/13	13/14	14/15	15/16
Students	357472	346876	339619	315513	305783	292291	263817
% female	60.1	61.2	61.6	62.3	63.1	63.5	64.5
First inscription	78598	85705	82064	65399	71961	67728	49033
Promotion rate	71.0	72.69	67.97	66.72	65.08	66.06	-
Repetition rate	24.77	23.45	29.13	30.77	31.06	31.18	-
Dropout rate	4.23	3.83	2.87	2.48	3.84	2.76	-

Source: Ministry of Higher Education and Scientific Research.

One can observe that the promotion rate has declined since 2011 and reached around 66 per cent in 2015. Repetition rate have steadily increased from 24.8 per cent in 2010 to 31.1 in 2015. The percentage of students leaving the university study in which they are enrolled before obtaining a formal degree was 2.7 per cent in 2015 and 3.3 per cent, on average since 2010.

By 2015, and in the top 30 African universities in the Times Higher Education World University Rankings³⁴, South Africa dominated the rankings. Two universities in South Africa, Cape Town and Witwatersrand, were top of the ranking, followed by Makerere University in Uganda. For its part, Morocco had three universities in the top 30: the Cadi Ayad University of Marrakech, in 10th position, the Hassan II University of Casablanca (15th) and the University of Mohammed V of Rabat (22nd). Egypt, which has six universities in the ranking - including the University of the Suez Canal which was in 14th position - was the second most represented country. Tunisian universities presenting in the top 30 were: the University of Tunis, the National School of Engineering of Sfax and the University of Sfax, ranked successively 20th, 21st and 28th.

Under the “International Colleges & Universities” (4icu)³⁵, there is no Tunisian university in the top 200 universities in the world; this clearly illustrates the poor quality of the level of the training of our higher education institutions, compared to Middle East universities.

CHARACTERISTICS OF TUNISIAN LABOUR MARKET

The institutional framework

In 1994 and 1996, the labour market actor decided to introduce reforms of the labour code. Labour regulation reforms consist of more flexibility in hiring through fixed term contracts (CDD) and part time work. According to the Global Competitiveness Report 2015–2016, Tunisia has an inefficient labor market mechanism. For example,

³⁴ The Times Higher Education World University Rankings is a higher education specialist magazine based in London. It provides information on news and issues related to higher education. It became known for publishing the annual Times Higher Education–QS World University Rankings, which first appeared in November 2004, by collecting and harnessing a set of data collected at world level which is stored and used in order to build meaningful measurement, insight and benchmarking of institution performance. To establish this ranking, the Times Higher Education was based on the number of citations per university publication.

³⁵ It is a higher education search engine and directory of world universities and colleges. Actually, it includes 12,273 college and university reviews and web rankings. The current ranking is based on a five-measure algorithm extracted from three different search engines: Google Page Rank, Alexa Traffic Rank, Majestic Seo Referring Domains, Majestic Seo Citation Flow, and Majestic Seo Trust Flow. This is intended to help international students and academic staff to understand how popular a university is in a foreign country.

regarding flexibility and wage determination, Tunisia has been classified as the 121st ranked country out of 144. Labour regulations protect employees through strong social security. Indeed, hiring rules are flexible but firing practices are rigid and protective (119th rank/144).

The intervention of the Government to reduce unemployment is summarised in a series of measures affecting the supply and demand for labour. The main objective of the labour policy is to improve the employment of young university graduates. Created in 2000, the National Employment Fund (NEF) is responsible for financing the different programmes of Labour Market Policy (LMP). At present, a large number of different employment and entrepreneurship support programmes are in place

At the beginning of 2016, two new programmes were launched: FORSATI and the Employability Improvement Check. The impact of programmes matching supply to labour demand is signified by two instruments: SIVP and CAIP. During the period between 2007 and 2015, the number of beneficiaries of the SIVP and CAIP programmes was equal to an average of 55,000 and 34,000 respectively.

The ALMP programmes are described as follows:

- *The Internship for Initiation to Professional Life (SIVP)*: was introduced in 1987. The SIVP is a wage subsidy with graduates receiving between 100 and 250 Tunisian dinars per month, depending on their qualifications, payable for a period of one year (with a possible extension of up to one more year). Firms receive exemption from payroll taxes and national insurance contributions and can top up the graduate's salary with a tax-free supplement (Broecke, 2012). To be eligible, graduates need to be registered with the national employment agency (ANETI) and be looking for work.
- *FORSATI*: is a new approach to the relationship between the job seeker and employment structures. The job offer will not remain the only starting point in the selection process between offer and demand, but the job seeker also becomes an active element in the mediation process through the emergence of a contractual relationship between him and his employment adviser, in order to build a professional project and to improve his employability.

- The beneficiary will have a confidential and personalised accompanying profile, from the identification phase of his professional project until its attainment. The project has to be in harmony with the job seeker's desires and his professional potential, with the economic needs and with labour market requirements for skills, in order to facilitate his integration into a salaried job or into an independent one.
- The employability improvement cheek: this programme is the experimental phase. The components of this programme are designed to give job seekers practical qualifications and skills through actions, supplementary training and vocational adaptation, in order to facilitate their integration into working life.
- The Placement of Graduates Programme (CIDES): targets higher education graduates whose period of unemployment exceeds three years. The state supports the cost of vocational training, providing a monthly allowance of 150 dinars (an additional monthly allowance of 50 dinars is given to candidates who reside outside the governorate location of the host company), a premium of 1000 dinars is paid to the company at the end of the programme, as well as the employer's portion of social security contributions from wages. The company is committed to provide additional compensation to the trainee (a minimum of 150 dinars per month) and to hire the beneficiary who has completed the internship contract.
- *Adaptation and Professional Integration Programme (CAIP)*: this programme aims at improving - through vocational training - the employability of job seekers who do not hold a degree in higher education. It concerns companies that are looking for specific competencies which are not easily available in the labour market. The state supports a monthly allowance of 80 dinars, as well as national insurance contributions and the cost of additional training for up to 400 hours. The company is committed to provide additional compensation to the trainee of at least 50 dinars per month and to hire the beneficiary who has completed the training contract.
- *Reinsertion into Working Life Programme (CRVA)*: this programme allows workers who have lost their job to get new skills that are sought by private firms. The

programme pays a monthly allowance of 200 dinars to the trainee, the national insurance contribution and the cost of the training (for up to 200 hours). The company provides an additional compensation to the trainee (a minimum of 50 dinars per month) and hires the beneficiary at the end of the internship contract.

- *Support Programme for Small Business Entrepreneurs (PAPPE)*: this programme includes financial support for different kinds of training sessions and consulting services for small business entrepreneurship, in addition to a monthly allowance of 150 dinars for graduates and 80 dinars for non-graduates.
- *Voluntary Civil Service Programme (SCV)*: this programme is aimed at graduates from higher education institutions who have never worked nor participated in the SIVP. A monthly allowance of 150 dinars and a refund of 60 per cent of transport costs are given for those who accept a part-time job in a professional organisation.
- *Employment Solidarity Programme (CES)*: this programme aims to facilitate the integration of job seekers into the labour market through specific actions initiated at regional or local levels, often related to cyclical changes in the employment market. The programme consists of a monthly allowance (the amount varies according to the education level and the programme) to job seekers and their supervisors.
- *Projects funded by the Tunisian Bank of Solidarity (BTS)*: founded in 1997, The Tunisian Bank of Solidarity (BTS) aims to facilitate access to loans for micro-entrepreneurs. Since January 2003, it has been responsible for managing loan programmes and micro-credits under the auspices of the National Employment Fund and regional authorities.
- *The AMAL Program and the Promoting Employment Programme (PEE)*: in 2011, the first post-revolutionary transitional government established a programme called AMAL which provides unemployed graduates with bonuses of 200 dinars per month for one year. Part of the population, which was earlier out of the job market, has registered to receive this grant. In 2011, this programme was allocated with a budget of 300 million dinars, supporting more than 200,000 job

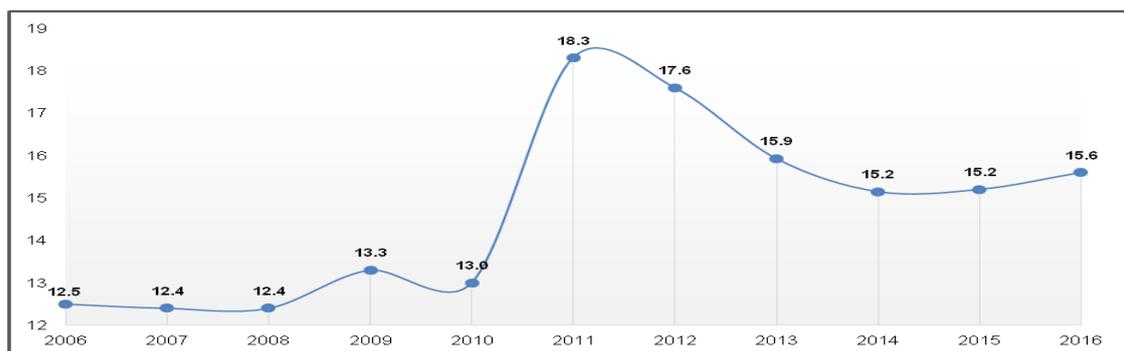
seekers. In 2012, it was relabelled the Promoting Employment Programme (PEE). Certain conditions were introduced for eligibility: at least three years of unemployment and a minimum of 28 years of age.

The labour market in Tunisia suffers from a structural and persistent imbalance due to the slowdown in economic activity and frictions in the labour market. At the second quarter of 2016 the labour force was estimated to be, **4.0472 million, 3.417 million persons (which number?)** The gap between labour supply and demand, gives an overall unemployment rate of 15.6 per cent (**629.4 miles unemployed persons (not sure what this means)**).

