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LIBYA

Labor market assessment

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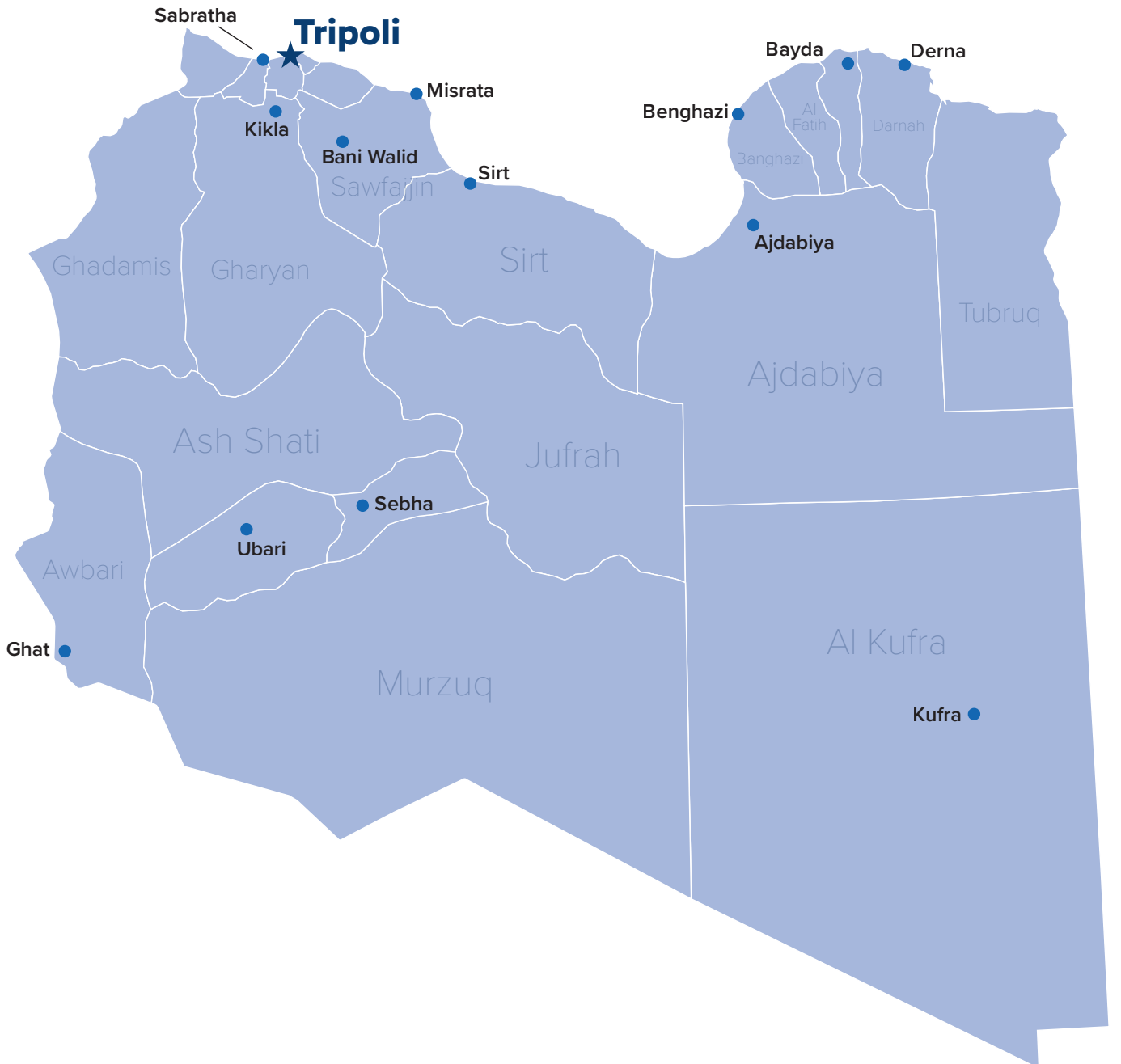
The Labour Market Assessment in Libya. Tripoli.

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1.1 Company Profiles



Tatweer Research, Libya

Tatweer Research is a Libyan company owned by the Libyan Local Investment and Development Fund (LLIDF). Tatweer Research prides itself on its mission: fostering a new knowledge economy that's outside Libya's natural resources. Tatweer Research achieves this by nurturing the brightest young individuals in Libya, incubating the ideas of ambitious homegrown entrepreneurs whilst attracting international talent and investment.

This aids in the path of developing and leading sectors such as renewable energy, climate change, healthcare, economic development and financial services. We are achieving this by collaborating with both local and international prestigious institutions.

Tatweer Research's headquarters are based in Benghazi, Libya, but work in all regions of Libya. Our local imprint and outstanding talents are what make our impact significant and sustainable in Libya. Tatweer aims to create businesses that yield a return on investment as well as a social enterprise. In addition to conducting its commercial activities and empower local communities.

M&C SAATCHI WORLD SERVICES

M&C Saatchi World Services, UK

M&C Saatchi World Services is a leading social and behavior change communication and research agency, established in 2011 as a specialist division of M&C Saatchi, the world's largest independent communications network. It brings the broader network's communications knowledge and expertise to the international development sector. We work globally across a wide range of issues including health and wellbeing, youth engagement, prejudice, and digital influence.

Since 2013, the Research, Insight and Evaluation (RIE) team at M&C Saatchi World Services has designed and delivered a range of research assignments for donors, multilateral, and bilateral agencies, INGOs, trusts, and philanthropic foundations. The research is designed to inform, monitor, and evaluate communications, engagement, and media interventions as well as build learning components into project delivery. We work across a wide range of issues including youth engagement, economic development, WASH, maternal and child health, hunger and malnutrition, HIV/AIDS, human rights, sexual and reproductive health rights, gender equality, family planning, violence against women and girls, and prejudice and discrimination.

Our clients include the Children's Investment Fund Foundation, UNICEF, WHO, Sight Savers, Nutrition International, USAID, FCDO, Girl Effect, the Global Fund, the Gates Foundation, UNDP, the World Food Programme, and civil society organizations.

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02

**Executive
Summary**

01

The private sector in Libya is underdeveloped, but growing in importance due to increasing opportunities in the sector

- Up-to-date data on the size and scale of both the formal and informal Private Sector in Libya is lacking. The dominant private sector industries, in terms of market prevalence, appear to be manufacturing, construction and real-estate, as well as consumer goods wholesale, retail, food services, arts, entertainment and recreation, and small businesses providing other services.
- The public sector still dominates the health, education, social services and utilities sectors, as well as smaller sectors such as financial services and telecommunications. Regardless, private companies are making greater inroads into these spaces.

02

A distinction between formal and informal business is difficult to establish; many businesses have elements of informality

- 73% of the companies in the private sector survey sample said they were registered with the authorities, while 27% said they were not. However, there exists a scale from highly formal to highly informal – and only 41% of the companies categorized as highly formal in this study said they provided employment contracts to employees.
- Key informal income-generating activities and micro-enterprises tend to operate in the areas of transportation, goods delivery, catering, food preparation for ceremonies, as well as sewing and tailoring, crafts making, and a range of other subsistence forms of production and service delivery.
- Informality is linked to size and sector; larger businesses are more likely to be formal enterprises.

03

Ineffective legal regulation, along with perceptions about job instability and lack of alignment with the education curriculum and academia are said to be top challenges within the private sector

- Ineffective business regulation was said to hinder the growth of the private sector. This related to complicated processes and bureaucracy involved in registering businesses. There was said to be little incentive to formally register a small business.
- Economic instability, including the liquidity crisis and fluctuating exchange rates have affected the Libyan market significantly – with little formal support offered to private Sector businesses.
- Private sector businesses report that they are lacking in capacity to grow, with regard to production assets, technological assets, processing capacity and human resources capacity.
- If these challenges are addressed, there are a number of sectors that are optimistic about their economic and employment growth in the short and medium-term. These include education, construction, real estate, and the arts, entertainment and recreation sectors.
- This suggests that in the right environment, the private sector in Libya will be able to absorb a significant share of the Libyan labor force and continue to support domestic innovation and production.

04

To underpin this positive outlook in the private sector, an adequate supply of skilled labor needs to be available

- Overall, there is a positive correlation between perceived importance of skills and perceived availability of skills. There are however a number of skills that are in short supply based on the expectations of the private sector. These include having a positive work ethic, time management and respecting deadlines, along with leadership and management skills.

- There are also a number of skills where there are significant gaps between the importance ascribed to them by the private sector and the confidence of Libyans to perform them. These overlap to a certain degree with the aforementioned skills, but also include writing reports, interpreting long texts, expressing ideas in written form, ability to fully use Microsoft Office and entrepreneurial spirit.
- Construction, education, health, and accommodation and food services are put forward for prioritized support for growth, based on higher growth estimates.

05

Libyan job seekers expect to receive contracts, social security, and pensions from their employees. However, only around a third of private sector companies provide these incentives

- Better salaries are expected in the private sector, however, a wider range of employee benefits is perceived to be offered from the public sector.
- This shaped the perception of the private sector, and thus only a third reported that they are interested in being employed in the private sector. On the other hand, two-thirds reported their interest in working for both the private and public sectors at the same time.
- Gender inequality is a significant factor as men with the same experience as women are paid 7%-10% higher.
- Differences within the private sector exist. The sector that appears to be providing most employee benefits is the arts, entertainment & recreation sector, followed by construction. At the other end of the spectrum are sectors such as transportation, wholesale/retail and real estate providing fewer benefits to employees. In terms of social security, by law, it is guaranteed to all working individuals in case of partial or complete inability to work (including retirement). The amount of social security varies in public and private sectors depending on the individual's income.¹

¹ Social Security Law No. 13 of 1980 <https://ssf.gov.ly/wp-content/uploads/2012/09/قانون-الضمان-الاجتماعي-رقم-13-لسنة-1980.pdf>

03

Introduction

The United Nations Development Programme in Libya (UNDP Libya) has actively worked with the government, its partners, and the Libyan population to fast-track the stability, recovery and resilience process within the country.

UNDP Libya has commissioned Tatweer Research and M&C Saatchi World Services to undertake a Labor Market Assessment (LMA) in Libya to assist in the development of the private sector with a focus on host communities. This aims to complement a parallel IOM report focusing on migrant communities, with an overall aim of better engaging the private sector in order to boost economic activity in the country.

In a 2016 report entitled “SMEs in Libya’s Reconstruction”, the OECD noted that small and medium enterprises (SMEs), typically in the private sector, are particularly important for economic recovery. This is because of their potential to generate jobs particularly because they are more likely to employ vulnerable segments of the population such as women, youth, and refugees and/or internally displaced people.² However, existing evidence on the private sector in Libya is limited, and comprehensive official records of private sector businesses across the board are challenging to verify.

3.1 Objectives

The LMA aims to provide a detailed analysis of the labor market in specific areas of Libya, as well as the various skill sets of their respective labor force in order to inform a private sector demand driven labor mobility strategy. The overall objective of this Labor Market Assessment (LMA) of Libya is to gain a better understanding of the scale and nature of the private sector. Specifically, the role that host communities play in their local economies and in Libya as a whole. In addition to this, the LMA will seek to map out the country’s primary private sector industries and businesses in key economic regions, as well as additional areas of interest. Which aims to evidence growth areas (and opportunities) to increase the engagement and participation of the migrant and domestic workforce in private sector industries. Ultimately, this will strive to enhance the economic activity and social cohesion in priority regions in Libya.

Following this, evidence-based recommendations will be made to aid UNDP Libya in determining the best avenues to support economic activities within the Libyan private sector, in order to build community trust, (economic) cooperation and interdependence (with a focus on engaging women and youth).

2 The Libya Public Financial Management (2017) Libya Workforce Market Survey Report

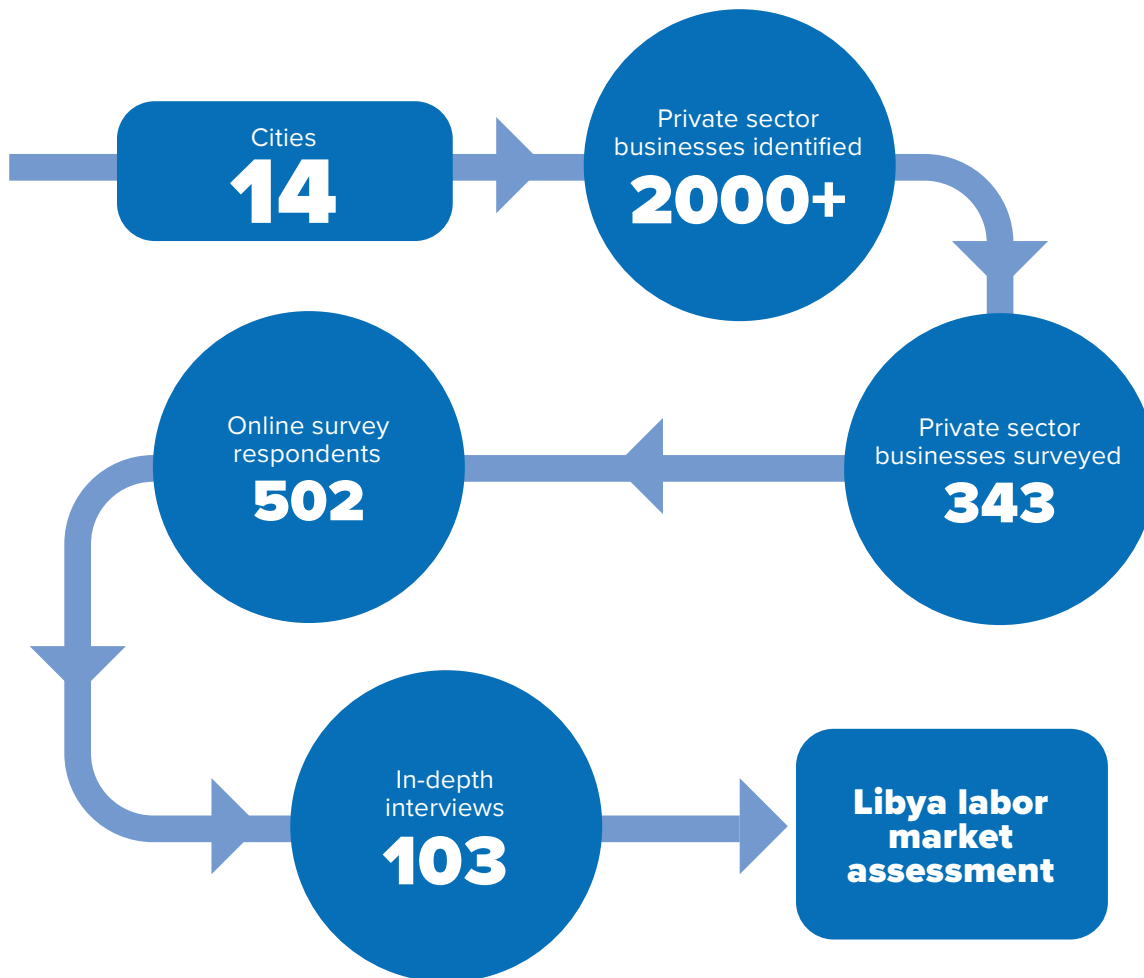
3.2 Scope

The mapping of Libya's private sector (PS) will serve to identify businesses and industries with the most potential for growth, further analysis and targeted support for their development. The mapping will aim to identify market opportunities related to specific goods/ services; identify the characteristics of those markets; and highlight gaps. The geographic areas that have been specified are: **Tripoli; Benghazi; Sebha; Misrata; Sirt; Bayda; Ajdabiya; Kufra; Derna; Ubari; Ghat; Bani Walid; Sabratha; and Kikla.**

The LMA has conducted primary research, producing both qualitative interview data and quantitative survey data to evidence recommendations to UNDP Libya. Additionally, this assessment incorporates insights from a review on the impact of COVID-19 on the labor market and on SMEs in Libya. The outputs from the labor market assessment include: 14 City Profiles, including 2087 PS businesses identified; analysis of labor market characteristics and challenges; a Skills Gap Analysis; and Private Sector Growth Forecasting and Prioritization.

