



Ready for Work

An Analysis of Workforce Asymmetries in the Middle East and North Africa

Merissa Khurma
Alexander Farley
Kent Hughes

With Foreword by Jane Harman,
President and CEO of the Wilson Center



Acknowledgments

The Middle East and North Africa Workforce Development Initiative team, Merissa Khurma, Kent Hughes and Alex Farley, would like to express its deepest gratitude to all the contributors, interviewees and experts who made this research possible. Our gratitude extends to all MENA embassies, especially the Embassies of Tunisia, Qatar, Jordan and Oman, for organizing our government interviews in each country.

We would like to acknowledge the support of the Director of the Woodrow Wilson Center for International Scholars, President and CEO Jane Harman for empowering the launch of this initiative.

We are grateful to Senior Vice President Robert Litwak and Advisor to the President Meg King and to Wilson Center fellows Haleh Esfandiari, David Ottaway, and Marina Ottaway for their thoughtful guidance throughout this process. We also appreciate the contributions of the editor, Richard Byrne and designer, Kathy Butterfield for their professional skill in finalizing the format of this report.

The MENA-WDI team would also like to extend special thanks to all the interns who have worked on this project in various functions throughout 2019; Masa Haddad, Devin Fusa, Sana'a Belabbes, and Ali Nayyef.

The MENA-WDI team is grateful to the Government of Qatar for supporting this research, which will lay the foundation for the Wilson Center Middle East Program's work in this topic throughout the region.

Preface

The Middle East and North Africa Workforce Development Initiative (MENA-WDI) was launched in January 2019 as part of the Wilson Center’s Middle East Program (MEP). MENA-WDI aims to assess both the current and projected challenges facing the region in developing a competitive workforce and the implications for peace and security. The initiative also aims to identify opportunities in the workforce development ecosystem across the MENA region to chart innovative pathways to reform and address challenges through multisector interventions in the short, medium and long terms.

This policy report, titled *Ready for Work: An Analysis of Workforce Asymmetries in the Middle East and North Africa*, is the first publication of the MENA Workforce Development Initiative at the Wilson Center. The authors offer a diagnostic look at the current workforce development ecosystem in MENA, and present actionable policy recommendations to governments, the private sector and education providers – both in the region and in the United States. Because technological, ecological and demographic disruptions are impacting and will continue to affect the future of work globally, we hope this report will be the first in a series of publications which assess workforce development trends in the region.

Foreword

By The Honorable Jane Harman

Director, President and CEO of the Wilson Center



The workforce challenge is among the most urgent socio-economic and political challenges facing the MENA region today.

It is also one of the most complex. The youth bulge is colliding with the constraints of slow economic growth and investment, which results in ballooning unemployment among young people. At the same time, the region is dealing with some of the world's most alarming humanitarian crises.

The grassroots movements now seen across the region, from Sudan and Algeria in North Africa to Iraq and Lebanon in the Middle East, are a collective response to these issues. Dire economic conditions, inadequate public services, corruption, and of course, high youth unemployment all contribute to growing discontent.

This is a disturbing trend — and one that requires greater attention. It risks trapping the region in a cycle of violent extremism; since we know that frustrated young people are the easiest targets for terrorist recruiters. And it demonstrates that a generation of young minds — which could contribute to innovation, creativity, and better governance — is being under-utilized.

Fortunately, the Wilson Center's MENA Workforce Development Initiative has put this issue front and center. This report, which is the initiative's first, identifies specific challenges and opportunities across the region with a focus on three countries: Tunisia, Jordan, and Oman.

Its key findings are a useful roadmap for the region, and for observers and thought leaders who want to help it.

I am enormously proud of the report's authors, Merissa Khurma and Alex Farley, and advisor Kent Hughes. Their work showcases what the Wilson Center does best: connecting deep scholarship and research to actionable ideas for policymakers.



Contents

Executive Summary	1
Key Findings	3
Recommendations	5
Introduction	9
Defining Workforce Development	10
The National Security Dimension and Workforce Development in MENA	12
The MENA-WDI Audience	14
Outline of Analysis	14
MENA-WDI Methodology	17
The Research Process	19
Limitations	20
Chapter I: Defining the Workforce Challenge	23
Tunisia	26
Jordan	28
Oman	30
MENA's Workforce Formula	32
Chapter II: Education	35
Quantity over Quality	36

Reform Needed	44
Connectivity to the Workforce	46
Mindsets on Education and Work	47
The Brain Drain Factor	50
Aligning Education Reform with the Workforce	52
Chapter III: Technical and Vocational Training	55
TVET Structure	57
TVET Quality	60
Employment and Professional Certification	64
Maximizing Gains from TVET	65
Chapter IV: The Private Sector	69
Private Sector Structure	70
Tunisia	70
Jordan	73
Oman	75
Entrepreneurship	77
Entrepreneurship in Tunisia	79
Entrepreneurship in Jordan	79
Entrepreneurship in Oman	82
Is Entrepreneurship a Panacea for the Workforce Challenge?	83



Access to Finance	84
The Business of Employment	86
Chapter V: Women and the Workforce	89
Gender Parity in the Workforce is “Smart Economics”..	90
Unpacking the “Paradox”: Barriers to Female Labor Participation in MENA	92
Social Norms on Gender & FLFP	92
Improving the Legal Environment for Women in the Workforce	94
Employment Opportunities and Economic Structure.....	96
Family Friendly Workplaces & Policies	98
Unlocking the Potential	100
Conclusion	103
Recommendations	105
Moving Forward	109
Appendix 1: List of Questions	111
Appendix 2: List of Interviews	115
Endnotes	121
Bibliography	130
About the Team	134



TABLES

Table 1: GDP, GDP Per Capita, GDP Growth	18
Table 2: Population in Millions	18
Table 3: Commonly Referenced Essential Skills	21
Table 4: Median age, Tunisia, Jordan, Oman	26
Table 5: Comparison of Certification Track of Technical and Vocational Training	58

BOXES

Box 1: Esprit University	40
Box 2: Luminus: Transforming Vocational Education in Jordan	63

FIGURES

Figure 1: Population Age Structure – 2020 Estimates, Tunisia, Jordan, Oman	24-25
Figure 2: Unemployment Rate - Higher Education Graduates, Tunisia and Jordan	28
Figure 3: Unemployment among Higher Education Graduates in Oman	31
Figure 4: School Enrollment at Tertiary Level in Tunisia and Jordan (1990-2010)	37
Figure 5: Yearly Number of Tertiary Graduates in Oman (2002-2017)	42
Figure 6: Rate of employment in the public sector in Jordan, Tunisia, and Oman (2017)	49



Figure 7: Merchandise exports (Millions USD) in Tunisia and Morocco (2000-2018)	71
Figure 8: Services exports (Balance of Payments, Million USD) in Tunisia, Jordan, and Oman	74
Figure 9: Expatriate vs Omani Workers in Private Sector	75
Figure 10: Starting a Business Score, Tunisia, Jordan, and Oman	78
Figure 11: MENA Incubators, Accelerators and Co-Working Spaces	80
Figure 12: FLFP rate in Tunisia, Jordan, and Oman (2019)	91
Figure 13: Woman, Business and Law Index Scores in Arab Countries (2019)	95
Figure 14: Self Employment as a percent of Female Employment in Tunisia, Jordan, and Oman (2018)	97
Figure 15: MENA Countries with Explicit Prohibition of Sexual Harassment in the Workplace	99





Executive Summary

The workforce challenge is among the most complex and urgent socio-economic and political challenges facing the Middle East and North Africa today. The growth of large and youthful populations is colliding with the constraints of slow growth and investment, which makes it impossible for regional markets to absorb surplus labor. Recent protests and grassroots movements across the region in Sudan, Algeria, Iraq and Lebanon all share the denouncement of corruption, inadequate public services, and dire economic conditions, especially the lack of jobs. These events elevate the premise adopted in this report that strengthening MENA's economic stability by developing a robust and competitive workforce represents a key pillar of peace, security, and an effective deterrent to violent extremism.

This report presents an analysis of workforce development in the Middle East and North Africa drawing from primary research conducted in Jordan, Tunisia, and Oman. Given the complexity of the workforce challenge, it breaks the problem into multiple supply and demand side factors.

On the supply side, many jobs go unfilled because of the skills mismatch, which represents a deficit of essential skills imparted through the education system in management, teamwork, leadership, communication, and oral and written presentation. This deficiency is partly a result of the rapid increase in enrollment in tertiary education without adaptation of curricula and aligning training with the private sector. The tracking system and general education exam further distorts the supply of specializations in higher education by emphasizing test performance over career choice. The Technical and Vocation Training pathway thus becomes stigmatized as a destination for academic failures. TVET also lacks implementation of qualifications frameworks and measurable standards with input and investment from private sector.

Endemically low female labor force participation also deprives these countries of their investment in education. More women than men are enrolling in universities and are achieving higher as well, but their rate of economic participation is still remarkably low. The suppression of FLFP is due to the absence of women friendly workplace policies (especially in the private sector), lack of improved public transportation, and also enduring social norms that dictate both a woman's decision to take a job, and also what careers are deemed acceptable.

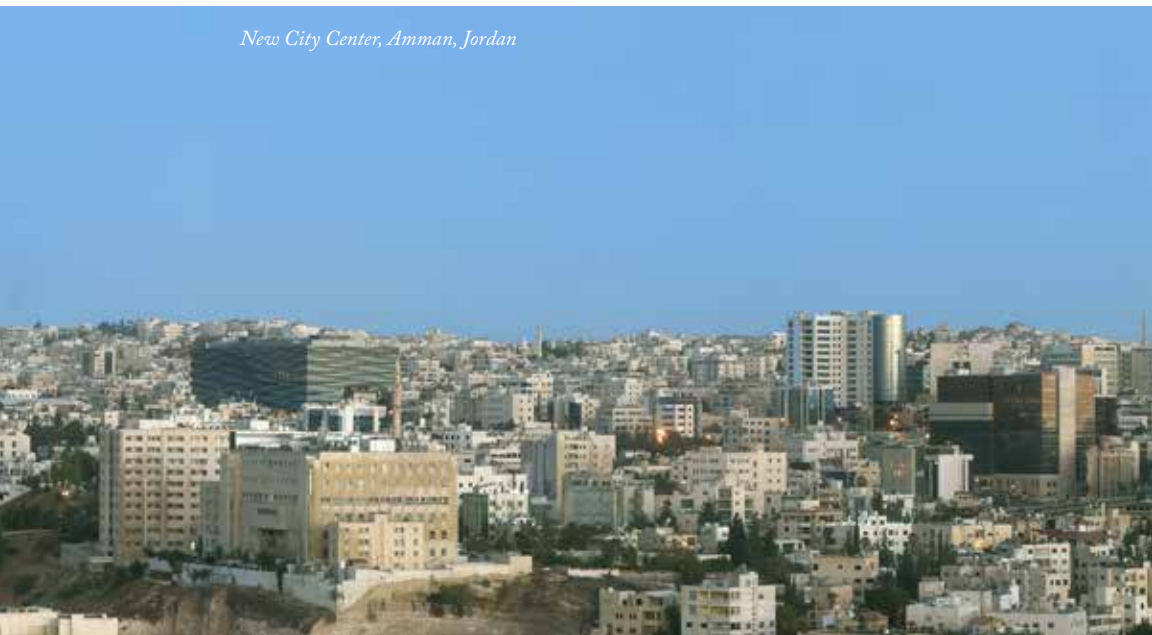
On the demand side, the private sectors consist of an abundance of low-productivity micro-enterprises. Small and medium sized enterprises (SMEs) face growth constraints from the financing gap and lack of available liquidity. Many efforts to encourage entrepreneurship are emerging to address the problem of low business density, however newly established firms will need consistent access to financing and technical support in order to grow into SMEs.

Key Findings

- **The Skills Mismatch** represents a deficit in skills demanded in the region's labor market compared to the supply, especially for essential (soft) skills.
- **The Private Sector** maintains no coordinating mechanisms with educational institutions to develop qualifications frameworks for required skills. There remains no consistent method of reporting and analyzing labor market data.
- **The Education System** does not impart essential skills or encourage critical thinking. Student assessments contribute to a distortion in higher education output by linking test performance to career choice and emphasizing selection over learning.
- **The Technical and Vocational Training** system is largely uncoordinated and suffers neglect due to its association with academic failure. TVET requires comprehensive governance reform, investment, and private sector involvement.
- **Social Mindsets** regarding work adhere to a hierarchy of public sector jobs and higher education over private sector jobs and vocational training creating a social bias against needed jobs and professions.
- **Private Sector Employers** have a strong hesitation to investing in training or meaningful internship or entry-level work opportunities for young graduates.

- **Small and Medium sized Enterprises** are not able to access the financial and non-financial assistance they need to grow and expand hiring. The private sector consists of an overabundance of micro-enterprises which are largely informal and don't drive overall employment.
- **Entrepreneurship** and new business creation in MENA remain much lower than in developed countries. Entrepreneurs need a diverse business ecosystem, and an enabling environment that helps them obtain credit, scale up, and access export markets.
- **Women exceed men** in higher education enrollments and outcomes. The depression of Female Labor Force Participation (FLFP), especially in the private sector, represents a net loss in human capital investment.

New City Center, Amman, Jordan



Recommendations

1. Reforming and realigning the education system to labor market needs

Establish an institutional system for tracking labor market data, develop qualifications and skills frameworks, include private sector in developing curricula and evaluations. Reform Education pedagogies to emphasize participatory learning and essential skills.

2. Rethinking assessment and tracking student progress

Include multiple student evaluations at the primary and secondary level to target learning gaps. Allow retake exams and subject choices for general education diploma.



3. Upgrading the TVET pathway

Create upward pathways from Technical Colleges to Universities. Provide pre-enrollment at secondary level. Encourage private investment and recruit trainers with industry experience.

4. Strengthening the ecosystem for entrepreneurship and SMEs

Broaden entrepreneurship support to greater number of viable sectors. Establish institutions for financial and technical support for SMEs based on one-stop-shop model.

5. Increasing FLFP using multiple interventions

Establish paternity and maternity leave, invest in safe and reliable public transportation, prohibit sexual harassment in the workplace, acknowledge negative social norms affecting FLFP, and encourage gender positive attitudes in education.



Graduation Hall at Education City, Doha, Qatar



Introduction

Political and socioeconomic developments in the Middle East and North Africa, particularly since the onset of the global financial crisis in 2008, and the Arab uprisings in 2010, have slowed economic growth, decreased the flow of foreign direct investment (FDI), constrained local investment, and driven up unemployment, especially for the region's rapidly growing youth population. According to the World Bank, the average youth unemployment rate for the MENA region stands today at 26.7 percent, compared to the global average of 12 percent. In some countries, youth unemployment is higher than average, reaching 37 percent in Jordan and 34 percent in Tunisia. The region also suffers one of the lowest labor force participation rates for women, which stands today at 21 percent compared to the global average of 51 percent. Further, the region is home to three of the most severe displacement and humanitarian crises in the world: Syria, Iraq, and Yemen with 10.5 million people internally displaced, and an additional 7.2 million refugees and asylum seekers displaced in countries across the region. These factors pose monumental challenges in ensuring that persons of concern have basic services, as well as chance to achieve dignified livelihoods.

While there is no panacea to the region's socioeconomic challenges, a 2015 study by the World Bank found that workforce development is "viewed by MENA governments" and the international development community, "as an important means to improve the area's socioeconomic prospects" and to enhance economic stability.¹ The MENA Workforce Development Initiative's basic premise is that strengthening MENA's economic stability by developing a robust and competitive workforce represents a key pillar of peace, security, and an effective deterrent to violent extremism.

Defining Workforce Development

There are various definitions of workforce development. This project's review of the literature suggests that most of these definitions focus narrowly on the supply side of the workforce development equation by highlighting the centrality of education and job or skills training activities that are "designed to help employers get a skilled workforce as well as to help individuals to succeed in the workplace."² Few definitions include elements on the demand side, including reforms to structural barriers to private sector development. Some direct approaches to workforce development take a more diverse approach by pairing elements of entrepreneurship with skills training interventions, or recognizing a need to understand business creation and the enabling environment in a particular market.

While few definitions comprehensively address both the supply and demand side, MENA-WDI adheres to the definition credited to Ronald Jacobs and Joshua D. Hawley in their essay, *Emergence of Workforce Development: Definition, Conceptual Boundaries, and Implications*:

"Workforce development is the coordination of public and private sector policies and programs that provides individuals with the opportunity for a sustainable

livelihood and helps organizations achieve exemplary goals, consistent with the societal context. From the definition, it should be noted that workforce development is not simply public sector programs to promote the acquisition of skills. Indeed, workforce development entails both profit and non-profit institutions to achieve a wide range of outcomes.”³

In the context of MENA, it is crucial to consider the overall employment ecosystem of training, economic development, and school-to-work transition. Whereas MENA has one of the highest youth unemployment rates in the world, new business density is relatively low. Therefore, the challenge to developing the workforce is not exclusive to the public sector or education system. It also involves the engagement and expansion of the private sector, along with coordination with local and international government and non-governmental institutions.

Recognition of the nexus of high unemployment (especially amongst educated youth) and low business activity has manifested itself in many activities to enhance skills and encourage entrepreneurship. Yet, it is unclear whether micro-entrepreneurship can support overall job growth at the needed scale, and growing large, internationally competitive firms can be a rare achievement. Nor can private firms simply increase hiring under the present circumstances. Many surveys of businesses in the region point to a deficiency in skills and work readiness of local job seekers, causing many vacancies to go unfilled even when available candidates are theoretically plentiful. This high unemployment, low productivity phenomenon points to endemic asymmetries between educational institutions and the private sector, both in terms of needs and perceptions. Our research of the workforce ecosystem in the three cases of Tunisia, Jordan, and Oman suggest this misalignment is related to the rapid expansion in access to higher education, accompanied by

slow adaptation of curriculum and student assessment throughout the system, meanwhile neglecting coordination with the private sector. The private sector complains of deficiencies in job seekers, especially in terms of written and oral composition, presentation, communication, problem solving, teamwork, and other essential skills. Yet private employers remain hesitant to invest in training, experiential learning, and entry level work opportunities. We cover these asymmetries in more detail in the chapters regarding education and the private sector.

The National Security Dimension and Workforce Development in MENA

Developing the workforce and addressing intractable unemployment in the MENA region are central to restoring economic stability, as well as promoting prosperity. They also are key to maintaining peace and security, particularly in the aftermath of the 2011 Arab uprisings. In his address to the United States Institute for Peace in Washington, DC, Abdelkarim Zbidi, Tunisia’s Minister of Defense – and not the country’s chief economic minister – highlighted the importance of addressing the workforce challenge:

“Tunisia knows that a democratic transition needs an economic transition, which will allow people to gain their dignity and their welfare. It’s on this challenge that all the efforts are focused right now. So we need economic growth to come back and this will have an impact on unemployment of the youth, especially unemployment among those who have university degrees. And we want decent jobs for a qualified labor force.”

In his address to the American University of Cairo in January 2019, U.S. Secretary of State Mike Pompeo also highlighted

the importance of the MENA region's economic health, and its implications for U.S. national security interests. He noted that a "strong, secure, and economically vibrant Middle East is in [the U.S.] national interest, and it's in yours as well." Secretary Pompeo's remarks are in sync with the U.S. National Security Strategy (NSS), which highlights the nexus between promoting economic prosperity of the region and U.S. national interests. The NSS particularly highlights how the United States "will support the reforms underway that begin to address core inequities" that are often exploited by violent extremists.⁴

Delivering the opening remarks at a conference titled "Strategic Response to Combat Extremist Speech" held in New York in September 2019, King Abdullah II of Jordan said:

*"This approach goes beyond security cooperation to contain a wide group of coordinated efforts, such as the enforcement of the law, education, and inclusive sustainable development which gives people, especially youth, opportunity and hope and breaks up conflicts in order to achieve peaceful political solutions to the crises that terrorists exploit."*⁵

This link between regional prosperity and countering violent extremism is one that the United States Agency for International Development (USAID) also recognizes at the core of its development work in the region. Through its various development programs, USAID addresses "social, economic, governance and other factors that can drive violent extremism or radicalization of individuals and communities."⁶ In sum, top policymakers in the U.S. and in MENA countries agree that advancing economic prosperity supports the broader security objectives of both regional governments and the U.S.

The MENA-WDI Audience

Given the centrality of workforce development to promoting economic development in the MENA region, and, thus, contributing to peace, security, and the advancement of U.S. national interests, the work of MENA-WDI addresses audiences in the U.S.

Government, specifically USAID and the Departments of State and of Defense. In addition, we believe others in the development, defense, and intelligence communities, including both donors and implementers, state and non-state entities, and others active in the region will be interested in the initiative's conclusions. The report also speaks to Middle East and North African governments which are actively seeking solutions to the workforce challenge.

Following the definition of workforce development adopted here (and specifically the need to address demand-side asymmetries in the workforce), this report also contains observations of interest to the private sector, both in the region and in the United States, especially in light of strong economic ties and mutual interests between the two. The report's audience also includes public and private education institutions, which represent one of the main pillars of the workforce development ecosystem.

Outline of Analysis

We conclude our introduction by fully describing the methodology used for this report. What follows are five chapters that lay out our findings and highlight examples from our project's three case studies: Jordan, Tunisia, and Oman.

Chapter I, *Defining the Workforce Challenge*, presents a critical discussion specifically addressing the skills mismatch and how it is characterized in each of our case study countries. This phenomenon

was so commonly referenced by those whom we interviewed that it warranted a dedicated discussion. A detailed examination of the region's education systems (especially higher education) follows, presenting the components of its expansion and overall quality that contribute to the mismatch. We also present a dedicated analysis of the Technical and Vocational Training (TVET) systems in all three countries, which are typically neglected elements of their education systems.

The chapters that follow describe the major barriers to private sector job growth, and address the characteristics of firm and employment structure, entrepreneurship, and access to finance. We also dedicate an individual chapter the problem of endemically low female labor force participation (FLFP) and the unique challenge it poses to regional development. We end with our conclusion and recommendations and offer ideas and directions for further research.



Downtown Tunis, Tunisia



MENA-WDI Methodology

This MENA-WDI report is a comparative case study that addresses challenges and similarities of workforce development in three distinct countries in the region: Tunisia, Jordan, and Oman. The main value of case comparison is to draw out shared realities between these countries despite unique geographic contexts. The research team also considered outside examples by observing the economy in Qatar as a developed state, noting the case of Education City, Qatar Development Bank, and the workforce development NGO *Silatech*.

The three main countries were selected because of their similar market sizes, development paths, and political-economic history, but also in order to explore different regional outcomes. Measuring economic output reveals important differences e.g. Oman's GDP per capita is significantly higher, but its economy is still reliant on hydrocarbon exports. Tunisia and Jordan have smaller domestic products overall, but have more diverse exports in agriculture, manufactured goods, and services, which support larger populations.

TABLE 1 | GDP, GDP PER CAPITA AND GDP GROWTH

	GDP (Million USD)	GDP per Capita (Thousand USD)	GDP Growth (Percentage)
Oman	79.2	16.4	1.1
Jordan	42.2	4.2	2.0
Tunisia	39.8	3.4	2.5

Source: World Bank

Despite differences in economy and population sizes (especially when foreign workers are considered), all three countries face strikingly similar challenges incorporating youth into the workforce. The governments in these countries recognize the problem, which is a symptom of very young populations and relatively small private sectors. All three have a similar development path, which emphasized public sector employment until trade liberalization in the early 1990s changed the economic model. Now they are adopting policies to encourage the private sector to become the main driver of employment.

TABLE 2 | POPULATION IN MILLIONS

Oman	4.82
Jordan	9.95
Tunisia	11.5

Source: World Bank

The Research Process

The project began with a literature review of major reports by international organizations, consulting firms and think tanks on workforce development and the future of work, in addition to studies on education, female labor force participation, and investment in the MENA region. Following this review, MENA-WDI conducted 24 interviews and round table discussions at the Wilson Center, and around Washington, DC, with relevant experts and organizations active in the workforce development space, including foreign embassies of regional governments (see Appendix 2). These interviews were compiled into a series of summaries based on the notes of the research team, and from this activity, the authors developed a two-part interview rubric highlighting major themes discussed on the supply (education, TVET, school to work transition), and demand (business environment, entrepreneurship, access to finance) aspects of the workforce ecosystem. The interview rubric is detailed in Appendix 1.

The team then used the same rubric in semi-structured interviews conducted in Tunisia, Jordan, Oman and Qatar. An identical rubric was used in each case to maximize the alignment of the results and the consistency of the main points. Both written notes were taken and audio recorded in most cases, and the data was compiled into a series of summaries based on consensus of the research team. However, given the diversity of actors who participated, and the nature of the semi-structured approach allowing them to discuss their relevant experience, not every subsection of the rubric was covered in each interview. The variety of participants included those who could address supply or demand characteristics, including government officials, private sector representatives, civil society organizations, business associations, educators, and international NGOs. In-country interviews are also detailed in Appendix 2. An advantage of this discovery process was that informants provided or directed the team toward other relevant research materials in Arabic,

English, and French that would otherwise be unavailable through a general literature search.