High unemployment rate between 2006 and 2016

The persistence of a high unemployment rate over several decades and through various economic cycles suggests that Tunisian’s unemployment is more of a structural phenomenon than a cyclical one. The decline in matching efficiency may reflect a growing skills gap between education outcomes and labour demand. Nevertheless, alongside structural unemployment, we are also in a context of involuntary unemployment. As indicated by Figure 54, the Tunisian unemployment rate increased to 15.6 per cent in the second trimester of 2016 from 15.2 per cent in the same period of 2015.

Figure 54: Unemployment rate

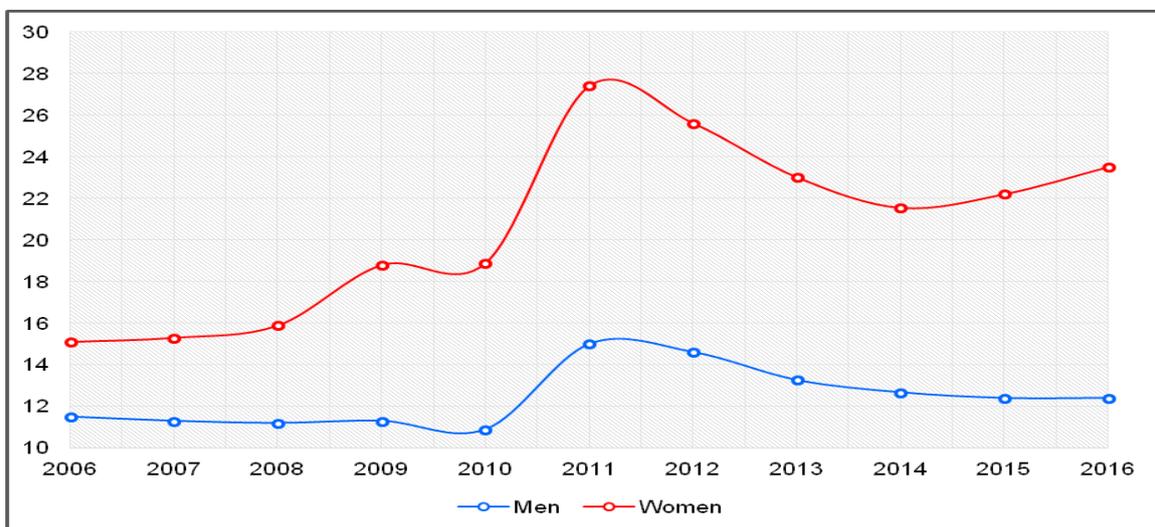


Source: INS.

Woman are more exposed to unemployment than men

In Tunisia, equal employment opportunities between men and women are far from being achieved. Although they are more successful in their studies than men are, women find more difficulty in accessing the labour market. Figure 57 shows that, between 2015 and 2016, the unemployment rate for women increased by 1.3 points compared to the unemployment rate for men, which remained the same, shifting from 22.2 per cent to 23.5 per cent in 2016.

Figure 55: Unemployment rate by sex



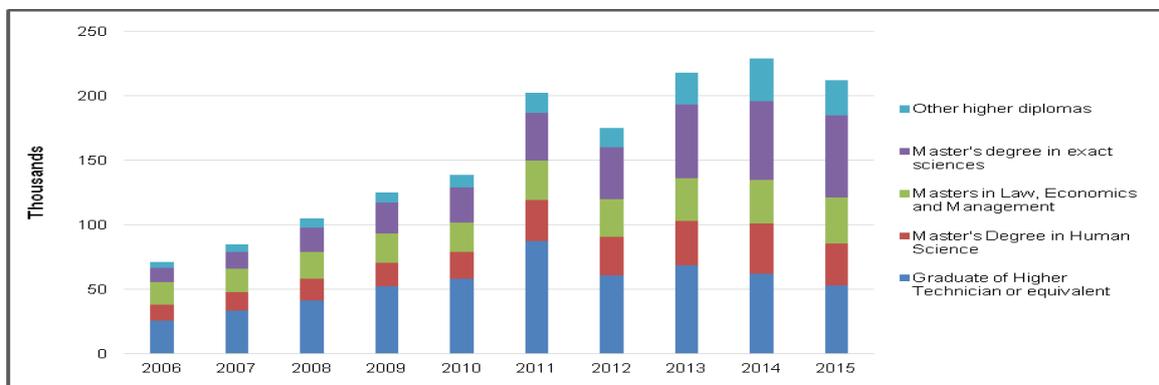
Source: INS

The increase of female participation rates in the labour force, the low demand for educated females in the private sector and the low mobility of women from under developed regions (Seliana, Jendouba, Kasserine, Gafsa, and Sidi Bouzid) to developed regions (Tunis, Sousse, and Sfax) constitute the main determinants of women unemployment.

According to census results, the youth unemployment rate (aged 15-29 years) is equal to 31%. The youth unemployment rate is likely to be at least twice the global unemployment rate; it can be explained by skill mismatches, lack of job creation and of

opportunities in the interior regions. More particularly, the west and south east regions are more affected by unemployment, with 22.3 per cent and 26.6 per cent respectively. Table 56 shows that graduates are not exposed to unemployment to the same extent. Graduates with a master’s degree in hard sciences and graduates with higher technical specialties have the highest numbers of unemployed, compared to other specialties.

Figure 56: Distribution of graduates’ unemployment by the type of specialty (2006-2015)

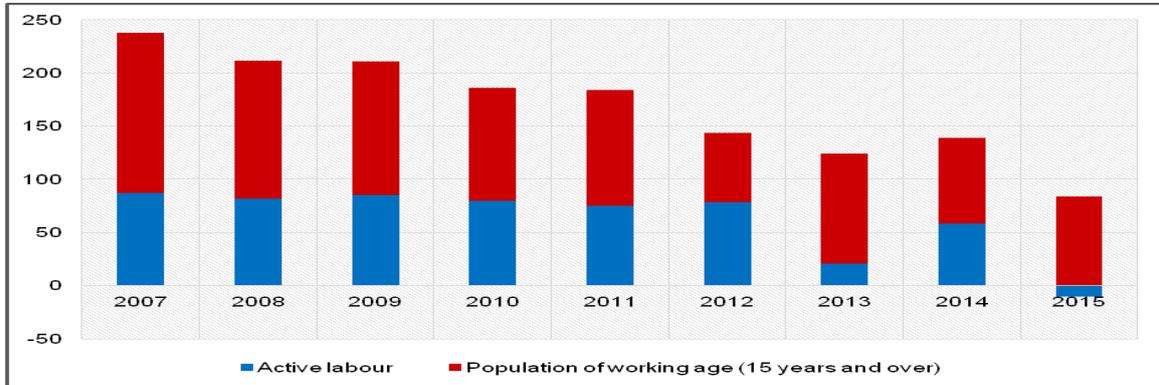


Source: INS

Recent labour market trends

Between 2006 and 2015, the working age population of 15 years and over increased by at least 12.7 per cent. It rose from 7525.9 to 8480.59 persons. On the other hand, the active labour force increased by 16.2 per cent. Actually, the number of active labour population was equal to 3,991,437 persons, representing 47 per cent of the working age population.

Figure 57: Variation in the labour force number of labour force and the working age population of 15 years and over

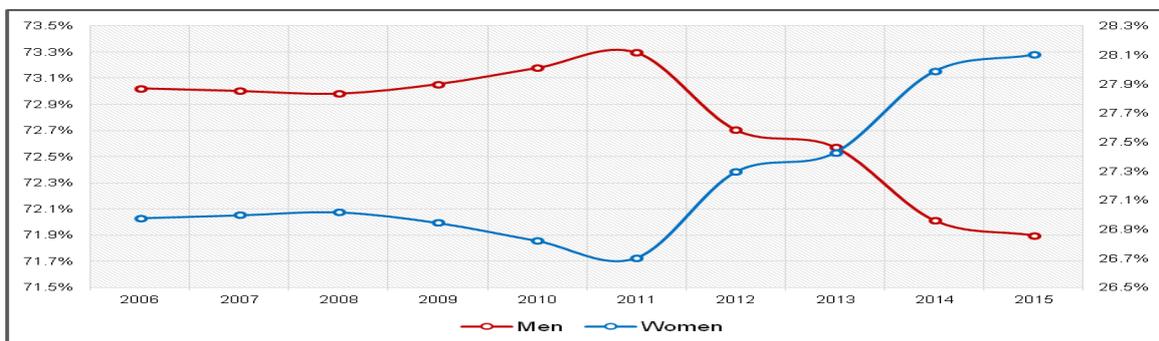


Source: INS

Between 2007 and 2015, the labour force varied less proportionally than the variation of the population aged 15 years and over. As a result, Tunisia has a very low rate of participation in the labour market (figure 59). In 2015, the labour force decreased by ten thousands compared to 2014.

Figure 58 indicates that the presence of women in the labour market is still weak. The element of women active in the labour force varied between 27 and 28 per cent, compared to 71 and 73 per cent for men. In the last four years, the share of women in active labour increased while the reverse trend was observed among men.

Figure 58: Share of active labour force by sex



Source: INS

The increase in the female labour force is justified by the improvement of women's educational attainment and the strengthening of women's employment rights. According to the NSI statistics, between 2004 and 2014, the proportion of women in the population aged 10 and over with a higher level of education increased from 6.9 per cent to 12.1 per cent.

By 2015, the share of private investment in GDP was around 12%. This was much lower than in high-growth countries, such as Asian countries (around 25 per cent). As a result, the contribution of the private sector to growth and employment remains relatively insufficient. It represented around 70 per cent of GDP just over 75 per cent of the active population in 2015.

The analysis of the employment structure in 2015, according to professional status, shows that it was made up mainly of employees (72.82 per cent) and 23.53 per cent of self-employed, care providers (3.19 per cent) and undeclared employees (0.46 per cent). Between 2006 and 2015, the share of salaried employees increased by almost 4 percentage points, compared with a one-point decrease in the share of self-employment (Figure 59).