This research builds on the existing literature and studies undertaken on the Libyan labor market, such as the 2015 World Bank Private Sector mapping, the 2017 USAID Workforce Development Study, the 2019 IOM Agriculture Assessment, as well as other studies that will be identified as part of the desk research. By applying a similar approach and analytical lens, this study identifies trends and patterns and compares results to previous findings. As the labor market has undergone significant change due to the challenges of conflict and COVID-19, this study will add value by providing an updated assessment. The assessment will explore multiple economic sectors as well as a wider geographical scope, from the east, west and south of Libya will further add value due to the breadth of the analytical (multiple economic sectors) and geographical scope, where former studies have typically been narrower.

Scope of fieldwork



3.3 Libya Context³

This section is a summary of the recent timeline, as the labor market that has now taken shape is due to the unique circumstances initiated over the past 10 years. An overview of the key insights and figures on how the market has formed over the past years is presented with the most noteworthy facts concerning public versus private sector differences in the labor market, age disparities, foreign labor participation and labor legislation.

³ Labor Market Dynamics in Libya, a World Bank study <https://openknowledge.worldbank.org/bitstream/handle/10986/22015/9781464805660.pdf;jsessionid=6F33346D8B5D0AD4A127F91DDD813253?sequence=1>

This does not suggest however a dismissal of what happened before 2011 in what has shaped the labor market to be what it is today. The deterioration of the market has come in the form of an exacerbation of pre-existing problems that had their genesis in the policies set by the regime previous to 2011. By far the most rapid period of change that has contributed to the transformation of the labor market over the past 10 years is the 2011 to 2013 period, which was followed by a smaller change between 2013 and 2015. During this period, the political situation further deteriorated against hopes of a rebound, and even got worse after 2015.

Prior to the political upheaval, the public sector dominated the labor market in the country. In 2015, the public sector employed 85% of the labor force, and 93% of women.

A core feature of today's labor situation is the age disparity. A youth bulge is a defining feature of Libya's demographic where 30% of the population was under 14 as of 2015. Now, with such a large proportion of youth entering the labor market and job security for over-45-year-olds still very high, a tragic 49% youth unemployment rate has culminated as a result.

Another defining feature is Libya's foreign labor participation. Over a 10-year period (2005 – 2015), the participation of foreign labor fell from 1.3 million (at the time, half the labor force) to a mere 0.3 million in 2015. The significance of this trend in relation to the youth is that the severe drop in foreign labor has not helped in alleviating youth unemployment to substitute the gap left by foreigners. A 2012 survey conducted across a large sample of managers found they plan to fill 6% growth with mostly foreign labor.⁴

It is important to note as an endnote to this description of the most recent period that has defined the labor market, that prior to the renewed conflict of 2014, a process to reform labor legislation, which started post upheaval as a priority, had been stalled. The amendment of labor laws is necessary in rectifying the hindrance of the private sector's incentive to enter contractual forms of employment, which will be necessary in closing the gap between public and private sector's proclivity to employ. This will prove pivotal in solving Libya's labor market problems.

4 World Bank, 2012, Libya Rapid Labor Market Assessment. Washington, DC

04

Methodology

4.1 Overall Approach

The objective of the LMA was to “to gain a better understanding of the role Host Communities play in their (respective) local economies and in Libya as a whole” with a broader objective to “increase the engagement and participation of the Migrant and Domestic workforce in the PS industries/businesses and therefore enhance the economic activity and social cohesion of the respective regions in Libya”⁵.

Our approach to the LMA was to build a comprehensive core data set on private sector trends, challenges and opportunities into a labor market forecasting analysis that can provide direction and recommendations to potential programming and priorities of UNDP engagement in Libya.

The analytical approach to the private sector mapping was structured around four key steps. The first, to develop bespoke **area profiles**, to be a broad description of the overall situation and context related to the private sector in each research study location/city. The second step was **private sector identification**, determined by the sectors/business generating the main share of economic output in the city, the main employers/employment generating sectors, as well as trending sectors in the areas. The third stage was **private sector prioritization**, which was developed by determining which sectors have the most growth potential in the short, medium and long term. The final stage was determining the **needs and support of the private sector** that would encourage maximization of potential. Focusing on the prioritized sectors/business, the final step will determine the main challenges and risks for the sectors/business achieving their economic and employment potential. As such, the analysis will focus on the main challenges impeding growth, the current available support to address these challenges and potential entry points (services, modalities, etc.) to address remaining key issues. The skills gap analysis was structured around four key elements. Cognitive skills: The core skills needed to process and understand information; literacy and numeracy (such as the ability to perform simple/advanced math, record numbers, etc.); non-cognitive Skills such as core skills needed to perform and excel in performing tasks. This includes social skills (such as communicating); work-place skills such as the core skills needed to constructively engage and excel in the workplace; and motivation. While acknowledging that skills are a core issue, another important

5 Terms of Reference, Libya Labor Market Assessment 2020

aspect influencing supply/demand dynamics in the labor market is the expectation or motivation from potential employees. This will in turn also impact on their ability to perform when engaged in the labor market. This includes potential career development opportunities, work hours, wages and conditions, as well as social protection policies in place.

The first three components were analyzed by assessing the perceived importance of these various skills, and the perceived availability of these skills, allowing identification of the main gaps i.e., where there is the biggest difference between importance and availability. The analysis will thus serve to identify emerging skill sectors and applicable skill sets in the respective regions of Libya; highlight the qualifications / professional certifications in the select skill sets in Libya and highlight niche gaps and therefore increase formal recruitment that will ensure better cohesion between the demand and supply of skills at the required skills level.

4.2 Qualitative Data Collection

The qualitative data collection was gathered from a total of 103 in-depth interviews with key informants (labor market experts and stakeholders, as well as professional businesspeople) across 14 cities in Libya. Twenty-one of the interviewees were females (20%).

Categories of interviewee were developed to cover both those with knowledge of the demand side (what labor is needed in the private sector) and those with knowledge of the supply side (what skills and characteristics are available within the labor market pool). The demand side interviews explored themes related to local recruitment processes, required skills, and local challenges to the labor market and private sector growth. The supply side interviews explored local employment processes, availability of skills, and current challenges in the labor market for employees. The number of interviews conducted are listed below, by category, area of expertise and city.

Figure 1: Key Informant Interviews, by City

KII category	Expertise	Ubari	Sirt	Ghat	Sebha	Benghazi	Bayda	Ajdabiya	Derna	Kufra	Misrata	Sabratha	Kikla	Bani Walid	Tripoli	Total
Human resources professionals	Local recruitment		1	1		1	1	1					1		1	7
Professional associations	Labor market demand				1	1	1		1	1	1				1	7
Local authority rep	Labor market demand	1				1	1	2	1					1	1	8
Women's NGOs	Labor market demand		1	1		1	1		1			1			1	7
Senior business professionals	Labor market demand	1				1	1	1	1	1	1		1		3	11
Community leaders	Libyan culture			1	1	1	1	1				1	1		1	8
Government rep	Labor market: unemployment	1				3			1		1		1		4	11
Human resources and business ops	Labor market: employment					2			1	1	1				3	8
Learning institutes, tech colleges	Labor market: recruitment				1	1	1				1		1		1	6
Vocational centers, SMEs	Labor market: recruitment	1	1			1		1				1			1	6
Youth organizations	Labor market: youth		1		1	1						1			1	5
Other, students union	Sector specific			1	1	5	1	2	1		1	1		2	4	19
Total		4	4	4	5	19	8	8	7	3	6	5	5	3	22	103

4.3 Quantitative Data Collection

The team reviewed best practice in conducting trader and employee surveys in Libya, to inform the approach. Previous labor market surveys primarily relied on non-probability sampling, including quota sampling, snowball techniques and other forms of convenience sampling. For example, the *Simplified Enterprise Survey* conducted in 2015 by the World Bank used a combination of random and snowball techniques to build lists and interview businesses via phone. The study encountered significant difficulties in obtaining robust lists of businesses and resorted to using informal non-probability techniques to achieve interviews.

For this LMA, a Private Sector Enterprise Survey (PSS) was conducted to understand the range of labor market and private sector themes across all 14 cities. An online survey was also conducted to attempt to cover a broader range of responses from the supply side.

Private Sector Enterprise Survey

For the Private Sector Enterprise Survey, a bespoke sampling methodology was developed. This methodology was employed due to Libya's unique economic scene and a general lack of complete and up-to-date documentation and representative data on the private sector across all cities. This bespoke methodology included primary research to generate a business list dataset, from which we could draw a sample for the survey. Business lists were developed by local researchers to supplement the incomplete and outdated commercial records of private businesses obtained from chambers of commerce and government agencies. As of December 2020, the field team had collated 2087 business details from the private sector in the 14 cities in Libya. The key sources for developing business lists are outlined in the following table.

Figure 2: Key Sources for Business List Development

Official commercial records	Local informants and community leaders	Door-to-door research	Snowballing technique
Outdated commercial records resulted in disappointing responses from business owners who mostly closed their business, changed their activity or even were never affiliated with the business in the first place.	Especially for the more urban cities, communities that are built around the ecosystem often exist and expand contacts into various sectors and businesses; very useful as a data collection method.	Door-to-door often helped; from rural, smaller cities, enumerators drove around more active sites in the city to access businesses in categories they needed to cover.	Snowballing mostly helped expand our network within the sector or similar sectors.

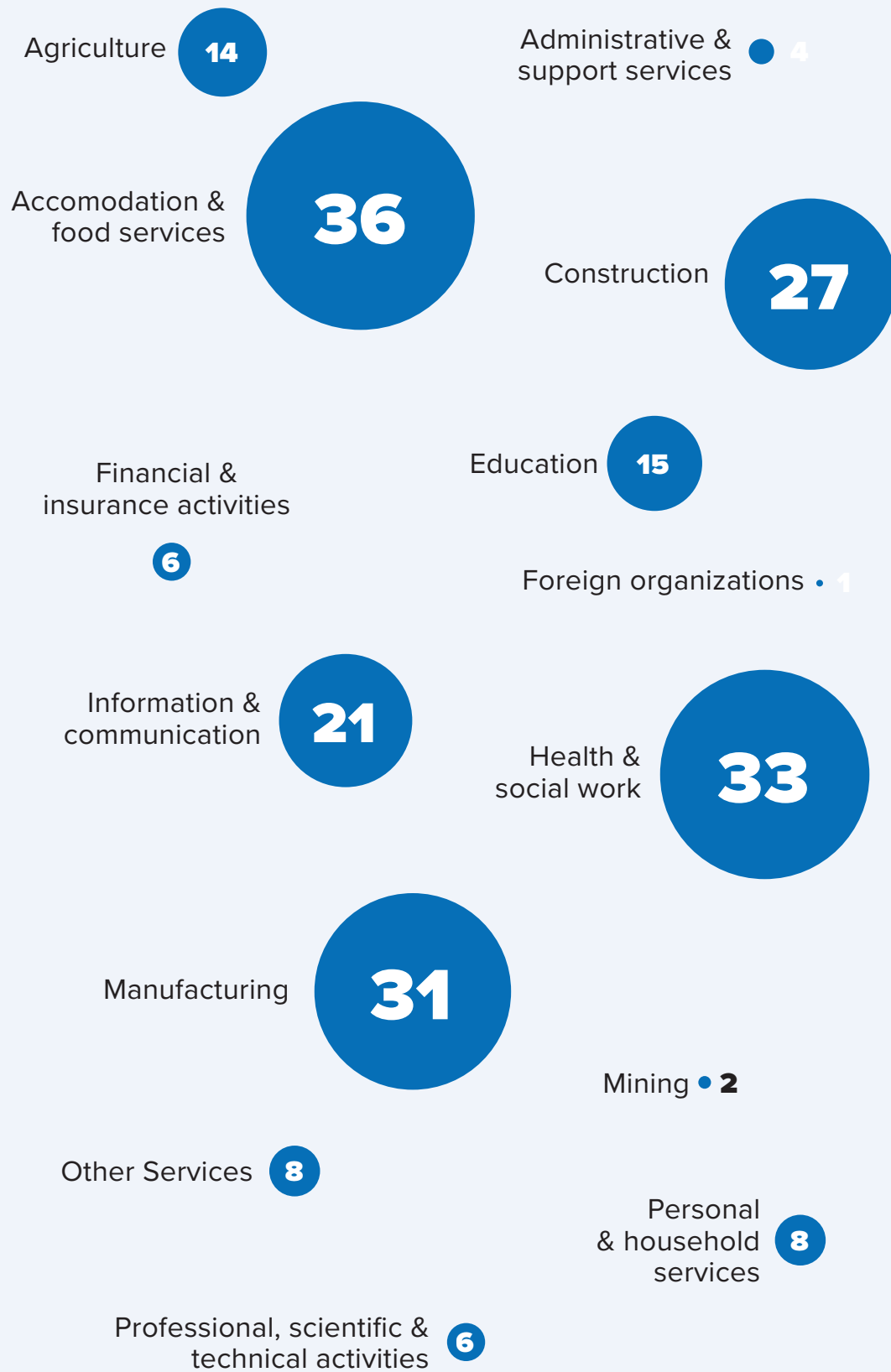
The Private Sector Enterprise Survey sample was distributed proportionally according to the population size of each city. The survey participants total 374 with a majority from Tripoli followed by Benghazi and Misrata, as shown in the table below. The proportions of female and male survey participants were 8.8% and 91.2%, respectively, despite deliberately attempting to oversample females to achieve a balance of gender. Participants were either business owners or senior managers.