Limitations

The first and most important limitation to this report is that the sample size is not representative. Of the 59 interviews conducted across all three cases, participants were not identical in number or background (In some instances, we could not access the Ministry of Education, or a dedicated NGO operates in one case study country, but not in the others). This of course is due to restrictions of timing and travel, but also each country's approach to workforce development. Another factor to note is that cases were chosen in part with consideration to access to information and interviews. These countries are accessible, and their officials and citizens have fewer objections to speaking openly about their challenges and strategic directions. Be that as it may, many people chose to speak to us off the record and declined to have their remarks recorded on audio. In this case, we have chosen to omit specific names when referencing interviews in the body of this report.



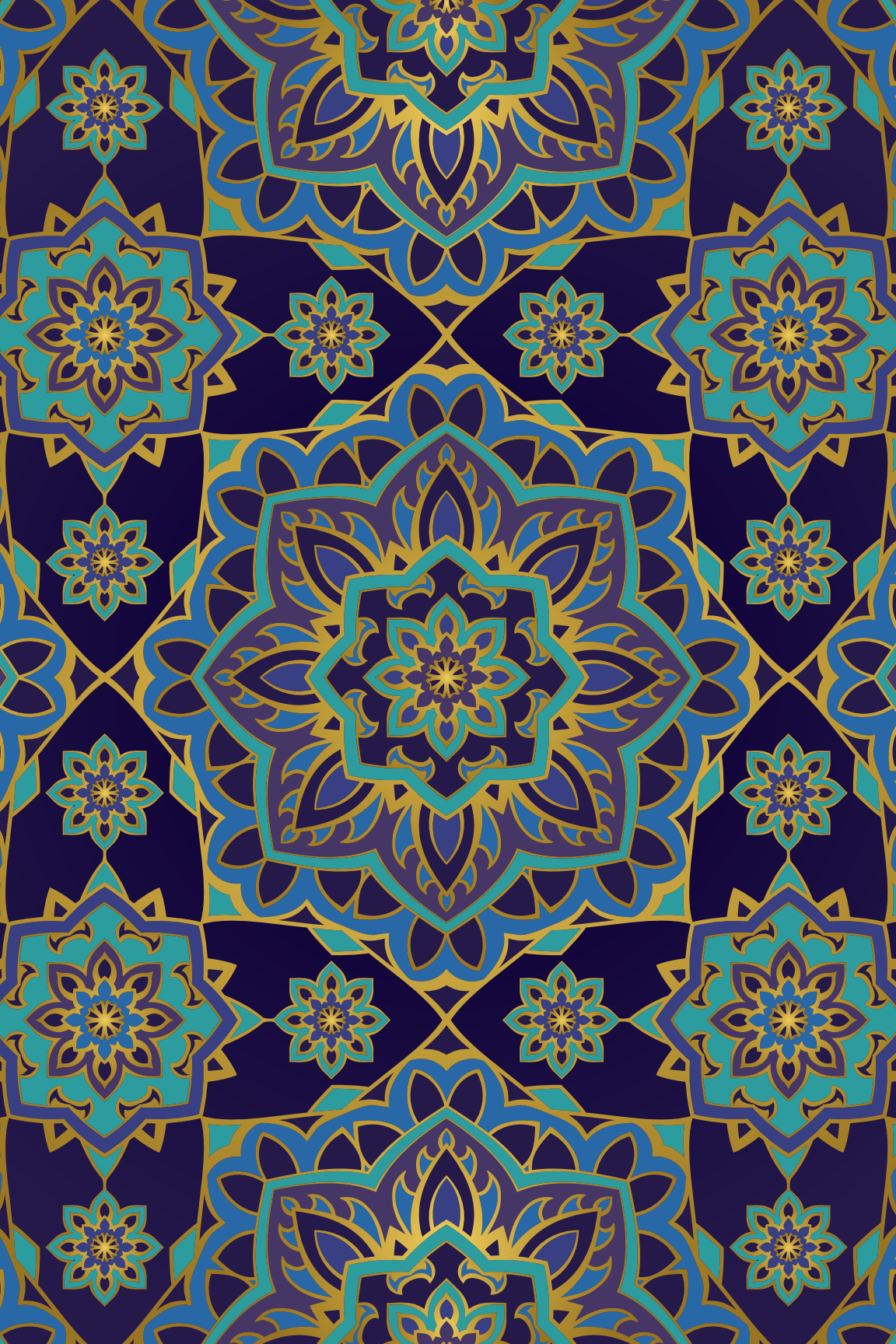
Carthage, Tunisia

TABLE 3 | COMMONLY REFERENCED DEFICIENT ESSENTIAL SKILLS

1. Critical thinking
2. Communication
3. Leadership
4. Working under pressure
5. Working independently
6. Management
7. Written and oral composition
8. Presentation skills
9. Timeliness
10. Dedication to mission
11. Problem Solving
12. Teamwork

Note: This table represent the authors' summary of commonly referenced essential skills from both documents and interviews. This list is neither exhaustive nor ranked according to employer preference.





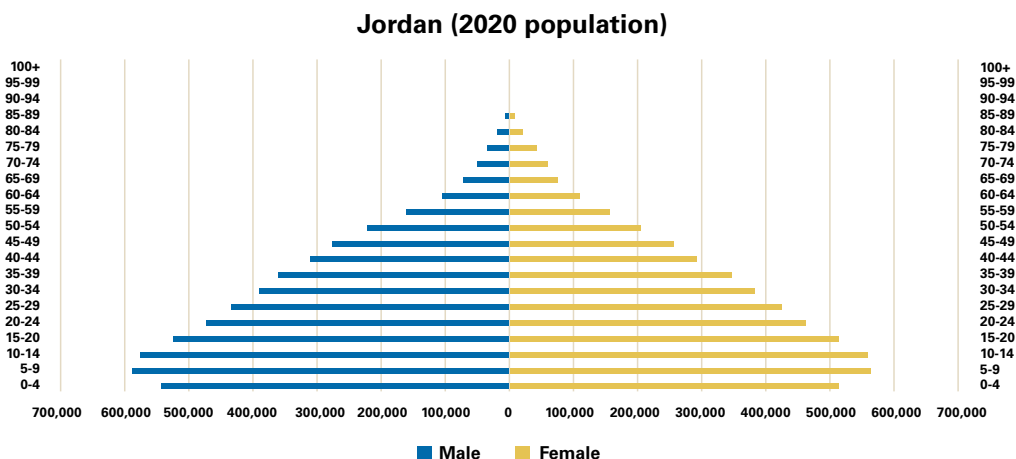
Chapter I: Defining the Workforce Challenge

One of the most commonly expressed concerns among all experts and interviewees for *Ready for Work: An Analysis of Workforce Asymmetries in the Middle East and North Africa* was the evident skills mismatch in the region's workforce. In general, employers are unsatisfied with abilities of new hires, especially in "soft" or essential skills (Table 3). Many applicants are merely unsuited to the needs of a particular job on offer. This mismatch points to inefficiencies in the education system and the private labor market, but also reflects the pace of transition to a young and educated workforce. These countries are currently experiencing a "youth bulge" transition, in which the general population increases faster than the working population. Meanwhile the output of higher education rapidly increased, but has not been aligned with surplus vacancies in the labor market. Furthermore, university output maintained a traditional emphasis on certain technical professions but gradually diverged from the demands of the private labor market. While youth and families were seeking higher education as a social elevator, education systems were not adapting substantively, or methodologically to the changing economy. As a result, the region has witnessed challenges in improving the quality of workforce

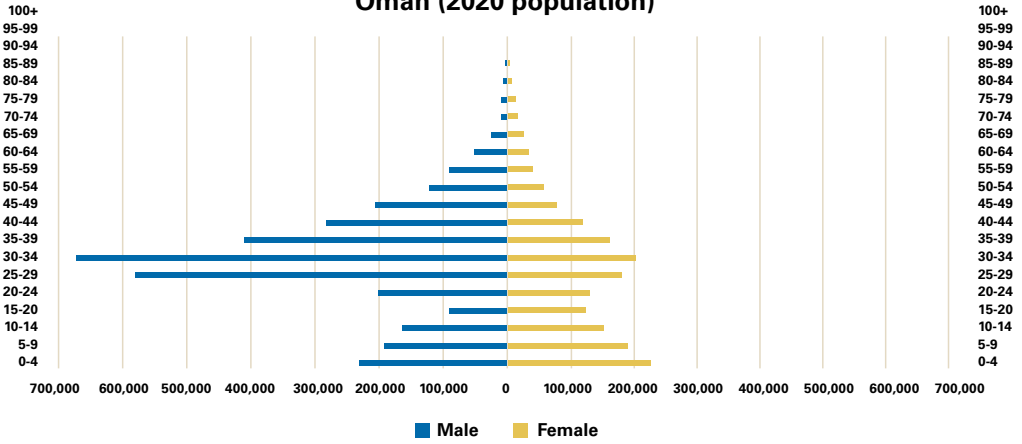
skills, aligning skills output to labor market outcomes, and dealing with outdated notions of what jobs are needed or productive.

All three countries show large youth populations (Figure 1). Many who grew up with greater access to higher education have already aged into their young adult years (25-29), the median age in Oman being 26 and Tunisia 32 while Jordan is noticeably younger, with a median age of 23 (Table 4). The population composition in Oman can be misleading because its large expatriate worker population is predominantly young and male, ages 25-39. This is consistent with other expatriate demographics within the Gulf. Jordan's age composition may also be skewed downward to childhood ages (5-14) because of higher birthrates among refugees. Be that as it may, all three countries show high numbers of youth entering the workforce compared with those with older populations.

FIGURE 1 | POPULATION AGE STRUCTURE ESTIMATES IN TUNISIA, JORDAN, OMAN - 2020 ESTIMATES



Oman (2020 population)



Tunisia (2020 population)

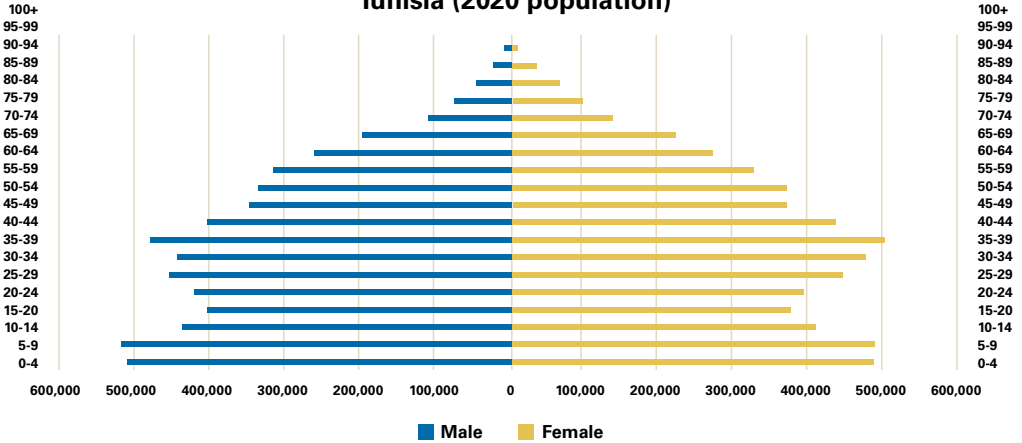


TABLE 4 | MEDIAN AGE: JORDAN, OMAN, TUNISIA

Source: Worldometer.info

Jordan	22.8
Oman	25.8
Tunisia	32

Source: CIA World Fact Book

Tunisia

In Tunisia, the “youth bulge” reached its peak in 2004, and the country’s population growth nationwide has stabilized at replacement level in recent years. However, the youth cohort (15-24) at that peak has since aged into a young adult (25-29) workforce, representing the most important age for school-to-work transition. Furthermore Tunisia’s young adult population continues to increase as the bulge generation ages.⁹

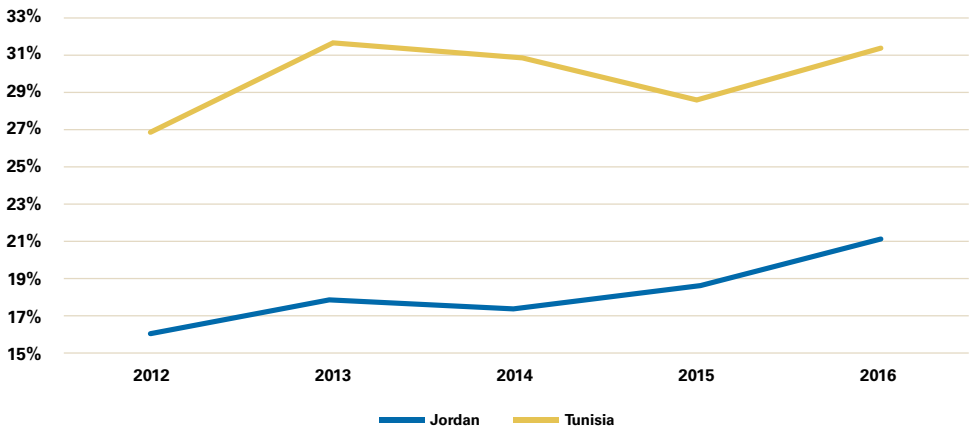
Overlapping this trend is an “explosive” increase in university degrees since 1990.¹⁰ The changes made to the education system that enabled this increase to occur will be discussed later, but graduation from Tunisian tertiary institutions increased at a rate of 12 percent a year between 1990 and 2004, five times faster than the growth of the working population.¹¹ That rate temporarily soared to 31 percent from 2009 to 2010, just before the 2011 revolution, and then steadily declined in its aftermath. The number of graduates dropped roughly 33 percent between 2010 and 2015.¹²

“An examination of unemployment patterns by education attainment confirms that unemployment in Tunisia is, for the most part, a problem that involves relatively more workers searching for formal jobs.”¹³

The overall result is an average unemployment rate of around 15 percent and a rate nearly double that among university graduates.¹⁴ However, though employers can choose from a surplus of workers, they still lack confidence in the skills of applicants. In 2016, as many as 27 percent of companies in Tunisia reported having unfilled vacancies and 60 percent of job applicants did not meet the minimal requirements.¹⁵

Most of the interviews conducted for this report confirmed that the skills mismatch is a major barrier for employers and job seekers alike, with essential skills posing a serious workforce challenge. The *Institut Arabe des Chef d'Enterprise* (2018) found that though more than half of applicants in Tunisia were found satisfactory in technical skills, more than two thirds were judged incompetent in written and oral presentation. The organization concluded that “the phenomenon is intrinsic to the education system, and does not lie with the requirements of businesses.”¹⁶ The *Union des Petites et Moyennes Enterprise* (UPMI) and the Center for International Private Enterprise (CIPE) narrowed their focus to employment outcomes among engineering students, finding that 82 percent of companies had difficulty finding profiles matching their needs, and observing that weak skill sets in management, teamwork, creativity and communication were major barriers.¹⁷

FIGURE 2 | UNEMPLOYMENT RATE: HIGHER EDUCATION GRADUATES IN TUNISIA AND JORDAN



Source: Tunisia Ministry of Higher Education, Jordan Ministry of Higher Education

Jordan

Most of Jordan's population is still under 30, and youth are overrepresented among the unemployed.¹⁸ Unemployment is low among the less educated, but rises to 14 percent among university graduates.¹⁹ Like Tunisia, the number of new entrants to the labor market with university degrees expanded rapidly in the 1990s, rising from 15 to 30 percent in a ten-year period.²⁰ The share of unemployed with university degrees rose from 12 percent in 2000 to 30 percent in 2010.²¹ These figures suggest problems with labor market insertion at the tertiary level in Jordan that resemble those in Tunisia. University of Minnesota economist Ragui Assaad (2018) hypothesizes that the asymmetry of employment for university graduates has to do with the transition of the economy from primarily government employment to a private, white-collar

workforce. The share of the private sector workforce was just 10 to 12 percent in the 1980s, rising to 36 to 38 percent in 2010. This shift to private sector driven growth overlaps with the trend of increased output of tertiary education, however the economy continues to produce a surplus of low wage rather than high skilled positions filled largely by expatriate labor. Mona Said (2018), writing on earnings inequality in Jordan observes:

“Long-term solutions for youth unemployment and sector wage differentials ultimately lie in improving demand in the private sector. An overhaul in education and acquired-skills systems may also help the labor force to meet the requirements of employment in the private sector.”²²

Yet, 400,000 applicants at the civil service bureau are waiting for jobs in the government, which is only hiring at a rate of 10,000 per year.²³ Meanwhile the higher education system is generating 60,000 students per year looking for jobs²⁴ – a figure that is impossible to absorb in the public sector alone. Despite progress increasing the share of private employment in Jordan, the public sector still employs 29.8 percent of the workforce. This figure is especially important because public sector wages make up only 6.8 percent of GDP, which make it both larger and less well paid by international standards.²⁵ Yet employers in the private sector also echo dissatisfaction with skills of new hires. In Jordan, only 22 percent of employers expressed satisfaction with hard skills, and 25 percent were satisfied with the soft skills of recent hires. These figures dropped even more when they were asked about vocational graduates, registering at 10 and 16 percent respectively.²⁶

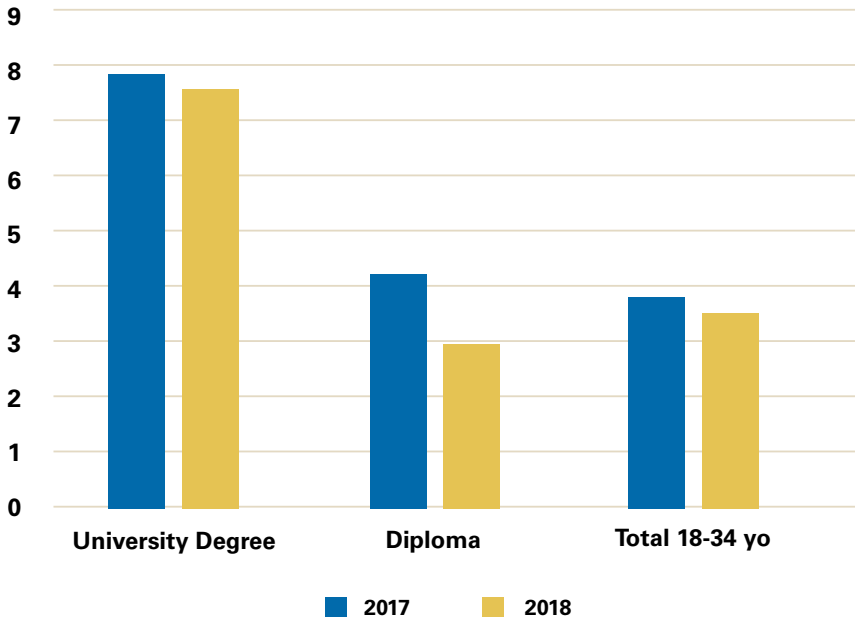
Oman

In Oman, the story is similar, but there are some important differences. At first glance, unemployment among graduates is much lower than in Tunisia and Jordan, standing at below 8 percent. However, Omani labor localization policies (or “Omanization”) sets quotas for hiring Omanis, and subsidizes their training costs, artificially driving the unemployment number down. Omanization has been in place since the early 1990s in order to lower dependence on foreign labor. In the early 2000s, access to tertiary education expanded to encourage citizens to become drivers of the private sector and the knowledge economy which are at the forefront of economic diversification. However, the government has struggled to resist drafting Omanis into the public sector during economic downturns. In addition to the unrest of 2011-2012 that affected all three countries, a depression in oil prices in 2014 sent an additional shock through the Omani economy. Private investment sank because it is so tightly linked to state spending, which is financed primarily by oil and gas. The government increased hiring in the public sector to make up for the loss of private sector activity. The resulting inefficiencies show that the reallocation of labor resources is just as important for Oman’s growth objectives as it is in the other two countries, despite lower unemployment.



Muscat, Oman

FIGURE 3 | UNEMPLOYMENT AMONG HIGHER EDUCATION GRADUATES IN OMAN



Source: National Center for Statistics and Information, Oman

Despite the fact that Oman can use its superior resources to influence employment outcomes, the private sector still complains about the skills of Omani graduates. Firstly, employers simply prefer high or semi-skilled foreign workers, especially from India, who are more productive and are paid much less. Omanis themselves are less willing to work longer hours or to move long distances. And as happens in Tunisia and Jordan, Omani employers also refer to skills deficiencies in the workforce. According to a 2016 survey of employers conducted by the Ministry of Higher Education, Oman's employers found mastery of written and spoken English, working under pressure, verbal and written communication skills, passion

for the mission, and an ability to work independently as the skills most lacking, followed closely by critical thinking and leadership skills.²⁷ The *National Project for the Alignment of Higher Education Graduates with the Needs of the Omani Labor Market* led by Sultan Qaboos University the same year revealed similar complaints, and forecast the needs of the labor market relative to the current allocation of specializations among graduates. This study found that many popular specializations would become saturated, while most new jobs would be concentrated in business administration, education, health, and hospitality.²⁸ These growth areas in particular emphasize the need for quality training in essential skills.

MENA's Workforce Formula

Dissecting the skills mismatch involves examining the rapid increase of university education while using employer complaints as a proxy for the quality of output. In all three case studies, the number of graduates from universities expanded rapidly in the 1990s and 2000s. This expansion either did not result in a stimulus of demand for high skilled jobs in the private sector, or the flood of new graduates exceeded its capacity to absorb it. Indeed, in all three cases, the private sector continues to produce a surplus of low-skilled jobs that graduates are no longer willing to fill. Furthermore, the apparent skills deficiencies cited by employers brings into question the quality of the education system and pedagogy. The specific essential skills in question are strikingly similar in all three cases, especially concerning language, communication, leadership, and critical thinking. Lastly, the output of specializations from the higher education system appears misaligned to the needs of the labor market. Too many graduates are competing for too few jobs in a narrow selection of careers.

It is not, however, only the skills mismatch that is at the heart of the workforce challenge. There simply is not enough growth in private formal employment to absorb surplus labor at an acceptable rate. Furthermore, the private sector itself often fails to clearly identify its skills requirements and shows conspicuously low interest in providing training. The public sector also remains a significant lure for its stable salaries and flexible work schedules, but is precariously overcapacity which significantly impacts government efficiency. The following chapters will consider questions raised regarding the education system and the private sector in aligning the supply and demand of the labor market.



Dibba, Musandam / Oman - December 2018: A group of young Omani Muslim girls happily walking back home from school, their notebooks in hand.



Chapter II: Education

The MENA region is home to the oldest “existing and continually operating” university in the world, the University of Karuein in Fez, Morocco, founded in 859 CE.²⁹ Al Azhar University in Cairo, erected in 970, is the second oldest. The fabled Dar al Hikma of Baghdad, founded in the 8th century was the first ever university in the world, and it is largely credited with ushering in the Islamic Golden Age until it was sacked by the Mongols in 1258. What set Islamic Universities apart from other centers of learning in the Middle Ages was that they were the first to provide formal degrees of accreditation, or *Shahadat*. Over the course of history, the region stood as a cradle of knowledge, science and innovation, producing scholars such as Ibn Al Haitham, Ibn Sinaa and Ibn Khaldoun, whose contributions to today’s knowledge are inestimable. Many works of philosophy, medicine, and engineering were translated from Arabic into Latin, and became the basis of scientific fields in Europe and beyond.

These esteemed centers of learning sailed steadily through the Middle Ages, but the Islamic world began to lose pace with Europe as it unleashed the potential of free compulsory public education. The era of Arab statehood, beginning in the early 1920s, saw the first modern reforms to education and the introduction of formal

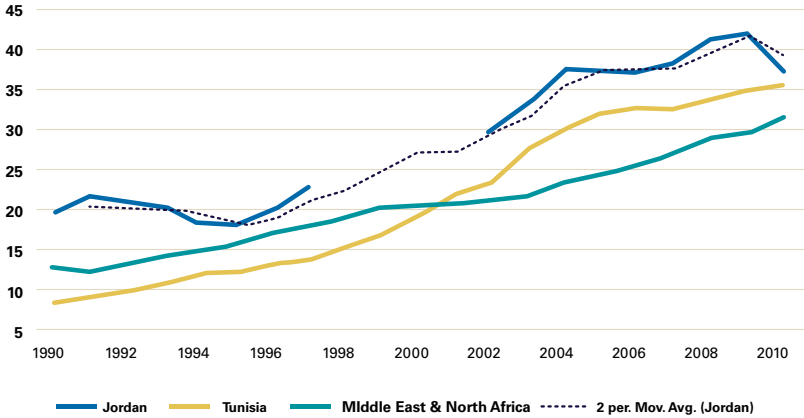
primary and secondary schools. The socialist period – starting in the 1950s with Gamal Abdel Nasser’s regime in Egypt – witnessed the universalization of education, and countries in the region made great leaps in reducing illiteracy and increasing enrollment in primary school. Today, despite this progress, education reform is lacking, particularly in the sphere of quality control and assessment – which is a symptom of broadening access. Primary and secondary systems still maintain the model of a bygone era, but meanwhile, tertiary enrollment has increased significantly since the early 1990s.