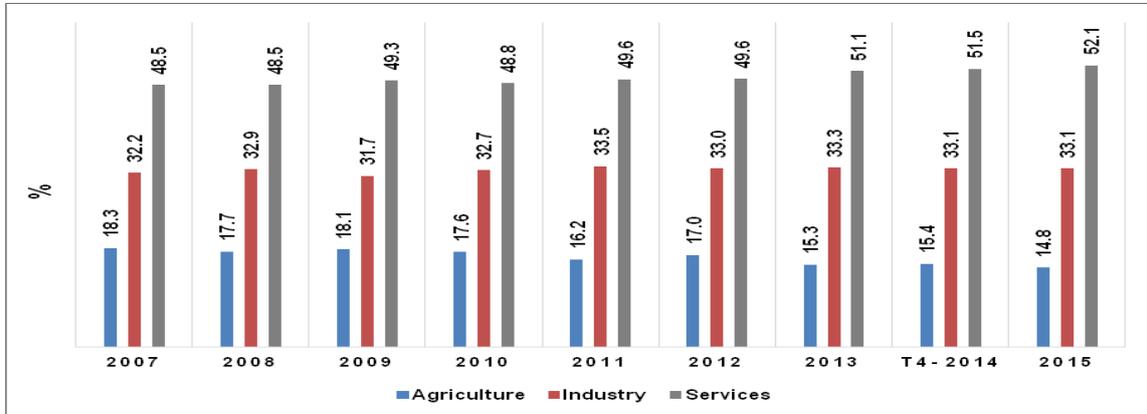
Figure 59: Share of employed labour force by status in occupation



Source: INS

Most Tunisians work in service and sales businesses, and the share of the Tunisian labour force with these occupations increased slightly from 48.5 per cent in 2007 to 52.1 per cent in 2015.

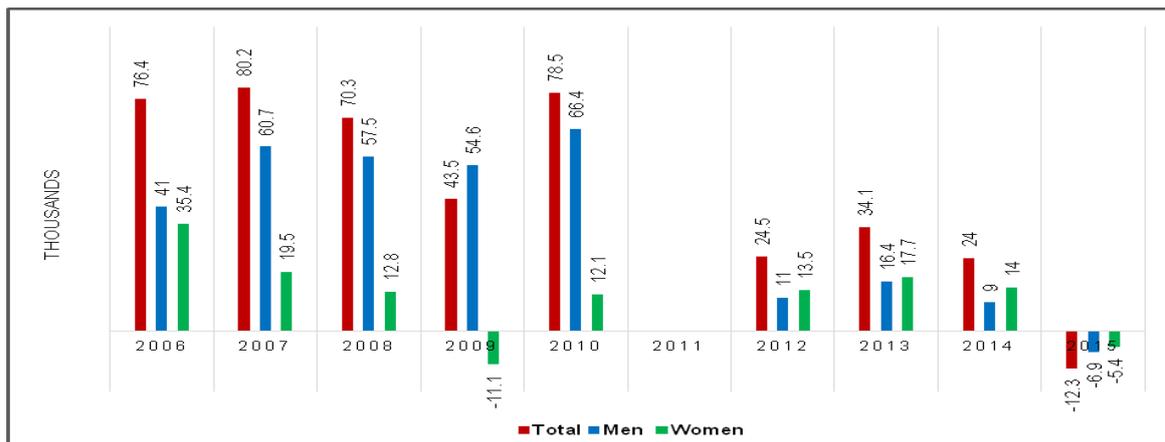
Figure 60: Share of employed labour force by sector of activity



Source: INS

In addition, the number of active workers in the service sector is 1.7657 thousand people. The tertiary sector is willing to take on more labour because its productivity is growing at a slower pace than demand. As indicated by Figure 61, the net created jobs between 2006 and 2015 were about 49,500, distributed as follows: 34,500 and 15,000 for males and females respectively.

Figure 61: Net job creation by sex



Source: INS

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From the distribution of net job opportunities by sex, one can observe that men have more opportunities compared to women. Moreover, for both sexes, we note a sharp decrease in the jobs created by the Tunisian economy. In fact, the impact of political instability on real activity, social demands and the unfavourable global economic situation - especially after the financial crisis of 2008 - are significant. Figure 63 indicates that the number of jobs created decreased between the periods of 2006-2010 and 2012-2015.

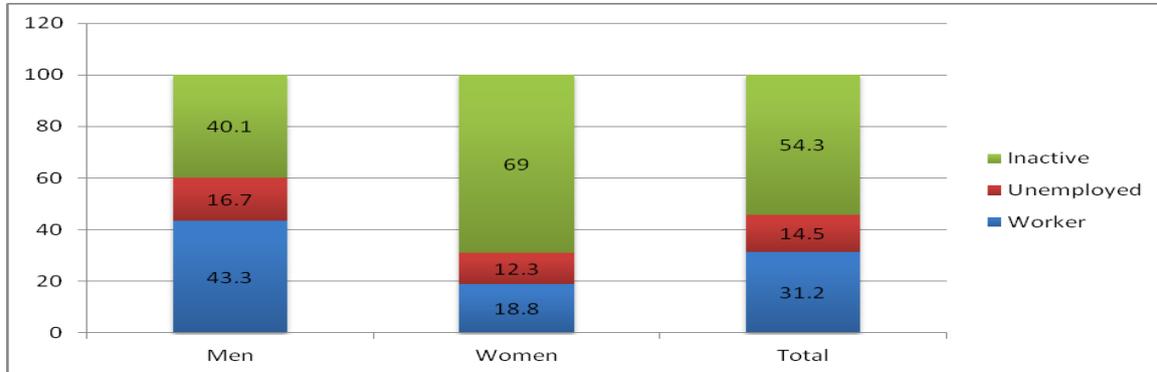
CHARACTERISTICS OF YOUTH IN TUNISIA

Youth employment is a big challenge in Tunisia. Only 31 per cent of young people find a job and the situation is even more difficult for those who are graduates. The social exclusion of these millions of young Tunisians is the cause of an important lack of productive activity and is a big economic loss. In order to better understand the school-to-work transition of youths in Tunisia, in 2013 the “Organisation Internationale du Travail” (OIT) and the “Observatoire National de l’Emploi et des Qualifications (ONEQ)” ran a large survey on the transition from school to working life of Tunisian youths³⁶. This survey covered a sample of 1769 youths between 15 and 29 years in Tunisia, providing information on their transition process from school to the labour market. In what follows, we refer to the results of this survey in order to study the main youth characteristics in Tunisia.

Youth inactivity is a massive problem in Tunisia. Young people who are not in education, employment, or training (NEET) represent a substantial proportion of the potential youth labour force. Youths, between 15 and 29 years old, represent about 30% of the labour force and about 75 per cent of unemployed (77.2 per cent in 2012). About 68.8 per cent of young people in Tunisia are not in working life (inactive or student) or unemployed and only 31, 2 per cent find a job (figure 64). On another hand, exclusion from working life is a phenomenon that affects more young Tunisian women than men; in fact, they have more difficulty being integrated into the labour market. 69 per cent of them are outside the labour market and only 18.8 per cent find a job. These rates are different for young men, where 43.3 per cent of them are employed.

³⁶ “Enquête sur la Transition de l’école vers la Vie Active” (ETVA 2013).

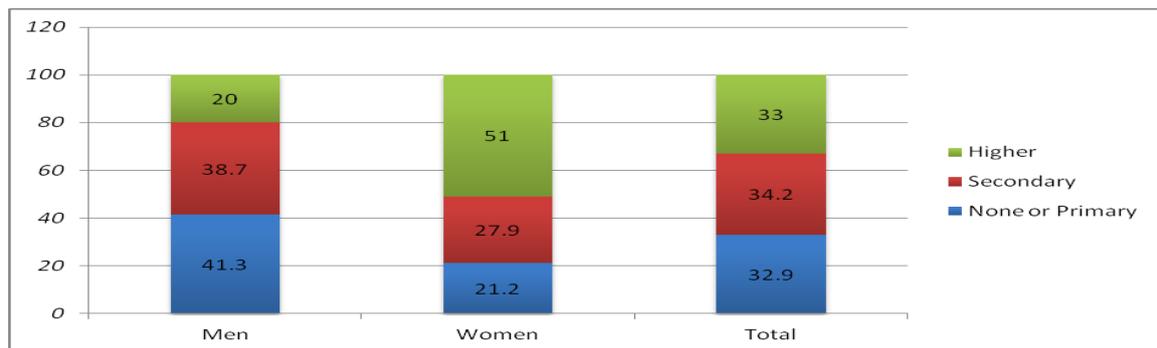
Figure 62: Distribution of youth by status and gender



Source: ETVA-Tunisia 2013.

The labour force is increasingly educated in Tunisia. The proportion of employed youths with university degree and active in the labour force increased considerably during these last years, rising from 13 per cent in 2005 to 22 per cent in 2014. However, the number of created jobs is not sufficient to absorb the flow of graduates. The result is more educated people becoming unemployed. 33 per cent of young unemployed are higher educated (Figure 63); this proportion is around 51 per cent for women. Only 20 per cent of unemployed young men have high level education and 41 per cent of them have none or only primary level education.