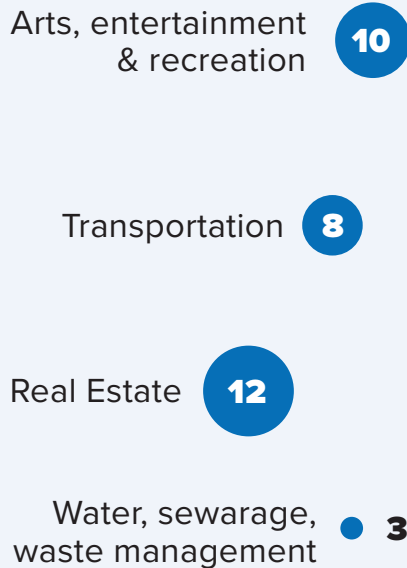
Figure 3: Private Sector Survey Participants, by City

City	Frequency	Percent
Ajdabiya	20	5.3
Bani Walid	10	2.7
Bayda	35	9.4
Benghazi	59	15.8
Derna	10	2.7
Ghat	10	2.7
Kikla	8	2.1
Kufra	10	2.7

City	Frequency	Percent
Misrata	45	12.0
Sebha	21	5.6
Sabratha	20	5.3
Sirt	15	4.0
Tripoli	101	27.0
Ubari	10	2.7
Total	374	100.0

Figure 4: Private Sector Survey Participants, by Sector





Online Survey

A secondary online survey was designed and launched on social media platforms as sponsored content, to better meet the research objectives regarding the supply side views of employees and students. The survey design included questions exploring areas of study, personal assessments of skills, and expectations of the labor market. The survey was launched in December 2020 and closed in January 2021. It ran for approximately 35 days.

In total, 501 individuals participated in the online survey. Of these, 21 responses were identified as duplicates and therefore deleted. The effective sample was therefore 480. Of these, 48% were current university level students. Additionally, 76% of online survey participants were females, and 24% were males. As this was an open online survey, promoted among student groups and known networks, the participants were self-selecting, and the resulting sample was biased towards female students. Due to the bias in the sample, the data has been weighted to make it more representative. Due to a lack of accurate student population information by city, the sample could not be weighted by education status. Hence, the data has been weighted by gender and location. The weighting has been done in an iterative fashion to ensure that each weight variable (gender and location) has the right distribution as determined by population data obtained from the Bureau of Statistics and Census Libya.⁶

⁶ Bureau of Statistics and Census Libya 2020 http://bsc.ly/?P=5&sec_Id=8&dep_Id=7

Index constructs from quantitative data

A skill index was created to investigate the level of proficiency in certain skills. Certainly, this can be subjective as in the survey one is asked 'How confident are you in performing these skills?' The index was developed using factor analysis to determine the underlying elements and the different skills association with the dominant factor. The factor analysis confirmed that there was one dominant factor (self-confidence in skills) dominating the response to most of the skills dimensions. The dimensions with an r-value below 0.5 (i.e., a less strong correlation with the underlying factor) were excluded from the index. This included empathy, writing and editing reports, and doing advanced and simple math. A total of 248 respondents were included in the index, as they had responded to all the questions.

Libyans' expectations of benefits were further explored by constructing an employee benefit expectation index. Factor analysis confirmed that there was a single dominant factor explaining the variance in the series of questions related to expectations of employee benefits. However, due to a relatively high number of non-responses to benefits questions, constructing an index with all variables would reduce the N size to 143. As such only variables that were very strongly correlated with the underlying factor were included i.e., only variables that had an r-value above 0.75. In addition, it was decided to remove "Refreshments" because of a high number of non-responses to that question. The reduced index was verified by testing the correlation with the index containing all the variables and it had a very strong correlation (r value of 0.956). The reduced index can thus still be considered an accurate representation of expectations from survey respondents. The final variables included in the index were: competitive salary, bonuses / rewards, medical insurance, social security, and work contract. The reduced index has an N of 245.

05

**Libya labor
market
characteristics**

5.1 Economic and Political Instability

Long standing economic and political instability has led to an underdeveloped private sector and, in some areas, a reliance on the public sector and migrant labor

Political strife, episodes of extreme violence and civil conflict have remained major characteristics of the Libyan political scene since the 2011 uprising and the ensuing period of regime change.

Since 2011 there have been successive interim governments and administrative splits in the country including dual rival governments. Libyan parties have agreed to hold elections on December 24th, 2021.

With regard to economic structure, the public sector employs the majority of Libya's active workforce. The private sector, due to decades of semi-socialist government policies has remained confined in size and despite relative liberalization post-2011, has had to contend with a poor security situation which has limited its growth.⁷

With regard to the labor market, as of 2018 the Libyan population was estimated at a total of 6.6 million with the largest concentration of the populace located in Tripoli and major urban centers along Libya's northern coast, including Misrata, Sirt and Benghazi.⁸ For decades the Libyan economy has been reliant on migrant labor mainly from neighboring Egypt and the bordering countries of Sub-Saharan Africa. As a consequence of the 2011 uprising and the ensuing conflict an estimated 1 million foreign laborers left the country according to the World Bank.⁹ The continued political instability and poor security conditions in many cities across the country have prevented the return of pre-2011 labor migration patterns.¹⁰ However, labor market stakeholders interviewed for this study have conflicting views about their employment preferences regarding migrants versus domestic labor.

7 Ibid (2015), p.47

8 <https://data.worldbank.org/country/LY>

9 World Bank (2015) Labour Market Dynamics in Libya: Re-integration for Recovery, p. xii.

10 World Bank (2015), p.9.



Migrant workers were largely dominating work. Therefore, the improvements in the labor market are the result of the revolution from 2011 until now, as it has decreased migrant worker numbers, forcing local workers to enter the labor market of technical employment in the recent period. Young people started working in the maintenance of houses, working as craftsmen, but the agricultural labor is still all migrant workers.”

Faculty member at Sabha University, Ubari



It is preferable to contract a Libyan better than a foreigner, but the work culture of the Libyan remains weak. We say that it has greatly improved and is still improving. Therefore, any work needs to be led by the Libyans.”

Professor and member of Entrepreneurship Centre to Support the Private Sector, Sebha

5.2 Dominant Sectors and Industries

The underdeveloped private sector remains in the realm of manufacturing, construction and real estate, as well as consumer goods wholesale, retail, food services, arts, entertainment and recreation, and small businesses providing other services.¹¹

Up to date data on the size of these industries in the private sector is lacking. However, it seems that these industries remain relatively in the same proportion with the wholesale and retail sector displaying the most significant growth post-2011 as demand for imported consumer goods has continued to rise. Moreover, the public sector still dominates the health, education, social services and utilities sectors, as well as smaller sectors such as financial services and telecommunications. However, private companies are making greater inroads into these spaces.

¹¹ World Bank (2015), p. 47.

KII data generally confirmed what previous studies have also shown on the composition of the private sector. Interviewees stated that the private sector is mainly based on trade, retail, manufacturing, construction, health and communication sectors. Other sectors were stated to be common like workshops and barbershops.

“ The most common and available jobs are retail shops salesmen, the retail shops are the most active private work in Benghazi followed by construction. However, construction could be number 1 if the situation stabilizes...”

Founder & CEO of an NGO

“ The situation that our country is having, makes the private sector work in a very limited range. One of the main and the biggest sectors is trading in Libya, because it has a quick profit. However, most of the traders won't take any risks to expand their business abroad as the profit of these businesses takes time, and also the unstable situation in politics and the economy in our country”

University Professor, Merqub University

“ Trading businesses are the most dominant after the public sector”

Elder from the Tribal Council, Misrata

5.3 Business Size and Formality

The problem of high unemployment and the limited ability of the inflated public sector, and the underdeveloped private sector to provide needed jobs has led to the expansion of the informal sector in Libya.¹² In 2011 the African Development Bank estimated that 30-40% of Libya's official GDP was generated by the informal economy.¹³ There is little official reliable data on the informal economy in Libya. This LMA's observation of local economies in the 14 study cities found key informal income-generating activities and micro-enterprises operate in the areas of transportation, goods delivery, catering, food preparation for ceremonies, as well as sewing and tailoring, crafts making, and a range of other subsistence forms of production and service delivery.

A distinction between formal and informal business was difficult to apply; many businesses surveyed had elements of informality

Formality of companies is difficult to assess in surveys (partly because survey participants may be reluctant to honestly answer questions that may have legal implications for them). Building on ILO guidance¹⁴, different proxies for informality were used in this survey, including:



¹² https://www.etf.europa.eu/sites/default/files/m/01BE9A2F283BC6B2C1257D1E0041161A_Employment%20policies_Libya.pdf

¹³ European Training Foundation (2014). p.11.

¹⁴ ILO. (2013). Measuring informality: A statistical manual on the informal sector and informal employment. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_222979.pdf

For the private sector survey (PSS) analysis, a combination of responses to questions on the first two proxies has been used as there was a high degree of non-response¹⁵ on questions relating to the last three proxies. These have been used to create a **Formality Spectrum** which is as follows:

1. **Highly formal business:** Companies that have complete bookkeeping (balance sheet and operating statements) and business premises with a fixed location independent from a private home, work from a construction site or home of client
2. **Semi-formal business:** Companies with complete bookkeeping, but non-fixed business premises or companies with simplified legal accounts and either fixed or non-fixed business premises
3. **Semi-informal business:** Companies with informal or no bookkeeping but fixed business premises
4. **Highly informal business:** Companies with informal or no bookkeeping and non-fixed business premises.

Checking against the other proxies, this spectrum appears to be a fair measurement of informality in Libya. For example, from the PS survey:

- **95%** of the companies that are characterized as highly formal also say they are registered with the authorities, as opposed to 25% of those characterized as highly informal
- **20%** of the companies that are labelled as highly informal say they have no legal form as opposed to 1.5% of highly formal companies and the most common legal form for highly informal companies is sole proprietorship (55%) while for highly formal it is limited liability companies (45%); and finally
- **92%** of highly formal companies claim to pay corporate tax, while only 17% of highly informal companies say they do.

¹⁵ A total of 140 responses would have been excluded had the last three proxies of informality been included.

Based on this, 52% of the companies in the PSS sample are labelled as being highly formal, while 23% are semi-formal, 19% are semi-informal and 6% are highly informal. 73% of the companies in the PSS sample said they are registered with the authorities, while 27% say they are not registered. In addition, most companies in the PSS sample were micro or small businesses. Almost 80% of companies were micro businesses (fewer than 5 employees) or small businesses (5-20 employees). Overall, businesses in sectors relating to human health and social work activities, wholesale and retail trade, repair of motor vehicles and motorcycles, and manufacturing have the highest numbers of employees. In contrast, the arts, entertainment and recreation, and architecture sector businesses have the lowest number of employees.

An issue linked to this is informal employment, which is typical in the informal sector, but can also be found in the formal sector. For example, only 41% of the companies categorized as highly formal say they provided employment contracts to a great or very great extent.

“Some commercial stores do not have official contracts, but in some sectors, for example with the doctors or pharmacists, I dealt with them with contracts and official papers, and I think that everything should be legal.”

CEO of a Development Academy, Ajdabiya

“It’s a complex issue. The building or the office in itself is registered. You’ll find that they pay 300 LYD at the end of the year, but the foreign employees who work in this company aren’t registered or they don’t have contracts with the company. In general, all the activities you see are official, but internally they are not. Even the private hospitals for example, nurses and other employees who work in it don’t have a contract with this hospital. And at the end of the day, they’ll give them the money.”

Company owner, Benghazi

Despite the growing importance and size of the informal sector, there are still more Libyans that would like to work with formal/registered companies rather than informal companies. 68% of the participants in the online survey said they would like to work in a formal/registered company, as opposed to 33% that said they would be interested in working for an informal company. This is discussed further in section 7.2.

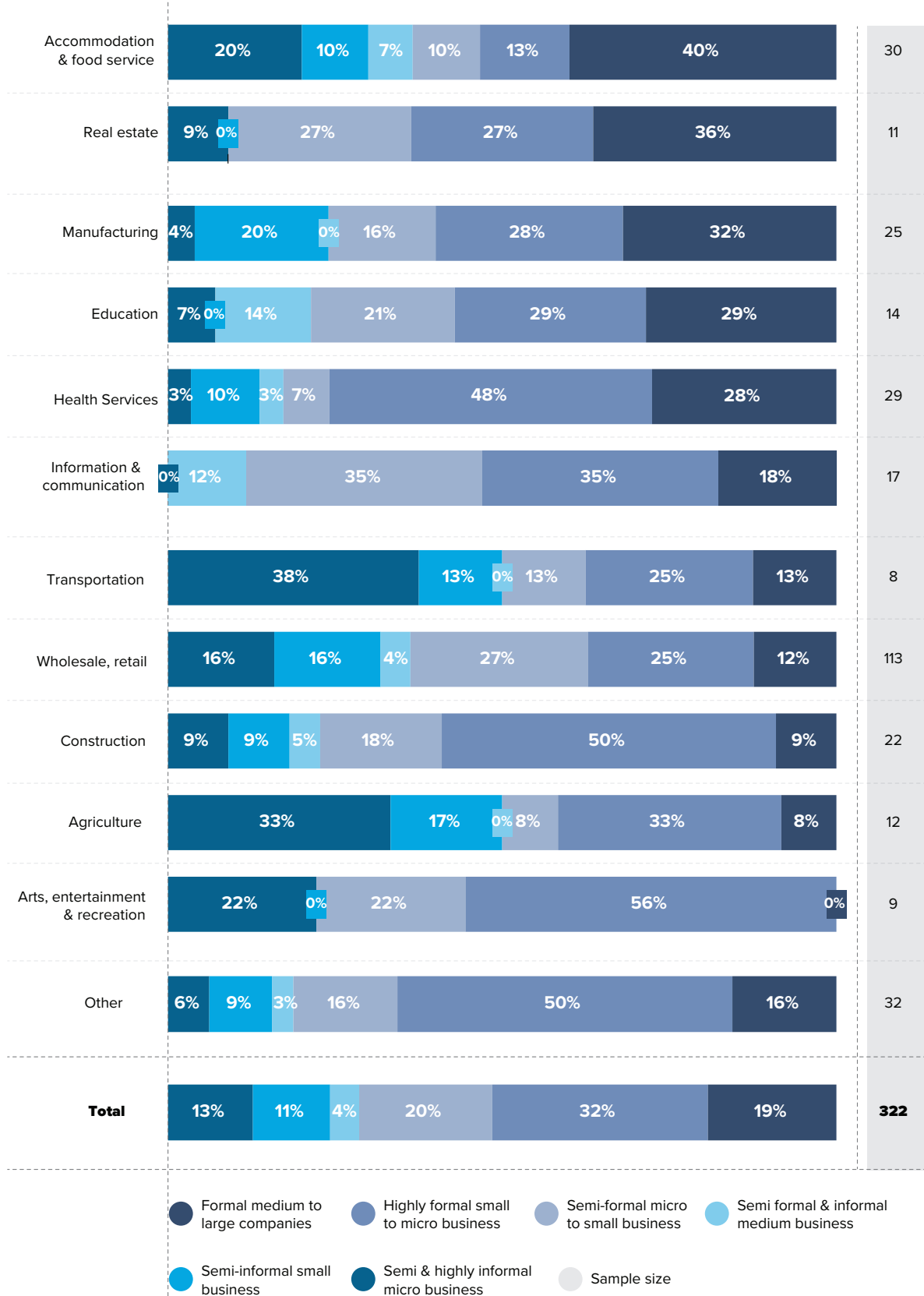
Informality is linked to size and sector; larger businesses are more likely to be formal enterprises

By segmenting the private sector companies along these two dimensions (formality and size), it is possible to dissect the private sector even further. The most common segments are formal small businesses (23%) and formal medium to large companies (19%). The latter appear slightly more common in the bigger cities such as Misrata, Tripoli and Benghazi. Informal micro businesses seem more prevalent in smaller cities such as Ubari, Ghat and Kikla.