The education sector is a central pillar in the workforce development ecosystem. In the MENA region, there is no shortage of university-educated youth. However, as discussed earlier, many of them are unemployed, either due to a lack of opportunities in the private sector, shrinking openings in the preferred public sector, or a lack of employability and essential skills. At the heart of the skills mismatch described in the vast majority of interviews conducted for this report is the current education system. This chapter will focus on the challenges and opportunities for reform in the education sector in Tunisia, Jordan, and Oman.

Quantity over Quality

While specific data is scarce, many indicators point to the urgent need to improve quality and reform existing systems. As senior economist and Middle East expert Shanta Devarajan noted in his address, *The Paradox of Higher Education in MENA*, “only two or three Arab universities are in the list of the top 500 universities in the world (and none are in the top 200).” The results of the Organization for Economic Cooperation and Development’s (OECD) Program for International Student Assessment (PISA) show that the region’s “PISA scores lag behind not only the OECD average but also behind other countries at a similar economic level.”³⁰

FIGURE 4 | SCHOOL ENROLLMENT AT TERTIARY LEVEL IN TUNISIA AND JORDAN (1990-2010)



Source: World Bank Development Indicators

The behavior of the private sector in Jordan, Tunisia and Oman highlights the misalignment of specializations and deficiency of essential skills in the job market. One common contributing factor in education systems in MENA is the tracking system that determines pathways for students through examination at the end of the secondary level (i.e. *Tawjihi* in Jordan, *le Baccalaureat* in Tunisia) to gain a diploma and admission to a university. The Ministry of Education in each country usually designs the content and standards of the exam, and the results determine not only a student’s ability to attend their university of preference, but also their field of study. The highest performers on the exam are usually directed to technical and prestigious disciplines such as engineering and medicine. Given the logic of selection over learning, the tracking system’s presorting of secondary graduates contributes to the oversupply of certain fields with limited input from market signals.³¹ Furthermore, as more students gained access to higher education in recent decades,

capacity was strained by greater demand, and the quality of learning outcomes was sacrificed in reforms aimed to adjust to that growth.

In Tunisia, the “explosive” increase in graduates entering the job market has created competition for limited high skilled jobs in the private sector. This cohort was formed by a rapid expansion of education under former Tunisian President Zeineddin Ben Ali, who expanded access while lowering quality standards. His policy represented a stark change from the emphasis of “quality over quantity” in the era of longtime leader Habib Bourguiba, which focused on “adapting the education system to meet economic requirements.”³² A series of reforms in 1991 eliminated assessment exams from the preparatory phase in 6th and 9th grade, and removed the vocational track from secondary schools. These changes accompanied a general drop in primary and tertiary education spending while enrollments were climbing. Negative impacts on quality were created, as many more students were equipped with university degrees, but fewer of them possessed “the skills that the job market required.” The link between diplomas and a good education was weakened.³³

Given this reality, Law number 73 of the year 2000 allowed private universities in the higher education sector to fill the gap during a period of ever-increasing tertiary enrollments. In the past, private universities played a very minor role in Tunisian education, as the public system was more selective and adequately funded. Yet while public universities still enjoy better reputations, the highly centralized nature of the education system created quality distortions. For example, there are no merit based rewards for performance in the system, discouraging competition. Courses are taught increasingly by part-time staff and assistant professors.³⁴ Recruitment of faculty and students is also controlled by the ministry itself, and not by

selection committees at the universities.³⁵ The inability to control inputs makes universities unaccountable, and student performance does not factor into faculty evaluation.³⁶ The report cited above by UPMI and CIPE (2015) in this context remarked on the declining quality of engineering curriculum in Tunisia, concluding that reforms were needed to give more agency to graduates.³⁷ Witnessing this change, several former engineering professors created a successful new private engineering school in Tunis called *Esprit*, which boasts an 85 percent employment placement rate for new graduates.



*Texas A&M University at Education City, Doha, Qatar.
Photocredit: Shutterstock.com*

Box 1

Esprit University

Esprit University was founded by former professors of engineering in public universities who saw the quality of engineering schools decline in Tunisia as the need of qualified engineers in the country expanded. They launched Esprit University in 2003 with the financial support of a few institutional investors and sought to align its training with international accreditation, such as the Conceive Design Implement Operate (CDIO) standard for engineering. Focused on project-based learning and incorporating Arabic, French and English into the curriculum, Esprit is now considered the top engineering school in Tunisia, and 85% of graduates are placed in jobs upon graduation. The vast majority of graduates however, land jobs in Europe, signaling both the high quality of their education at international standards, but also fewer opportunities and inferior pay for engineering candidates to work in Tunisia. The trajectories of these successful graduates have added to the brain drain, a problem which faces Tunisia and other MENA countries in retaining their qualified workforces.³⁸



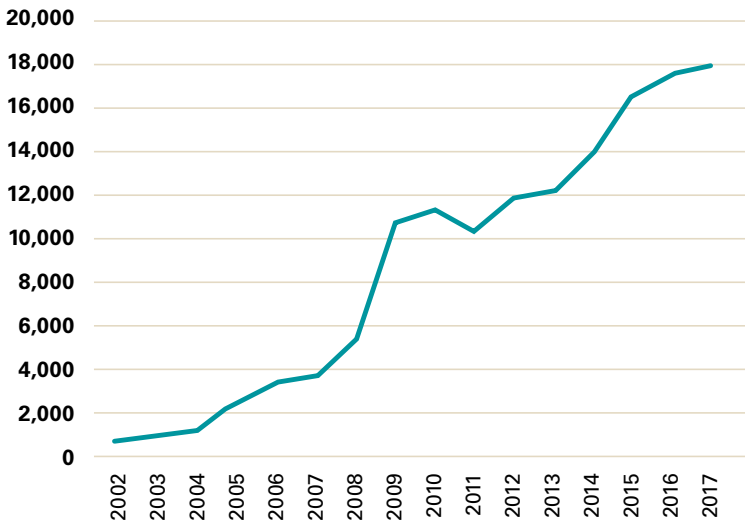
Esprit University School of Business, Tunis, Tunisia

Jordan and Oman have also experienced the tensions of expanding enrollment throughout their education systems. Jordan's transition to an educated workforce began relatively early. The University of Jordan was established in 1962, but most eligible students still attended universities abroad. The government launched a major education reform package in 1988, aimed at improving the quality of education and updating the curricula to include critical thinking.³⁹ However, the demand for higher education outpaced the government's means, and it began licensing private universities in 1990 to fill the gap. Only five years later, 12 private universities had already opened and were enrolling 25 percent of the nation's student body.⁴⁰ One of the main concerns with private education was that the admission threshold was lower, and these universities were governed by different laws, though the Ministry of Higher Education exercised considerable control over their expansion and course offerings. More importantly, private universities were introduced to fill demand driven by a broad social consensus that wider access to higher education would improve economic conditions. This rapid growth however created quality distortions and a complicated series of reforms, laws, and mandates under different ministries to manage the burgeoning public and private education sector. This also came at the expense of enrollment in technical education, where significant deficits are currently felt.⁴¹

Oman got the latest start in educating its workforce. When Sultan Qaboos assumed power in 1970, Oman was one of the poorest countries in the Arab world, which makes the education transition the more remarkable. Through the 1970s and 80s, the state harnessed its resource wealth to build schools and implement adult learning and literacy programs around the country. Sultan Qaboos University (SQU), still the sole public university, was founded only in 1986. Oman still sends several thousand students every year to universities abroad, but enrollments within the country increased steeply from 2002 to 2012 at a rate of 23 percent and continued

at around 8 percent a year until 2017. SQU expanded its ranks to accommodate more students, but most of the surplus demand was filled by private universities, now numbering eight around the country, in addition to 21 smaller public colleges.⁴² Therefore, private universities have become primary providers of higher education in Oman. The government sets the standards of the high school exit exam and university faculties specify their criteria for admission. The ministry itself sets the number of available “seats” at all colleges and universities, both public and private, by providing a limited number of *internal scholarships* to admitted students. The current number of scholarships for newly admitted students stands at around 45,000. Given that all students are admitted with an internal scholarship, the government effectively funds and regulates both the public and private education sector. However, during times of economic pressure, such as the unrest in 2011, or the oil price decline in 2014, the public demanded greater offerings of internal

FIGURE 5 | YEARLY NUMBER OF TERTIARY GRADUATES IN OMAN (2002-2017)



Source: National Center for Statistics and Information, Oman

scholarships, indicating that the government can leverage this admission system to appease demand.

At the other end of this education transition is the lingering skills mismatch. As we have seen, all three countries have expanded access to higher education. Tunisia under Ben Ali accomplished this by lowering standards and oversight for the public system. Jordan and Oman filled this demand by allowing the establishment of private institutions which would admit students at a lower threshold. Although expanding access to higher education is generally a good development strategy, these reforms weren't necessarily grounded in a logic of improving learning outcomes. Therefore, the function of education as a social elevator was undermined. Furthermore, the tracking system contributes to a selective mindset, emphasizing exam outcomes over career exploration. Rapid growth constrained the capacity to revise curricula and pedagogies, and employers now notice deficiencies of young graduates educated in a rote learning environment using purely didactic pedagogies, rather than a mix of didactic and interactive or participatory instruction. In Jordan, Tunisia, and Oman, there is consensus amongst public officials as well as the private sector that there is an urgent need to introduce more interactive pedagogies that focus on critical thinking, problem solving, project-based learning, and teamwork. These teaching methodologies help equip youth with the essential skills needed for the job market. According to Jordan's Human Development Strategy 2016-2030:

“Our education system is no longer producing the results the Kingdom needs. Whether judged by enrollment and progression rates, the results achieved in school examinations, or the employment and employability of those graduating or leaving education, the system is failing to meet expectations.”

Reform Needed

There is broad consensus amongst international development experts and public and private leaders across the MENA region that education reform is a necessity. In the case of Jordan, King Abdullah II commissioned a national committee in 2015 to investigate the root causes of the shortcomings of the education system and set a roadmap for developing the country's human resources with a focus on reforming the entire system. Today, many of the reforms outlined in that strategy are being implemented. Jordan's National Center for Curriculum is currently working on reforming the curriculum for math and science, for example, to address Jordan's under-performing PISA scores. The new curriculum is set to be deployed in 2020.⁴³

Tunisia's Minister of Education Hatem Ben Salem emphasized the need for "deep reform" of the education system. Tunisia is already taking some steps to do so including incorporating English language training, improving the teaching of essential skills in the curricula, and integrating technology into the education system. Furthermore, he expressed intent to reintroduce student assessments at the primary and secondary stages before the general education exam or *le Baccalaureat*. These intermediate tests – which were removed under Ben Ali's education reforms – are essential to tracking student progress before they demonstrate mastery of the general education curriculum. One of the biggest barriers to achieving necessary education reforms in Tunisia is political disruption and frequent turn-over of ministers.

In Oman, the previously mentioned study published by Sultan Qaboos University found that both the public and private sectors believe graduates were lacking in the "use of critical thinking, logical reasoning, analytical thinking and problem solving."⁴⁴ Similarly, employers viewed graduates' ability to execute tasks on time negatively and pointed to their lack of communication skills

and English language proficiency. Accordingly, the SQU Project recommended the revision and reform of school and higher education curricula to include these essential skills. The study also recommended other key reforms of the education system, including training teachers regularly and introducing innovative and participatory teaching methodologies as well as assessments.

INFOGRAPHIC | KEY EDUCATIONAL REFORMS NEEDED FOR MENA



Connectivity to the Workforce

The education sector's alignment to labor market needs and the school-to-work transition in MENA are ongoing challenges that many governments are beginning to address. Systemic dialogue and coordination between the private sector and education institutions on the career readiness of their graduates is underdeveloped. Though private sector leaders often have seats on university or department boards, such relationships are not translating to better employment outcomes. The Ministry of Higher Education in Oman found these relationships wanting among the country's higher education providers. Many also referred to a need for reliable labor market data to provide economic projections and employment statistics which are sorely needed to address the skills mismatch.

Efforts are underway to strengthen labor market data reporting in order to decrease information asymmetries with the education sector. However, these initiatives are not streamlined into a single government institution. In Oman for example, in order for the SQU project on aligning the labor market needs with the workforce to make projections for saturated sectors it created a database of every student and every vacancy in the country. However, the Ministry of Higher Education has not yet operationalized this tool.

In Jordan, the Minister of Education Dr. Walid Maani noted that there is dialogue with the universities to curb students from entering fields that do not provide sufficient employment opportunities. This is a good first step, however efforts to institutionalize the dialogue between the education and private sectors must go further.

Notable exceptions to this include educational institutions such as Luminus College and Hussein Technical University in Jordan which follow a demand driven model by signing memorandums of understanding with the private sector for training needs and building other formal linkages. In Tunisia, Esprit University is closely

aligned with the private sector and focuses on aligning outcomes to internationally recognized accreditation such as the Conceive Design Implement Operate (CDIO) framework for engineering. In 2018, Oman launched its Vision 2040 plan as well as an Education Strategy 2040, focused on “linking the educational output to the requirements of the labor market.” The initiative presents a framework that ensures that education fulfills its role of preparing “a national cadre in accordance with the future aspirations of the country” as it moves away from reliance on oil revenue towards economic diversification. Furthermore, the newest public university, Oman University (now in the planning stages) will institutionalize links with the private sector by creating a residential innovation hub at the university, which will be elaborated in Chapter IV.

Mindsets on Education and Work

Another common factor which emerged consistently in the course of researching for this report is what we have come to refer to as the prevailing mindsets on education and work. These sets of norms and attitudes have a heavy effect on the career trajectories of young people, which influences their performance in the education system and outcomes in the labor market. Though attempting to pinpoint the social origins or quantify the impact of these mindsets remains outside the scope of this report, it is necessary to clearly characterize what we have repeatedly heard from our conversations. These mindsets can be divided into four main categories: difficulty accepting and learning from failure, preference for certain disciplines, preference for the public sector, and role of women in the workforce.

Firstly, there is low tolerance for risk-taking and accepting and learning from failure. Psychologist Carol Dweck draws a distinction between “fixed” and “growth” mindsets that see an opportunity or setback in every failure. A growth mindset in this sense fosters entrepreneurship by encouraging students to face challenges openly,

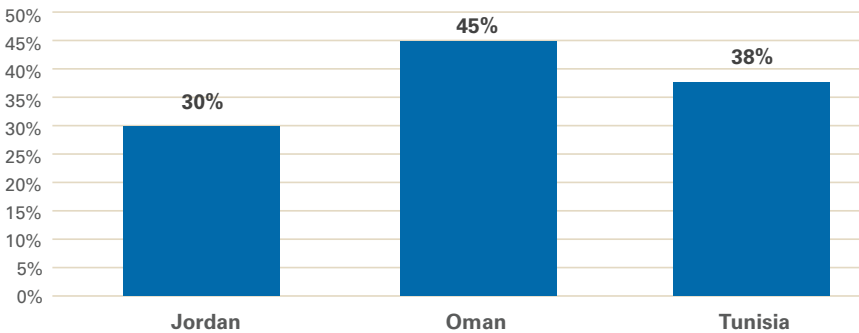
and to take risks and initiative. However, we heard repeatedly that failure is so heavily stigmatized that it deters youth from becoming entrepreneurs or pursuing an unorthodox path in their education. Yehya Hourri, director at Flat6 Labs in Tunisia, a tech startup accelerator, noted “If you haven’t failed at least twice, we won’t take you.” Experience with failure is important for entrepreneurs. However, In the MENA region, a fixed mindset regarding failure limits opportunities to learn and progress. Incorporating essential skills into the curricula must involve critical analysis and self-assessment tools to encourage healthy adaptation to undesired outcomes. If educational institutions in the MENA region can achieve this it will help plant the seeds for innovation, creativity and entrepreneurship in the future.

The second contributing mindset is the overwhelming preference for certain professions and disciplines such as engineering, medicine, business, and law over others such as health sciences (non-medical), nursing, education, journalism and media, design, art, film or social research. The technical disciplines mentioned here are regarded as positions of social prestige in most MENA countries. They are often imposed on students or encouraged by families, thereby contributing to an oversupply of candidates and graduates in these fields. As discussed earlier, this oversupply is also generated by the tracking system which directs candidates to these fields based on their performance on the general education exam. This creates pressure to perform accordingly on the exam and orients the secondary school system to maximizing test outcomes rather than creating an environment for career exploration. This common experience also devalues careers attainable through the vocational training system, which is stigmatized as a destination for school underachievers. This will be discussed in chapter III.

Third, the preference for the public sector over private employment

is among the most deeply ingrained mindsets in our case studies and throughout the region. This relationship is tied directly to their historical development. As their economies were developing in the mid-20th century, the highest skilled workers, many of whom pursued their education abroad, were directed to the public sector to build the state. Their private sectors were still traditional and family oriented, and few major industrial activities then existed. The public sector today still provides far superior compensation packages, while the private sector fails to match its stability and benefits. Jordan's Minister of Education noted that many Jordanian youth would rather be unemployed and wait for a public sector job opening than seeking other job opportunities in the private sector. In Tunisia, government jobs were offered to ease the strains of the Arab Uprisings and democratic transition in 2011. In Oman, the government has recognized it cannot continue to absorb its educated nationals into the public sector exclusively.

FIGURE 6 | RATE OF EMPLOYMENT IN THE PUBLIC SECTOR IN JORDAN, TUNISIA, AND OMAN (2017)



Source: *Statistique Tunisie, Department of Statistics: Jordan, National Center for Statistics and Information: Oman*

Lastly, mindsets regarding women and their career trajectories also affect workforce participation. As we will discuss in detail in chapter V, participation in the labor force by women in the region ranks among the lowest worldwide. While there are many structural barriers within the labor market itself, social mindsets regarding which professions are acceptable for women push them into “feminine” careers such as teaching, nursing, domestic work, or simply to remain outside the workforce all together. The public sector is also far more attractive to women because of its security and flexible work hours, while the private sector shows stark gender wage differentials. Reforming curricula to more positively reflect working and professional women is an important first step to address this widespread mindset.

The Brain Drain Factor

A final challenge to address regarding education is the “brain drain” facing the region. Given the phenomenon we have addressed of high unemployment among university graduates, the resources devoted to their education are lost either to idleness or emigration. The Arab Knowledge Report 2014 cites the potential impact of this outflow noting that, “Migration estimates show that between 10 to 15 percent of the Arab youth migrate, and that the migration rate is high among graduates of higher education institutions (9 percent on average)” which is “double the global rate.” For countries such as Lebanon and Morocco, the migration rate is as high as 35 percent and 17 percent respectively.⁴⁹ It is also known that Tunisia cannot retain its surplus of engineering and medical candidates. Though Jordan has traditionally exported skilled labor to the Arab Gulf, recent economic pressure has pushed more to seek their livelihoods in Europe and the US.

While emigration also creates economic benefits in the form of remittances, knowledge exchanges, and building links with

international networks for trade and investment, it does represent a significant loss in knowledge and human resources for the sending countries. In Tunisia for example, more than 80 percent of Esprit University graduates find job opportunities in Europe. In Jordan, the Center for Strategic Studies' Arab Democracy Survey 2018/2019 finds that 45 percent of Jordanians "think about emigration outside the country," with the highest percentages among youth ages 18-29 and the university educated, both at 52 percent.⁵⁰ But it is not only a question of retention of resources spent in education, but also the distribution of the workforce in efficient sectors. Furthermore, as will be discussed in chapter IV, the economies in MENA countries are also facing challenges generating the types of employment where an educated workforce can be productive.

In contrast to the countries of the Levant, Egypt, and North Africa, the countries of the Gulf Cooperation Council (GCC) do not suffer the same brain drain loss. They are net importers of educated youth from across the region. The vast majority of the 800,000 Jordanians abroad work in GCC countries, with the largest proportion in Saudi Arabia.⁵¹ In the summer of 2018, the governments of Qatar and Jordan set up a joint committee to facilitate the provision of "10,000 job opportunities for Jordanian youth in Qatar."⁵² Such policies may be exceptional at this point as many GCC governments are focusing on localizing their labor forces as they face their own employment challenges, particularly amongst youth. However, most Jordanians that emigrate to the Gulf are highly educated and are employed in the private sector, making it a useful place to gain experience and possibly open new businesses. Meanwhile Tunisia, Jordan, and Oman are all pursuing policies to open their economies to skilled immigration in order to stimulate the private sector. Although the brain drain can become a net loss of human capital, effectively harnessed, it can become a vector for improving connections in the private sector.

Aligning Education Reform with the Workforce

As we have seen, the most remarkable change to the education systems in Tunisia, Jordan, and Oman, is the rapid increase of tertiary education over the past 30 years. However, as discussed in chapter I, not only has the labor market been unable to absorb the surplus of educated workers, but according to observations from the private sector, graduates demonstrate weakness in work-ready skills such as written and oral composition, communication, critical thinking, and leadership. We believe these deficiencies are in part caused by the rapid increase in tertiary enrollment at the expense of student assessment and adaptation of pedagogical approaches. It is also apparent that the increase in enrollments, which coincided with the aging of the youth cohort in the 1990s and 2000s, wasn't informed by market signals, and the new public and private institutions of higher education built their enrollment strategies around what was expected from society rather than what the market required.

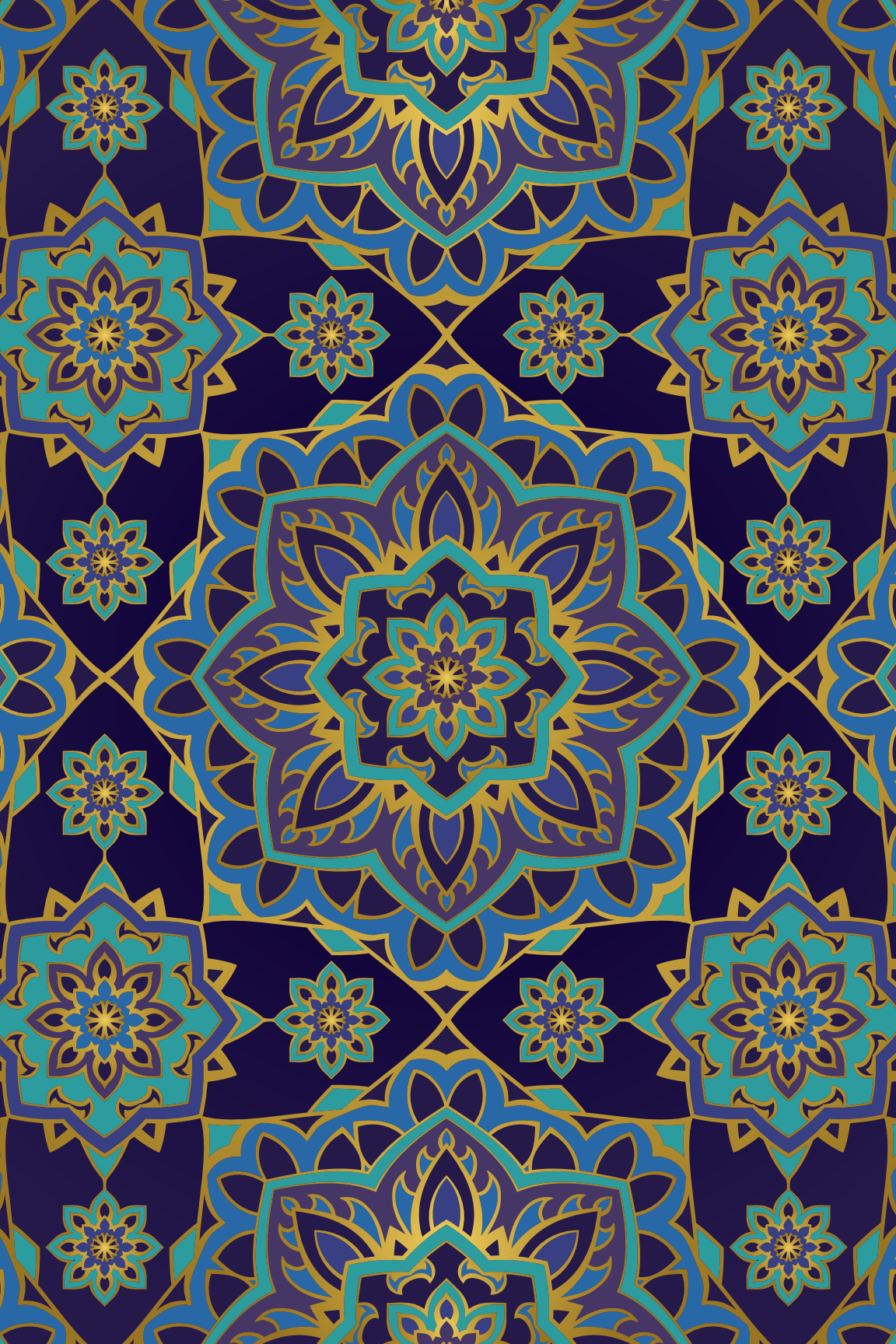
Furthermore, the tracking system, which channels candidates to certain fields based on test results, was designed at a time when most highly educated individuals were destined to work for the state. Now it signals to parents and youth that the only hope for a good life is to pursue a small set of traditionally lucrative and increasingly exclusive careers and perform accordingly on exams. By presorting the output from secondary schools, the tracking system creates a static output of workers in those fields with little information on market needs. It also contributes to the social mindset that the purpose of primary and secondary education is to aim for that narrow outcome rather than exploring career options and identifying aptitudes. Lastly, the inefficient output and resulting unemployment among graduates turns the most qualified to foreign markets, contributing to the brain drain. If properly managed,

expatriate workers could become an asset for development in the future, but if the structural issues in the education system and private sector persist, they will represent a net loss of human capital resources.