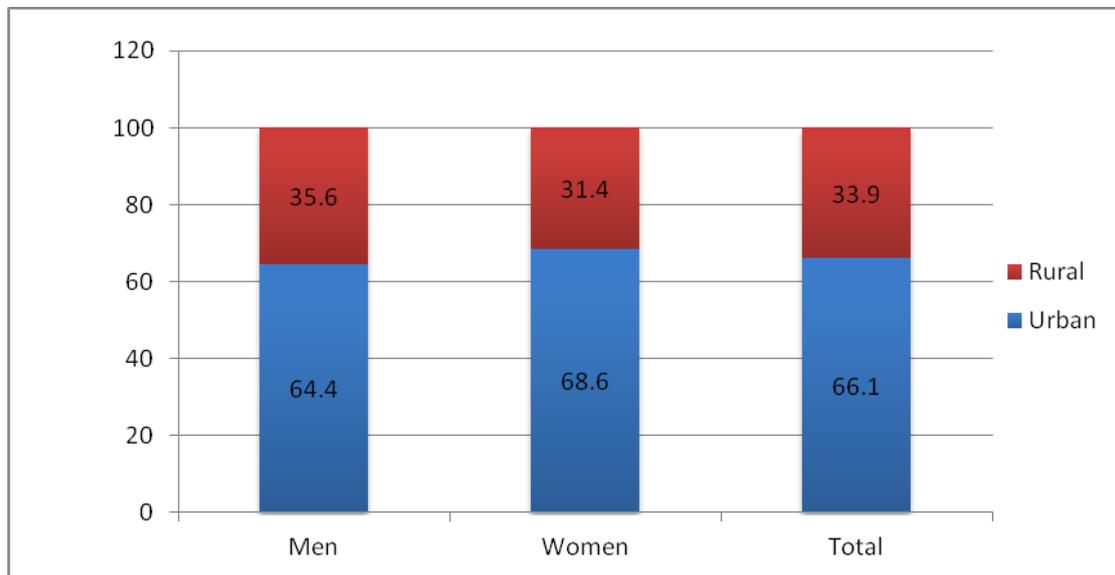
Figure 63: Distribution of unemployed youth by educational level



Source: ETVA-Tunisia 2013.

Moreover, people who leave in urban areas are more affected by unemployment than those leaving in rural places. About 66 per cent of unemployed youths are urban, against 34 per cent from rural areas (Figure 64). This disparity is more pronounced for women than for men, with the proportion of unemployed women leaving from urban areas reaching 69 per cent. This is due to the fact that educated people and graduates live in urban areas; this category, as mentioned above, is more affected by unemployment than others.

Figure 64: Distribution of unemployed youth by gender and place of residence



Source: ETVA-Tunisia 2013

The Tunisian labour market is small in quantity and quality and is clearly unable to absorb all graduated people. “The problem has been made more difficult by the fact that educated youth expect good jobs and are not satisfied with the low-productivity, low-wage jobs offered by the private informal sector that are easier to find”.³⁷

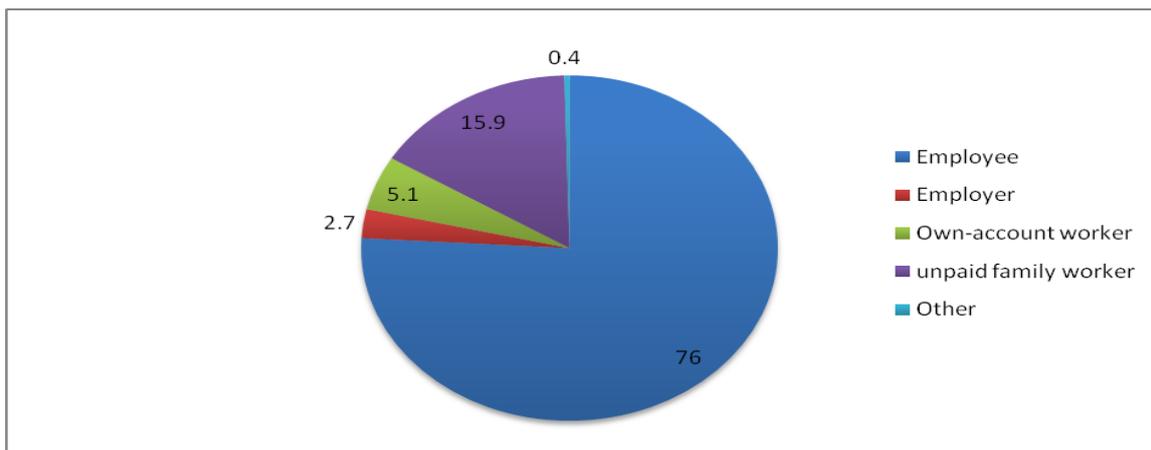
Figure 67 gives the distribution of employed youths by work type. “Employee” represents the most important part of the youth labour force in Tunisia. 76 per cent of

³⁷ Boughzala, M (2013), “Youth Employment and Economic Transition in Tunisia”, Working Paper n°57, Global Economy & Development, Brookings.

employed youths between 15 to 29 years old are employees. Labour demand in Tunisia is strongly concentrated around the public sector; people usually think that formal and decent jobs are primarily offered by the public sector. Unpaid family workers represent about 16 per cent of the young employed. In fact, in the absence of good work opportunities, people prefer to help their families rather than looking for job - even if the work is unpaid.

Despite efforts to promote the creation of micro and medium enterprises, only a small proportion of young people opt for independent job. Among all youths in employment, only 7.8 per cent of them work independently, among them, 5 per cent work on their own account and 27 per cent as employers.

Figure 65: Distribution of employed youth by work type (in %)



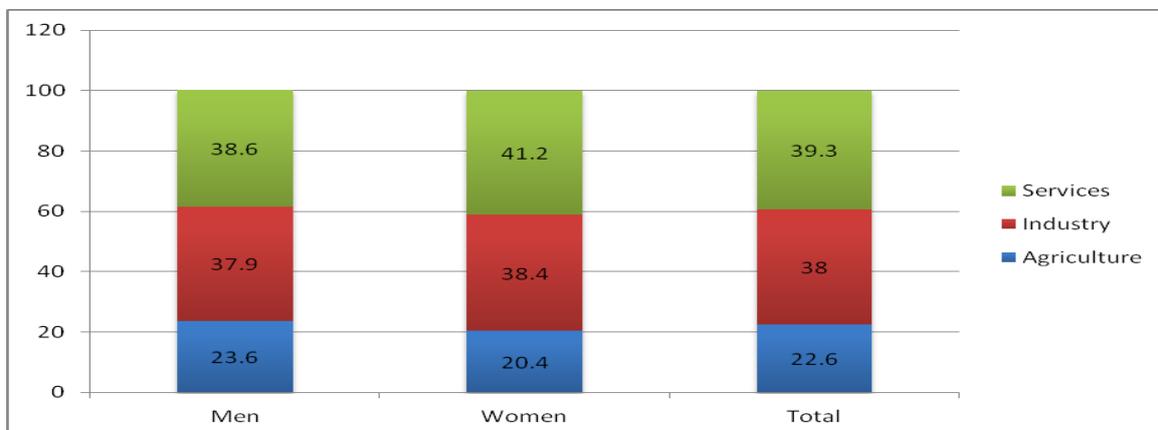
Source: ETVA-Tunisia 2013

The number of independent workers has increased in recent years, rising from 741,700 in 2006 to 831,200 in 2015. However, this was not sufficient to create more job opportunities and the contribution of the private sector to absorb the massive stock of unemployed youths remains low. This fact seems to be due to the poor perception of

entrepreneurial culture among the young, despite the encouraging incentives provided by the Tunisian government.

Regarding the distribution of employed youths by sector and gender (Figure 66), we can see that services and industrial sectors are the main employers of Tunisian youths, respectively with about 40 per cent and 38 per cent of employees. The percentage of young people employed in agricultural sector is still low; this sector absorbs only about 22 per cent of workers. Note however, that labour supply in the industrial sector increased after the revolution, compared to the period from 2007-2010, but the share of the employed population in the sector rapidly stabilised around 33 per cent during the period of 2012-2015. Figure 66 also shows that there is no big difference between men and women regarding employment sector; employed young women in the services sector are, however, a little higher than their male counterparts, who seem to be more interested in the agricultural sector.

Figure 66: Distribution of employed youth by activity sector and gender

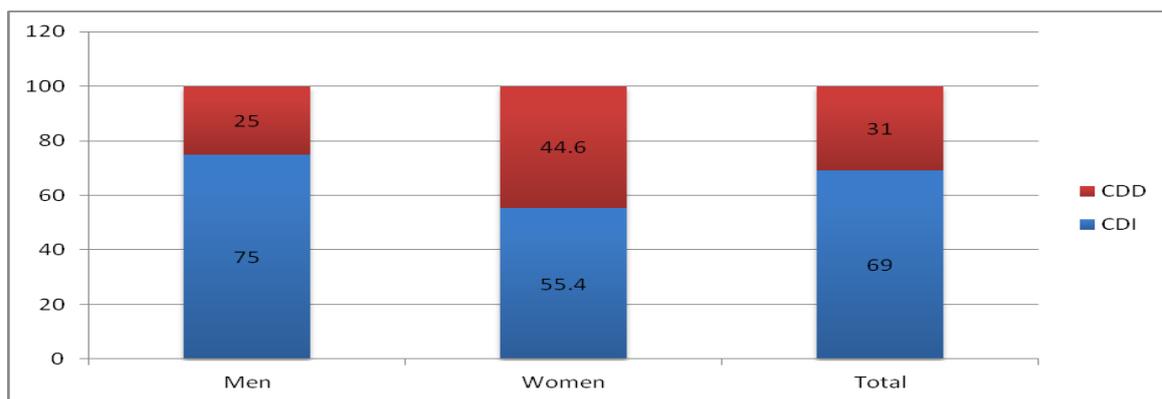


Source: ETVA-Tunisia 2013

The majority of the young who have been employed in Tunisia have a CDI (fixed job); they represent 69 per cent of total employed youths (see Figure 69). The proportion is about 75 per cent for men and much lower for women (about 55 per cent). This gender gap confirms the discrimination, still observed in several Arab countries, against women in the labour market.

But the importance of the proportion of young people benefiting from CDI should not mask the insecurity associated with such jobs. Figure 70 gives the distribution of employed youth by work type. It shows that, despite the increase in the general level of education in Tunisia, the majority (70 per cent) of youths aged between 15 and 29 years old get an unskilled or low-skilled work. Only 30 per cent of them benefit from skilled work. The gap is more pronounced for men than women; 75 per cent of young employed men get unskilled or low-skilled jobs. The proportion is about 58 per cent for women. In Tunisia, women have more difficulties accessing the labour market and face discrimination, but when employed, they get better opportunities for qualified jobs.