Highly formal, medium to large companies are most common in accommodation and food services (e.g., hotels and catering companies), real estate (e.g., property investment companies) and manufacturing (e.g., plastic factory, marble cutting factories, etc.). Small, highly formal businesses are found in health services (e.g., pharmacies), construction (e.g., smaller construction companies and building material supply) and arts, entertainment and recreation (e.g., event companies, tourist companies). Micro highly informal businesses are typically found in agriculture (e.g., farms or poultry service companies) and the transportation sector (taxi companies and delivery services). Other studies have found that 1.2-1.6 million people are informally employed, mainly in the agriculture, construction and retail trade sectors.¹⁶

¹⁶ https://www.etf.europa.eu/sites/default/files/m/01BE9A2F283BC6B2C1257D1E0041161A_Employment%20policies_Libya.pdf

Figure 5: Private Sector Survey, by Size and Formality



The KII data confirms that the informal sector plays a major role in the Libyan economy, in part because there are challenges for businesses to formalize; it is difficult to follow all the correct procedures, and register with the right authorities, particularly in smaller cities.

“ At least 60% of the market is informal, and that gave us the idea that most of the businesses here are not registered.”

Professor of Accounting, Tripoli

“ Informal business in the private sector is very big to be honest and till now the Ministry of Economics and Finance couldn't determine how big it is.”

Journalist, Tripoli

“ When it comes to following all the proper procedures and having all the correct papers I would say that virtually all businesses are in some way informal.”

HR Specialist, Benghazi

This is also confirmed by the PSS, where 82% of the companies in the major cities (Misrata, Benghazi and Tripoli) were either semi-formal or highly formal (66% of them are highly formal). In the remaining smaller cities in the sample only 36% are highly formal and 30% are semi-formal. KII data further suggests that the high degree of informality is linked to the instability in the country as companies lack incentives to formalize when the economic and security situation is unstable.

“ Informality is very high due to business having little faith in the stability of the country and the economic state right now.”

Ministry of Labor, Kikla

5.4 Labor Market Patterns

Gender

The imbalance of gender in the libyan labor market is sector specific; education and healthcare have more female labor representation

The World Bank estimated female participation in public sector employment at 34% in 2019.¹⁷ In the private sector, female employment is most prominent as teachers in private schools at primary and secondary levels; the growing Libyan fashion design sector; the beauty and cosmetics sector; and catering.¹⁸ Women also account for the largest share of employment in the education sector in the vast majority of MENA countries¹⁹ and also make up the majority of workers in the healthcare sector²⁰. This data from Libya therefore replicates the regional trend. Whilst women are dominant in the health and education sectors, there is also a notable percentage of women employed in the information and communication sector. Other studies also confirm that educated and skilled women are overwhelmingly employed as teachers or nurses. Other typical jobs for women in Libya are administrative and clerical work in banks, department stores, government offices and domestic service.²¹

In Libya, female-based business initiatives increased significantly in the relatively liberalized private sector post-2011, however, female-established businesses still tend to be small in size, and, for the most part, micro-businesses in sectors that are typically female-dominated.²² Factors limiting women's participation in the private economy, outside

17 Labor force participation rate, female (% of female population ages 15+) (modeled ILO estimate) <https://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS>

18 Libyan Women and the Informal Market (2017) <https://www.libyaherald.com/2017/10/10/libyan-women-and-the-informal-market/>

19 https://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/publication/wcms_446101.pdf

20 COVID-19 crisis in the MENA region: impact on gender equality and policy responses (2020) <https://www.oecd.org/coronavirus/policy-responses/covid-19-crisis-in-the-mena-region-impact-on-gender-equality-and-policy-responses-ee4cd4f4/>

21 https://www.etf.europa.eu/sites/default/files/m/01BE9A2F283BC6B2C1257D1E0041161A_Employment%20policies_Libya.pdf

22 Women and the Informal Market (2017) <https://www.libyaherald.com/2017/10/10/libyan-women-and-the-informal-market/>

of the aforementioned service sectors, include, but are not limited to, the pervasiveness of culturally conservative views on female work, as well as physical mobility, such as a lack of ability to travel alone.

Female-owned businesses in the PSS sample were more likely to be found in accommodation and food services, education, and manufacturing. They tended to be smaller than male-owned businesses: 46% of the female-owned businesses were micro companies, compared to 34% of male-owned businesses. However, as is discussed in further detail later in this report, female-owned businesses do have a more positive economic growth outlook, when controlling for business size, compared to male-owned companies. Female business owners also tended to think that skills were more important compared to male business owners.

Overall, two-thirds of Libyan employees in the private sector survey sample are males. This is roughly comparable to national data, where women are estimated to only account for a third.²³ A larger proportion of the female workforce is employed in the public sector (97% of all working women are employed in the public sector compared to 79% of working males²⁴), but there are generally fewer women in the labor market as a whole.

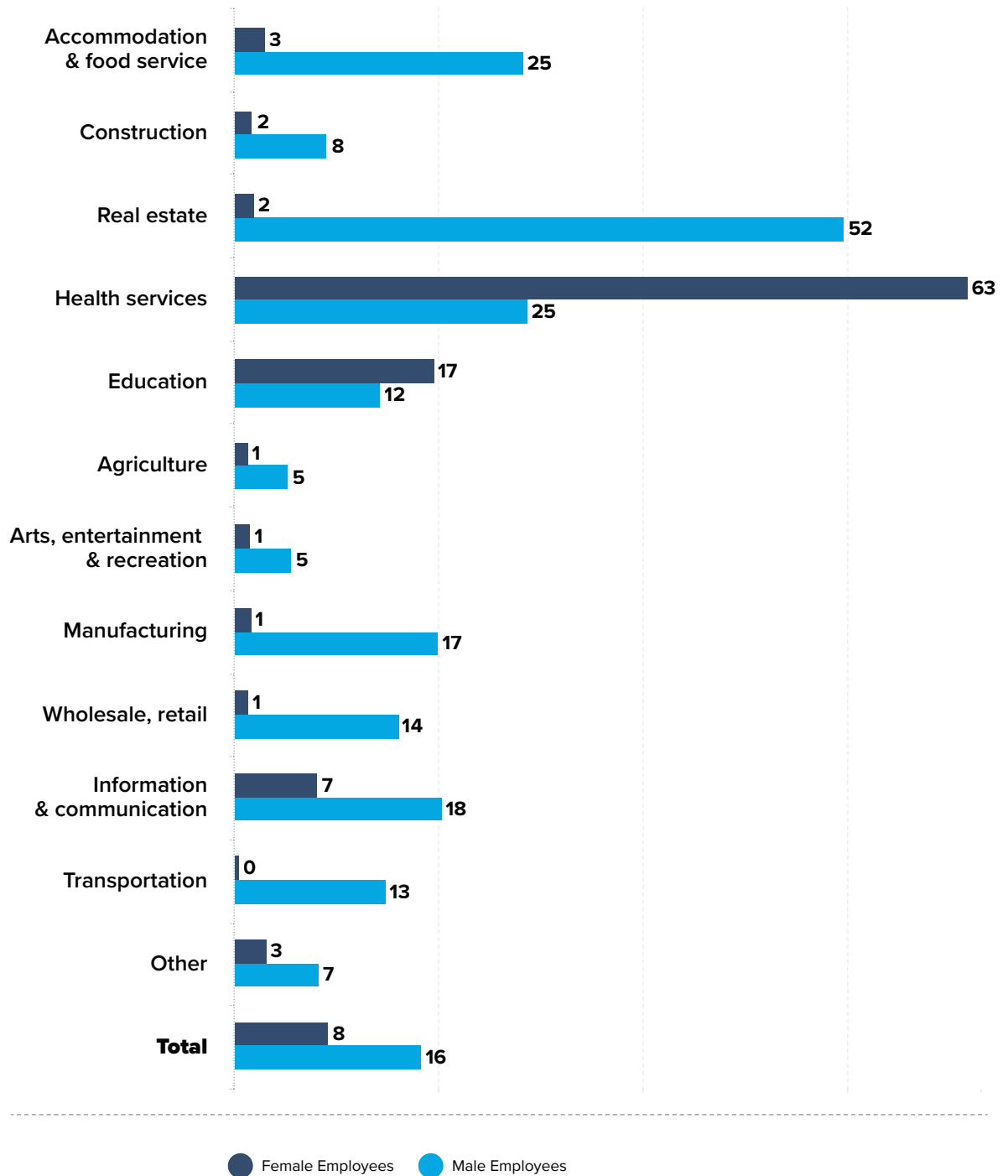
The KII data confirms these findings. Education and healthcare are again sectors where higher proportions of women are represented, as well as positions such as secretaries and receptionists. This is further supported by other research and labor statistics on gender in Libya.²⁵ Men are generally more dominant in more physical labor and in senior managerial positions:

23 <http://documents1.worldbank.org/curated/en/967931468189558835/pdf/97478-PUB-PUBLIC-Box-382159B-9781464805660.pdf>

24 World Bank (2012) 'Labor Market Dynamics in Libya: Reintegration for Recovery' World Bank Group Publication, page 10.

25 [HICA Final Report, Libya Ministry of Education \(Sept. 2019\); Libya Country Engagement Note for the Period 2019-2021, World Bank \(2019\); Libya Status of Women Survey, Rola Abdul-Latif, International Foundation for Electoral Systems \(Sept. 2013\); and Women in Libyan Workforce, Friedrich Ebert Stiftung \(Dec. 2017\).](#)

Figure 6: Average number of Libyan employees, by sector
(Private Sector Survey, not weighted)



“ Libyans had for a long time opposed females studying, and now they all study, and before they were banned but now they are allowed to work in specific sectors like education and this is what will continue to happen as time goes on.”

Former director of a food manufacturing factory, Bayda

“ Because there are some jobs [where] you’ll find females more, whereas other jobs you’ll find males more. And there are other jobs that have mixed genders. Like the medical jobs and pharmacies, you’ll find females more than males. Other jobs you’ll find males are more dominant in it. In the medical sectors, you’ll find females more, whereas in industrial work, you’ll find males more than females. While other sectors you’ll find them equal. Overall, you’ll find males are more dominant than females.”

Company owner and general manager, Tripoli

“ The percentage of both genders in the labor market is close because some jobs are only occupied by women and other jobs only occupied by men. But overall, men are a majority in the labor market because they are present in a wider variety of occupations and are willing to work in more sectors.”

Faculty member and employee at a medical center, Misrata

Conservatism, particularly in the smaller cities, remains a barrier for working women

Overall, 28% of the companies in the PSS sample say they would be willing to hire a Libyan woman. This is slightly lower than the 29% that would be willing to hire a foreign man, but much lower than the 72% that would be willing to hire a Libyan man. The perception of hiring women appears to be related to the areas and size of cities. In the biggest cities (Misrata, Tripoli and Benghazi) 38% of the companies in the PSS sample say they would be willing to hire a Libyan woman, while in the remaining smaller cities, only 21% express this willingness. This finding is also confirmed by the KII data, which showed that interviewees from larger cities expressed more positive views in terms of gender balance, unlike smaller cities.

“ The [split] between the two genders is almost 50%.”
Head of Current Accounts at a bank, Benghazi

“ It is almost an equal ratio. Males and females are found in all workplaces.”
CEO of an NGO for leadership and development, Tripoli

“ 90% of the workers are males. The number of female workers is very small compared to the males.”
Entrepreneur, Kufra

In relation to these findings, interviewees of both genders spoke of the conservative nature of some parts of Libyan society, and the limited acceptance of women in the workplace, which still hinders female participation in the labor market to this day.

“ Due to the rural and Bedouin nature of the society, there is a high level of close mindedness among them.”
Ministry of Labor, Kikla

“ This imbalance is related to social reasons. For example, some families refuse the idea of their daughters working, even if they were highly educated graduates. It is the culture of the society.”

Senior member at the Almadar company, Benghazi

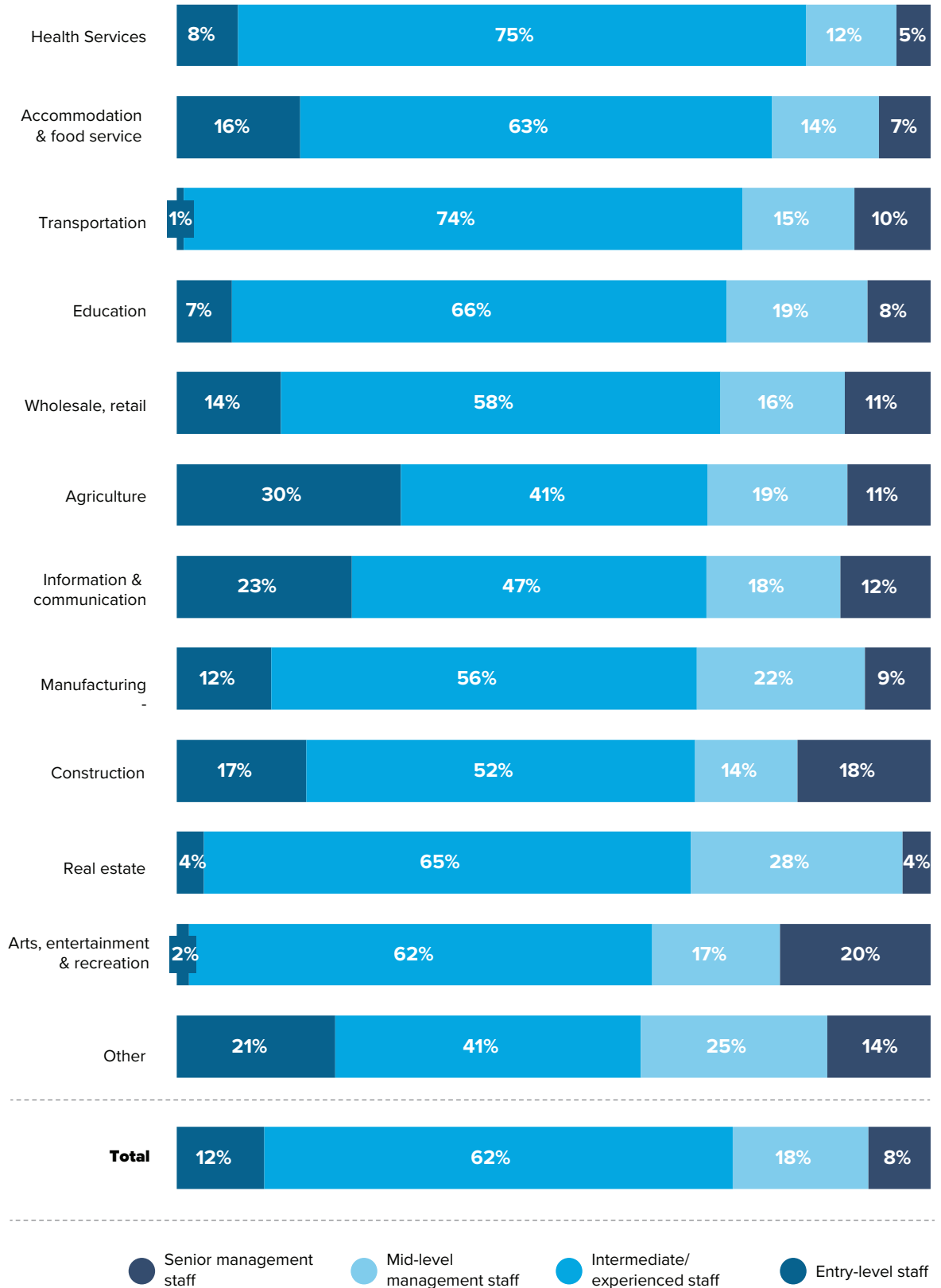
“ The barriers for women are nothing more than the ideas and traditions that the people have inherited and I hope these views break down in the future.”