The ascendancy of higher education also came at the expense of Technical and Vocational Training, which has experienced severe neglect over the past decades. The next chapter addresses the deficiencies in this parallel area of the education system, which is necessary for generating workforce capabilities in a variety of applied fields.



Headquarters of Union Générale Tunisienne du Travail (UGTT), Tunisia's oldest labor union est. 1946, Tunis, Tunisia



Chapter III: Technical and Vocational Training

Technical and Vocational Training (TVET) is generally defined as a pathway of post-secondary education that combines essential theory with applied technical and manual skills intended for direct insertion into the workforce. Though a TVET education is traditionally regarded as a pathway for manual and semi-skilled careers (e.g. electrician, plumber), there is increasing market demand for a steady output of professionals in IT, digital media, healthcare, green building, and other technical fields. These workers can acquire a repertoire of digital and human skills without needing a lengthy academic corridor. Thus, interest in TVET has experienced a revival in recent decades, often because it offers shorter, competency-based, and market-ready training cycles that can keep pace with technological change and offer potential for continuous training.

Though the last few decades have put heavy emphasis on traditional higher education, is TVET an effective educational model? Narrow the scope to skills training specifically, and there is a growing body of evidence that suggests training interventions improve labor market outcomes. According to the *International Initiative for Impact*

Evaluation, 60 studies have examined the link between technical skills training and probability of employment, 52 looked at earnings, and 25 analyzed hours worked, in addition to other measures.⁵³ A meta-analysis by Kluve et al. (2017) of 107 interventions on active labor market programs (ALMPs) targeting youth concluded that skills training generally had a positive effect on earnings and employment.⁵⁴ A similar study by Tripney et al. (2013) demonstrated that TVET interventions on average had a positive impact on formal employment and monthly earnings, though effect sizes were small.⁵⁵

This evidence shows that those who receive skills training have better outcomes in employment and earnings compared to those who do not, especially in disadvantaged groups. Extrapolate that to the formal TVET education system and we expect the outcomes of direct skills training to be amplified through high quality instruction and widely recognized licenses and certifications. Furthermore, TVET should ideally have a direct link to high demand technological skills given its proximity to industrial and applied fields. Quality in TVET is, of course, relative to the level of investment and coordination with the private sector that demands such training.

Unfortunately, TVET is sometimes described as the “Achilles heel” of the education systems in Arab countries.⁵⁶ Despite offering a pathway to many in-demand technical jobs, the designation still holds a very low status. A broad consensus among those interviewed for this project confirmed that vocational jobs are unattractive to the majority of youth, who are deterred by perceptions of poor standards and social bias toward higher education. For example, in 2019 only 8,178 of 442,065 secondary school students in Morocco took the professional/vocational track on the baccalaureate exam, representing a threefold increase from 2018!⁵⁷ Despite that the governments in our cases have recognized TVET as an important

driver of youth employment, candidates in the sector still represent a small quantity of post-secondary students overall.

TVET Structure

In all three countries, TVET oversight is generally managed by the ministry primarily responsible for labor, rather than education. Broadly speaking, the vocational path starts in high school through the tracking system, placing students in vocational courses or providing a vocational option on the high school exit exam. The following table summarizes the TVET training and credential pathway in all three countries:



Education model of Hussein Technical University, Amman, Jordan

TABLE 5 | COMPARISON OF CERTIFICATION TRACK OF VOCATION TRAINING

Tunisia ⁵⁸	Jordan ⁵⁹	Oman ⁶⁰
<p>Vocational or General Ed Track in 2nd year of secondary school</p> <p>Two Tracks:</p> <p>A. Initial Training</p> <p>B. Continual Training</p> <p>Initial Training</p> <p>1st Cycle:</p> <p><i>Certificat d’Aptitude Professionnelle. (1 year)</i></p> <p>2nd Cycle:</p> <p><i>Brevet de Technicien Professionnel (BTP)</i></p> <p>Professional Baccalaureate</p> <p>A. <i>Brevet de Technicien Supérieur (BTS)</i></p> <p>B. Higher Education</p>	<p>Secondary Vocational Education (G 11-12): Industrial, Agriculture, Hospitality, Home Economics</p> <p>Enroll in:</p> <p>A. Technical Education</p> <p>B. Vocational Training</p> <p>Technical Education:</p> <p>Community Colleges grades 13-14 (Al-Balqa Applied University)</p> <p>Vocational Training:</p> <p>Vocational Training Centers (VTCs) under Vocational Training Corporation.</p> <p>National Employment Training Corporation (NET):</p> <p>Created by the armed forces in 2007 with mandate to train 30,000 unemployed for the construction sector.</p>	<p>Secondary School: Certificate of general education</p> <p>Enroll in:</p> <p>A. Technical College</p> <p>B. Vocational College</p> <p>Technical College:</p> <ol style="list-style-type: none"> Foundation Year Technical Diploma (third year) Advanced Technical Diploma (fourth year) Technical Bachelor (fifth year) <p>Vocational Colleges:</p> <p>Diploma Track</p> <ol style="list-style-type: none"> Foundation year Vocational Diploma (third year) <p><i>Apprenticeship Track and Vocational Cycles for dropouts and continuing education.</i></p>

In Tunisia, the secondary vocational track was eliminated in 1991, and vocational training was transferred to the newly created Ministry of Employment and Vocational Training. The number of vocational candidates sank as access to higher education increased and technical colleges gradually became the destination for baccalaureate failures.⁶² Technical middle schools were introduced in 2007, and specialized vocational secondary schools and a professional baccalaureate were established by law in 2008, but never fully implemented.⁶³ Vocational diplomas increased from 2002 to 2010,⁶⁴ but according to a 2007 survey, 33 percent of enrollees left their studies without a diploma citing deficiencies in training or difficulty finding an internship.⁶⁵ Today, TVET attracts less than 5 percent of the student population overall.⁶⁶ There was also a marked decline in enrollment in basic technical education from 2010 to 2014.⁶⁷

Jordan has continuously struggled to overcome fragmentation in the technical and vocational education sector. A TVET council was established in 2001 to bring together the various stakeholders and was replaced by the E-TVET council in 2008. The corresponding E-TVET fund was established in 2005 and was financed mainly by a 1 percent tax on private sector profits.⁶⁸ However, from 2005-2010, 78 percent of these funds went to the NET (Table 5), which graduated only 3,600 of 9,000 enrollees by 2009.⁶⁹ The tax was abandoned in 2010, leaving the fund dependent on fees from foreign worker permits, and placing the fate of TVET in limbo. In 2015, roughly 6 percent of the post-secondary student body was enrolled in technical colleges.⁷⁰ TVET as a share of secondary enrollment dropped steadily between 1999 and 2011 from 7.8 to 3.6 percent. According to the *National HRD Strategy*, Jordan intends to establish a public-private Skills Development Corporation to replace the ETVET council, harmonize TVET policies, and align with labor market needs.

Vocational training in Oman has had to overcome similar challenges. TVET had long been a priority in Oman, largely because of the need to train semi-skilled and technical professionals to reduce dependence on foreign labor. Such training was placed under the newly created Ministry of Manpower in 2001, and the five-year plan of 2003-2007 focused on the “sensitive question” of vocational training.⁷¹ Over a ten-year period, Oman opened numerous technical and vocational institutes, but only reached the capacity to enroll eight to ten thousand a year. Despite these measures, employers continued to dismiss graduates as lacking in adequate preparation.⁷² Upgrading industrial schools to accredited 4-year technical colleges significantly increased their reputation,⁷³ and in 2012, vocational colleges began offering 2-year diplomas with the possibility of continuing to a technical college.⁷⁴ In 2017, around 29 percent of post-secondary students were enrolled in technical colleges, which has held steady at around 40,000 a year since 2013.

TVET Quality

In terms of quality, the greatest failing of the TVET system in all three cases is that enrollment is overdetermined by the education tracking system, and closely linked to scholastic achievement. Only those who fail to reach the threshold to enter higher education are generally admitted to TVET institutions. This sorting of the student body has led to the peculiar phenomenon of *failing-in*, which portrays TVET exclusively as a destination for low performing students. In a culture that highly values credentials, this low status is amplified by the culture of shame,⁷⁵ *Thaqafat Al Eib*, which defines careers by education outcomes. In Tunisia, TVET is thought of as a “catching up process,” as it offers a circuitous link back to higher education.⁷⁶ In Jordan, technical community colleges are also seen as a path back to higher education.⁷⁷ However, in Jordan those who fail the grade 10 exam are placed in vocational training under the Vocational Training Corporation with no upward pathway to a college whatsoever.⁷⁸ Both the Jordanian *National HRD Strategy 2016* and Tunisian *Development Plan 2018* recognize that both the image

around TVET and the corresponding mindsets are a major hurdle to reforming the sector.⁷⁹ This situation is also repeatedly cited in the context of Oman's educational system.⁸⁰

The low social status of vocational jobs in these countries is compounded by the relative weakness of TVET centers, training methodologies, and recruitment of qualified trainers. In Jordan, vocational schools under the VTC are required to hire instructors from the civil service bureau, which has generated a pipeline of trainers consisting of unmotivated university graduates without industry experience.⁸¹ In Tunisia, it is difficult to find enough qualified trainers in the governorates to staff the 130 training centers nationwide, further perpetuating geographic inequalities.⁸² The government's draft of the unemployed into the education sector after the revolution in 2011 also likely affected the quality of TVET instruction. At least on paper, Oman appears to have the most clearly defined criteria for trainers, which falls into one of two categories. The first category consists of instructors recruited directly from TVET institutions and then sent to pursue a master's degree following six-month placement in industry positions. The second consists of experienced foreign professionals. The implementation status and impact of this criteria is unclear, especially considering the fact that TVET in Oman continues to struggle to gain the confidence of the private sector.

Challenges with training methodology and recruiting qualified trainers is compounded by the mediocre quality of training centers. Being government controlled, they are affected by budget constraints. Negative public perceptions create a hurdle to contributing resources to the sector and equipment and lab space tend to be outdated.⁸³ Lagging updates to technology and equipment negatively affects trainees' productivity in the job market, further affecting perceptions among employers that they are poorly trained. The fate of TVET candidates is tightly linked to transformation of

technology given their proximity to industrial fields.⁸⁴ Government turnover, budget constraints, and lack of involvement from the private sector remain among the biggest hurdles to improving investment in TVET institutions, especially in Tunisia and Jordan, which do not have significant resource rents.

There is also a lack of effort to clearly show career paths for vocational jobs, preventing families from seeing these jobs as good lifetime work opportunities.⁸⁵ The Ministry of Labor in Jordan recognizes this as a major deficiency and is taking steps to address it.⁸⁶ As mentioned, upgrading industrial colleges in Oman to four-year technical colleges improved their reputation, and offering degree paths that link back to higher education also has strengthened recruitment. Luminus College in Jordan has also had great success experimenting with implementing career guidance and offering more flexible credential corridors. Formerly known as Al Quds Community College, Luminus achieved strong enrollment by offering 4-year degrees involving career counseling while program offerings were strictly determined by MOUs with employers and assessments of industry needs.⁸⁷ Hussein Technical University offers rigorous courses while providing students with full certification at every year of training, allowing them to enter the field earlier and return to continue the 4-year credential.

Box 2

Luminus: Transforming Vocational Education in Jordan

Founded in 1999 by the Al Safadi' Family, Luminus is a private sector project that aims to create a holistic educational experience for students, encompassing both personal and professional development. It seeks to do so by changing the perception of TVET, and providing high-quality, market-oriented programs that can lead to job security, social stability and economic growth.

With 50 accredited programs in 12 areas of academic specialization (business, information technology, creative media, engineering, health and safety, construction, medical professions) in its 4 campuses (3 in Jordan and 1 in Iraq), Luminus has graduated over 40,000 students by 2017 who come from 23 countries and has an employment placement rate of over 80 percent.

As a part of Education for Employment Initiative (E4E), the IFC invested more than 8 million dollars in this project in 2013, seeking to bolster employment-focused education in the region. This collaboration was a new boost for Luminus, and expanded its focus to include employability, the pursuit of international accreditation, the implementation of new teacher training efforts, and the development of programs to address financial constraints for lower-income students.

This partnership between Luminus and E4E also helped open doors to engage the government on education policy issues. In 2016, Luminus contributed to the government's Human Resources Development report and played a critical role in a ministerial committee that assessed the state of TVET in the country. Luminus also works closely with potential employers to identify available jobs and helps to create workplaces that are friendlier to women.

Today, the new policy spurred Luminus to transform Al Quds community college into a technical university called the Luminus Technical University College which offers a wide range of qualifications to serve students from 16-35, even those who failed in the Tawjihi exam.

Source: IFC, 2017

Employment and Professional Certification

Problems with TVET quality manifest themselves in poor employer confidence in training results. A recent Population Council study of outcomes of secondary vocational schools in Egypt found that both employers and graduates themselves believed they lacked appropriate skills to work in their fields.⁸⁸ Of the 15 percent of employers that currently hire VTC workers in Jordan, only half of those surveyed were happy with the skill level of those they hired.⁸⁹ In Tunisia, some vocational centers have sat completely empty because they were not specialized for the needs of the region. The graduates of these centers commonly find themselves unemployed.⁹⁰ Oman has the advantage of an established petrochemical industry which actively hires from TVET centers, but it is also reported that employers lack confidence in the skills of vocational graduates, and many of these new workforce entrants face long periods searching for employment.⁹¹

However, it was often expressed by interviewees that companies themselves invest very little in providing training.⁹² The Jordanian private sector ranks among the lowest in the world in providing training opportunities.⁹³ Though most TVET candidates in Tunisia are registered in “alternating” on-the-job curricula, very few begin the practical portion of the training because employers are not contractually obligated to provide it.⁹⁴ Some sectors are providing training opportunities with the support of donor funding. USAID in Tunisia for example supports 40 of the 130 vocational schools and assists some larger employers with cost-sharing training programs.⁹⁵ However, widespread donor-funded support cannot replace active involvement of the local private sector. Furthermore, employers in Jordan could not differentiate between programs and levels at community colleges and vocational schools, and many of them had difficulty articulating their specific skills requirements, which makes it more difficult to format training programs to their needs.⁹⁶

Poor articulation of required skills also negatively feeds back into the qualification framework, which affects distribution of licenses and certifications. Governance of qualifications was often ambiguous in our case study countries. According to the Jordanian *HRD Strategy*, quality assurance standards are set and monitored by different ministries. The Center for Accreditation and Quality Assurance was established to monitor TVET administered only by the Ministry of Labor, whereas private institutes, vocational schools, and community colleges are subject to different laws.⁹⁷ However, some entrepreneurial business associations – such as *Int@j*, which represents the IT sector – help define qualifications to work in its field. The National Sector Skills Councils, to which *Int@j* is affiliated, represent very new industry-led efforts to define skills in by area of activity, and show that civil society can lead in developing qualifications frameworks.⁹⁸ In Oman, the Ministry of Manpower participates in a working group of the Oman Academic Accreditation Authority to develop a national qualifications framework, which will eventually apply to all aspects of academic and technical education.⁹⁹ Furthermore, entrepreneurship training has become mandated throughout the higher education and technical training systems to encourage graduates to establish businesses in their fields.¹⁰⁰

Maximizing Gains from TVET

Technical and Vocational Training provides practical skills for the workforce and is generally effective at improving employment outcomes. Maximizing these gains by providing high quality instruction and widely recognized credentials is also possible. In all three of our case studies, despite recognizing the importance of TVET to the economy and employment, governments have struggled to overcome hurdles of negative public perceptions, poor governance, and lack of private sector confidence. Quality and image suffer most from the pattern of recruiting among those who fell

behind in the tracking system. Nor do those students deserve to be condemned to a pathway with a reputation for poor instruction and low employer interest. A lack of involvement from the private sector also defeats the core purpose of TVET and fails to attract independent applicants interested in applied versus academic pathways to the workforce.

Oman seems to have had the greatest success in addressing some of these challenges by consolidating governance of the sector by placing most of its key functions within the Ministry of Manpower. Motivated by making TVET an engine to reduce reliance on foreign labor, investment has increased participation to about 30 percent of post-secondary enrollment, which is a stated goal in the other two countries. Providing modular credentials and pathways between TVET institutions or to higher education makes participation seem less absolute, and keeps the focus on performance and career development. Entrepreneurship coursework implemented in Oman is also a positive step (and addresses a parallel problem of low business density), but outcomes in this regard are untested. In



Citadel, Amman, Jordan

Tunisia, the BTP and the BTS (Table 5) are popular credentials of the TVET pathway, though more follow through is needed on stalled reforms. In Jordan, business associations are beginning to take an active role in defining qualification frameworks, which could have major benefits for the TVET system and could encourage more synergy with the private sector.

Yet none of these three case study countries has completely overcome the endemic social stigma and poor industry participation in TVET. Many reforms involving various stakeholders are underway, but, in the past, these have not effectively resulted in an integrated sector. Country strategies need to address families directly by providing a clear demonstration of the quality and effectiveness of the TVET pathway, especially by showcasing the diversity and sophistication of the jobs available. Industry needs to recognize that there are no passive solutions to their staffing needs, and stronger involvement in TVET is the surest way to establishing a stream of qualified labor. If these and other best practices are adopted, TVET will have a stronger future in the region.





Chapter IV: The Private Sector

In addition to education, the private sector has also undergone a transformation in the three case study countries. Following wider trends in the historical development of the region, Tunisia, Jordan, and Oman first generated demand for educated workers for employment in the public sector. However, by the early 1990s the workforce expanded beyond the point that the public sector could easily absorb – in order to continue their economic expansions, the need to encourage private sector to become the main driver of employment and growth was recognized. Export promotion, however, continued to generate demand for low and semi-skilled workers, while more citizens were pursuing opportunities in higher education. Exports in services increased as well, but not sufficiently to absorb the surplus educated workers. Furthermore, the robust growth of the 2000s was derailed by the 2008 financial crisis which severely impacted FDI, and the disruptions of the Arab Uprisings slowed recovery and investment. In addition, persistently low regional economic integration restricts market sizes and scale that international corporations can exploit. Furthermore, the relatively slow establishment of new businesses in these countries has raised calls to encourage entrepreneurship. But

without a clear enabling environment and access to finance, there is a lack of available fuel to get promising enterprises off the ground.

Nevertheless, a bevy of promising initiatives shows momentum for creating new businesses. New laws in Tunisia and Jordan have created a funding ecosystem for tech startups, which is a growing industry region wide. Oman has identified five key areas of competitive advantage and is taking every opportunity to encourage locals to start businesses in those strategic areas. With an infusion of foreign investment these projects could get important traction. Furthermore, stronger efforts to encourage savings deposits and financial inclusion, and facilitating repatriation of diaspora capital could increase needed banking reserves. Countries are already taking many of the right steps; if they get on the same page on the business climate, the opportunities could revitalize slow growth. The following sections will address the structure and development of the private sector in these countries which show persistent challenges with informality and small firm sizes. Following this we examine the most recent efforts to enable entrepreneurship and lastly address some of the constraints to the financial sector.

Private Sector Structure

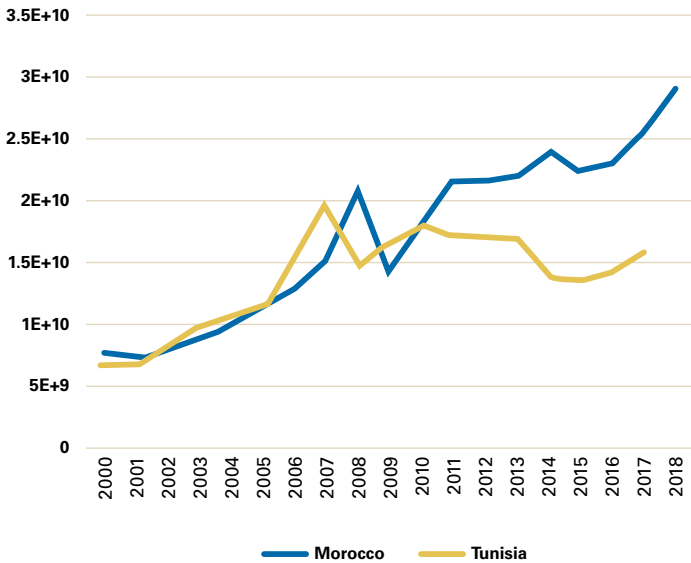
TUNISIA

During the last 30 years, Tunisia's economy has undergone several changes. In the 1990s, the economy was mostly based on agriculture and raw materials. Today, the largest share of GDP is in services whose share in GDP has grown from 48 percent in 1980 to 59.7 percent in 2010.¹⁰¹ The country exports textiles, electrical and automotive components, agricultural goods, and phosphates – mainly to Europe, especially France and Italy. Most of Tunisia's large employers are concentrated in these sectors, especially textiles and phosphates. Tunisia moved toward an export promotion model in

the 1970s, progressively taking steps to integrate into international markets; joining the WTO in 1993, signing an FTA with the EU in 1995, and then GAFTA (General Arab Free Trade Area) in 1998.¹⁰² These agreements led to an export growth of 5.1 percent per year since the 1990s, and a contribution to GDP of 55.6 percent in 2008.¹⁰³ Foreign direct investment was encouraged through the Foreign Investment Promotion Agency (FIPA) and through providing tax incentives. However, investments were concentrated in the energy sector, which generates less employment overall than jobs created by the manufacturing and service sectors.

Still, exports as a share of GDP in Tunisia have stagnated, indicating limited success in integration with international markets.¹⁰⁴ Furthermore, growth rates and FDI plummeted after two events – the global financial crisis in 2008 and the revolution in 2011 – created significant uncertainty in the business climate, and much needed

FIGURE 7 | MERCHANDISE EXPORTS (MILLIONS USD) IN TUNISIA AND MOROCCO (2000-2018)



Source: World Bank Development Indicators

reforms and enforcement stalled under repeated cabinet reshuffles. These governance constraints have exposed many other economic vulnerabilities. The nation's once-sizeable share of phosphate production has dropped steeply since the revolution, and it has remained depressed due to protests by the unemployed in the poor South East region. As such commodity exports overall have declined while in nearby Morocco they have increased, showing that slow reform and investment are having lasting effects on the economy. Furthermore, as mentioned, hiring in the public sector expanded precipitously immediately after the revolution as the government sought to ease short term strains. As a result, the oversaturated public wage bill is locked between competing interests of political parties and labor unions in an economy that isn't offering enough employment alternatives.

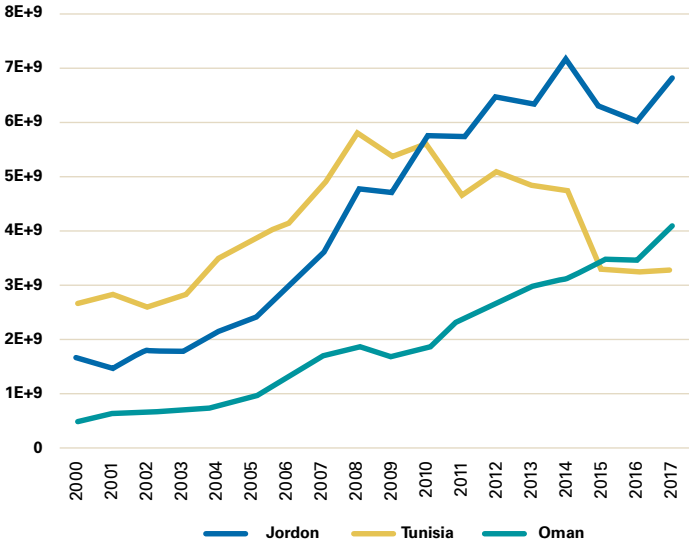
As for the composition of the private sector, SMEs make up 99 percent of companies, but micro-enterprises of four or fewer workers account for 97 percent of Tunisian businesses. In total, such enterprises employ only about 11.8 percent of the private sector workforce.¹⁰⁵ Forty-one percent of salaried permanent employees work at large firms of over 200 workers – which make up a tiny portion of firms overall, and are concentrated in main industrial export sectors.¹⁰⁶ This structure has not changed significantly since 1997,¹⁰⁷ but informality is believed to have increased since the revolution. Around 95 percent of SMEs can be considered informal because they employ four or fewer workers. They are largely unregistered, and lax enforcement allows them to remain invisible and avoid social security taxes and duties.¹⁰⁸ It is estimated that the informal sector is growing at a rate of 5.1 percent a year, as opposed to 2.1 percent for the formal private sector. The vast majority of these enterprises employ two or fewer people, and as many as 87 percent have no employees at all.¹⁰⁹ The overabundance of unregistered microenterprises suggests significant asymmetry in the business climate in terms of both business registration and access

to financing. The overall challenges to Tunisia's private sector involve increasing exports by improving infrastructure and investment, but productivity improvement for SMEs also requires arriving at a new consensus with powerful labor interests.