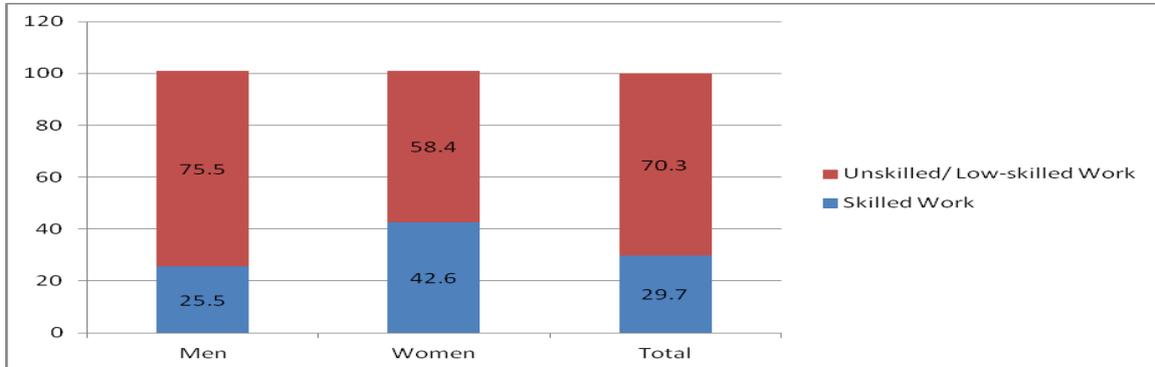
Figure 67: Distribution of employed youth by contract type



Source: ETVA-Tunisia 2013

Skill mismatch is a major issue in Tunisia; due to the massive investment in education, growth in the supply of educated workers outpaces the demand for these workers. Some of them accept a job even if their skills exceed the skills required for this job. According to David and Nordman (2014), 12 per cent of workers in Tunisia are over-educated. This problem is particularly important for bachelor or master degree holders, especially in social sciences, and is less observed for engineers, whose employment rate in some fields exceeds 90 per cent.

Figure 68: Distribution of employed youth by the type of work



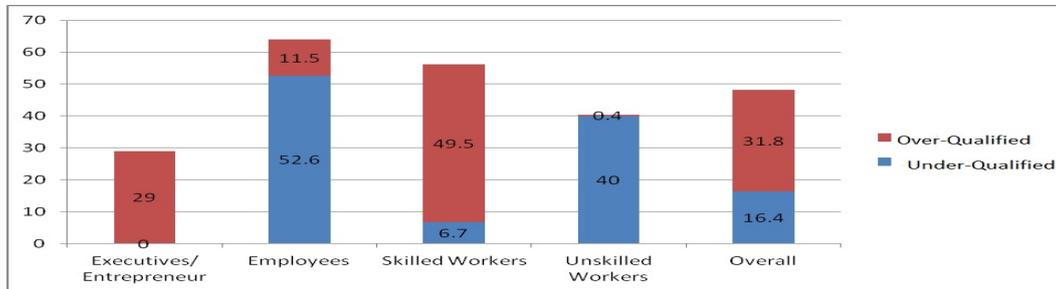
Source: ETVA-Tunisia 2013

Many of Tunisia’s young are not satisfied with their current job. About 47 per cent of them want to change job, including 10 per cent because of skill mismatch or over-qualification³⁸. Overall, 32 per cent of employed youths believe that their qualifications or skills exceed those required for the work they perform (Figure 71). This percentage is very high for skilled workers and employees, 50 per cent of whom seem to be over-educated. This is the case of many graduate youths who accept jobs below their qualifications rather than remaining unemployed. Elsewhere, 40 per cent of unskilled workers are under-qualified; indeed, many workers hold positions for which they do not have the required qualification.

Skill mismatch appears, then, to be a massive problem in Tunisia, where only a small percentage of employed youths obtain jobs that exactly match their qualification or diploma.

³⁸ « Transition vers le marché du travail des jeunes femmes et hommes en Tunisie », ONEQ et BIT, Work4Youth Série de publication N° 15, Juin 2014.

Figure 69: Distribution of employed youth by qualification

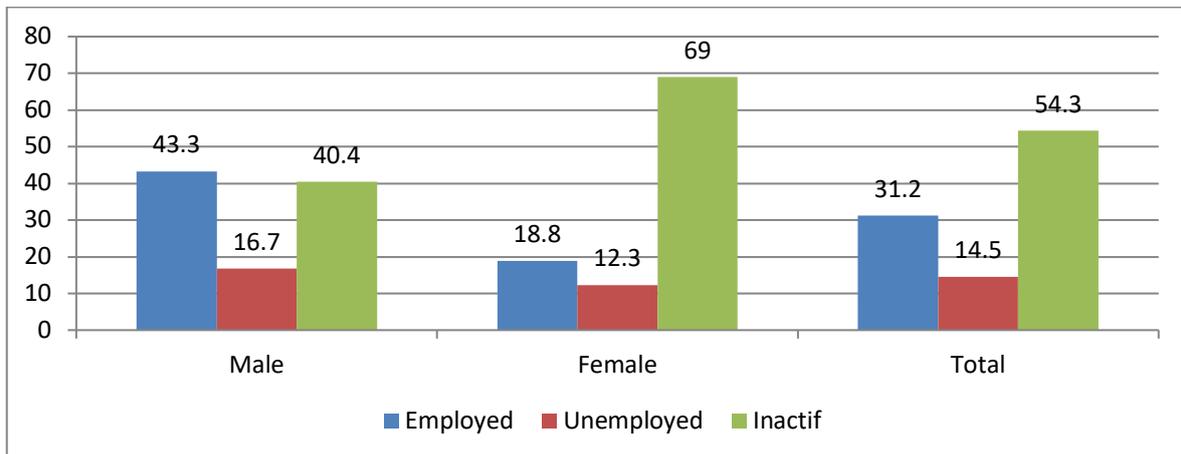


Source: ETVA-Tunisia 2013

Trends in the youth labour force and youth employment

Before the Jasmine Revolution and despite the consistently good macroeconomic performances, the Tunisian economy was characterised by high unemployment (14.2 per cent in 2010) which, among higher education graduates, was 18.7 per cent in 2007 and increased from 23.3 per cent in 2010 to 33.2 per cent in 2012.

Figure 70: Tunisian youth according to economic activity status



Source: ETVA-Tunisia 2013

Figure 70 indicates that more than half of young in the 15 to 29 age category are inactive; women are significantly more affected by this phenomenon than men. Among all young people, 54.3 per cent are inactive students. Employed and unemployed individuals represent 31.2 per cent and 14.5 per cent respectively. Inactivity is much more significant among young women (69 per cent) than among men (40.4): women are more likely to pursue tertiary education than men; indeed, the number of female students in tertiary institutions has grown almost twice as fast as that of men.

Table 40: Youth employment by sector according to 1-digit ISCO categorisation and sex

Profession	Male	Female	Total
Professional, scientific and technical	2,7	6	3,7
Legislators, senior officials & managers	2,8	1	2,3
Intermediate profession	4,2	12,8	6,8
Transportation and storage	9,5	19,3	12,4
Administrative employees	3,4	5	3,8
Skilled agricultural & fishery workers	11,5	16,9	13,1
Artisanal sector	18,1	7,1	14,8
Wholesale and retail trade; repair	16,1	16,7	16,3
Workers and unskilled employee	31,8	15,2	26,8
Total	70,3	29,7	100

Source: ETVA-Tunisia 2013

In spite of the considerable investment necessary for the development of education in Tunisia, most young people aged 15-29 were in service and professional groups, which together amounted to 70.3 per cent of employed youths: workers and unskilled workers (26.8 per cent), transportation and storage (12.4 per cent), artisanal sector (14.8) and wholesale and retail trade; repair (16.3 per cent). The first three major occupational groups, typically the higher-skilled occupations, accounted for 19.8 per cent of working women, but only 9.7 per cent of working men.

Table 41: Unemployed youth by duration of unemployment and sex (%)

Period of job search Total Male	Male	Female	Total
6 months to less than 1 year	19,8	15,8	18,1
1 year to less than 2 years	20,9	19,0	20,1
2 years or longer	37,3	38,4	37,7

Source: ETVA-Tunisia 2013

As indicated by Table 41, per cent the majority of employed youths, 57.8 per cent, have been searching for work for 1 year or longer. This **long-term unemployment** is proof of the inability of the Tunisian government to ensure full employment and contain this scourge. As asserted by Mroz and Savage (2006) and Gregg and Tominey (2005), long-term unemployment may lead to the erosion of occupational skills and, by consequence, raise the probability of being unemployed in later years and produce an occupational wage penalty. It is important to note that long-term unemployment equally affects young men and young women.

The labour market status can also be affected by the duration of experience in the market. Jovanovic (1979) argued that the duration of the match between young applicants and jobs should increase with the duration of young people's experience in the labour market. In others words, the duration of experience constitutes an important indicator that employers use in selecting job applicants.