Elder from the Tribal Council, Misrata

Corporate Structure

In the PSS sample, the majority of Libyan staff across sectors are found in intermediate positions, which we define as positions without management responsibilities, but with some experience. Entry-level positions account for about 12% of positions, while mid-level and senior management combined account for 26%. Some sectors appear to be more top-heavy and thus with fewer entry-level opportunities for new graduates or those with limited experience. This includes real estate, arts, entertainment and recreation in particular, but, to some extent, the education and transportation sectors as well. The sectors with the highest share of entry-level staff are accommodation and food services, agriculture, and information and communication sectors.

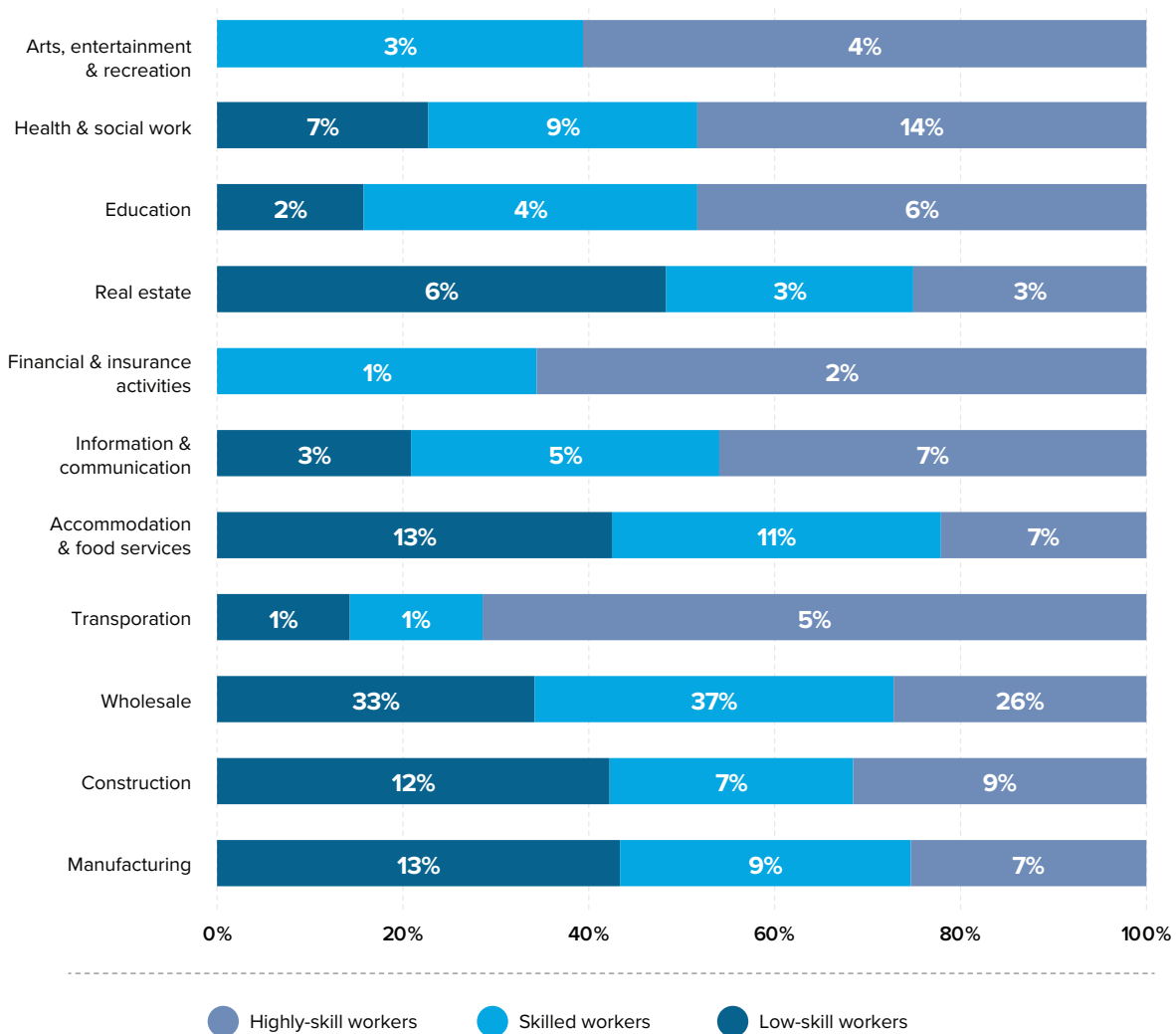
Figure 7: Private Sector Survey, by Staff Position



Across the businesses in the PSS sample, the data indicates that most employees are aged 25-39, with 45% of male employees and 26% of female employees belonging to this age category. The age group with the lowest share of employees in the private sector is 60 years old and above. The likely reason for this is that according to the Libyan law for social security²⁶, the retirement ages for males and females are 65 and 60 years old respectively. Nonetheless, it is permitted for individuals aged 60+ to work, upon the consent of the employer and in agreement with the remaining laws for social security.

Furthermore, the majority of hired workers are reported to be skilled workers, defined as those with experience and professional training (50%), and highly-skilled workers, defined as those with higher education and advanced experience (33%).

Figure 8: Worker Skill Level, by Sector



26 <https://ssf.gov.ly/wp-content/uploads/2012/09/القانون-رقم-13-لسنة-1980-بشان-احكام-قانون-الضمان-الاجتماعي-2.pdf>

Domestic workers and migrant workers

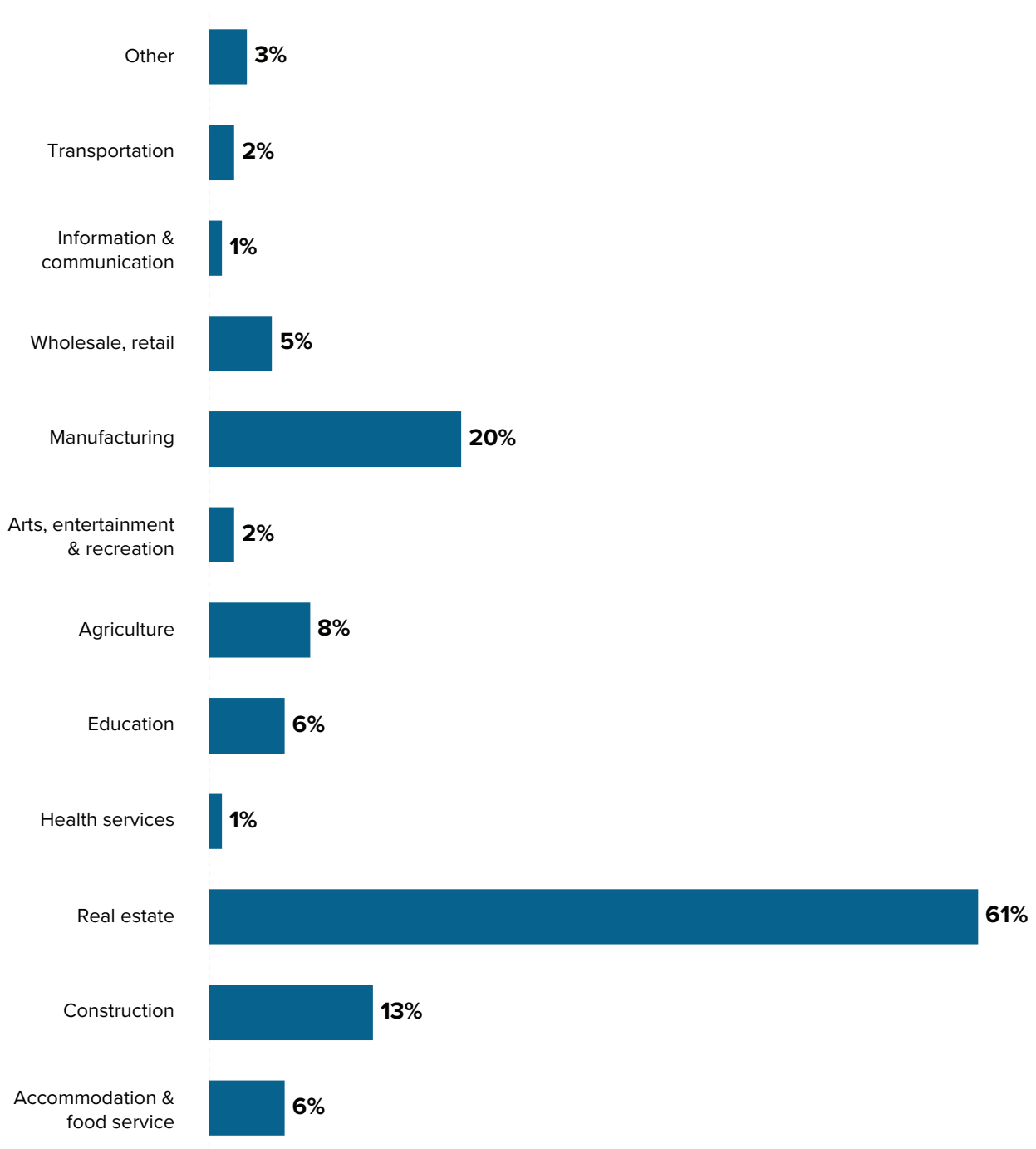
Real estate, manufacturing and construction appear to be the sectors with higher proportions of male migrant workers; the health sector is more likely to have more female migrant workers

Overall, migrant workers make up approximately 14% of the workforce in the companies in the PSS sample. When looking at individual sectors, they comprise 20% in manufacturing, and 13% in construction.²⁷ They account for less than 5% in sectors such as health services, entertainment and recreation, information and communications, and transportation. This shows that whilst overall, migrant workers make up a minority of the workforce in the private sector, there are certain sectors where their presence is much more notable. Migrant workers do appear to be over-represented in the informal sector with 22% of the workers in semi-informal companies being migrant workers. Yet in highly informal companies they only account for 5% of the workforce.

As highlighted earlier, 29% of the companies in the PSS sample said they would be willing to hire a foreign man, which is slightly more than their willingness to hire a Libyan woman at 28%. However, willingness to hire a foreign woman is even lower, at only 10%.

It is worth highlighting that foreign women only account for 2% of the total number of migrant workers in the sample. However, they make up 54% of the migrant workers in the health sector sample and also represent most of the foreign employees in accommodation and food services, and the agriculture sector. The preference for hiring migrant workers is due to them being more reliable (74% of those willing to hire foreign workers), more flexible with work hours (71%) and having better skills/qualifications (58%).

²⁷ They comprised 61% of employees in real estate, but this was an outlier. There was one real estate company that responded they had 1000 migrant workers. If you remove that company from the analysis the % drops to 0 and the overall share drops from 14% to 5%.

Figure 9: Proportion of Foreign Employees, by Sector

The domestic workforce were often perceived unfavorably when compared to the migrant workforce

When asked about the migrant workforce in Libya compared to the domestic workforce, there were some sharp perceptions shared about commitment levels and wider class dynamics. The issue of preference towards the migrant workforce was explained with perceptions that migrant workers are able to be more committed, and in some cases have the right skills set. Again, there were specific sectors where the migrant workforce was said to be more likely to dominate, such as construction and handywork and other physical labor – in part because they had the required skills. Some interviewees talked about the social class dynamics, referring to the fact that migrants often fulfil jobs that Libyans would not consider, especially well-educated Libyans who prefer administrative, professional roles.

“Whenever the skills and experience are at the same level, the local worker is preferred.”

Municipality member, Ubari

“Migrants generally have better vocational and technical skills than Libyans and are more likely to be hired in these jobs.”

Elder from the Tribal Council, Misrata

“There is a big migrant existence in the labor market, especially in industrial jobs, however the administrations remain Libyan.”

Employee, Benghazi

“Yeah, we favor the foreign workers over the locals due to their commitment. Because foreigners are strangers and don’t have that many social occasions. They’ll commit more than locals. It’s known about Libyans that they make excuses easily to escape from the job. Especially in the private sector. Even [regarding] the quality of work, you’ll find foreigners are better.”

Entrepreneur, Kufra

“Whenever you need mechanics or construction workers or any manual laborers almost 95% of the workers are migrants, there is a dominance in these kinds of jobs.”

HR Specialist, Benghazi

“Migrants occupy up to 60% of the jobs because they take their jobs more seriously and don’t have social commitments.”

Restaurant chain owner, Beyda

“I think foreigners have the majority, but nowadays you can see a lot of local young men who started working in crafts such as plumbing, carpentry and so on. One thing they lack is the training courses for that. Maybe they are graduates, but they couldn’t find the appropriate jobs that suit their majors, so they direct themselves to such crafts.”

Municipality HR manager, Derna

06

Private sector challenges

Lack of legal regulation, along with perceptions about job instability and lack of alignment with academia are said to be top challenges within the private sector

Periods of political instability combined with the absence of a cohesive legal framework to regulate the private sector, has encouraged poor working conditions and work practices. Labor laws are not actively nor effectively enforced and consequently, on the side of employers, there is a general misunderstanding of what is applicable in terms of labor regulations.²⁸ Private companies, particularly those small and medium in size, hold great discretion in terms of determining salary, work hours, benefits and social security, whilst elements often considered basic formalities of work, such as clear employee identification and formal work contracts, are simply not utilized.