JORDAN

Jordan has made significant strides in encouraging the local private sector, but it faces many other challenges. Its primary material exports include phosphates, potash and agricultural goods. The United States is Jordan's largest receiver of exports, thanks to an FTA signed in 2000, and robust relations between the two countries. From 2000 to 2008, exports grew at an estimated 17 percent per year.¹¹⁰ There are areas of concern, however. The textile industry, which took shape in the Qualified Industrial Zones around the port city of Aqaba, has not shown the expected growth. Rather than driving local employment, this industry has mostly imported labor from abroad. After 2008, services took a greater share of exports and continued growth, showing the development of a comparative advantage for Jordan. But numerous exogenous shocks have severely impacted growth and investment. The loss of markets in Syria and Iraq after 2011 has reduced commodity exports, and disruption of gas supplies from Egypt has forced Jordan to purchase energy at international rates, thus driving up the public debt. The necessity of absorbing over one million refugees due to conflicts in neighboring countries has had the effect of creating an oversupply of low skilled labor and an enlargement of Jordan's informal economy.

FIGURE 8 | SERVICES EXPORTS (BALANCE OF PAYMENTS, MILLIONS USD) IN TUNISIA, JORDAN AND OMAN



Source: World Bank Development Indicators

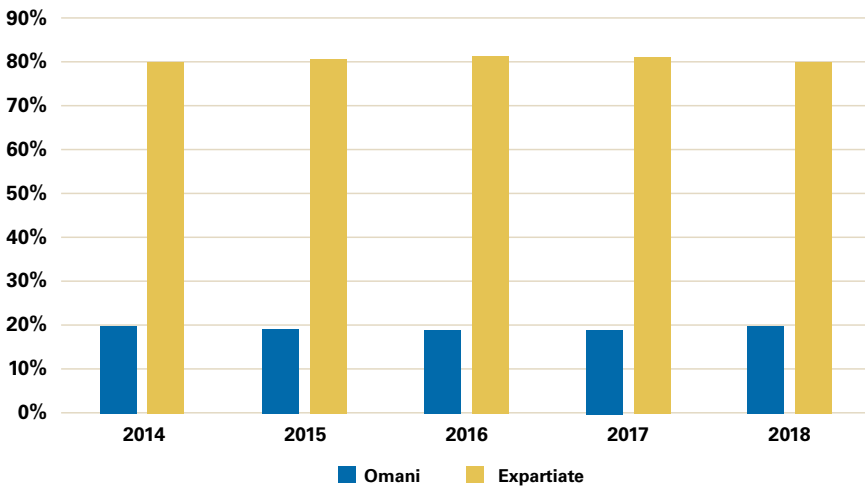
Even before the Syrian conflict, Jordan’s private sector consistently generated more demand for low-skilled laborers than higher-skilled professions. Like Tunisia, the abundance of very small firms (fewer than four workers) shows that informality is widespread and that barriers to the business environment remain that prevent the easy registration, scaling up, and insolvency proceedings. Jordan’s informality is less acute as it avoided some consequences of informalization during the economic opening in the 1990s by allowing short-term contracts. Assaad (2018) shows that many who start on short term contracts eventually enter permanent employment as they gain experience.¹¹¹ Jordan has succeeded in making the private sector the main driver of formal employment (over 30 percent), and taxes on private sector profits are now the main source of government revenue. Yet the public sector remains large

and relatively unproductive in terms of labor distribution, and the large numbers of Jordanians registered with the civil service bureau demonstrates not only preferences for public sector employment, but also uncertainty in the private job market.

OMAN

Oman has led many efforts to encourage the private sector, but its main source of revenue is still predominantly oil and gas exports that fluctuate due to both global demand and competition from new energy sources. Oman and the rest of the GCC have shifted toward economic diversification by encouraging a high skilled economy focused on education, financial services, digital innovation, and healthcare. Oman is somewhat distinct in identifying the key geographic and geological components of its comparative advantages in its *Vision 2040* national plan: fisheries, mining,

FIGURE 9 | EXPATRIATE VS OMANI WORKERS IN PRIVATE SECTOR



Source: *The National Center for Statistics and Information, Oman*

manufacturing, tourism, and logistics. Diversification efforts in Oman are not new however and go back to the 1990s. Since 1996, foreign investors have been exempt from taxes for the first five years, as well as being free of customs duties. Rules for privatizing state-owned companies were regularized. One hundred percent foreign ownership of commercial ventures is allowed if the project “contributes to the development of the national economy.” Oman joined the WTO in 2000 and signed a bilateral FTA with the US in 2006, significantly increasing foreign shareholding.¹¹²

Though these efforts have increased the scale of the private sector, they have not reduced dependence on foreign labor, despite years of labor localization policies – or Omanization. As one interviewee put it, there are two tiers in the Omani economy: tier 1 consists of international companies and other high wealth firms that demand high skilled labor. These businesses make up 15 percent of the private sector and are on average 21 percent Omanized. Tier 2 makes up 85 percent of companies and employs mostly low-skilled workers. These companies are only 1.1 percent Omanized.¹¹³ This shows that labor localization in the private sector has remained elusive, and the private sector still demands a lower skill level, leaving educated Omanis dependent on public sector employment. The public sector is also deeply interwoven with private firm behavior and spending, because the private sector is highly dependent on a government consumption which is tied to oil and gas revenue and vulnerable to price fluctuations. As mentioned, in 2014, a temporary drop in oil prices drove private sector spending to a halt and the government resorted to hiring in the public sector to ease the strains. New business classes have struggled to emerge under the old model of state development.¹¹⁴

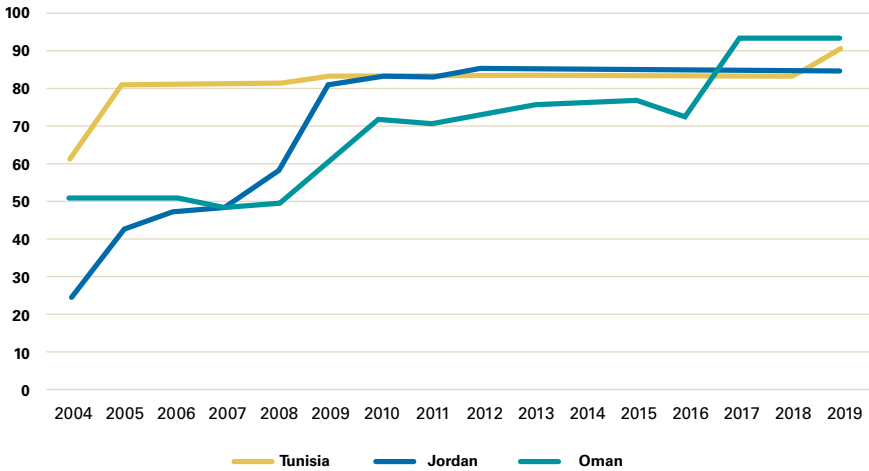
In all three countries, economies continue to generate more demand for low skilled workers than high-skilled educated workers. In

Tunisia, this manifests itself in the faster increase in informal, low-productivity micro-enterprises than growth in the formal private sector. In Jordan the level of informality is also a concern and is inflated by large numbers of refugees from neighboring countries without official work permits. In Oman the high-skilled portion of the private sector is much smaller than firms that demand low skilled labor which they import from abroad. All three countries have recognized the need to create new, scalable, high productivity firms to drive employment through encouraging entrepreneurship.

Entrepreneurship

The potential for entrepreneurship in much of the MENA region is still unrealized. All three of this project's case study countries have implemented initiatives to encourage both micro-entrepreneurship and large commercial ventures. The micro approach focuses on self-employment, especially if jobs are scarce. The latter approach aspires – in Silicon Valley terms – to the creation of *gazelles* (fast growing companies), startups that become *unicorns* (worth a billion U.S. dollars) which will reach a scale that will attract FDI and generate more employment. There are, however, risks with both approaches. Micro-entrepreneurship can support individuals, but it does not drive overall employment. As we see in Tunisia and in Jordan, the abundance of micro-enterprises creates few valuable jobs. With the latter approach, a small number of larger firms can generate many times more jobs, but looking for *unicorns*, as the name implies, can be elusive. Furthermore, encouraging small enterprises of any type requires changes in regulations to create a business-friendly environment and better access to financing and export markets, all of which remain major barriers to entrepreneurs in MENA. It is also a question of structuring the education system to enhance communication and leadership skills.

FIGURE 10 | STARTING A BUSINESS SCORE, TUNISIA, JORDAN, AND OMAN



Source: World Bank Doing Business Report

All three countries have made significant improvements to the processes for starting a business, according to scores created for the World Bank Doing Business Report. However these improvements have not quickly resulted in a multiplication of high value businesses and lack of government capacity limits the ability to implement other adaptive reforms. Further, the MENA region has yet to develop a complete entrepreneurship ecosystem, in which the government, the private sector, the investors, the educational and social sectors are strategically aligned to seed and grow entrepreneurs. There are, of course, many positive initiatives in the entrepreneurship space across MENA focused on nurturing this ecosystem. All three countries, but especially Tunisia and Jordan, have embraced digital entrepreneurship to drive growth and employment. As McKinsey (2018) notes in its report on “Entrepreneurship in the digital economy in MENA,” the region has only exploited 8 percent of its digital potential. And as internet and

cellphone penetration increases, interest in creating new institutions from “targeted, VC-like investment funds to structured incubator and accelerator programs,” is growing, and “public institutions are also playing an increasingly key role in the start-up ecosystem,” highlighted by such examples as Fintech Factory in Egypt, Fintech Hive in the UAE, and National Fund for SME Development in Kuwait.¹¹⁵

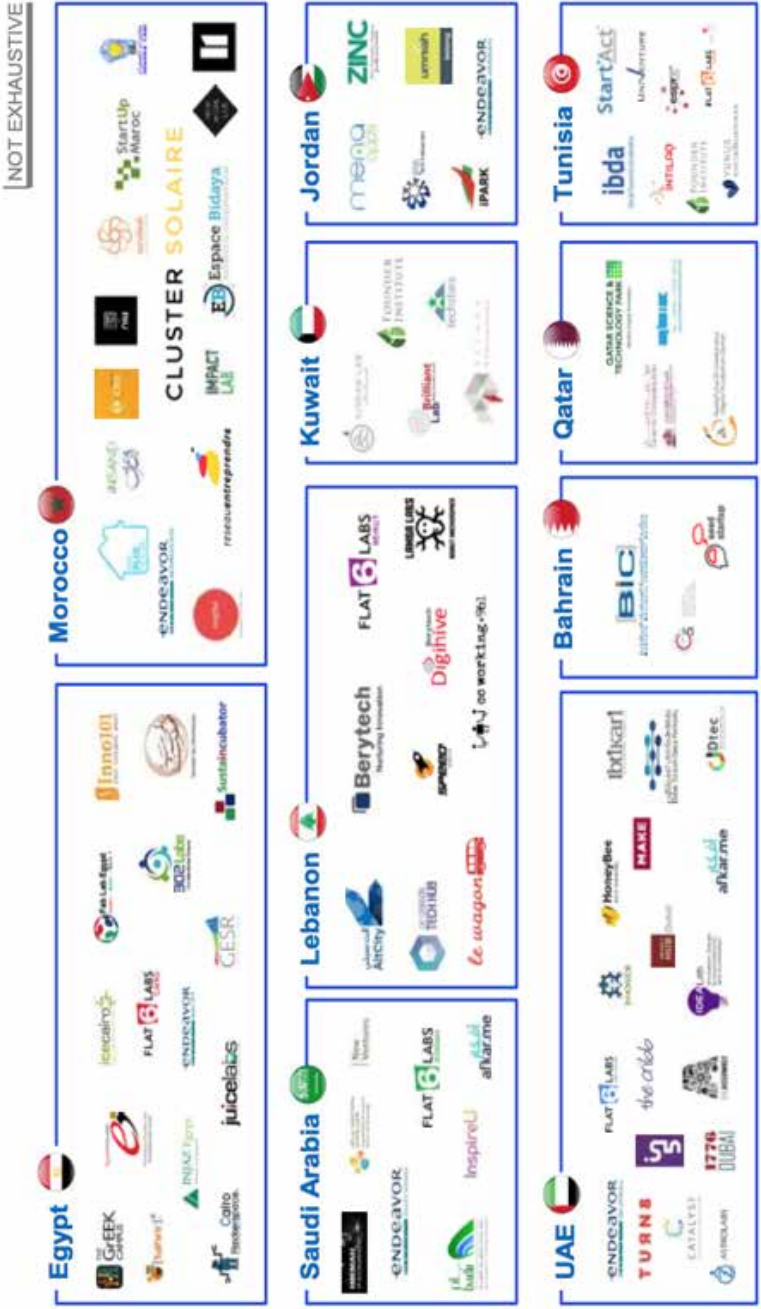
ENTREPRENEURSHIP IN TUNISIA

In Tunisia entrepreneurship and new business creation is necessary given the oversaturation of the public sector and state-owned enterprises. *Silatech*, an NGO that supports “the startup and growth of sustainable, job creating youth enterprises” across MENA,¹¹⁶ partnered with *Tunisiana*, the main private telecommunications operator, to launch an e-mobile employment platform *MobiWorks* in 2013. Reaching 300,000 Tunisians in less than a month, *Mobiworks* offered mobile learning for entrepreneurship, career guidance, and financial literacy in the hopes of generating new SMEs. Tunisia also emerged as one of the first countries in the region to pass sweeping reform for digital entrepreneurship: the 2017 Start-Up Act. This legislation made significant improvements in business registration and allowed companies to hold greater reserves of foreign currency, which is critical to startups because the Tunisian Dinar is not convertible. Regional accelerators such as Flat 6 Labs also helped define the reforms most needed to create startups. Other accelerators and investors in the region have taken note that Tunisia is adopting enabling policies for tech entrepreneurs.

ENTREPRENEURSHIP IN JORDAN

Jordan possesses many essential elements of an entrepreneurship culture, including a large talent pool, and a government that works to adopt supportive legislation. The government and Royal Court

FIGURE 11 | MENA INCUBATORS, ACCELERATORS AND CO-WORKING SPACES
MENA incubators, accelerators and co-working spaces (illustrative and non-exhaustive)



Source: Venture Capital in the Middle East, MENAScapes.com

have focused on digital services as a key area for growth for more than a decade. This approach has evidently paid off: when the World Economic Forum identified 100 leading entrepreneurs in the Middle East in 2019, *twenty-seven* of them were from Jordan; vastly disproportionate to the population of the Middle East. Jordan's most successful startup incubator, Oasis 500, was established in 2010 as the "entrepreneurial arm" of the King Abdullah Fund for Development (KAJD).¹¹⁷ It has since evolved into an independent fund that has launched more than 150 new businesses, 41 of which are still active.¹¹⁸ The incubator's CEO did note a significant challenge, however. Though it became adept at launching new startups, it was powerless to guide them through the "valley of death" – the dearth of financial resources available between the startup and scale-up phases.¹¹⁹ The newly created Jordanian Entrepreneurship and Innovation Association (JEIA), a body representing Jordan's rising success in creating entrepreneurs, is pushing for a new fund focused on the growth stage of new startups.¹²⁰

By continuing to direct an already well-educated workforce into high value services, especially in digital services, Jordan can continue to grow and bypass physical barriers to trade. With more successful companies, both FDI and in-country value will be generated, driving growth and employment of less skilled labor. However, there are no lack of regulatory barriers, and certain voices in the government are seeking an exemption from social security taxes for new businesses.¹²¹ Looking over the last 20 years of reform, the *Jordan Strategy Forum*, a local think tank focused on economic policies, identified improving the business environment as Jordan's greatest priority for spurring growth.¹²² Within the last few months, the government has concluded numerous new initiatives in collaboration with the World Bank, including a new digital skills training fund with the Ministry of Digital Economy and Entrepreneurship. These moves will help the Jordan investment commission attract FDI and draw outsourced business processing and call centers to the country.¹²³

ENTREPRENEURSHIP IN OMAN

In the last two decades, Oman has worked to create a pro-business, pro-entrepreneurship infrastructure. In 2003, the Sultanate opened *Knowledge Oasis Muscat*, the flagship technology park for Oman, which is located near the Rusayl Industrial Park and Sultan Qaboos University near Muscat. The five-year plan of 2001 also set up two programs, *Sanad* and *Intilaqa*, which offer Omanis the chance to set up their own companies. *Sanad* subsidizes the training of candidates in a private company, and then helps them establish new branch franchises, while *Intilaqa* provided direct financial assistance to entrepreneurs. By 2009, these two efforts helped over 15,000 Omanis start new companies.¹²⁴ In 2012, the National Business Centre (NBC) was established to provide a platform for aspiring entrepreneurs. The NBC works with innovators in the pre-incubation, incubation, and accelerator stages, helping move new companies from idea to market. The Sultan also supported the creation of two new entities in 2013: *Riyada* provides business analysis and advice for new ventures, and the *Raffd Fund* provides financial support. The latter is intended to establish new businesses to employ job seekers in the priority sectors targeted by *Vision 2040*, while also recognizing the need to increase the scale of such businesses.¹²⁵

Oman differs from the other two case study nations because its entrepreneurship support has targeted creation of new businesses in a broader array of sectors, narrowing the scope more recently on the *Vision 2040* priority sectors. However, the Ministry of Higher Education's plan to establish a new public university, Oman University, is especially geared toward the creation of new enterprises through technological innovation. In addition to research, the university will house a residential innovation hub where students, faculty, and private companies can work together and capitalize on new innovations. The degree programs will be interdisciplinary, integrating entrepreneurship, leadership, and

management into three main pathways: energy and sustainability, systems design and technology, and healthcare, medicine, and wellness.¹²⁶ Through the innovation hub, the university will have many supportive mechanisms to turn new ideas into businesses. In addition, entrepreneurship curricula and innovation units are becoming institutionalized across the tertiary and technical education systems.

Is Entrepreneurship a Panacea for the Workforce Challenge?

Supporting entrepreneurship, especially among jobless youth, is a necessary growth strategy in all three countries. Even when startups fail, as the majority of them do, the experience of starting and growing a business is a valuable one for young graduates, particularly those with no previous on the job training or market experience. However, MENA “will need many more people to work for a startup than to create their own,”¹²⁷ and as discussed, accepting failure is a challenge to prevailing mindsets in the region. Startups must also be supported to expand and reach scale in order to have significant impact on jobs and growth, which was often mentioned by the private sector leaders interviewed for this project. In creating a supportive environment for entrepreneurship, governments can best hope to find a *unicorn*. As one CEO put it, “Jordan needs another Maktoob.”ⁱ Careem in the UAE, which was purchased by Uber, provides another relevant example. Some other unique cases we encountered were Petra Engineering in Jordan which used the free trade agreement to become a major supplier of custom HVAC

i Maktoob.com was founded in 1999 in Amman, Jordan as one of the first webmail user domains in the region with Arabic support. Its success allowed it to create other successful businesses such as CashU for electronic payments and Souq.com for online retail. In 2009 it was purchased by Yahoo! for \$164 million, one of the biggest acquisitions in regional history.

units in the U.S, and Reem Batteries in Oman which became the sole supplier of batteries to the famous red “double-decker” buses of London. Companies such as these will create more jobs and bigger downstream growth for complementary firms. But getting there was not easy. Governments and financial institutions need the flexible financial mechanisms and liquidity to allow smaller firms to become SMEs that will become clients that serve larger domestic and international corporations.

Access to Finance

Accessing the necessary financing to expand new firms is a multifaceted challenge in the region. As discussed, intermediate injections of capital are necessary for firms to overcome the “valley of death.” As they grow, they also need assistance lowering information and regulatory barriers to access export markets. But are external interventions to help SMEs grow successful? A meta-analysis of impact studies of business support services performed by Piza et. al. (2016) showed that services such as grant matching programs, technical assistance, tax simplification and export promotion overall had a positive impact on firm performance and employment. Grant matching in particular showed similar impact for both measures, indicating that direct financial support can positively affect firm investment.¹²⁸ Though heterogeneity of results and relative lack of studies in MENA countries limits the conclusions we can make from this study, it still confirms that technical and financial support services play an important role in helping SMEs grow.

The evidence from the financial sector itself in the MENA region is less encouraging. We often heard from those we interviewed that it is difficult for entrepreneurs and small businesses to secure bank loans. According to the Millennium Challenge Corporation (2013), even though 48 percent of companies in Tunisia believe that the high cost of credit and collateral requirements are significant obstacles,

it did not conclude that bank financing constituted a major obstacle for the economy.¹²⁹ However the problem may not be the banking system or network, but simply a deficit of available capital relative to SME demand. A study conducted by the International Financial Corporation (IFC) within the World Bank Group measured the size of the financing gap for Micro, Small and Medium Enterprises (MSMEs) around the world by comparing estimates of demand with the supply of available financing. The report found that MENA had the largest financing gap relative to demand and the ratio of the gap relative to GDP was the highest at 26 percent. The report states, “the higher the ratio the higher the need for financing in relation to the size of the economy.”¹³⁰

Through our own investigation we heard a variety of comments that expanded on these conclusions. It was mentioned that banks in Tunisia are over-collateralized and hold too much of their assets, in addition to imposing high collateral requirements to secure loans. Overall the banking system is diffuse with too little capital spread across too many banks.¹³¹ Unwillingness to lend could be an issue of inability to properly assess the profitability or credit worthiness of new enterprises. A diffuse sector also makes it more difficult for individual banks to manage risk. An interesting pattern emerged from Oman in which banks are more open to lending to public sector versus private sector employees, the reason perhaps being that government jobs are well paid and more secure, making the borrower a lower credit risk.¹³² Oman does have credit guarantee programs to take on some of the risk of lending to SMEs, and requires banks to hold about 5 percent of SME lending in their portfolios, but banks often have trouble reaching that threshold.¹³³

Access to finance in MENA countries remains a major issue as it is a crucial component to enlarging SMEs. The large numbers of informal businesses especially in Tunisia and Jordan shows that a significant amount of commercial activity is occurring outside

the banking system. Financial institutions are rational actors, so it stands to reason that lending behavior is partially explained by the financing gap and lack of available capital, which is also explained by low saving and financial inclusion. This is also an area where further research is needed to better understand bank lending behavior, tolerance to stress, and calculation of risk.

The Business of Employment

Since the 1990s, these three countries have made many changes to increase the role of the private sector in the economy and integrate with international markets, but with mixed success. Despite periods of significant growth, demand is still concentrated in industries that require low skilled workers. Widespread informality is also an indication that more support mechanisms are needed for entrepreneurs and SMEs and must affect a broader range of businesses. There is encouraging evidence that technical and financial support can help increase performance of SMEs. One-stop-shop style business support and export promotion services can also support the goal of enabling new firms and enlarging existing ones. Innovative models such as the Qatar Development Bank in Doha have a successful track record in enabling SMEs. The Ministry of Development and International Cooperation in Tunisia also intends to build on a one-stop-shop model. Access to financing remains a significant issue and more research must be done to understand the behavior of the financial sector in the region, but important reforms such as insolvency regulations can significantly reduce risks to banks. Multiple reforms are essential for easing risk and lowering information barriers to growing companies.

There is a lot of constructive activity to encourage entrepreneurship, but more work must be done to improve the business climate and generate more high-skilled jobs. Micro-entrepreneurship is important especially in areas where few jobs are available, but enabling and

growing SMEs will ultimately be a bigger driver of employment in the region. Firm formalization can also be achieved through tax incentives and streamlined registration services. Greater formality should increase the efficiency of firms and make them more productive, especially if the right support mechanisms are in place. Lastly, the private sector needs to increase its dialogue with education, especially higher education and TVET, in order to establish a streamlined flow of qualified workers. This can be achieved through a combination of investment, participation on board management, and working collaboratively with other firms to establish clear qualifications frameworks that define the skills and standards required to work in those fields and translate them to training programs.



Royal Palace, Muscat, Sultanate of Oman



Chapter V: Women and the Workforce

Earlier in this report we discussed how the mindsets regarding women and work restrict women to certain careers or discourage them from entering the workforce all together. This has produced a significant differential in labor market outcomes between women and men. The World Economic Forum's Global Gender Gap Index 2018, measured gaps between men and women in four main areas: education, economy, politics and health. Based on today's trends, the Forum observed that the gap today stands at 32 percent, and projects that the "overall global gender gap will close in 108 years." But the region-specific figure for the Middle East and North Africa jumps to 153 years! In fact, the 2018 report notes that while the MENA region is making some progress, it "continues to rank last globally on the overall Index," with a remaining gap between men and women at 40%.¹³⁴

Akin to global trends, the MENA region mainly falls short in two sub-indices: economic participation and opportunity and political empowerment. When it comes to closing the gender gap in education, the region has made significant progress in the last four decades. Female adult literacy, for example, increased from

28 percent in 1973 to 72.5 percent in 2016. In other key education metrics, such as primary and secondary enrollment, the region has demonstrated continuous progress and in tertiary education, female enrollment has increased from below 5 percent in 1970 to almost 42 percent in 2017. In countries such as Qatar, Oman, Jordan and Tunisia, women now outnumber men in university enrollment.