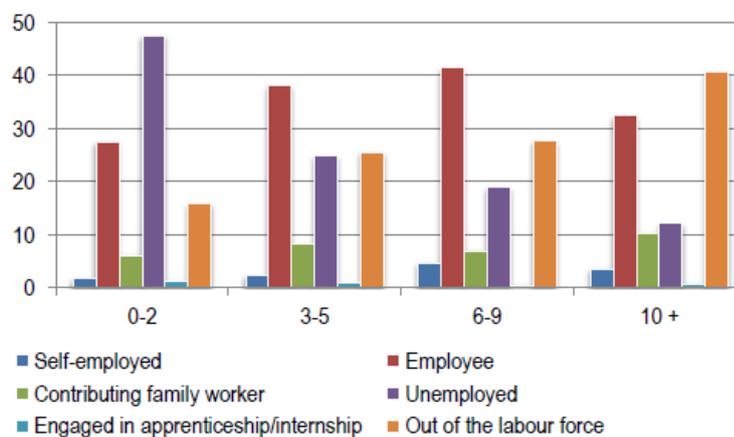
Table 42: the average number of labour market status changes per year

Duration of experience in the labour market (in years)	Average number of changes in labour market statuses (per year)
0–2	0,26
3–5	0,18
6–9	0,15
10+	0,09

Source: ILO, Michèle Mansuy and Patrick Werquin

Based on the analysis of the SWTS findings, summarized in Table 42 and Figure 71, Mansuy and Patrick Werquin (2015) argued that “that the labour market status of respondents changes as experience increases. Recent labour market entrants have spent 47.5 per cent of their time in unemployment, but this figure reduces to 25 per cent for those who have from three to five years of experience in the labour market”.³⁹

Figure 71: Duration in various labour market statuses and years of experience (as per centage of total duration)



Source: ILO, Michèle Mansuy and Patrick Werquin

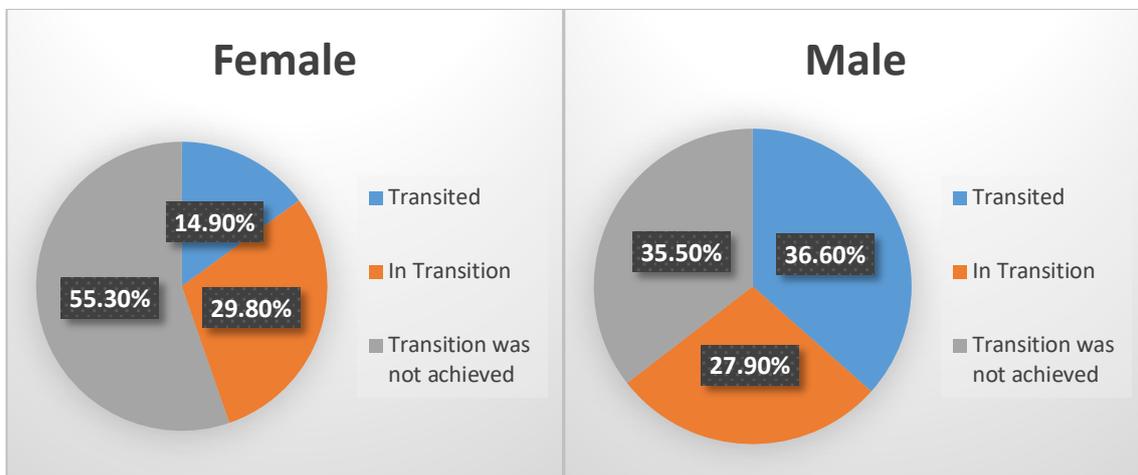
³⁹ “Labour market entry in Tunisia: The gender gap”, ILO 2015, page 13.

Transition stages for young people in Tunisia

As mentioned in the preceding sections, young people in Tunisia enjoy good access to education and training; more than 38.1 per cent of young people aged from 15 to 29 years are enrolled in school, at university or in training. However, their transition to the labour market is more complicated; the length of time between their first leaving school and their first access to the labour market depends on several qualitative factors. In order to identify these factors, it is important to define the labour market transition concept and the different stages of transition.

Figure 72 shows that young male were more much likely to have completed their transition than their female peers. Only 14.9 per cent of young women achieved stable employment, versus 36.6 per cent for young men. More than one half of young women had not yet started the transition (35 per cent for men). This Tunisian gender gap can be explained by the fact that women tend to stay longer in education and, in some regions, they marry earlier and are expected to take up full-time family responsibility.

Figure 72: Youth population by stages of transition and sex



Source ETVA-Tunisie 2013

Youth transition process

The results reported on table 43 indicate that 61 per cent of young Tunisians in transition are unemployed and looking for a job. This fact confirms that, despite the wide range of programmes and instruments implemented by the government to help the young, the major problem for young Tunisians aged 15 to 29, remains the difficulty of accessing satisfactory employment.

Table 43: Transition youth by sub-category and sex

	Proportion of men %	Situation (%)	Proportion of Women (%)	Situation (%)
Unemployed	52.2	69.4	47.8	61.4
No satisfactory and temporary employment	64.3	11.3	35.7	6.1
No satisfactory self-employment	63	13.5	37	7.7
Inactive non student	18.1	5.7	81.9	24.9
Total	49.1	100	50.9	100

Source ETVA-Tunisie 2013

Transiting youths were mostly (71 per cent) in stable employment. It is important to point out that the proportion of young in satisfactory but temporary employment and satisfactory self-employment sub-categories represents 11.2 per cent and 17.4 respectively (Table 43). Women are under-represented in each sub-category of transited youth. Only 12.8 per cent of women fall in the second sub-category.

As shown by Table 44, among transiting Tunisian youth, 38.7 per cent move directly from education to a stable and/or satisfactory employment. A disaggregation of the results by sex shows that 39.4 per cent of males and 31.3 per cent of female’s fall into this category.

Table 44: Transited youth by sub-category and sex

	Male	Female	Total
Stable and satisfactory or not	39.4	34.5	38.1
Stable but temporary employment	32.2	15	22.7
Satisfactory self-employment	54.1	42	51.5
Total transited	39.4	31.3	38.7

Source ETVA-Tunis 2013

Following the ILO report (2013), more than half (53 per cent) of young Tunisians of working age who have completed their transition have known short transitions and mainly direct transitions. Nearly one in four youths who have completed this transition has been in a long transition. In Jordan, long transitions present a third of the cases of completed transitions, whereas for Egypt this share does not exceed 15 per cent. Unlike men, women have less probability of quickly completing their transition (45 per cent of the transitions are short, against 56 per cent for men). On the other hand, on average, there is equality between men and women in terms of average number of attempts at interim jobs (1.7 attempts, not to mention the direct transitions).

Table 45: Indicators on the transition paths of transited youth by sex

Indicator	Male	Female	Total
Length of transition (months)-excluding direct transition	49.4	45.4	48.2
Length of transition (months)-including direct transition	26	27.9	26.5
Length of transition to stable employment (months)	26.3	27.3	26.5
Length of transition to satisfactory and temporary employment (months)	39.5	34.8	36.8
Length of transition to satisfactory self-employment (months)	21.1	20.6	21

Source: Source ETVA-Tunis 2013

Tunisia's youth not moving directly from education to stable and/or satisfactory employment face a long transition of 27 months (2.3 years) on average. Young men tend

to complete their transition slightly faster than their women peers (49.4 months versus 45.4 months on average respectively) (Table 45).

MIGRATION

Like many SEMCs, the lack of labour market opportunities in Tunisia, especially for the university educated, constitute the main factor encouraging young people to migration. Since independence, migration has always been the consequence of two phenomena: on one hand, the lack of work opportunities and, on the other, the increasing demand for an international workforce. This demand, for the first time, came from European countries in the post-war construction phase, and secondly from neighbouring Arab countries and those of the Gulf following their enrichment through the oil windfall. Since the revolution, political instability and conflict has constituted another pattern of migration and forced some Tunisian people to leave their homes.

In recent years, the emigration of Tunisian workers began to attract the attention of decision-makers, who consider it a solution to the dysfunction of the Tunisian labour market. In this context, migration is considered a factor of regional economic integration. However, it is important to study the consequences for the country of a mass emigration of young graduates or highly skilled workers, especially since the majority of them do not return. It is also important for returning emigrants to be able to assess the impact of skills acquired and investments made in human capital on employment and economic activity in general. But before, it is essential to study the flows of emigrants, and the distribution of these flows according to gender, the level of education, the country of destination, and that we aim to understand the profiles of this migration through the presentation and the description of available data from different public statistical sources. However, it is evident that an exhaustive analysis of these migratory flows cannot be perfect without data on clandestine migration. In what follows, we focus our analysis on the description of regular emigration in Tunisia.

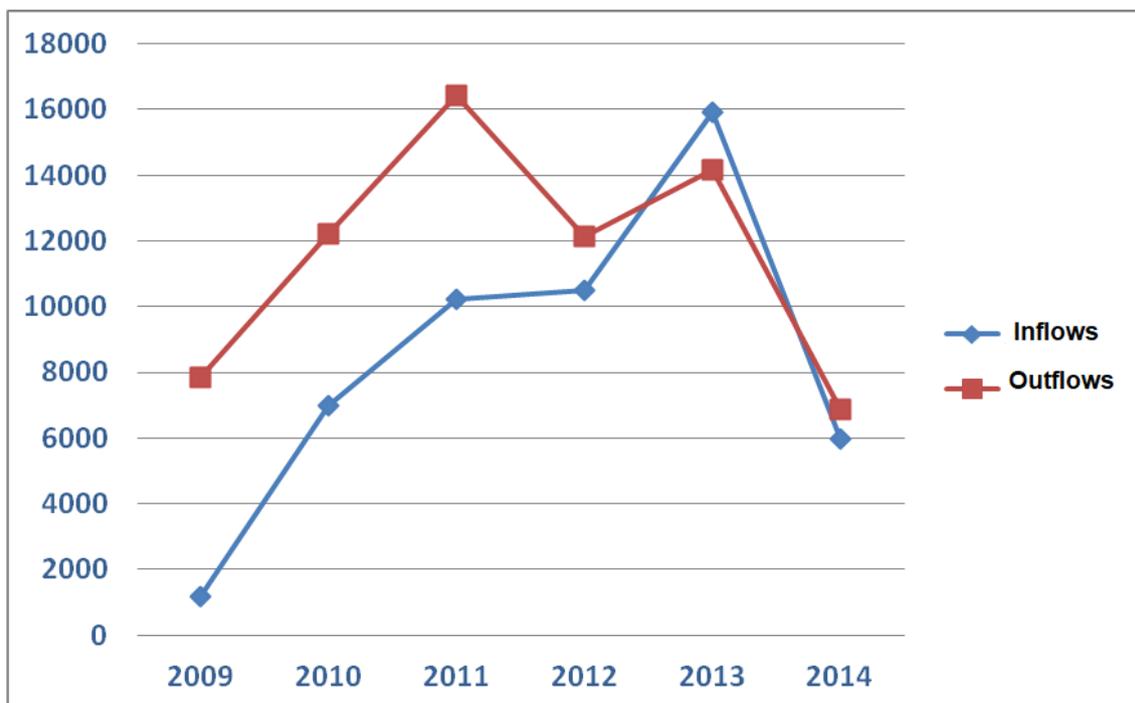
Flows of emigrants

The first great waves of departure of Tunisians abroad go back to the mid-1960s. This period was characterised by a context of economic plight with a deregulation of the

labour market, a significant decrease in public employment and precariousness of employment. A massive flow of emigrants went to Europe which recognised at the time that it had a great workforce need for the reconstruction of the post-war continent. Since the 1960s, the number of emigrants has increased steadily. In 2011, Tunisians residing abroad represented about 11.3 per cent of the total population, with an average growth of 4.7 per cent per year during the last decade.