A central feature of the Libyan economy is the expansive nature of the public sector, which has historically dominated economic production, as well as the delivery of goods and services. Decades of semi-socialist policies worked to limit the size of the private sector and ensured the state's control of key industries and services. Though current official data on the size of Libya's public sector is lacking, in 2012 the World Bank estimated 77% of Libya's labor force as employed within the public sector.²⁹ Whilst the government remains the largest employer, unemployment remains high amongst Libyan youth, reflecting regional MENA trends. Young Libyans, as a result, are increasingly looking towards the private sector for job opportunities or turning to informal work as a means of generating a basic income.

KII interviewees linked the dominance of the public sector to social and economic stability, indicating that public sector jobs are considered as permanent jobs that provide a reliable income, and social security. Interviewees also mentioned the social pressure to secure such positions.



Unfortunately, public sector employees don't get fired, which has been a cause of much corruption.”

Ministry of Labor, Kikla

²⁸ Confederation of Danish Industries. Potential for social dialogue in the Libyan labor market p.12.

²⁹ World Bank (2012) 'Labor Market Dynamics in Libya: Reintegration for Recovery' World Bank Group Publication, p.10.

“Some people prefer the private sector and others prefer the local one, for example in the local sector people’s main concern is the stable source of income.”

Senior member at the Almadar company, Benghazi

“Social pressure plays a role in wanting a government job, but also the feeling of ease and comfort knowing you have a safe job you can’t lose.”

“It is very difficult to lose your job in the public sector due to the laws governing the relationship between the public sector employee and the government. It is these laws that give the employees the comfort that they have and feel in the public sector.”

Senior Lawyer, Tripoli

“It tends to be a very small percentage, as in the Libyan work law the cases of dismissing workers is limited only for exceptional situations. The Libyan law reduces the scope of dismissal. Most workers in the public sector never get dismissed.”

Staff Member at the administrative branch in the Almadar company

“There is a lot of social pressure to get hired in the public sector due to the protection and stability and consistent salary it provides.”

HR Specialist, Benghazi

Qualitative data from interviewees across Libya on the topic of private sector challenges hindering growth were grouped into four main categories:

01

A lack of business regulations which would facilitate and support the growth of the private sector. This also related to complicated processes and bureaucracy involved in registering businesses.

“ In order for you to issue a practice authorization you have to provide more than 20 documents ... and some of them are not in any way relevant... also, if you are following the Libyan labor market law, you are not allowed to hire anyone unless you are doing this through the Ministry of Work and they have to be registered in the job seekers database, that is if the database exists.”

Business owner, Tripoli

“ One of the main challenges to the private sector is the lack of support and guidance, in fact it is the other way around; the acting laws are working against the growth of the private sector. for example the Libyan law requires very large legal reserve value in order to start commercial activity, and requires the employee not be a public sector employee, and free full time.”

Teacher of Accounting, Kufra

“ I have a farm and we should have an agricultural booklet to register the business, but we do not have one because we cannot register due to the complicated paperwork required and also the fact that I cannot register as long as I’m an employee in the public sector. Us farmers have no security and no one to fight for our rights. You could buy fertilizer today and find out that its price jumped the same day or plummeted.”

Farm owner, Ejdabya

02

Lack of linkage between education systems and private sector employment needs, causing a significant disparity between demand and supply.

“ Educational degrees and curriculums don’t fit the market demands at all.”

Ministry of Labor, Kikla

“ [There are] too many graduates of the same field – no diversity of majors. Another reason is not many job opportunities are available in some fields. For example, I am a tour guide and ever since the beginning of the war in Libya in 2011, there has not been any tourists, which led to a drawback in my field of work.”

Tour guide, Sabratha

“ There is no study regarding the requirements of the labor market. Students enter any field they wish with possibly no work opportunities.”

Entrepreneur, Kufra

03

Economic instability, including deteriorating security situations, the liquidity crisis and fluctuating exchange rates which have affected the Libyan market significantly - with little formal support offered to private sector businesses.

“ As a result of the instability of the price of the dollar, we can't set internal prices. Consumers complain about raising the prices in the labor market and why there is no decline in prices. The employers and the owners of private clinics have nothing to do as they are associated with foreign companies for supplying medicines, equipment and the materials which are used in fillings, fixtures and extraction which are related in the dentistry field. When these companies start raising the prices of their supplies, employers do the same thing with their prices when they start working and the citizens start complaining about the prices.”

Medical doctor, Ejdabya

“ The first five years (after 2011) there was growth, construction and investments at a 200% rate, however in recent years it's slowed. Any place without political stability wouldn't have economic growth because economic growth is led by politics, such as is the case in the Gulf countries.”

Entrepreneur, Kufra

“ Stability, unfortunately, does not exist in the country for everyone, everyone is trying to cope with the situation and, unfortunately, most of the projects closed and ended due to lack of stability or due to weak financial support and an imbalance of financial accounts for the project budget. The risk is very high and in return, if you work intelligently the benefits will be high, the market is open for any business, but they need to work smart and professionally.”

Owner of fast food delivery company, Tripoli

04

The impact of public sector dominance in the workforce – which encourages the culture of being paid regardless of performance.

“ The cultural idea about work in Libya, as they are used to getting paid without even working. Educational bodies should have an awareness of what the labor market needs.”

Professor of Accounting, Tripoli.

“ The main barrier to the private sector is the public sector itself. On top of hiring more than its ability, it is giving salaries without work. Now why would someone leave this to go to the private sector? There are no incentives or motivations in the public sector [to work hard], the promotions are automatically given, there are no penalties, annual performance appraisals are not common, and if enforced they just copy and paste.”

Faculty member at the Faculty of Economics, Bayda

Overall, the public and private sector offer two different attractions, which has also resulted in a general trend of multiple jobs in both sectors. Many public sector employees are forced to get another job in the private sector to supplement the low income they attain from the public sector, whilst benefiting from perceived stability of a job in the public sector.

“ For the majority it is insufficient, taking a thousand Libyan dinars per month while having a level 13 degree. It is not enough. There are some workers who take 17 thousand or 18 thousand dinars per month, such as workers who are in the state audit and the Libyan parliament, but for the majority their average salary is under one thousand.”

Senior Employee at the Ministry of Economy, Tripoli

This was also supported by the data obtained from the online survey, as 66% of participants expressed a preference to have both a governmental job with another in the private sector. Having a single job in the private sector was a preference for 19% of survey respondents, and a single governmental job was only preferred by 6%.

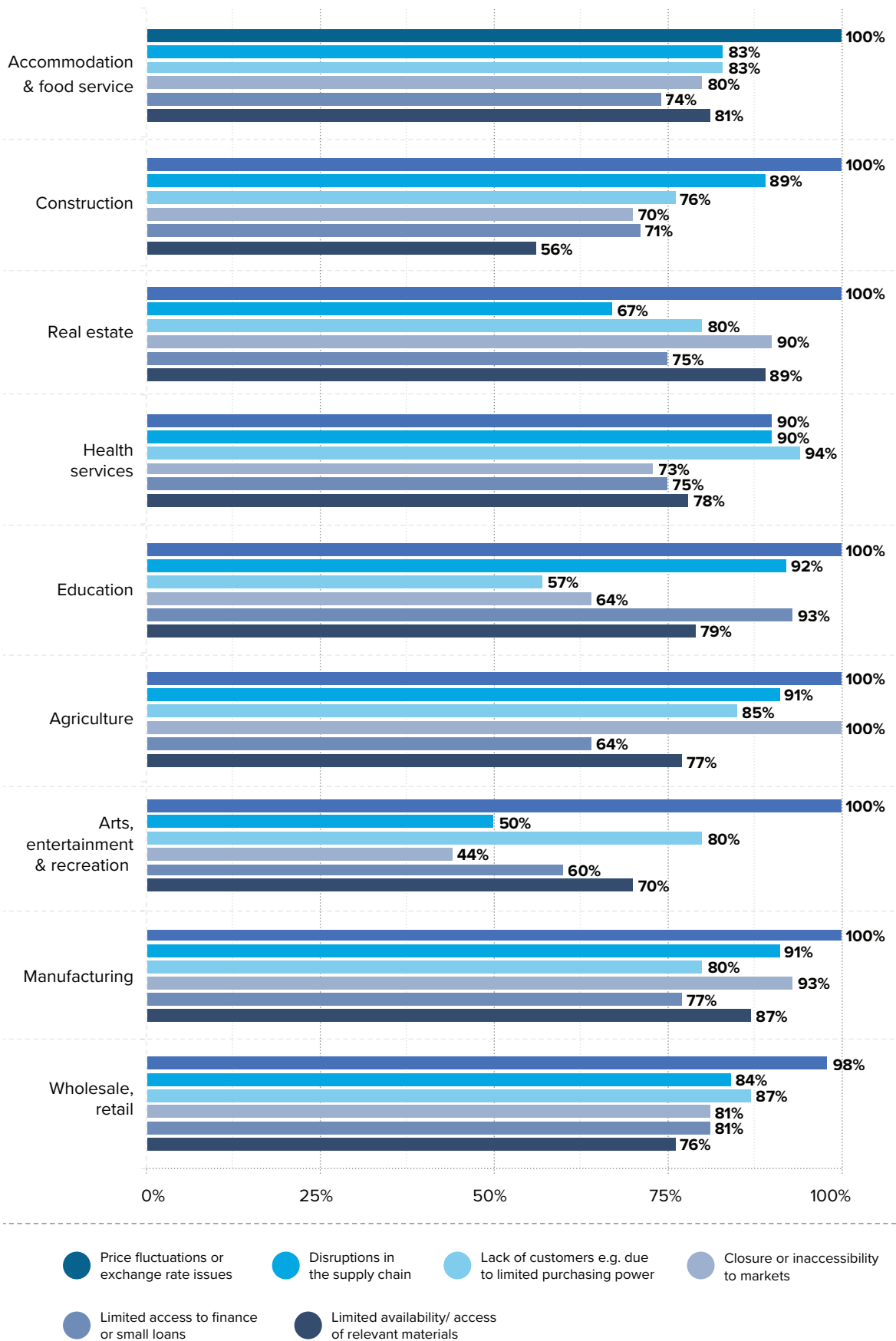
6.1 Operational Challenges

Price fluctuations affect the vast majority of businesses, along with disruptions to the supply chain and stagnant local markets

From the PS survey, the main challenges facing Libyan companies are price fluctuations or exchange rate issues, mentioned as issues by 97% of companies. This is followed by disruptions to the supply chain (84%) and a lack of customers (82%). The top six challenges can thus be considered as relating to the market functionalities and inputs (materials and financials).

From a specific list of challenges, the challenges least mentioned related to labor, machinery and getting products to markets. Difficulty finding qualified workers (68%), lack of skilled labor (64%) and lack of unskilled labor (23%) are not considered among the top six key challenges facing companies, yet nonetheless, a lack of qualified workers and skilled labor are clearly still significant issues. This is likely partially due to the fact that challenges related to labor are not considered as important in the wholesale and retail sectors, which constitutes approximately one-third of the sampled companies. Difficulty finding qualified workers is considered more of a challenge in health services (83%) and in accommodation and food services (80%).

Figure 10: Top Private Sector Challenges



Lack of provision of support was reported as a challenge by 95% of businesses surveyed. This included the lack of any form of financial support (e.g., loans), as well as the provision of assets (such as equipment and supplies), and training.

Most of the businesses in the PSS sample mainly cater for local markets. On average companies report that 65% of their income comes from local markets. In addition, 12% of income comes from markets within their region. Only about 2% of income on average comes from exports.

In terms of resources assessment, the majority of businesses rated the availability of relevant market supplies as “very bad” especially in their city/area (67%) and international markets (77%).

6.2 Contextual Challenges

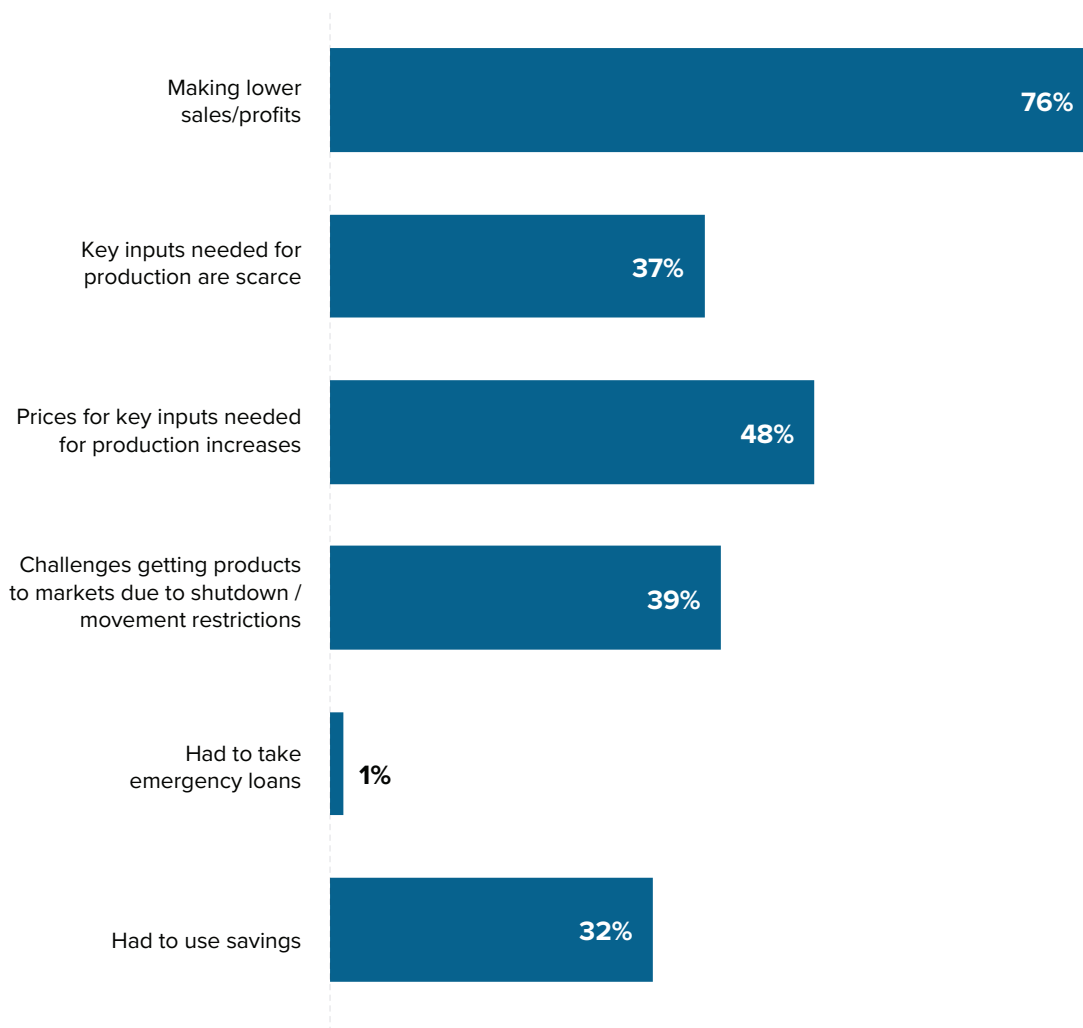
COVID-19 has had a significant impact on the financial climate

More recently, the global outbreak of COVID-19 has added a new layer of complexity to the Libyan labor market, presenting new challenges to an already fragile private sector.