These positive indicators show that the region is moving forward toward gender parity in education. However, this upward trend is not translating to women's participation in the labor market. Ragui Assad and his co-authors in *Explaining the MENA Paradox* (2018) note that the diverging outcomes in education and workforce participation of women represent a major puzzle.¹³⁵ In fact, according to the World Bank, female labor force participation (FLFP) in the MENA region stands at 20.27 percent compared to the global rate of 47.8 percent and 56 percent in the United States (World Bank 2018).

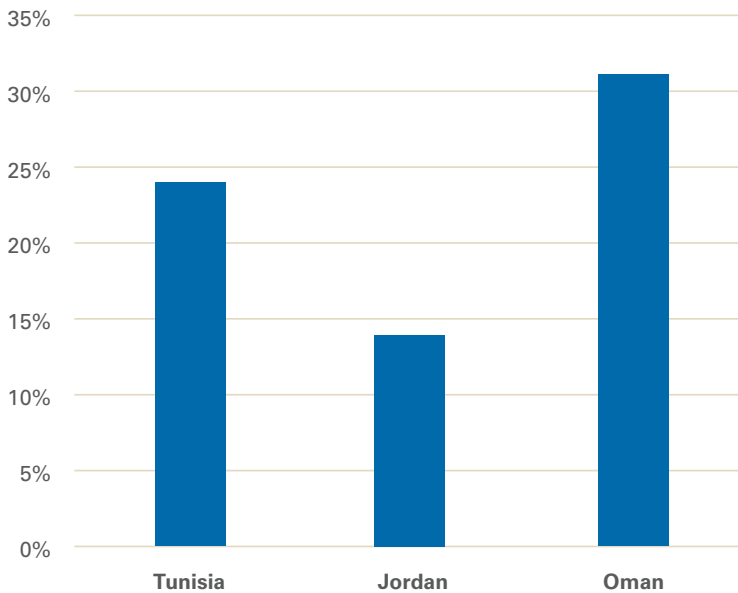
Gender Parity in the Workforce is “Smart Economics”

The high educational attainment and outcomes for women present an opportunity for the MENA region to boost economic growth if its countries invest in increasing their participation in the workforce. In 2006 the World Bank developed the “Smart Economics” formula, which links increasing FLFP with reducing poverty and augmenting economic growth, which, in turn benefits not only women, but also “men, children and society as a whole.”¹³⁶ Confirming this formula, the a report published by McKinsey Global Institute (2015) on the power of gender parity concludes that completely closing the gender gap in FLFP, or what is referred to as “full potential scenario,” would raise the annual GDP in the MENA region in 2025 by 47 percent.¹³⁷ This potential is further elaborated by the IMF (2018), which notes that the MENA region “could have gained \$1 trillion in cumulative output (doubling the average real GDP growth) over the past decade if female labor force participation had been raised to

narrow the gender gap from triple to double the average for other emerging market and developing economies.”¹³⁸

This report’s case study countries all present examples of this MENA Paradox. All three have succeeded in achieving gender parity in educational attainment, with Jordan at 98 percent, Tunisia at 96 percent, and Oman at 99 percent, according to the Gender Gap Index 2018. However, the gender gap in economic participation and opportunity has not been closed, with Jordan at 37 percent, Tunisia at 44 percent, and Oman at 43 percent. According to Mariana Felicio, Senior Development Specialist at the World Bank, “[Jordan] is the country with the lowest female labor force participation in the world of a country not at war...and it is also the country with the highest level of [female] university degree graduates, 54 percent.”¹³⁹

FIGURE 12 | FLFP RATE IN TUNISIA, JORDAN, AND OMAN (2019)



Source: Source: World Bank Data, modeled ILO estimate, 2018

Assaad, Hendy and Yassine (2012) also note that MENA, “risks wasting a significant portion of the considerable investment it has made in women’s education if the participation rates remain so low.”¹⁴⁰ Though FLFP in Jordan remains the lowest in the region, the same warning applies to both Tunisia and Oman. Tunisia presents stark contrast between progress of women in government and parliament versus their share of the workforce; FLFP remains at 24 percent. In Oman, despite having a gender equality clause to its constitution, FLFP still falls short of the international average. Though these countries should be encouraged by the progress they have made in women participation in education, their focus should turn to transitioning these outcomes to the workforce by passing policies that support working women as the current generation ages into its prime working years.

Unpacking the “Paradox”: Barriers to Female Labor Participation in MENA

There are numerous barriers to female labor force participation in the MENA region on both the supply and demand side of the workforce development equation. Based on the review of the development literature and stakeholder interviews conducted for this report, we see that demand-side factors such as social norms and mindsets that define gender roles, as well as supply-side factors such as the legal environment, public sector vs. private sector employment opportunity structures, ‘women unfriendly’ work environments, and weaknesses in infrastructure (particularly transportation), are to blame for the low outcomes in FLFP. This project also consistently found that the lion’s share of barriers exists on the supply-side of the workforce formula.

SOCIAL NORMS ON GENDER & FLFP

The World Bank’s 2018 report, titled Understanding How Gender

Norms in MNA Impact Female Employment Outcomes, defines social norms related to gender as a “wide range of practices, behaviors, and even thoughts and feelings that are considered appropriate for men and women to have and exhibit.” These norms range from “interpersonal behaviors (e.g., when and how many children to have), social practices (e.g., dress, speech, dominance, child rearing), to political actions (e.g., holding and exercising public office, voting) and economic decisions (e.g., participating in the labor force, opening a bank account, starting a business, employing others).”¹⁴¹ Consistent with this definition, our interviews and analysis found that gender norms are consistently cited barriers to women’s participation in the workforce.

In Tunisia, Jordan, and Oman, gender specialists note that one of the challenges for women entering the workforce, particularly married women with children, is the perpetuation of traditional gender roles that expect women to be primary caretakers and housewives – even if they do work outside the home. Dr. Dababneh, Director of the Center for Women’s Studies at the University of Jordan observes, “Women in Jordan are constantly debating their role in society. Their move from the private sphere (the home) to the public sphere has been costly, because they end up playing double the part- working woman and housewife/mother.” The situation is similar in Tunisia according to Dr. Lilia Labidi, former Minister of Women’s Affairs. The double burden also partially explains women’s preference for public sector work, as greater work-hour flexibility allows them to balance domestic responsibilities with professional life.

Similarly, the World Bank (2018) shows that in Jordan, “societal expectations are that women should take care of all the household chores (cooking, cleaning, caring for children, taking them to school, etc.)... [while] men’s contribution to household chores is negligible, regardless of women’s work status, (except when it comes to feeding children).” In Oman, a study on women in the

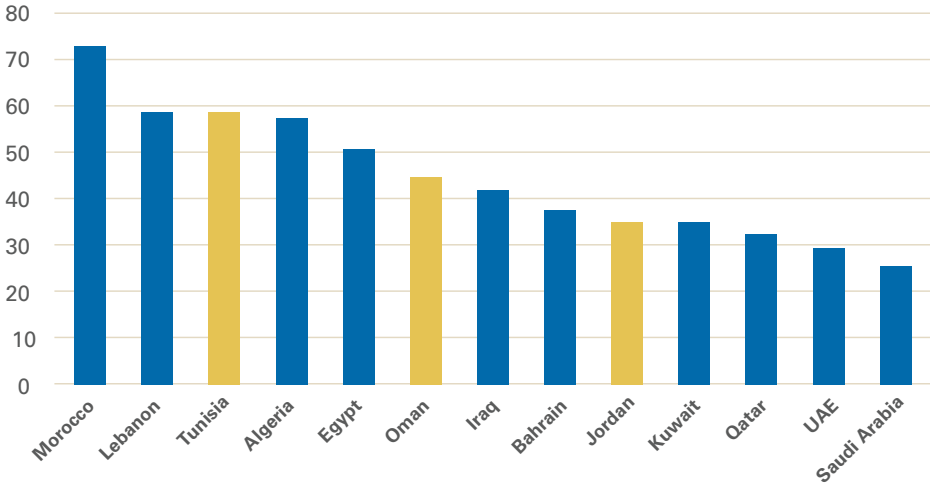
International Journal of Business and Management, notes that there is an “interdependence of work and family life which is especially problematic for women as a result of their greater family responsibilities,” which women carry as simultaneous obligations with their outside work, while men’s responsibilities are more typically sequential, with the result that “woman may be called on at work regarding a sick child whereas typically a father may fulfill role obligations after work hours.”¹⁴²

Social norms regarding gender also tend to influence the types of employment deemed appropriate for women, thereby affecting the choice of sectors and careers to pursue.¹⁴³ In our case study countries, working women are found mostly in the health, education and social services sector. Women employees and leaders in the public sector also tend to be limited to feminized roles, such as the ministries of healthcare, tourism, or handicrafts.

IMPROVING THE LEGAL ENVIRONMENT FOR WOMEN IN THE WORKFORCE

While many countries in the MENA region have reformed their laws pertaining to women’s rights and status in society, many reforms are needed in order to decrease any legal barriers to women in the workforce. According to the World Bank report, Women, Business and the Law 2019, the region’s average score stands at 47.37, “meaning the typical economy in that region gives women less than half the legal rights of men in the measured areas.” There are certainly variations across MENA. Morocco scores best with a total of 73.13, while Lebanon and Tunisia both are rated at 58.75. Jordan’s score is 35, and the lowest ranking in the region – and worldwide – is Saudi Arabia with a score of 25.53 (Figure 13).¹⁴⁴

FIGURE 13 | WOMAN, BUSINESS AND LAW INDEX SCORES IN ARAB COUNTRIES (2019)



Methodology: Using ten years (2007–2017) of Women, Business and the Law data, countries are scored across eight indicators of 4 or 5 binary questions, each represents a different phase of a woman’s career. Scores are calculated using the unweighted average of the questions within each indicator and scaling the result to 100. The final score is the average of the 8 indicators

Some of the key laws that require amendment include family status laws, which tend to sideline women in any decision-making related to the family or her own status. These laws affect inter-household dynamics. In Jordan, the World Bank study revealed that men and women “agreed that men are the ultimate decision makers in the household; including deciding for women on whether to accept a job offer or not.”¹⁴⁵ The Organization for Economic Co-operation and Development (OECD) (2017) finds that due to some elements in family status laws in MENA, “women often do not share the same rights as men to make decisions, pursue a profession, travel, marry or divorce, head a family, receive an inheritance or access wealth,” which further impacts their participation in the workforce. Strong

sexual harassment laws are also key for women joining and staying in the workforce. Very few countries in the region have enacted laws to protect women from sexual harassment in the workplace, rendering such environments as unsafe or unfriendly for women.

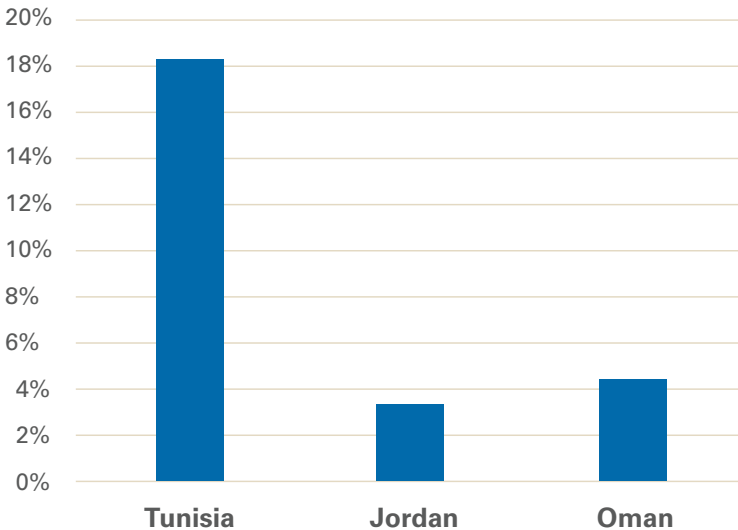
In addition to reforming laws, there also is a need to build capacity, particularly at the public sector and judicial levels, in order to ensure that any new laws are being implemented correctly. Nisreen Alami, an activist with SADAQA, an NGO focused on creating a women friendly working environment in Jordan, notes that there have been positive steps taken in amending the labor law to include paternity leave, and amending Article 72 by allowing a variety of models beyond just onsite workplace daycare and extending services to children of both working men and women. But she adds that the challenge remains to ensure such legislative advances are enforced and implemented.¹⁴⁶

EMPLOYMENT OPPORTUNITIES AND ECONOMIC STRUCTURES

Women in the MENA region are mostly found in the public sector, rather than the private sector, where gender pay gaps are much higher and workplaces aren't seen as "family friendly." Working hours in the public sector are shorter, maternity policies are more favorable, and jobs are considered more stable or secure. In Oman, a report issued by the National Centre for Statistics and Information (NCSI) finds that in 2017, 41 percent of women were employed in the public sector, while 25 percent in the private sector.¹⁴⁸ Similarly, in Tunisia, 36 percent of employed women work in the public sector.¹⁴⁹ A similar trend exists in Jordan, where in addition to working in public administration, women are also mostly found in the education and health sectors, which are two areas that are dominated by the public sector.¹⁵⁰

This dynamic of women employment predominately in the public sector is another bottleneck to women’s participation in the workforce. First, public sector employment in many MENA countries has been on the decline since the 1970’s. Assad et al. (2018) argue that in Algeria, Egypt, Jordan and Tunisia, “the contraction in public sector employment opportunities has not been made up by a commensurate increase in opportunities in the formal private sector, leading to increases in female unemployment or declines in participation.”¹⁵¹ Further, Harvard economist Ricardo Hausman et al. (2019) argue in that in Jordan, the traditionally “feminine jobs” that women take in education, health services and public administration have not grown fast enough to hire the large numbers of women earning university degrees. They add that “unless the country changes its areas of comparative advantage to reflect the growing endowment of educated and increasingly female workers, the accumulated human capital will be wasted.”¹⁵²

FIGURE 14 | SELF EMPLOYMENT AS A PERCENT OF FEMALE EMPLOYMENT IN TUNISIA, JORDAN, AND OMAN (2018)



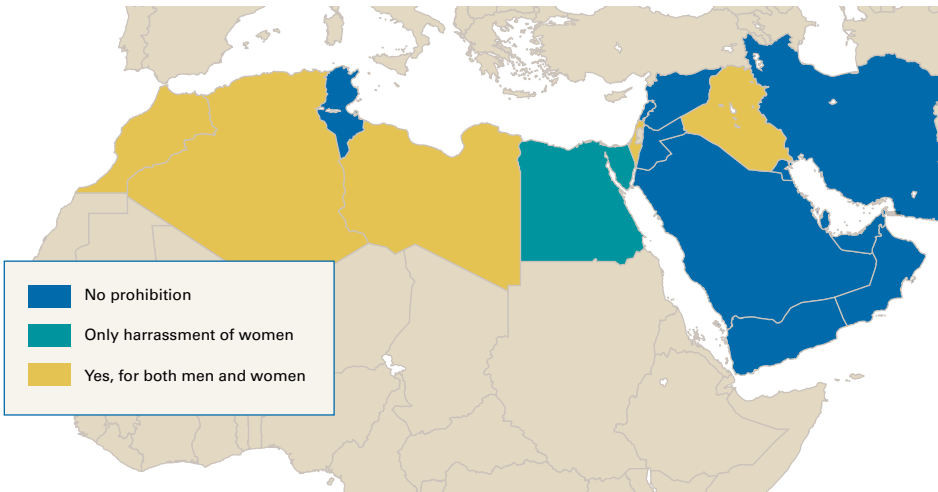
Source: World Bank Development Indicators, modeled ILO estimate, 2018

Another endemic economic barrier to FLFP are rules and conventions surrounding female control of assets, business ownership, and access to finance. According to the World Bank, the rate of self-employed women in the MENA region (as a percentage of employed women) stands at about 30 percent compared to 47.7 percent globally. In many MENA countries, female self-employment is a rarity. It is as low as 3.3 percent in Jordan and 4.4 percent in Oman. Abysmally low levels of self-employment can be partially attributed to challenges facing women in accessing bank loans or micro-financing tools, but also indicates major gaps in women ownership of assets and financial accounts. According to the IFC's (2017) measurement of the worldwide MSME financing gap, the MENA region has the second highest gap for woman owned micro-enterprises (29 percent), representing "\$16 billion [USD] gap between the credit female entrepreneurs in MENA need and the financing they receive."¹⁵³

FAMILY FRIENDLY WORKPLACES & POLICIES

As noted earlier, the paucity of women or family friendly workplace policies further limits women's participation in the workforce. This includes favorable maternity leave and paternity leave policies, flexible working hours, anti-harassment legislation to protect women in the workplace, as well as childcare services on or off site. In Tunisia, Dr. Soukaina Bouraoui of the women's advocacy NGO, CAWTAR noted that for women of her generation, childcare services were not much of a hurdle because children were cared for by grandmothers, who were not employed at the time. Today, however, young women are in need of daycare services, especially when their mothers are working, and are thus unable to care for their grandchildren.¹⁵³

FIGURE 15 | MENA COUNTRIES WITH EXPLICIT PROHIBITION OF SEXUAL HARASSMENT IN THE WORKPLACE (2019)



Source: World Policy Center. Retrieved on October 2019 from <https://www.worldpolicycenter.org/policies/is-sexual-harassment-explicitly-prohibited-in-the-workplace>

There are some positive steps being taken by a few countries in the region to address some of the factors that contribute to unfriendly working environments for women. In Jordan, a “flexible hours” by-law was passed in 2017, prompting King Abdullah II of Jordan himself to celebrate it in a tweet on International Women’s Day: “Celebrating Jordanian women, we look forward to the flexible working hours by-law to economically empower them and expand the job market #ABH”¹⁵⁴ In Tunisia, a new draft maternity leave law has been introduced extending leave from two to three months and providing time off for fathers as well.¹⁵⁵ Further, certain MENA countries have passed legislation to protect women from harassment in the workplace.

Another barrier to women’s participation in the workforce is the paucity of adequate and safe transportation services. In Tunisia, safe and secure transportation has long been a challenge for women,

most pressingly for rural women employed in the agriculture sector (which make up 58 percent of the rural workforce). Several recent incidents of rural women in Tunisia being victims of road accidents while walking to work indicates the danger of unsafe and limited transportation services. While each accident has triggered awareness campaigns on social media over the past few years, only this year did the Government of Tunisia announce that it has authorized the provision of public transports for agricultural workers outside authorized zones to ensure the safety and dignity of women agricultural workers.¹⁵⁶ In Jordan, the Minister of Transportation Anmar Khasawneh noted that 47 percent of Jordanian women “cite a lack of public transportation as the reason they have not joined the labor force.” This is certainly in line with findings of various World Bank reports on women and workforce participation.

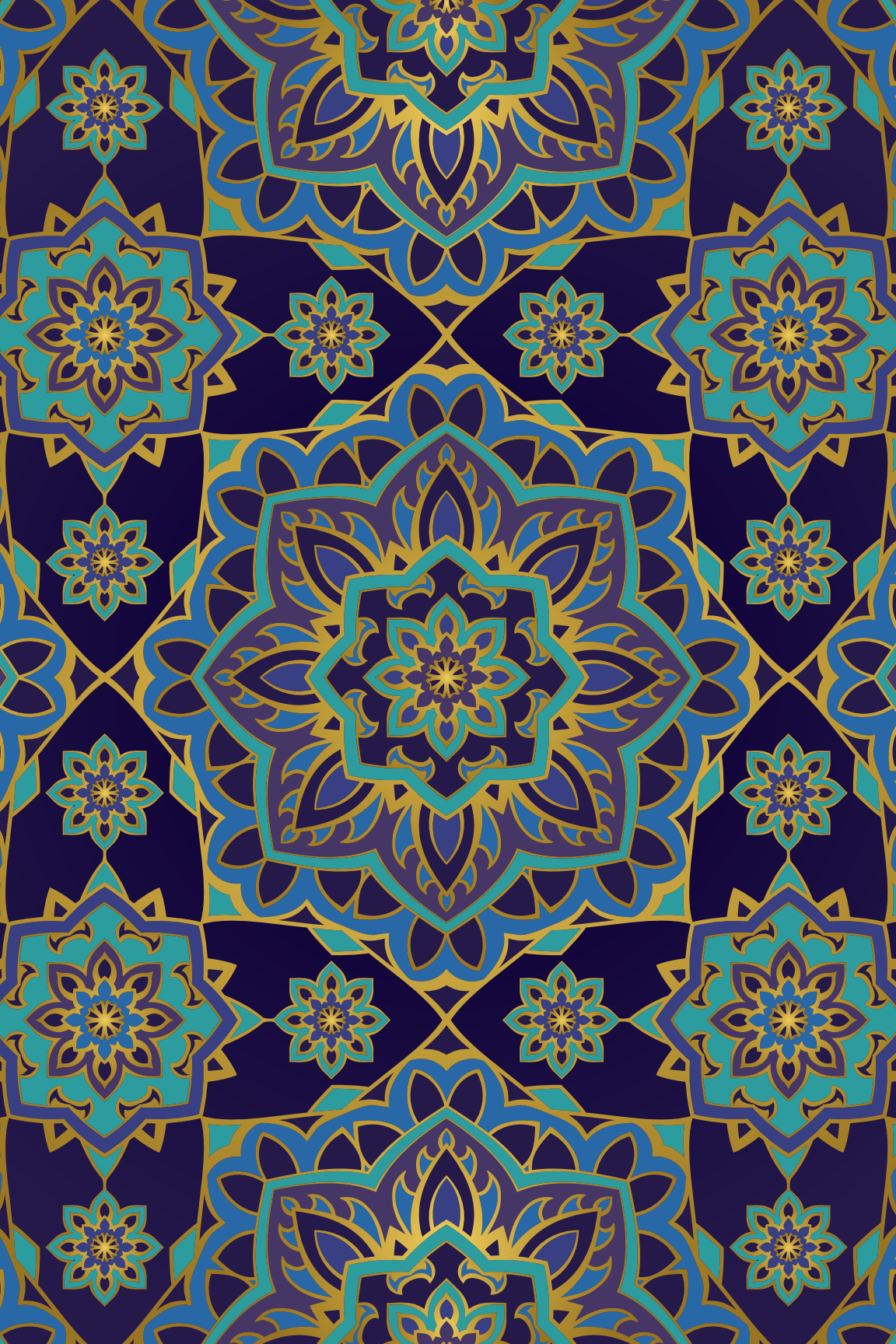
Unlocking the Potential

The barriers facing increased FLFP are multifaceted and require interventions at the legal, political, economic and social levels. The key vulnerability of the “MENA Paradox” is that women are acquiring university credentials at a higher rate, are exceeding men in enrollment and outcomes (especially in our three case study countries) but these human resource gains are not transferring to the workforce. The failure to include women therefore represents a loss of investment in skills which are needed for a highly productive economy. Furthermore, the potential loss for growth rises to the trillions of dollars for the whole region. Clearly these economic gains would offset any cost associated with policies to increase FLFP.

While some countries are addressing the barriers by passing new legislation, creating training opportunities for women, and creating funds for women to create their own businesses, the road ahead is a long one. It requires strong political will on the part of MENA governments, as well as a proactive stance from the private sector to reduce the gender pay gap, offer flexible work arrangements, and improve the work environment for women. Public campaigns are also necessary to improve perceptions of women pursuing careers. These interventions must take the form of direct education campaigns and subtler changes to messaging in the public sphere. The government can also help by appointing qualified women to important roles outside of traditionally feminine sectors. Otherwise, as noted earlier, this failure to take advantage of MENA's female human capital will prove to be a monumental loss for the region.



The Medina of Tunis at Bab Babr, Tunis, Tunisia



Conclusion

The problems facing the workforce in the Middle East and North Africa are complex. The authors of the present report have attempted to break down the problem into supply and demand side factors. The general field of workforce development practice tends to focus on the supply side, pertaining to education, skills acquisition and certification. However, the workforce development situation in MENA requires a careful examination of the private sector as well, given slow generation of needed jobs. Therefore, we have presented an analysis on the following areas. On the supply side: the skills mismatch, education system, and technical and vocational training – and on the demand side: the private sector, entrepreneurship, and access to finance. Lastly, we examine the multiple demand and supply side characteristics behind endemically low female labor force participation.

This report has attempted to address this question through a comparison of three countries from major sub-areas of the MENA region, Tunisia from North Africa, Jordan from the Levant, and Oman from the Gulf. These three were chosen for their unique geographic contexts, but also for relative comparability in population sizes and economic scale. The analysis draws on multiple primary

and secondary sources of data. An interview methodology was developed through a preliminary canvassing of workforce experts in Washington, DC, and then used to interview public and private officials in the comparison countries. This report also uses multiple resources from think tanks, consulting firms and academia that were used to develop the interview framing in addition to filling gaps in the primary data.