Figure 73 gives the evolution of outgoing and incoming migrant flows, between 2009 and 2014.

Figure 73: Flows of outgoing and incoming migrants (2009-2014)



Source: INS- RGPH 2014

In general, the outgoing number is higher than that of the incoming, except in 2013. The flows of emigrants increased between 2009 and 2011 but decreased in 2012 and significantly in 2014. Just after the revolution (2011) Tunisia saw a massive wave of

emigration, with more than 16,000 outgoing people, mainly due to the situation of insecurity and the weakness of the state during this period. Then, after 2011, we move towards a decrease in the outgoing flow, in parallel with an increase in the incoming flow, culminating in a final decrease of both flows in 2014.

The increase of the incoming flows since 2011 is essentially due to the high number of Tunisian expellees in an irregular situation. In fact, the massive wave of emigrants after the revolution was mainly composed of irregular emigration. This category of emigrants was then rapidly expelled from Europe. France and Italy, which are the main host countries of Tunisian emigrants in Europe, have the highest levels of expulsion, with more than 78 per cent of total expellees coming from Italy in 2011. The main reason for expulsion by far is the clandestine crossing of borders. In 2011, the percentage of illegal expellees reached 85 per cent and more than 62 per cent in 2012.

The number of male emigrants is much higher than that of women. The majority of emigrants are also youths. Men between 25-29 years of age are the most affected by emigration, with more than 15,000 emigrants in 2014.

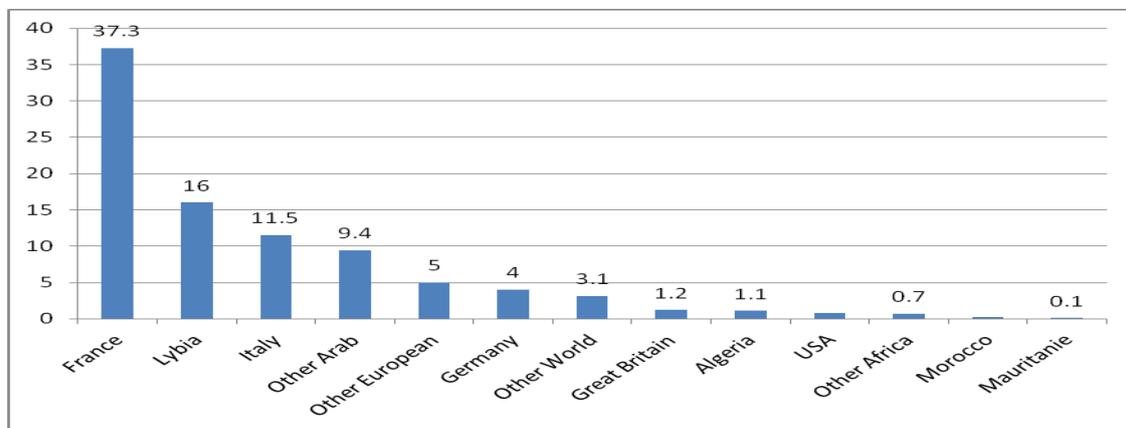
In the last decade, the majority of emigrants have been concentrated in European countries with about 60 per cent of total emigrants. France remains the main host country in Europe and in the world. 37 per cent of total emigrants between 2009 and 2014 were in France followed by Italy (11 per cent) and Germany (4 per cent) (figure 76). The number of emigrants living in France has increased by about 35 per cent since 2002. The emigrant population is essentially composed of 46 per cent workers and 5.7 per cent students.

The Arab oil countries have opened their borders to Tunisians mainly through technical cooperation agreements. In 2012, the Tunisian Agency of Technical Cooperation (ATCT) registered 9817 cooperation contracts in Arab countries, representing 76 per cent of total cooperation. Technical cooperation was originally designed as assistance to some friendly countries. Via these agreements, 9 per cent of Tunisian emigrants, the majority working in the field of education, health and sport, have settled in Arab countries such as Saudi Arabia, the United Arab Emirates, Oman and Qatar. However, the percentage of emigrants in Arab countries remains very low,

compared to European ones. This percentage has also decreased in recent years, affecting in particular the flows of emigrants to Algeria and Morocco.

Libya represents the most important host country among the Arab and African countries, with about 16 per cent of the total number of Tunisian emigrants. The easy access to informal employment in Libya has made it the destination most targeted by Tunisian migrants in recent years, despite the insecurity problems that exist.

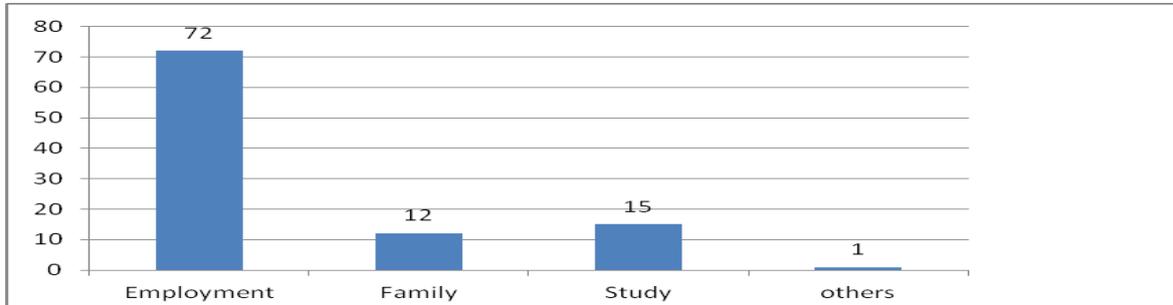
Figure 74: Distribution of emigrants by destination (2009-2014)



Source: INS- RGPH 2014

In fact, the main cause of emigration of Tunisian youth is undoubtedly the search for a job. 72 per cent of Tunisians leave Tunisia to look for work in other countries, where better opportunities of work exist. The percentage of emigrants studying represents about 15 per cent of the total number of emigrants (Figure 75).

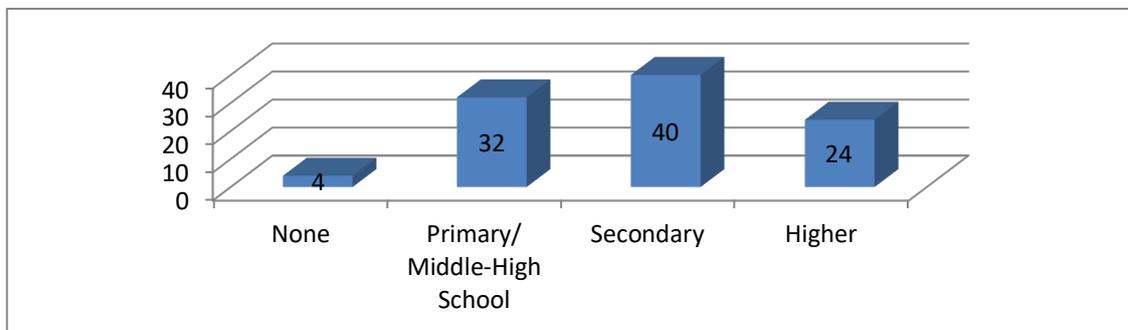
Figure 75: Distribution of emigrants by reason



Source: INS- RGPH 2014

Regarding educational level (Figure 76), the majority of emigrants have secondary or primary level education, respectively with 40 per cent and 32 per cent of total emigrants. Higher educated emigrants represent about 24 per cent of Tunisian emigrants. This share is considerable and leads us to think about the consequences for the country of a mass emigration of young graduates or highly skilled workers, especially since the majority of them do not return when finishing their studies.

Figure 76: Distribution by educational level



Source: INS- RGPH 2014

Most Tunisian emigrants generally come from coastal cities. The highest numbers are recorded in Tunis, Mahdia, Sousse, Nabeul and Sfax. The proximity to Europe via the sea is, in fact, a key factor in facilitating emigration, especially irregular emigration. A great number of emigrants also come from Medenine, the city that lies on the Libyan

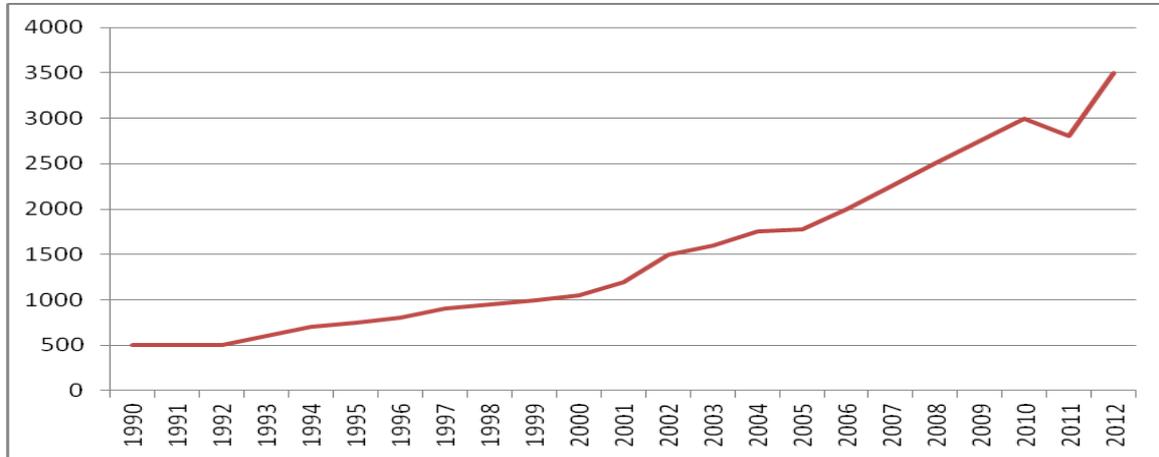
border. Due to this proximity, more than 7000 Tunisians from Medenine emigrated to Libya in 2014.