Overall, there was an overarching agreement in the PSS that COVID-19 had an impact on businesses in Libya; 84% of businesses surveyed said it had an adverse impact, across all sectors, but the most affected were businesses in manufacturing, agriculture, construction, and wholesale goods.

Furthermore, the most agreed-upon impact of the pandemic was ‘making lower sales/profits’, followed by ‘increased prices of production’, illustrating a further blow to economic stability. Other key effects included ‘absence of inputs needed for production’ (37%), ‘challenges of getting products’ (39%), and ‘using company savings’ (32%).

Figure 11: Proportion who felt COVID-19 had a business impact, by sector



In the summer of 2020, views about the full impact of COVID-19 were uncertain. Generally, the impacts that private sector stakeholders reported at that time can be summarized as follows.

01

COVID-19 had four effects on competition

- a. Increases in competition attributed to fewer business opportunities
- b. Increases in competition attributed to a rise in available labor
- c. Decreases in competition within industries due to the closure of similar businesses
- d. Some companies have attempted to diversify their services to survive the impact of COVID-19, leading them to experience new competition.

02

Many SMEs maintained staff levels and salaries, yet this lacked sustainability

- a. Low-skilled, semi-skilled and contract workers are those most likely to have faced salary reductions or have been released from employment.
- b. Many employers have indicated feelings of social responsibility towards maintaining salaries, using company reserves to do so.
- c. Employers in SMEs negatively impacted by COVID-19 that have continued to pay salaries indicate that they will soon be forced to reduce salaries and/or employee numbers if the situation does not improve, indicating severe consequences on employment.
- d. Power cuts and unreliable internet connections demonstrate the weakness of Libyan infrastructure in being able to support long-term remote working.
- e. Most businesses, including those that have reported no impact or a positive impact from COVID-19, express that they have postponed or cancelled business development plans due to concerns regarding the longevity of COVID-19, indicating a long-term effect on growth.

However, many interviews, from both early in the pandemic and more recently, described the impact of COVID-19 as contextualized in the midst of ongoing conflict and longstanding challenges within the Libyan economy. Historic fragility in the Libyan labor market is viewed as compounding the impact of COVID-19 in some ways, adding new pressures to an already under-developed private sector and a stretched public sector.

Conversely, this same legacy was also described as providing a buffer to the COVID-19 impact in two specific ways. Firstly, many people in Libya still work in public sector roles (a 2015 World Bank study put the proportion of the workforce employed in the public sector at 85%) and it was described that these workers were able to retain some of their salary during lockdown, so only a few were reliant on the private sector businesses that were impacted most. Secondly, the economy in Libya is heavily dependent on imports rather than production, so there were a limited number of manufacturing companies that had to close.

Some responded that the impact was sector specific, whilst others commented on the changing skills sets required to adapt to the situation, claiming that the pandemic has resulted in an increased demand on online and digital skills, though this view was not consistent.

“ It affects only the private sector. Especially those who are working by daily labor. The quarantine, for example, has affected the employees more due to fewer working hours.”

Owner of a publishing office, Benghazi

“ It may have affected the increased demand for online work skills. Many people have been forced by COVID-19 to use online shopping and have continued with it.”

Founder & CEO of a development NGO, Benghazi

6.3 Private Sector Capacity

Private sector businesses are lacking in capacity to grow, particularly human resources capacity

In the PSS, each business rated their resources and capacity in four categories:

- 1.** Production assets (i.e., machines, vehicles, inputs needed to produce goods, etc.)
- 2.** Technological assets (i.e., computers, data communication lines, network and telecommunications equipment, Internet-related information technology, etc.)
- 3.** Processing capacity (speed and efficiency of production)
- 4.** Human resources (quantity and quality of staff)

In all four categories, most businesses rated over 60% of their assets as ‘very bad’. This indicates that most Libyan businesses in the sample lack capacity in all of the listed categories. Regarding production assets, 64% rated their resources as ‘very bad’, while only 26% rated it as ‘good’. As for technological assets, 61% estimated their resources as ‘very bad’, while 25% as ‘good’. For processing capabilities, 69% rated their resources as ‘very bad’, and only 18% as ‘good’. Finally, for human resources, over 78% estimated their resources as ‘very bad’, while only

17% as 'very good'. Human resources capacity is therefore shown to be the poorest amongst the categories, however, capacity and resources in other categories is still clearly lacking.

Capacity issues differed by sector however, with the arts, entertainment and recreation sector who estimated their technological assets as good by 100%. Real estate estimated their processing assets as good by 60%. The implications are that certain sectors may need to be prioritized in terms of support required to build the capacity related to their growth.

Figure 12: Capacity – Human Assets

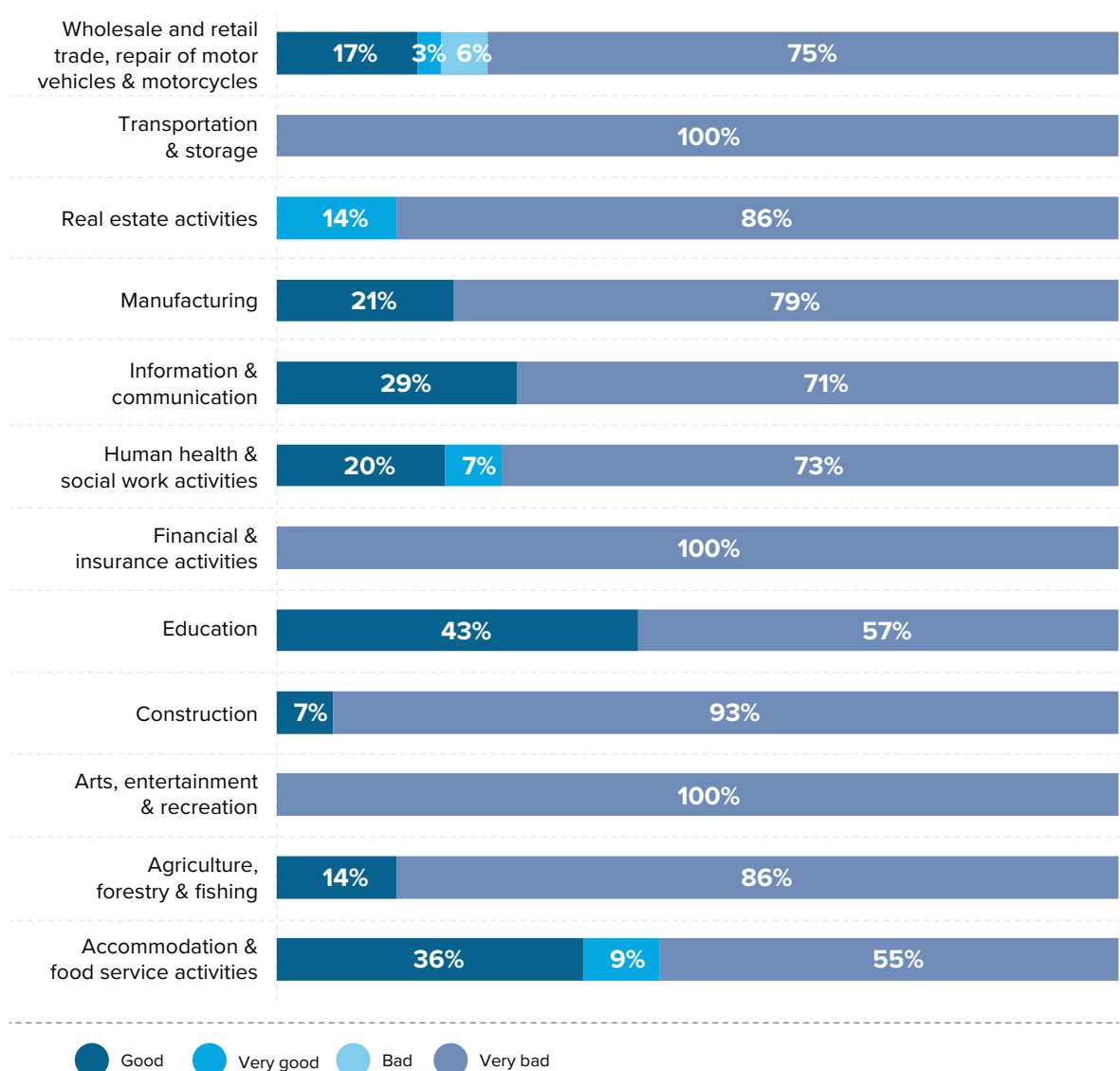


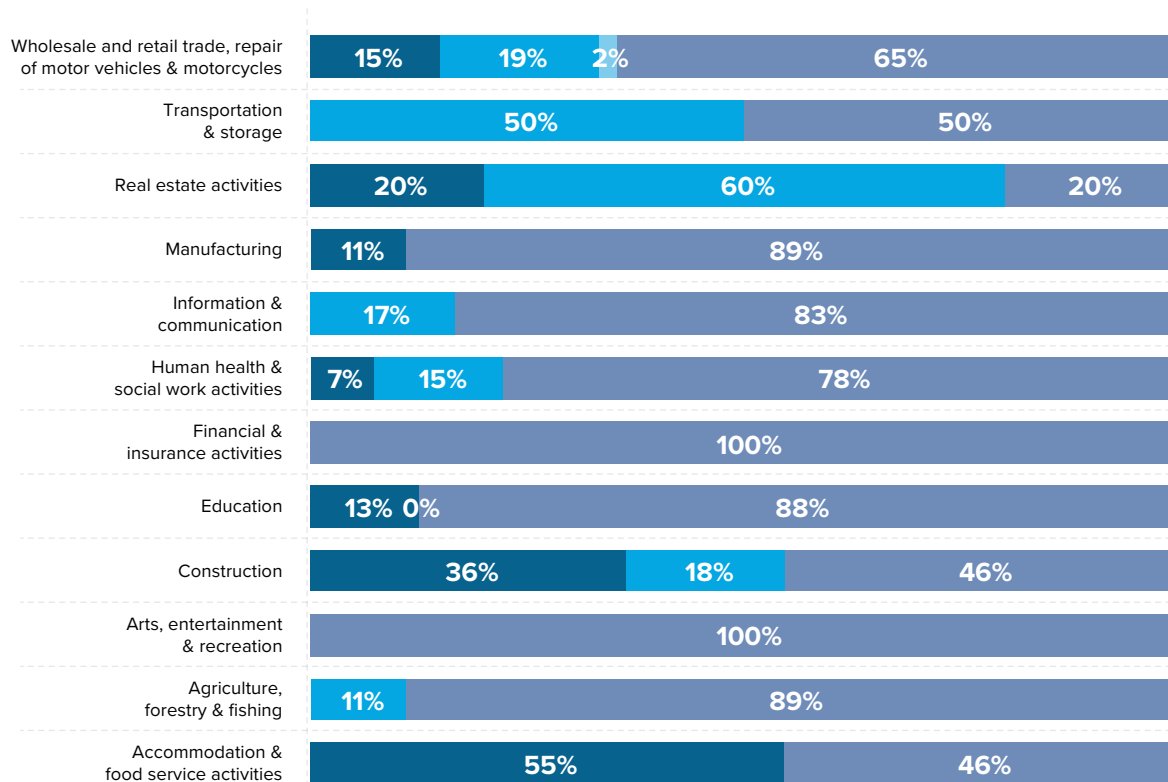
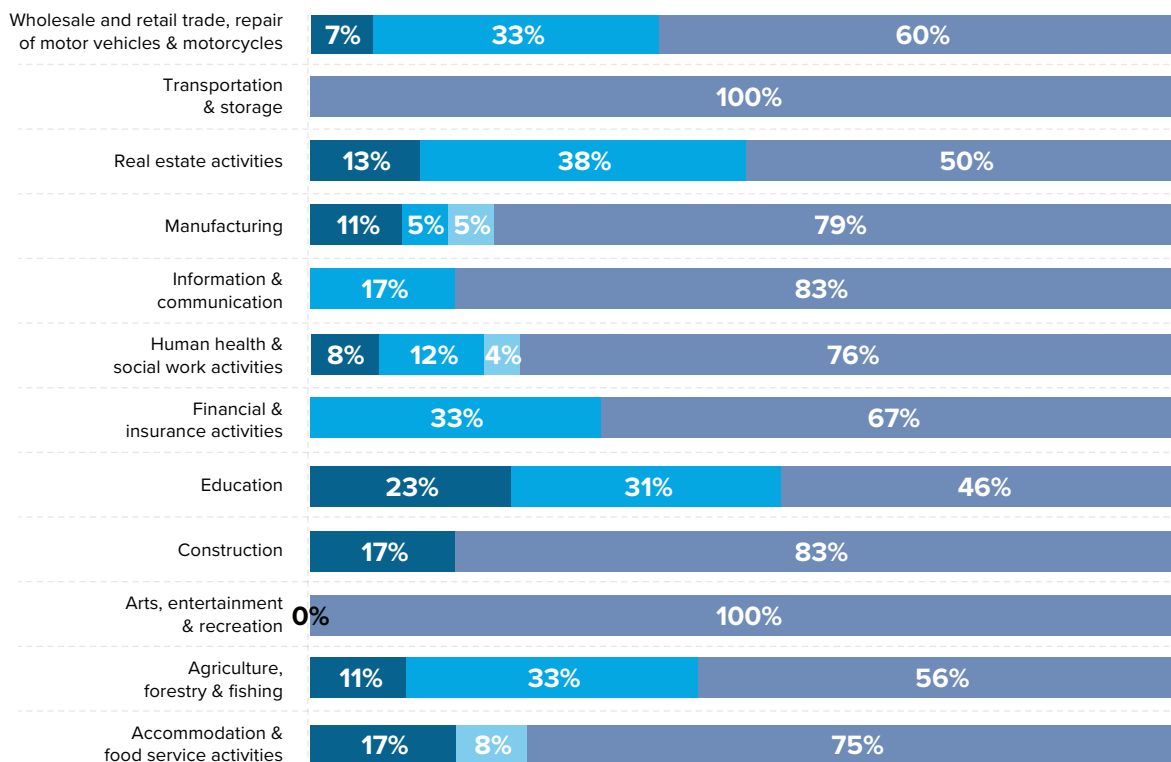
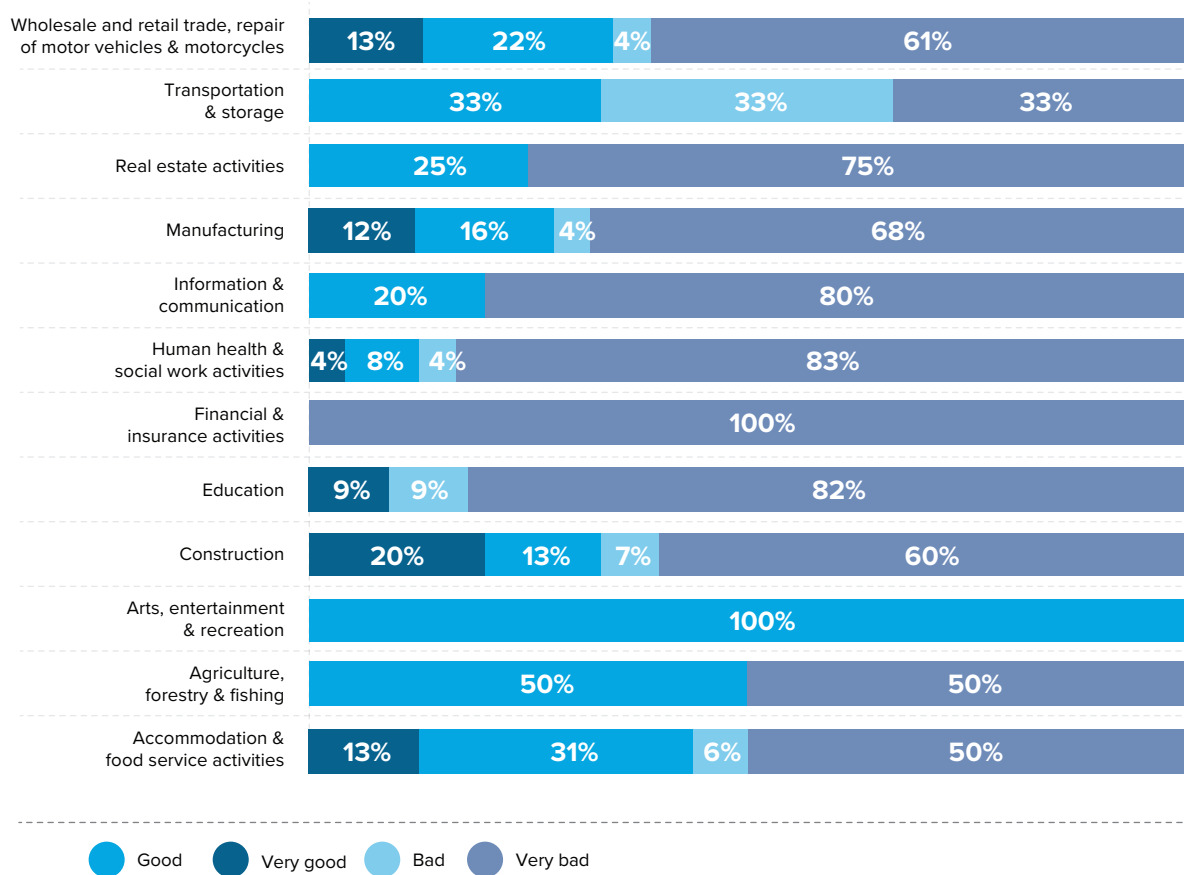
Figure 13: Capacity – Processing Assets**Figure 14: Capacity – Production Assets**