Concerning the workforce supply, one fundamental feature in these three countries is the sharp increases of enrollment in their higher education systems over the last 20 to 30 years. However, the skills mismatch explains why many jobs go unfilled despite the availability of candidates. According to surveys of employers, this mismatch is represented largely by a deficit in essential skills imparted through the education system in management, teamwork, leadership, communication, and oral and written presentation. The failure to emphasize these skills and address other quality issues in the education system is partly a result of the rapid increase in enrollment without parallel reforms to pedagogical approaches, or dialogue with the private sector to identify the jobs and skills most needed in the market. The tracking system, which culminates in the general education exam at the end of secondary school, also leads to an over and undersupply of certain specializations because of its heavy influence on career choices relative to exam performance. This rigid placement system does not address market signals well and also contributes to the mindset that one must focus on the outcome of the general education exam rather than explore career interests and personal attributes. This selective mindset has also deprived attention to the Technical and Vocation Training pathway, which is stigmatized as a destination for academic failures. TVET outcomes are also held back by a lack of qualification frameworks with sustained input and investment from the private sector itself.

Next, we addressed issues arising from the private sector. All three countries achieved development historically through growing

the public sector and the private sector was later encouraged to drive employment and integration into global markets. However, their economies still demand more technically skilled labor, while citizens prefer enrolling in higher education. We also see that their private sectors consist of an abundance of low-productivity micro-enterprises. While SMEs provide more and higher quality jobs, the necessary expansion of these enterprises is limited. We believe this is in part due to the financing gap and lack of available liquidity. Many new efforts to encourage entrepreneurship are emerging to address the problem of low business density, however newly established firms will need consistent access to financing and technical support in order to grow into SMEs.

Lastly, we devote attention to the problem of endemically low female labor force participation. In all three countries, more women than men are enrolling in universities and performing higher as well, but their rate of economic participation is still remarkably low. Given that women are expanding the ranks of the educated workforce, their lack of economic participation represents a loss of human capital investment. The low level of FLFP is due to the absence of policies making workplaces friendlier to women and families (especially in the private sector), lack of improved public transportation, and also enduring social norms that dictate both a woman's decision to take a job, and also what careers are deemed acceptable.

Recommendations

Countries in the region need to make numerous reforms to address both supply and demand aspects of the workforce formula. This report makes a number of policy recommendations addressed to key stakeholders of the workforce development ecosystem including governments in the region, the private sector, the education sector as well as donor and development agencies focused on economic development in MENA.

REALIGNING EDUCATION SYSTEMS TO LABOR MARKET NEEDS

MENA must address the skills mismatch and quality of education. Higher education and TVET must institutionalize communication with the private sector through direct board management, but more importantly, by institutionalizing a system for tracking labor market data. The private sector should also organize cooperative associations in order to develop clear and measurable qualification frameworks. Assessments and evaluations of curricula by higher educational institutions should include leaders in the private sector representing relevant fields of study.

REFORMING EDUCATION PEDAGOGIES IN MENA

Education systems must transition from rote and didactic to interactive and participatory learning methodologies, recruit and train teachers in those methodologies, and encourage the development of curricula that emphasize leadership, critical thinking, self-assessment, and presentation skills. These reforms should also include early on messages on workforce and career readiness. Further, gender mainstreaming of curricula is crucial to ensure references to women and work are gender positive.

RETHINKING ASSESSMENT AND EVALUATION

Reforming the educational system should also include a fundamental reconfiguration of the tracking system and general education exam. Multiple exams at the primary and secondary levels should be implemented and tied with targeting deficiencies in a student's learning, rather than prescribing their career path. We also believe making re-take exams and subject choices available are positive reforms.

UPGRADING THE TVET PATHWAY

TVET institutions should provide a credential pathway that can lead

to admission to higher education if the student performs accordingly. This makes TVET less of a terminal outcome and can lead to a greater variety of professional skillsets. New funding mechanisms should be explored to increase investment and involvement of the private sector, especially in updating technology. Instructors with industry experience should be recruited through exchanges and salary matching. TVET should also stimulate recruitment by providing incentives such as pre-enrollment to engage students who prefer a fast track to the workforce rather than pursuing further academics. Lastly, TVET institutions, responsible ministries, and the private sector should work together to clarify and demonstrate the career path for related jobs and careers.

STRENGTHENING THE ENTREPRENEURSHIP ECOSYSTEM

Regarding the private sector, entrepreneurship support should be broadened to a greater number of viable sectors. More importantly, each country should develop a structure for combined financial and non-financial support to SMEs on the one-stop-shop model. Supplementing the financial sector by offering matching grants or credit guarantees through a dedicated fund should help successful SMEs increase their productivity so they can reduce their credit risk in lending markets. Dedicated SME units at commercial banks could also provide more institutional support to SMEs and improve banks assessment of lending risks. Lastly, these countries should continue to advance implementation of insolvency regulation.

INCREASING FEMALE LABOR FORCE PARTICIPATION

In order to increase female labor force participation, governments must enact strong maternity leave and paternity leave laws, enable reliable and safe public transportation (especially in rural areas) and pass legislation that penalizes sexual harassment in the workplace. It is also crucial that governments take a proactive step in addressing the social norms limiting women's access to the workplace by

empowering a Ministry of Women's Affairs, appointing qualified women to official positions outside of traditionally feminine roles, and improving messaging in the education system and the public sphere that depicts women pursuing professional careers.

ADDRESSING SOCIO-CULTURAL NORMS AND MINDSETS THROUGH A HOLISTIC APPROACH

Changing norms and mindsets regarding public sector vs. private sector employment, women's work, vocational jobs and entrepreneurship requires a holistic approach that includes various stakeholders as well as different types of interventions. Educational curricula reforms, for example, must address socio-cultural mindsets through strategic messaging, images and videos that highlight the needed behavioral or attitudinal changes. This approach should also include creating success stories using past and present role models, road shows, TV shows, soap operas, films, as well as gaming. Creating high-level national competitions for entrepreneurship and vocational or technical work elevates the status of these careers. Working with local community leaders and families to educate them and raise awareness on stigmatized jobs also helps change attitudes over time.

INVOLVING LOCAL STAKEHOLDER IN DESIGNING INTERNATIONAL DEVELOPMENT INTERVENTIONS

Working closely with local governments, the private sector and community leaders in the MENA region to implement projects focused on workforce development through dialogue, town halls, focus groups and surveys is crucial to the design of these interventions. Further, building capacity of local partners in MENA to implement development projects lessens the dependency factor in the long term and ensures effective and efficient implementation of donor funds.

Moving Forward

This report provides a window into the ecosystem of workforce development in the MENA region. The key findings and recommendations we present outline the main areas of concern based on our review of the literature and our conversations with experts and stakeholders. Yet there are many more opportunities for future research that we identified through the course of this investigation. Many of these areas derive directly from our findings, and others are based on observations that we believe merit dedicated exploration. Ultimately, we envision this report to be a foundation for many other deep dives on specific aspects of the workforce development challenge in MENA.

Many of the problems highlighted above are related directly to information asymmetries in the labor market. Therefore, we need a deeper understanding of the school to work transition in MENA. This should involve investigating the role of career centers and support services in secondary and post-secondary institutions. Organizations such as Silatech also collect data on employment outcomes at career centers, but we know little of their impact. We also need to better understand the role of the family unit in education and career planning, how they access information, and how they assign value in education outcomes and career milestones.

We also addressed the role of qualification and skills frameworks in the education system. The private sector itself is crucial to articulating needed skills and must coordinate within their fields to develop measurable standards. Therefore, we believe it's important to know what role business associations or other civil society entities can play in developing frameworks for measuring and evaluating specific skills and rendering them into pedagogies that can be implemented in the education system. It is also necessary to investigate if widely recognized licenses and certifications deriving

from those frameworks have an impact on reducing informality in the private sector.

We know little of the standards for human resources practices in the MENA region. For example, we don't know how many SMEs have a dedicated HR department or function, at what size companies typically acquire one, or if HR departments are professionalized. It is also critical to know how they access labor market information, how they recruit candidates, what kind of skills they require, and the character of their relationships with educational institutions.

There is an emerging body of work focusing on the role of MENA diaspora networks in promoting trade, investments, as well as in the exchange of knowledge and expertise. Given the brain drain challenge that the region faces, it is essential to better understand the activity of diaspora networks and explore opportunities for their involvement as stakeholders in the larger workforce development ecosystem.

Last, we need to understand if the MENA region is prepared for the future of work and technological disruptions. This question requires a careful assessment of what technologies are transforming the global labor market, but also which ones will most directly impact MENA in the near and long term. Technology could also bring many benefits to the region by increasing agricultural productivity, water conservation, reducing demand for foreign labor, and as we have seen, increasing the potential for job creation in the digital economy.

Appendix 1: Interview Questionnaire and Methodology

FRAMING QUESTIONS

- How would you define/frame the workforce challenge facing your country?
- What is your policy/strategic approach toward creating jobs and preparing people for the world of work?
- What are the main factors that determine job selection among employers and candidates?

SUPPLY

- Access
 - What are the main barriers people face in your country to enter the workforce?
 - Is education at all levels available/accessible to all?
 - Is TVET part of the national employment strategy?
 - » How is the TVET system structured? Is it fully utilized?
 - » What licenses are required to work in vocational professions?
 - » How do universities and TVET institutions recruit candidates?
 - » Do workers access jobs, educational opportunities regionally or abroad?
 - » In what sectors or countries?

- Quality
 - Are graduates (secondary or tertiary) employable or ready for the workforce?
 - » If no, what skills are the most lacking?
 - How is student performance evaluated? At what levels of education?
 - » Are schools and administrators accountable for performance?
 - How are teachers recruited, trained, and assigned?
 - Do employers and institutions recognize and prepare certification standards?
 - » Are they widely recognized?
 - How is quality of university and TVET programs measured?
 - » How do students choose schools and programs?
- Connectivity
 - What ministries are responsible for workforce development?
 - » What mechanisms streamline communications across ministries?
 - » How does government work with private sector, NGOs, and international donors on workforce development programs?
 - How do ministries identify sectors in need of labor and generate recruitment and training strategies for those jobs?

- Do TVET and universities have institutional linkages to the private sector?
- What programs help graduates transition to their first jobs?
- What role does migrant labor play in the economy?

DEMAND

- Entrepreneurship
 - What are the main barriers facing your country in creating job opportunities?
 - » Are there available jobs that go unfilled?
 - How many steps are involved in establishing a business and what is the cost?
 - Can startups and entrepreneurs access financing to start a business?
 - » What kind of guarantees are required to take out loans?
 - What are the consequences of failure in starting a business, socially and professionally?
- Expansion
 - Do companies and investors think short term or long term?
 - What sectors does the government target for growth?
 - » Does the government incentivize local and foreign investment?

- What plans does the government have for infrastructure investment?
 - » In what areas do you see the most productive investment?
- How do local SMEs access regional or international markets?
 - » Does the government assist in encouraging exports?
 - » Are there barriers to accessing profitable markets?
- How do companies assess skill levels and recruit qualified labor?
- Are human resources in the private sector equipped for recruitment, development and retention?
 - » What direct opportunities for training and certification are provided in the private sector?
- Regulation and Procedure
 - Is it easy or difficult to settle a trade dispute?
 - Do companies have voice in revision or creation of regulations?
 - What are the policies for hiring and dismissal in the public and private sector?
 - Does the government guarantee or subsidize social security benefits for public and private sector employees?

Appendix 2: List of Interviews

JORDAN

Adey Salamin, Founder. OpenSouq.com. May 21, 2019.
Amman, Jordan

Alaa Einsheiwat, National Skills Council. May 20, 2019.
Amman, Jordan

Ali Kamel, The World Bank Mideast Office. May 22, 2019.
Amman, Jordan

Amanda Kelleher, Ghazi al Daboubi and Haifa Al Attia,
Luminus College. May 20, 2019. Amman, Jordan

**Angie Haddad, Charlie Wilson Doom, Haneen Rasheed and
Kail Padgett**, USAID; Fred Aziz. Commercial Attache of the
American Embassy in Jordan. May 22, 2019. Amman, Jordan

Deema Bibi, CEO. Injaz. May 27, 2019. Amman, Jordan

Dr. Walid Al Maani, Minister. Ministry of Higher Education. May
22, 2019. Amman, Jordan

Fadi Daoud, Talal Abu Ghazaleh (TAG) Knowledge Center. May
23, 2019. Amman, Jordan¹⁵⁷

Hamdan Yacoub and Rana Al Ansari, Ministry of Labor. May
22, 2019. Amman, Jordan

Husam Hammo, Jordanian Entrepreneurship and Innovation
Association (JEIA). May 21, 2019. Amman, Jordan

Kareem Shaban, CIPE Jordan. May 19, 2019. Amman, Jordan

Luma Fawaz, CEO. Oasis 500. May 19, 2019. Amman, Jordan

Mohammad Al-Issess, Minister. Ministry of Planning and

International Cooperation. May 23, 2019. Amman, Jordan

Mohammad Bataineh, Chairman. The American Chamber of Commerce. May 22, 2019. Amman, Jordan

Mohammad Jinni, CSR Manager. CISCO Jordan. May 19, 2019. Amman, Jordan

Mothanna Gharaibeh, Minister. Ministry of Digital Economy and Entrepreneurship. May 18, 2019. Amman, Jordan

Nidal Bitar, Int@j. May 20, 2019. Amman, Jordan

Reem Khasham and Zaid Arida, Hussein Technical University (HTU). May 19, 2019. Amman, Jordan

Yousef Shamoun, Akhtabout and Zen HR Solutions. May 20, 2019. Amman, Jordan

OMAN

Amjaad Al Hinai and Dr. Heba Aziz, GUtech. June 19, 2019. Muscat, Oman

David Pender, Fatima Sualiman Al Azri and Ishaq Khalfan Al Busaidi, Ithraa'. June 18, 2019. Muscat, Oman

Dr. Hana' Ameen and Dr. Zamzam Al Lamki, Ministry of Higher Education. June 16, 2019. Muscat, Oman

Dr. Salim Zuwaid and Sheikha Al-Makaini, Sultan Qaboos University. June 16, 2019. Muscat, Oman

Faten Hani, Oman University (MoHED). June 17, 2019. Muscat, Oman

Khalid Al Safi Al Haribi, Riyada Impact. June 18, 2019. Muscat, Oman

Safia Al Rashidi, and Safi Hamoud Saif Al Riqadi, Ministry of Manpower. June 17, 2019. Muscat, Oman

Samira Faraj and Faraj, Noor Majan Training Institute. June 15, 2019. Muscat, Oman

Sawsan Al Lawati, National Center for Statistics and Information (NCSI). June 19, 2019. Muscat, Oman

Yousef Al Baluchi, Oman Vision 2040. June 16, 2019. Muscat, Oman

TUNISIA

Ali Ayadi, CIPE Tunisia. May 16, 2019. Tunis, Tunisia

Ali Mnif, Director. Silatech Tunisia. May 14, 2019. Tunis, Tunisia

Annouar Ben Kaddour, Union Generale Tunisienne du Travail (UGTT). May 14, 2019. Tunis, Tunisia

Douja Gharbi, Connect. May 16, 2019. Tunis, Tunisia

Dr. Soukaina Bouraoui, President. The Arab Women Center for Training and Research (CAWTAR). May 16, 2019. Tunis, Tunisia

Fouzia Kamoun, Lamjed Battaieb, Tahar Ben Lakhdar and Zied Alaya, Esprit. May 15, 2019. Tunis, Tunisia

Hatem Bin Salem, Minister. Ministry of Education. May 13, 2019. Tunis, Tunisia

Jennifer Smith, Amideast Tunisia. May 16, 2019. Tunis, Tunisia

Jonathan Fischer and Mike Elkin, U.S. Embassy in Tunisia. May 14, 2019. Tunis, Tunisia

Lilia Labidi, Former Minister of Ministry of Women's Affairs in Tunis and Former Wilson Center Fellow. May 12, 2019. Tunis, Tunisia

Luiz Hernandez, USAID. May 14, 2019. Tunis, Tunisia

Mondher Ben Ayed, Founder and CEO. TMI Private Sector Leader. May 13, 2019. Tunis, Tunisia

Redwan Massoudi, Civil Society Representative. Center for the Study of Islam and Democracy. May 13, 2019. Tunis, Tunisia

Sami Salini, Union Tunisienne de l'Industrie, du Commerce et de l'Artisanat (UTICA). May 14, 2019. Tunis, Tunisia

Samira Fendri, Ministry of Employment and Vocational Training. May 16, 2019. Tunis, Tunisia

Ulrich Brunnhuber, European Development Bank in Tunis. May 14, 2019. Tunis, Tunisia

Yehia Hourri, Flat Labs. May 5, 2019. Tunis, Tunisia

Youssef Fennira, Director General of Agence National Pour l'Emploi et le Travail Indépendant (ANETI) and CEO of CORPS. May 14, 2019. Tunis, Tunisia

Zied Ladhari, Minister. Minister of Development, Investment and International Cooperation. May 15, 2019. Tunis, Tunisia

QATAR

Ahmad Hasnah, President, and Mayrah Al-Dafa. Hamad Ben Khalifa University. June 13, 2019. Doha, Qatar

Aysha Al Mudahka and Houria Ahmed, Qatar Foundation. June 13, 2019. Doha, Qatar

Dr. Stephen Wright and Nada Abduljalil Al Mahmeed, Hamad Ben Khalifa University – College of Humanities and Social Sciences. June 12, 2019. Doha, Qatar

Fathi Rihani, Khoulood Ali Al Hajri and Rauf Mammadov, Qatar Development Bank (QDB). June 12, 2019. Doha, Qatar

Mahboobeh Majedzadeh, Mohammed Al Emadi and Sabah Ismail Al Haidoos, Silatech. June 13, 2019. Doha, Qatar

WASHINGTON D.C.

Ahmed Hosni and Maha Abdullah, Embassy of Egypt. February 27, 2019. Washington D.C., USA

Almedina Music and Samira Halabi, World Bank. April 8, 2019. Washington D.C., USA

Anthony Hagger and IhabOthman, US Sudan Business Council. April 11, 2019. Washington D.C., USA

Bachir Tawk, Embassy of Lebanon. February 22, 2019. Washington D.C., USA

Daniel Rubinstein, Ambassador. U.S. Embassy in Tunisia. April 25, 2019. Washington D.C., USA

David Fenner, Professor. Middle East Center of the University of Washington. March 14, 2019. Washington D.C., USA

Dr. Al Quraishi and Jafar Kais, Embassy of Iraq. April 16, 2019. Washington D.C., USA

Dr. Al-Saidi and Dr. Jabri, Embassy of Oman. February 27, 2019. Washington D.C., USA

Fawaz Bilbeisi, Advisor to the Executive Director. World Bank. April 8, 2019. Washington D.C., USA

Fayçal Gouia, Ambassador and Abdeljalil Ben Rabeh, Debuty Charged of Mission. Embassy of Tunisia. March 4, 2019. Washington D.C., USA

Gary Wasserman, Author of “The Doha Experiment”
Washington D.C., USA

Ibrahim Saif, Jordan Strategic Forum. April 16, 2019.
Washington D.C., USA

Julian Messina, Inter-American Development Bank. February 7,
2019. Washington D.C., USA

Nancy Taggart, USAID MENA Office. April 16, 2019.
Washington D.C., USA

Ronit Avni, Localized. March 21, 2019. Washington D.C., USA

Ambassador Patrick Theros, U.S Embassy in Qatar. February
19, 2019. Washington D.C., USA

Wafa Boughaighis, Ambassador, Embassy of Libya. March 29,
2019. Washington D.C., USA

Endnotes

- 1 Abu Ghida, Dina and Thacker, Simon. (2015). *Workforce Development: Middle East and North Africa Regional Synthesis Report*. The World Bank.
- 2 Jacobs, Ronald and Hawley, Joshua. "Emergence of Workforce Development: Definition, Conceptual Boundaries, and Implications" in R. MacLean & D. Wilson, eds. (2009). *International Handbook of Technical and Vocational Education and Training*. Amsterdam: Kluwer. Pg. 11
- 3 Ibid. Pg. 12
- 4 National Security Strategy. December 2017. Pg.48
- 5 Almamlakatv. 24 September 2019. "The King calls to Wake up to the Spreading Threat of Terrorism and Extremism." Almamlakatv. Accessed from www.almamlakatv.com (Arabic)
- 6 USAID. 2011. *The Development Response to Violent Extremism and Insurgency*.
- 7 Assad, Ragui, Ghazouani Samir, and Krafft Caroline. "The Composition of the Labor Supply and Unemployment in Tunisia." In in Assaad, Ragui and Boughzala, Mongi (2018) *The Tunisian Labor Market in an Era of Transition*. Oxford: Oxford University Press. Pg. 1
- 8 Ibid 3
- 9 Ibid 7
- 10 Ibid 10
- 11 Ibid 12
- 12 Ibid
- 13 Ibid 28
- 14 IACE (2018). *Rapport National sur l'emploi*. Tunis. Pg. 5
- 15 Ghali, Sofiane and Zitouna, Habib. "Labor Demand in Tunisia: Size, Structure, and Determinants." in Assad, Ragui and Boughzala, Mongi (2018) *The Tunisian Labor Market in an Era of Transition*. Oxford: Oxford University Press. Pg. 57
- 16 Ibid 11
- 17 UPMI and CIPE. (2015). Pp.
- 18 Amer, Mona. "The School to Work Transition of Jordanian Youth." In Assaad, Raghui Ed (2018). *The Jordanian Labor Market in the new Millenium*. Oxford: Oxford University Press. Pg. 70

- 19 Ibid 71
- 20 Assaad, Raghui. "The Structure of the Labor Market in Jordan." In Assaad, Raghui Ed (2018). *The Jordanian Labor Market in the new Millenium*. Oxford. Oxford University Press. Pg. 9
- 21 Ibid
- 22 Said, Mona. "Wage Formation and Earnings Inequality in the Jordanian Labor Market." In In Assaad, Raghui Ed (2018). *The Jordanian Labor Market in the new Millennium*. Oxford. Oxford University Press. Pg. 161
- 23 Interview with Dr. Walid al Maani, Ministry of Education, May 22, 2019
- 24 Ibid
- 25 Jordan Strategy Forum. 2019. The Jordanian Economy over two Decades: Achievements and related Challenges. Amman: Jordan Strategy Forum. Page 25 (Arabic)
- 26 Education for Employment, Islamic Development Bank, and International Finance Corporation. "Educa-tion for Employment: Realizing Arab Youth Potential." Pg. 38
- 27 Sultanate of Oman Ministry of Higher Education. 2016. Graduate Survey: Employer Trends in Hiring Graduates in the Private Sector. Page 46 (Arabic)
- 28 Sultan Qaboos University. 2016. The National Project to Align Outcomes in Higher Education with the Needs of the Labor Market in the Sultan Oman. (Arabic)
- 29 Oldest higher-learning institution, oldest university. Retrieved from Guinness World of Records:, https://www.guinnessworldrecords.com/world-records/oldest-university?fb_comment_id=884703521549256_947923768560564
- 30 Dorn, Emma and al. 2017. Drivers of student performance: Insights from the Middle East and North Af-rica. Retrieved from McKinsey & Company: <https://www.mckinsey.com/industries/social-sector/our-insights/drivers-of-student-performance-insights-from-the-middle-east-and-north-africa>
- 31 Limam, Imed and Ben Hafaiedh, Abdelwahab. "Education, Earnings, and Returns to Schooling in Tuni-sia." in Assaad and Boughzala Eds. 2014. *The Tunisian Labor Market: In an Era of Transition*. Oxford: Oxford University Press. Pg. 203
- 32 Masri, Safwan., 2017. *Tunisia: An Arab Anomaly*. New York: Columbia University Press. Pg. 252 , 2017, page 252
- 33 Ibid, 282