Contribution of emigrants in investment and job creation

The emigration returns can play an important role in the economic development of the country and the creation of jobs. The income generated by the investment of emigrants in their country is, in fact, very valuable for the economy and for regional development policy.

The monetary transfers of Tunisians abroad increased in recent years, with a gap of 23 per cent in 2012 compared to 2011 (figure 79). Most transfers come from European countries where more than one million Tunisians live. The share of transfers from Europe out of total transfers was about 88 per cent with 50 per cent from France. On the other hand, transfers made by Tunisians residing in the Arab countries have declined in recent years, with a total of 270 MD in 2011. This amount came mainly from Saudi Arabia, United Arab Emirates and Qatar. However, in terms of average transfer per emigrant, average transfer performed by a Tunisian resident in the Gulf countries was significantly higher than that of a Tunisian coming from Europe. Finally, transfers from Libya, the second host country for Tunisian emigrants after France, were very small (35 MD in 2011) compared to other countries.

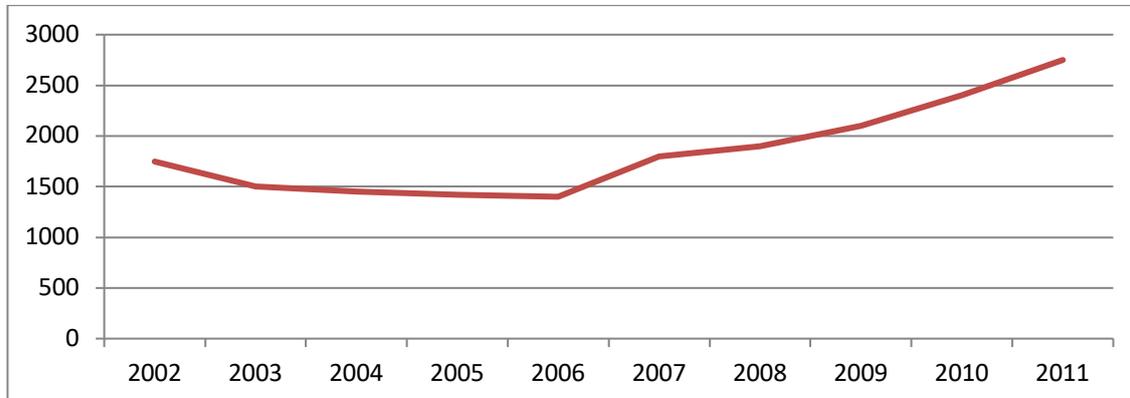
Figure 77: Evolution of transfers of emigrants in MD (1990-2012)



Source: Ministry of Foreign Affairs 2012

The coastal regions of Tunisia have the highest amounts of transfers compared to the regions of the interior. There is also a strong heterogeneity between the governorates; Medenine, Tunis, Tataouine and Mahdia have the largest transfers per capita, while the lowest amounts are recorded at Sidi Bouzid, Gafsa, Siliana and Kasserine.

Regarding the investment made by emigrants, despite the economic difficulties in Tunisia especially after the revolution, the amount of total investment of Tunisians living abroad still increased, reaching 48 MD in 2011. These investments generated more than 2700 new jobs in 2011 (Figure 78) and, as a consequence, participated in economic growth by reducing unemployment and creating new opportunities of work for Tunisians living in Tunisia. Services sector have the largest share of investment with more than 59 per cent of total investments, followed by agricultural and industrial sector (respectively 22 per cent and 19 per cent). This situation is explained by the fact that the services sector is considered to be the one that creates the most employment and, therefore, attracts the most investors.

Figure 78: Evolution of created jobs (2002-2011)

Source: Ministry of Foreign Affairs 2012

However, when looking at the regional distribution of emigrant investments, about 70 per cent of the total investment is made in the eastern regions. In consequence, most of the created new jobs are in these regions. This fact is not advantageous for Tunisia, which already suffers from an imbalance in favour of the coastal regions. It is then important to review the distribution of investments in order to bring them closer to the employment problems in Tunisia. Actually, the regions suffering more unemployment receive the lowest share of emigrant investments.

Note finally that, despite the importance and the increase of the number of emigrants in Tunisia, there is a lack of ex-ante migration policy. In fact, since the 1980s, only job migration induced by technical cooperation had benefited from investment and monitoring policies. This form of organised emigration remains small in terms of numbers, however, compared to the total emigration of Tunisians. It is vital, therefore, to reflect on a smart strategy to manage the massive flow of migrants. Circular migration schemes, which were promoted by EU, could form the optimal strategy to reopen channels for legal migration. Indeed, this policy should create better conditions for migrants to integrate host country societies, whilst retaining a pride in their origins. According to this migration model, migrants must return to their home countries after working for a given period, with the opportunity of coming back for multiple periods. Thus, this policy could be beneficial for SMC countries and the EU; it can address the demographic losses at working age and avoid the social and cultural problems arising

from permanent migration. It can also be considered as a way of alleviating pressures on SMC countries' saturated labour markets, which are suffering from the consequences of skill mismatch. The scale of circular migration benefits would be highly significant; indeed, migrants may have an increasing propensity to invest in their own education and accumulate human capital in addition to financial capital. The SMC countries, in collaboration with the EU, have to find the best way to maximise remittances and economic investment in home countries and to channel the diaspora's knowledge and skills, by creating an environment favourable to investment: return migration.

However, the management of the migration process in developing countries is often hampered by the lack of objective and reliable data on migrant stocks and flows. In Tunisia, detailed scientific data on the determinants, dynamics, and consequence of international migration and the migratory intentions of young people are not sufficiently developed. Administrative data on international migratory flow suffers from various limitations. In fact, none of the administrative registers collect information on the pre-migration situation. Separately, the increasing number of bilateral labour agreements generates new requests for data on the subject. In this context, The Tunisian National Institute of Statistics, with the funding of the European Union, developed (2015-2017) "The Tunisia Household International Migration Survey (Tunisia-HIMS)", in order to overcome the lack of statistical data on international migration. This survey will give us interesting information on the determinant and the consequence of migration and international mobility and can be very useful for researchers.

CONCLUSION AND MAIN FINDINGS

In short, this document reviews the characteristics of Tunisia socio-economic environment and the ability of youth to access the labour market. This report confirms the promising performances registered by Tunisia in the field of youth education. However, they also show that young Tunisians face different employment problems, like job insecurity, the renunciation of activity, etc. Indeed, for the young who do not transit directly from higher education to a stable job, transitions are long and difficult. The skills mismatch phenomena is behind the difficulties young people in Tunisia face when entering the labour market.

Thus, the challenge is not just to accumulate human capital and improve skills, but to match skills to the labour market requirement. Recent empirical literature has shown that the persistent increase of high unemployment in Tunisia, particularly for young people, is not only the result of excess labour supply, but is also related to a mismatch between supply and demand. In fact, the global economic crisis in 2008-2009 caused a massive increase in unemployment, in patterns of job destruction and job creation; henceforth, it is unrealistic to assume that labour markets cannot evolve without temporary or permanent imbalances. These new structural labour market trends have generated various types of skills mismatch which point towards different forms of imbalances between the skills offered and job requirements. Indeed, due to the steady increase of global education indicators, the mismatch between skills and job level arises as a crucial issue in Tunisia, where governments encourage investment in education by providing public and free education. As mentioned above, education has expanded in Tunisia faster than in neighbouring countries. David and Norman (2014) find that 12% of workers in Tunisia are over-educated; this rate is about 11% in Egypt. According to them, one of the highlighted causes of this problem was the high prevalence of employment in the public sector until the 1980s that led universities to orient their training offering towards humanities and social sciences, fields in which labour demand barely increased in recent decades.

But improving the quality of education and the VET by means of a solid public-private partnership is not the only challenge that Mediterranean countries are facing in relation to the labour market. The challenge is not just to accumulate human capital and improve skills, but match these skills to the labour market requirement. Recent empirical

literature has shown that the persistent increase of high unemployment, particularly for young people, is the result not only of excess labour supply, but is also related to a mismatch between supply and demand. Between 2004 and 2007 - and despite high economic growth - only 77,000 new jobs were created, the majority of which were low-skilled. In the same period, the unemployment rate for the college educated rose significantly (14% in 2004 and 22% in 2009) while it fell for those with no education. This labour market imbalance had been greatly reinforced by the global economic crisis in 2008-2009 which caused a massive increase in unemployment, and patterns of job destruction and job creation. Henceforth, it is unrealistic to assume that labour markets cannot evolve without temporary or permanent imbalances.

These new structural labour market trends have generated various types of skills mismatch which point to different forms of imbalances between the skills offered and job requirements. Indeed, due to the steady increase of global education indicators, the mismatch between skills and job level arises as a crucial issue in some developing countries, such as MENA ones, where governments encourage investment in education by providing public and free education. Education has expanded in this region faster than in any other region of the world. Assaad (2007) finds that the high unemployment rates for young graduates in Egypt are a direct result of these mismatches between education outcomes and labour market demands. 70% of the new entrants to the labour market in Egypt had at least a secondary education level in 2007, while in 1980, 40% of these new entrants had less than primary education. The European Commission (2010) stresses in this context the importance of articulating employment policies with education and training policies.

In short, and despite the massive investment in education, in Tunisia social and occupational integration of young people remains a long and challenging process. Indeed, the second phase of the demographic transition is now reaching an end and the cohorts of young people currently entering the labour market are the largest ever (Kateb, 2010). The challenges facing young people in finding a job, clearly massive on the northern rim of the Mediterranean, are even greater for young people in the southern and eastern regions (Reiffers and Galal, 2011).

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