- 34 Limam, Imed and Ben Hafaiedh, Abdelwahab. Pg. 201 Limam, Imed and Hafaiedh, Abdelwahab. 2017. Education, Earnings, and Returns to Schooling in Tunisia. *Economic Research Forum*. Pg. 201
- 35 Boughzala, Mongi. 2014. "Employment and the Functioning of the Labor Market in Tunisia." in Assaad and Boughzala Eds. 2014. The Tunisian Labor Market: In an Era of Transition. Oxford: Oxford University Press. Pg. 276
- 36 Ibid
- 37 UPMI and CIPE. (2015.). *Porter la Voix des acteurs économiques locaux pour la réforme*. Tunis
- 38 Interview with Esprit University Faculty. Tunis, Tunisia, May 15, 2019.
- 39 Kinghussein.gov. "Education in Jordan: a Commitment to Excellence". Accessed from: <http://www.kinghussein.gov.jo/resources3.html>
- 40 Burke, Dolores and Al-Waked, Ahmad. 1997. "On the threshold: Private Universities in Jordan." *International Higher Education*
- 41 Kinghussein.gov.
- 42 Interview with Hana' Ameen
- 43 Interview with Dr. Walid Maani, Jordan's Minister of Education, Amman, Jordan, May 22, 2019.
- 44 Sultan Qaboos University. 2016. Page 6-7 (Arabic)
- 45 Ministry of Higher Education. 2019. Summary of Suggested Regulations for Employing Job Seekers. Muscat. Page 9 (Arabic)
- 46 Interview with Hanae Amine and Zamzam Alamki, Senior Adviser of Research Ministry of Higher Education, Muscat, Oman, Jul 8, 2019
- 47 Interview with Dr. Walid Maani, Jordan's Minister of Education Dr. Walid Maani, Amman, Jordan, May 22, 2019.
- 48 The Education Council. 2018. Oman Education Strategy 2040. Pg. 19
- 48 Arab Knowledge Report: Youth and Localization of Knowledge 2014, UNDP & Mohammad Bin Rashid Al Makhtoum Foundation, page 17.
- 50 Montanari, Johanna, "Survey sounds clarion call to plug brain drain," Jordan Times, August 8, 2019
- 51 Jordan Strategy Forum. July 2018. "Jordanian Expatriates in the Gulf." Amman. Pg. 4

- 52 "Qatar-Jordan committee to ensure 10,000 jobs for Jordanians." July 2018. Retrieved from The Peninsula, July 18, 2018, <https://www.thepeninsulaqatar.com/article/18/07/2018/Qatar-Jordan-committee-to-ensure-10,000-jobs-for-Jordanians>
- 53 International Initiative for Impact Evaluation. Youth Employment Evidence Gap Map. <http://gapmaps.3ieimpact.org/evidence-maps/youth-employment-evidence-gap-map>
- 54 Kluge et al. 2017. "Interventions to improve the labour market outcomes of youth: a systematic review of training, entrepreneurship promotions, employment services, and subsidized employment interventions." *Campbell Systematic Reviews*. Pg. 12.
- 55 Tripney et al. 2013. "Technical and Vocational Education and Training (TVET) Interventions to Improve the Employability of Young People in Low and Middle Income Countries: A Systematic Review." *Campbell Systematic Reviews*. Pg. 9
- 56 Valeri, Marc. 2009. *Oman: Politics and Society in the Qaboos State*. New York: Columbia. Pg. 204; Limam, Imed and Ben Hafaiedh, Abdelwahab. "Education, Earnings, and Returns to Schooling in Tunisia." in Assaad and Boughzala Eds. 2014. *The Tunisian Labor Market: In an Era of Transition*. Oxford: Oxford University Press. Pg. 196
- 57 AbiNader, Jean. 5 June 2019. "Moroccan Graduates Face an Uncertain Future despite Efforts to Promote Youth Employment." *Morocco on the Move*. Accessed from moroccoonthemove.com
- 58 Limam and Ben Hafaiedh. 2014. Pg. 196
- 59 Office of the Prime Minister. 2016. *Education for Prosperity: Delivering Results, a National Plan for Human Resource Development 2016-2025*. Amman. Pg. 142
- 60 Ministry of Manpower. 2018. Annual Report 2018. Page 76, 90 (Arabic)
- 61 Masri, Safwan. 2017. *Tunisia: an Arab Anomaly*. New York: Columbia University Press. Pg. 282
- 62 Limam and Ben Hafaiedh. 2014. Pg. 195
- 63 ILO
- 64 OIT, AECID, ONEQ. 2013. *Analyse du système éducatif Tunisien*. Pg. 61
- 65 ILO. 2013. Pg. 62
- 66 Limam and Ben Hafaiedh. 2014. Pg. 196
- 67 Limam and Ben Hafaiedh. 2014. Pg. 197

- 68 Ministry of Labor. *Jordan's National Employment Strategy 2011-2020*. Amman. Pg. 44
- 69 Ibid 40
- 70 Office of the Prime Minister. 2016. Pg. 147
- 71 Valeri, Marc. 2009. Pg. 204
- 72 Ibid 208
- 73 Interview with Safia Al Rashidi, Ministry of Manpower. June 8 2019. Oman
- 74 UNESCO-UNEVOP. *World TVET Database: Oman*. May 2013. Bonn. Pg. 8
- 75 Interview with Kareem Shaaban.CIPE-JO. May 19, 2019. Jordan
- 76 Limam and Ben Hafaiedh. 2014. Pg. 196
- 77 Office of the Prime Minister. 2016. Pg. 148
- 78 Ibid
- 79 Office of the Prime Minister. 2016. Pg. 142
- 80 Oxford Business Group. 2017. "The Report: Oman 2017." Oxford
- 81 Office of the Prime Minister. 2016. Pg. 150
- 82 Interview with Luiz Hernandez (USAID), Jonathan Fischer, and Mike Elkin (S)
- 83 Interview with Mohammed Jannini, Cisco-Jordan, May 19, 2019
- 84 Interview with Khaled Al Safi Al Haribi. Riyadh. June 2018. Jordan
- 85 Interview with Haifa Al Attia, Amanda Kelleher, Ghazi al Daboubi. Luminus. May 20, 2019. Jordan
- 86 Interview with Hamdan Macoub and Rania Al Ansari, Ministry of Labor, May, 22 2019
- 87 Interview with Haifa Al Attia
- 88 Nasser, Ali and Rashid, Ala. (2018, forthcoming). A study of Employment Outcomes among Technical and Vocational Secondary Education Graduates in Egypt. Final Report. Cairo: Population Council.
- 89 Office of the Prime Minister. 2016. Pg. 148
- 90 OIT. 2013. Pg. 55
- 91 Interview with Khaled Al Haribi

- 92 Interview with Haifa Al Attia. Luminus. Jordan; Interview with Kareem Shaaban. CIPE. Jordan
- 93 Office of the Prime Minister. 2016. Pg. 148
- 94 OIT. 2013. Pg. 62
- 95 Interview with Luiz Hernandez, the USAID Representative in Tunis and Jonathan Fischer and Mike Elkin from the US Embassy in Tunis. May 14, 2019, Tunisia
- 96 Ibid. 148-148
- 97 Ibid. 154
- 98 Interview with Nidal Bitar and Alaa Einsheiwat,. Int@j and The National Skills Center. May 20, 2019. Jordan
- 99 Ministry of Manpower. 2018. Pg. 110
- 100 Interview with Safia Al Rashidi
- 101 MCC, Pg. 28
- 102 Ghali, Sofiane and Zitouna, Habib. 2018. "Labor Demand in Tunisia: Size, Structure, and Determinants." in Assaad, Ragui and Boughzala, Mongi. The Tunisian Labor Market in an Era of Transition. Oxford: Oxford University Press. Pg. 48
- 103 Millenium Challenge Corporation. 2013. Towards a New Economic Model for Tunisia. Pg. 25
- 104 Ghali, Sofiane and Zitouna, Habib. 2018.
- 105 Ibid 42
- 106 Ibid 43
- 107 Ibid 42
- 108 Boughzala, Mongi. 2018. "Employment and the Functioning of the Labor Market." in Assaad, Ragui and Boughzala, Mongi The Tunisian Labor Market in an Era of Transition. Oxford: Oxford University Press. Pp. 65, 69
- 109 Ibid
- 110 Hausman, Ricardo et al. 2019. "Jordan: the Elements of a Growth Strategy." Center for International Development, Harvard University. Working Paper no 346. Cambridge. Pg. 10
- 111 Assaad, Raghui. 2018. Pg. 15
- 112 Veleri 2009. 220

- 113 Interview with Hana' Ameen
- 114 Valeri. 2009. 223-224
- 115 Digital McKinsey. 2018. Entrepreneurship in the Middle East and North Africa: How investors can support and enable growth. Pg. 7
- 116 Silatech Website: <https://silatech.org/enterprise-development/>
- 117 Jordan - KAFD launches new investment fund. Retrieved from MENA FN: <https://menafn.com/1098757740/Jordan-KAFD-launches-new-investment-fund>
- 118 Interview with Lumma Fawaz, CEO. Oasis 500. May 19, 2019. Amman (Jordan)
- 119 Ibid
- 120 Interview with Husam Hammo, JEIA/Tamatem, May 21, 2019
- 121 Interview with Mothanna Ghareibeh, Minister of Digital Economy and Entrepreneurship. May 18, 2019. Jordan
- 122 Jordan Strategy Forum
- 123 Interview with Ali Kamel. World Bank. May 22, 2019. Amman
- 124 Valeri, Marc. 2009. Oman: Politics and Society in the Qaboos State. New York: Columbia. Pg. 204
- 125 Ministry of Higher Education. 2019. Page 11 (Arabic)
- 126 Interview with Faten Hani. Ministry of Higher Education. June 17, 2019. Oman
- 127 Wayne, Jamil. 2014. What Is Needed for Youth Entrepreneurship in MENA? Retrieved from *Huffpost*: https://www.huffpost.com/entry/a-needed-component-of-ent_b_5930970
- 128 Piza et al. 2016. "The Impact of Business Support Services for Small and Medium Enterprises on Firm Performance in Low and Middle-Income Countries: A Systematic Review." The Campbell Collaboration. Pg. 79
- 129 Millennium Challenge Corporation. 2013. Pg. 72
- 130 World Bank Group, SME Finance Forum, IFC. 2017. "MSME Finance Gap: Assessment of the Shortfalls and Opportunities in Micro, Small, and Medium Enterprises in Emerging Markets." Pg. 35
- 131 Interview with Ulrich Brunhubber, European Development Bank, May 14, 2019
- 132 Interview with Youssef al Baluchi, Oman Vision 2040, June 16, 2019
- 133 Interview with Khaled al Safi al Haribi, Riyadh, June 18, 2019.
- 134 World Economic Forum. 2018. The Global Gender Gap Index.

- 135 Ragui Assaad et al. March 2018. "Explaining the MENA Paradox: Rising Educational Attainment, Yet Stagnant Female Labor Force Participation." *Institute for Labor Economics*.
- 136 The World Bank. 2006. Gender Equality as Smart Economics. Pg.2
- 137 The Power of Parity: How Advancing Women's Equality Can Add 12\$ Trillion to Global Growth. Pg. 33-34
- 138 IMF. 2018. Opportunity for All: Promoting Growth and Inclusiveness in the Middle East and North Africa. Pg. 67
- 139 Wilson Center. 2018. MENA Women in the Workforce: Understanding Social Norms. Washington DC.
- 140 Assaad, Ragui and al. 2012. "Gender and the Jordanian Labor Market." Economic Research Forum. Pg. 143
- 141 The World Bank. 2018. Understanding How Gender Norms in MENA Impact Female Employment Outcomes. Pg. 26
- 142 Goveas, S. and Aslem, N. 2011. A Role and Contributions of Women in the Sultanate of Oman. *International Journal of Business and Management*. Vol. 6. No. 3
- 143 Assaad, Ragui and al. 2018. Explaining the MENA Paradox: Rising Educational Attainment, Yet Stagnant Female Labor Force Participation. IZA Institute of Labor Economics. Pg. 7
- 144 The World Bank. 2019. Women, Business and the Law. Pg. 9
- 145 The World Bank. Social Norms Executive Summary.
- 146 Alami, N. 2019. National Policies Should Prioritize Women's Labor Force Participation in Jordan. *Enheduanna Wilson Center Blog*.
- 147 ONA. 2018. NCSI : 41% women employed in public and 25% in private sectors in 2017. *MuscatDaily.com*
- 148 Statistique Tunisie. 2018. *Caractéristiques des agents de la fonction publique et leurs salaires 2012-2016*. Pg 10
- 149 Assaad, Ragui and al. 2012. Gender and the Jordanian Labor Market. Economic Research Forum. Pg. 105
- 150 Assaad, Ragui and al. 2018. "Explaining the MENA Paradox: Rising Educational Attainment, Yet Stagnant Female Labor Force Participation." IZA Institute of Labor Economics.
- 151 Hausman et al. 2019. Pg. 27

152 IFC. 2017. Pg. 39

153 Interview with Dr. Soukaina Bouraoui, President of The Arab Women Center for Training and Re-search (CAWTAR). Tunisia

154 March 2017. Flexible working hours will benefit working women, gov't says. Jordan Times

155 Union Women Arab States. 2019, March 28. Significant Progress for the Tunisian Women. Retrieved from UN Women: arabstates.unwomen.org/en/news/stories/2019/3/press-release-significant-progress-for-the-tunisian-women

156 Ibid.

157 This was a focus group with other attendees from different organizations:
Dr.Abeer Dababneh, Wom-en's Studies Center, University of Jordan;
Dr.Aghadeer Jweihan, Princess Taghreed Institute; Ghadeer Khuffash, Education for Employment; Hani Khleifat, CEO of Vocation Training Center; Nayef Estetieh, Business Development Center; Nour Mughrabi, GIZ and Tamam Mango, CEO of Crown Prince Founda-tion

Bibliography

- Abu Ghida, Dina and Thacker, Simon. July 2015. *Workforce Development: Middle East and North Africa Regional Synthesis Report*. The World Bank.
- Jacobs, Ronald and Hawley, Joshua. "Emergence of Workforce Development: Definition, Conceptual Boundaries, and Implications" in R. MacLean & D. Wilson (eds.). 2009. *International Handbook of Technical and Vocational Education and Training*. Amsterdam: Kluwer
- National Security Strategy., December 2017.,
- Almamlakatv. 24 September 2019. "The King calls to Wake up to the Spreading Threat of Terrorism and Extremism." Almamlakatv. Accessed from www.almamlakatv.com (Arabic)
- Assad, Ragui, Ghazouani Samir, and Krafft Caroline. "The Composition of the Labor Supply and Unemployment in Tunisia." In in Assaad, Ragui and Boughzala, Mongi (2018) *The Tunisian Labor Market in an Era of Transition*. Oxford: Oxford University Press.
- IACE (2018). *Rapport National sur l'emploi*. Tunis.
- Ghali, Sofiane and Zitouna, Habib. "Labor Demand in Tunisia: Size, Structure, and Determinants." in Assaad, Ragui and Boughzala, Mongi (2018) *The Tunisian Labor Market in an Era of Transition*. Oxford: Oxford University Press.
- Amer, Mona. "The School to Work Transition of Jordanian Youth." In Assaad, Raghui Ed (2018). *The Jordanian Labor Market in the new Millenium*. Oxford. Oxford University Press.
- Assaad, Raghui. "The Structure of the Labor Market in Jordan." In Assaad, Raghui Ed (2018). *The Jordanian Labor Market in the new Millenium*. Oxford. Oxford University Press.
- Said, Mona. "Wage Formation and Earnings Inequality in the Jordanian Labor Market." In In Assaad, Raghui Ed (2018). *The Jordanian Labor Market in the new Millenium*. Oxford. Oxford University Press.
- Jordan Strategy Forum. 2019. *The Jordanian Economy over two Decades: Achievements and related Challenges*. Amman: Jordan Strategy Forum. Page 25 (Arabic)
- Sultanate of Oman Ministry of Higher Education. 2016. *Graduate Survey: Employer Trends in Hiring Graduates in the Private Sector*. Page 46 (Arabic)
- Sultan Qaboos University. 2016. *The National Project to Align Outcomes in Higher Education with the Needs of the Labor Market in the Sultan Oman*. (Arabic)

- Dorn, Emma and al. 2017. Drivers of student performance: Insights from the Middle East and North Africa. Retrieved from McKinsey & Company: <https://www.mckinsey.com/industries/social-sector/our-insights/drivers-of-student-performance-insights-from-the-middle-east-and-north-africa>
- Limam, Imed and Ben Hafaiedh, Abdelwahab. "Education, Earnings, and Returns to Schooling in Tunisia." in Assaad and Boughzala Eds. 2014. *The Tunisian Labor Market: In an Era of Transition*. Oxford: Oxford University Press.
- Masri, Safwan., 2017. *Tunisia: An Arab Anomaly*. New York: Columbia University Press. Pg. 252 , 2017
- Boughzala, Mongi. 2014. "Employment and the Functioning of the Labor Market in Tunisia." in Assaad and Boughzala Eds. 2014. *The Tunisian Labor Market: In an Era of Transition*. Oxford: Oxford University Press.
- UPMI and CIPE. (2015.). *Porter la Voix des acteurs économiques locaux pour la réforme*. Tunis
- The Education Council. 2018. *Oman Education Strategy 2040*.
- Arab Knowledge Report: Youth and Localization of Knowledge 2014, UNDP & Mohammad Bin Rashid Al Makhtoum Foundation
- Montanari, Johanna, "Survey sounds clarion call to plug brain drain," *Jordan Times*, August 8, 2019
- Jordan Strategy Forum. July 2018. "Jordanian Expatriates in the Gulf." Amman.
- "Qatar-Jordan committee to ensure 10,000 jobs for Jordanians." July 2018. Retrieved from The Peninsula: July 18, 2018, <https://www.thepeninsulaqatar.com/article/18/07/2018/Qatar-Jordan-committee-to-ensure-10,000-jobs-for-Jordanians>
- International Initiative for Impact Evaluation. Youth Employment Evidence Gap Map. <http://gapmaps.3ieimpact.org/evidence-maps/youth-employment-evidence-gap-map>
- Kluve et al. 2017. "Interventions to improve the labour market outcomes of youth: a systematic review of training, entrepreneurship promotions, employment services, and subsidized employment interventions." *Campbell Systematic Reviews*.
- Tripney et al. 2013. "Technical and Vocational Education and Training (TVET) Interventions to Improve the Employability of Young People in Low and Middle Income Countries: A Systematic Review." *Campbell Systematic Reviews*.
- Valeri, Marc. 2009. *Oman: Politics and Society in the Qaboos State*. New York: Columbia.

- AbiNader, Jean. 5 June 2019. "Moroccan Graduates Face an Uncertain Future despite Efforts to Promote Youth Employment." *Morocco on the Move*. Accessed from moroccoonthemove.com
- Office of the Prime Minister. 2016. *Education for Prosperity: Delivering Results, a National Plan for Human Resource Development 2016-2025*. Amman.
- Ministry of Manpower. 2018. Annual Report 2018. Page 76, 90 (Arabic)
- Masri, Safwan. 2017. *Tunisia: an Arab Anomaly*. New York: Columbia University Press. OIT, AECID, ONEQ. 2013. *Analyse du système éducatif Tunisien*.
- Ministry of Labor. *Jordan's National Employment Strategy 2011-2020*. Amman.
- UNESCO-UNEVOP. *World TVET Database: Oman*. May 2013. Bonn.
- Oxford Business Group. 2017. "The Report: Oman 2017." Oxford
- Nasser, Ali and Rashid, Ala. (2018, forthcoming). A study of Employment Outcomes among Technical and Vocational Secondary Education Graduates in Egypt. Final Report. Cairo: Population Council.
- Ghali, Sofiane and Zitouna, Habib. 2018. "Labor Demand in Tunisia: Size, Structure, and Determinants." in Assaad, Ragui and Boughzala, Mongi. *The Tunisian Labor Market in an Era of Transition*. Oxford: Oxford University Press.
- Boughzala, Mongi. 2018. "Employment and the Functioning of the Labor Market." in Assaad, Ragui and Boughzala, Mongi *The Tunisian Labor Market in an Era of Transition*. Oxford: Oxford University Press.
- Hausman, Ricardo et al. 2019. "Jordan: the Elements of a Growth Strategy." Center for International Development, Harvard University. Working Paper no 346. Cambridge.
- Digital McKinsey. 2018. *Entrepreneurship in the Middle East and North Africa: How investors can support and enable growth*.
- Jordan - KAFD launches new investment fund. Retrieved from MENA FN: <https://menafn.com/1098757740/Jordan-KAFD-launches-new-investment-fund>
- Ministry of Higher Education. 2019. Summary of Suggested Regulations for Employing Job Seekers. Muscat. Page 9 (Arabic)
- Wayne, Jamil. 2014. What Is Needed for Youth Entrepreneurship in MENA? Retrieved from *Huffpost*: https://www.huffpost.com/entry/a-needed-component-of-ent_b_5930970
- Piza et al. 2016. "The Impact of Business Support Services for Small and Medium Enterprises on Firm Performance in Low and Middle-Income Countries: A Systematic Review." The Campbell Collaboration.

- World Bank Group, SME Finance Forum, IFC. 2017. "MSME Finance Gap: Assessment of the Shortfalls and Opportunities in Micro, Small, and Medium Enterprises in Emerging Markets."
- Ragui Assaad et al. March 2018. "Explaining the MENA Paradox: Rising Educational Attainment, Yet Stagnant Female Labor Force Participation." *Institute for Labor Economics*.
- The Power of Parity: How Advancing Women's Equality Can Add 12\$ Trillion to Global Growth.
- IMF. 2018. Opportunity for All: Promoting Growth and Inclusiveness in the Middle East and North Africa.
- Wilson Center. 2018. MENA Women in the Workforce: Understanding Social Norms. Washington DC.
- Assaad, Ragui and al. 2012. "Gender and the Jordanian Labor Market." Economic Research Forum. Pg.
- The World Bank. 2018. Understanding How Gender Norms in MENA Impact Female Employment Out-comes.
- Goveas, S. and Aslem, N. 2011. A Role and Contributions of Women in the Sultanate of Oman. *International Journal of Business and Management*. Vol. 6. No. 3
- Assaad, Ragui and al. 2018. Explaining the MENA Paradox: Rising Educational Attainment, Yet Stagnant Female Labor Force Participation. IZA Institute of Labor Economics.
- Alami, N. 2019. National Policies Should Prioritize Women's Labor Force Participation in Jordan. *Enhed-uanna Wilson Center Blog*.
- ONA. 2018. NCSI : 41% women employed in public and 25% in private sectors in 2017. *MuscatDaily.com*. Statistique Tunisie. 2018. *Caractéristiques des agents de la fonction publique et leurs salaires 2012-2016*.
- Assaad, Ragui and al. 2012. Gender and the Jordanian Labor Market. Economic Research Forum.
- Assaad, Ragui and al. 2018. "Explaining the MENA Paradox: Rising Educational Attainment, Yet Stagnant Female Labor Force Participation." IZA Institute of Labor Economics.
- March 2017. Flexible working hours will benefit working women, gov't says. *Jordan Times*. Union Women Arab States. 2019, March 28. Significant Progress for the Tunisian Women. Retrieved from UN Women: arabstates.unwomen.org/en/news/stories/2019/3/press-release-significant-progress-for-the-tunisian-women

About the MENA-WDI Team

MERISSA KHURMA

Merissa Khurma is the project manager of MENA-WDI and co-author of this report. She leads the Middle East Special Initiatives at the Woodrow Wilson International Center for Scholars and is an adjunct professor at Georgetown University's School of Foreign Service. Merissa has leadership experience working in a range of development projects in the Middle East and West Africa that focused on economic development, the Syrian refugee crisis, education, youth, gender development, and governance. Additionally, Merissa served as director of the Office of Jordan's Prince Ali Bin Al Hussein (2010- 2013) and as press attaché and director of the Information Bureau at the Embassy of Jordan in Washington, D.C. (2003-2010). Merissa has a master of public administration from Harvard University's Kennedy School of Government, a master of science in international security and foreign policy from Georgetown University, and a bachelor of art in political science from McGill University. Merissa speaks Arabic and French.






KENT HUGHES

Kent Hughes is the Chief Economic Advisor of the MENA-WDI. Dr. Hughes is the former Director of the Program on America and the Global Economy (PAGE) at the Woodrow Wilson International Center for Scholars. As part of the PAGE agenda, he published a book, *Building the Next American Century: The Past and Future of American Economic Competitiveness* (Wilson Center Press 2005), which emphasizes the importance of innovation and education to America's future. Dr. Hughes served as Associate Deputy Secretary at the U.S. Department of Commerce, president of the private sector Council on Competitiveness, and in a number of senior positions with the U.S. Congress. Dr. Hughes also served as a staff attorney for the Urban Law Institute. Dr. Hughes holds a Ph.D. in economics from Washington University, a LL.B. from Harvard Law School, and a B.A. in Political and Economic Institutions from Yale University. He serves on the Executive Advisory Board of FIRST Robotics and is a member of the D.C. Bar, American Bar Association and the American Economic Association.

ALEXANDER FARLEY

Alex is the program and research associate for the Middle East Special Initiatives at the Woodrow Wilson International Center for Scholars and is the co-author of this report. He holds a Master of Public Administration and Master of Arts in International Studies from the University of Washington with a focus International Development Policy and Management. He has conducted qualitative research on refugees and the nonprofit sector in Jordan and the refugee resettlement system in the United States. His specializations include migration, refugees, governance, the nonprofit sector, social movements, workforce development, and education policy in the MENA region. He has previously lived in Morocco and Jordan. Alex speaks Arabic and French.



-  www.wilsoncenter.org/middleeast
-  mep@wilsoncenter.org
-  facebook.com/WilsonCenterMEP
-  [@WilsonCenterMEP](https://twitter.com/WilsonCenterMEP)
-  202.691.4000

ISBN: 978-1-938027-89-5
© 2019, Wilson Center