Figure 15: Capacity – Technological Assets

07

**Skills gap analysis
and labor market
motivations**

7.1 Skills Gap Analysis

There is a demand for high skilled labor, however a quarter of businesses surveyed said there was no minimum education requirement for their employees

Importance of skills

As highlighted above, some skills are significant drivers of expected economic growth. The skills being supplied in the labor market are therefore an important economic parameter. Furthermore, ensuring that the employment growth potential is realized requires that in-demand skills are supplied in the labor market. This section further investigates the relationship between the importance and availability of skills in the Libyan labor market, as well as employment motivations and expectations among Libyan employees.

Education

Across the sample of businesses in the PS survey, the most common minimum level of education required from employees was secondary education/vocational training (42%). Only 14% of businesses require that their employees have at least a bachelor's degree, whilst, on the other hand, 24% of businesses said they did not have a minimum education requirement. This suggests that it is possible to obtain employment in the Libyan private sector with limited educational attainment. However, 74% of the companies in the sample also state that the optimal level of education is a bachelor's degree or higher, showing a preference for a higher level of education. This therefore clearly indicates a demand for high skilled labor in the Libyan private sector. The preference for a higher level of education is particularly high in health services (97% of companies in PSS sample), real estate (92%) and information and communication (89%), while low in sectors such as agriculture (55%), arts, entertainment & recreation (63%) and wholesale/retail (65%)

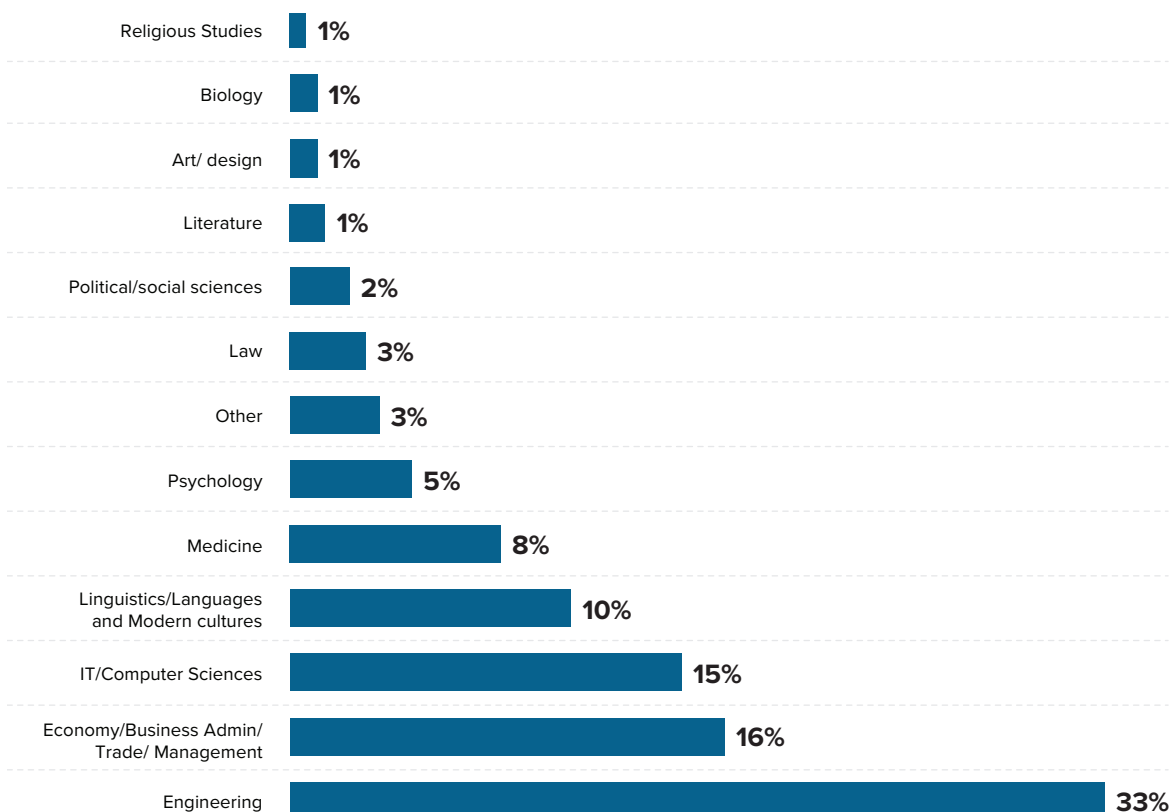
The online supply-side survey data suggests that education levels of participants varied across cities. Unsurprisingly, the larger cities of Tripoli, Misrata and Benghazi had the most students in higher education and university levels. Tripoli was the highest in number of students both in university level and higher education.

Misrata surpassed Benghazi in terms of number of higher education-level students, whilst Benghazi had a higher number of university students. These high levels of university enrolment and educational attainment appear to be fairly well-matched with the high demand for skilled labor in the private sector.

Languages

The PS survey also reflected a fairly low demand for a wide range of languages, which somewhat reflects the market characteristics. The most required languages from employees are Arabic with 97%. English is the second most required language, yet required by less than half of businesses, at 47%. Other languages, including French and Italian, are not widely required at all. On the supply side, 35.3% of the sample in the online survey said they were able to speak English either fluently or at an intermediate level, suggesting slightly lower levels of English amongst the working population than that which is required by the private sector. However, 26.5% of respondents said their English was at beginner level, indicating potential for required levels of English.

Figure 16: Top 10 Topics of Current Study, by Online Survey Participants



Behavioral skills

Looking specifically at the demand for skills in the private sector, the most important relate to behavioral skills in the workplace. More specifically, these include having a positive work ethic, time management skills, and respecting deadlines. This is also confirmed by the KII data, where informants also highlight the importance of similar behavioral skills. including work ethic, leadership skills, and management skills.

“ Personal skills in which employees know how to deal with people, dealing skills let’s say, being committed to their job and clever in picking things up, these are the skills at the center of focus at a primary level.”

Senior member at Almadar company, Benghazi

“ Some occupational work needs professionalism, needs people who have the desire to work and take risks and also have crafting skills. Administration skills are one of the essentials skillsets that are needed in job requirements in the labor market, alongside English and IT.”

Professor of Accounting, Tripoli

In addition to these, other skills highlighted as important by businesses in the PSS sample include the ability to work in teams and communicating with co-workers. This was also echoed by a number of key informants.

“ Skills in public relations (communication skills) because it is necessary to provide courses for those who work as a secretary, in order to learn how to communicate with people.”

CEO of a development academy, Ajdabiya

“ Communication skills are the most required skills in most sectors here.”

Senior at the Office of Scientific and Technical Affairs of the Higher Institute, Kikla

“Communication and leadership skills are valued to an astronomical degree, without these no one can hope to grow in the job market.”

Entrepreneurship expert, Tripoli

Key informants also highlighted that in most jobs, basic mathematical skills, computer skills, and English language capabilities are highly requested. Basic math skills were also found to be fairly important among companies in the PSS sample, but IT skills were of lesser importance.

“An employer would expect these skills, such as English as a second language. It is a must to have knowledge of computer skills such as Microsoft, Excel, Word and PowerPoint.”

Economic and Security Field Officer at a humanitarian organization, Tripoli.

Lastly, technical skills, such as craft and manual labor skills, were also highlighted by key informants to be in demand, as previously, foreigners used to do this type of work, but now there are fewer migrant workers in Libya due to the poor security environment.

“Craftwork is the most wanted skills nowadays... I think computer skills is one of the most important.”

Owner of a publishing office, Benghazi

“The private sector currently seeks more [skills] in technical aspects such as mechanical technicians, electricians, plumbers, solderers, etc.”

Economic and Security Field Officer at a humanitarian organization, Tripoli

As highlighted earlier, female-owned businesses tend to think skills are more important than male-owned, when controlling for sector using regression analysis. In terms of location differences, business owners in Bayda generally think skills are less important, compared to other areas. In terms of sector differences, manufacturing and wholesale/retail businesses tend to think skills are less important compared to

other sectors. Interestingly, this is quite intuitive, as these sectors are typically those where limited skills are required, which was also found with regards to preference for education level among employees. Additionally, the more formal a business is, the more likely they are to prescribe importance to skills. This could suggest that formal companies also deliver more technical and complex services and products that thus require higher-skilled labor than informal businesses.

Availability of skills

There is a strong, positive, correlation between perceived importance of skills and perceived availability of skills, indicating a good skills match between supply and demand

In terms of availability of skills, private sector businesses in the sample tend to think that ability to do simple math, a positive work ethic, and ability to communicate with co-workers are among the most available skills in the Libyan labor force. This illustrates the fact that overall, there is a strong, positive correlation between the perceived availability of skills and the importance ascribed to those skills by employers, i.e., the more important a skill is, the more available it typically is. This suggests that generally there is a fairly good match between skills supply and demand. While other studies have found that Libyans often work in different fields from their academic qualifications³⁰ the non-sector specific skills they learn do appear to match the demand in the private sector labor market.

Perception of availability of skills is also seen to be driven by company size, in that the more employees that businesses have, the more they tend to think skills are available. This causality may also work in reverse, in that because these businesses find that the skills they need are available, they hire more employees. Similar to findings regarding the importance of skills, business owners in Bayda also tend to think skills are less available compared to other areas.

For companies in the wholesale/retail sector, again, like findings regarding the importance of skills, they also think skills are less available. Similarly, the more formal businesses are, the more they

30 https://www.etf.europa.eu/sites/default/files/m/01BE9A2F283BC6B2C1257D1E0041161A_Employment%20policies_Libya.pdf

tend to think skills are available – perhaps reflecting their increased capacity to find such skills (such as having a Recruitment Manager or Human Resources Officer, for example). This may also reflect potential higher motivations for job seekers to apply for these companies, which will be explored later.

The greater the extent to which a business offers a competitive salary and other benefits such as free meals and flexible working hours the more likely they are to perceive skills to be available. This suggests some correlation between companies that are better at providing these specific benefits with the types of applicants and talent they are able to attract. This also further underscores the importance of providing benefits to attract preferred applicants.

Lastly, businesses that use public recruitment agencies or networks tend to think skills are less available. Again, this causality may be a result of the reverse, in that companies that find it difficult to find their required skills may be more likely to engage recruitment agencies and networks to recruit.

Supply of skills

The online survey data investigates the confidence Libyans have in performing different relevant skills to a satisfactory level. Overall, Libyans are most confident doing simple math, working in teams, using the Microsoft Office suite, using social media, and having an entrepreneurial spirit. Generally, the analysis shows that there is a strong correlation between the private sector's perception of availability of skills and the confidence Libyans have in performing those skills. It also shows that, on average, companies perceive skills to be more available than the confidence Libyans have in performing those skills. Specifically, private sector companies have a significantly more positive perception of availability of skills such as simple math, communicating with co-workers, providing a solution to a problem, positive work ethic and learning new skills than supply data would suggest is available. On the other hand, employers tend to have a more negative perception of Libyans' skills in terms of writing reports, interpreting long texts, expressing ideas in written form, ability to fully use Microsoft Office and entrepreneurial spirit.

Regression analysis with the skills index as the dependent variable showed that the younger Libyans are³¹, the more confident they

31 Age groups were: under 20 years, 20-25, 26-30, 31-35, 36-40, over 40

are in their skills. It also showed that men are more confident in their skills than women. People working full-time are also more confident in their own skills in comparison to people working part-time or those that are unemployed. In terms of sector-specific findings, people that are interested in working in the media and communications sector are generally less confident in their skills, while people that are interested in working in administration and support services are more confident in their skills. Looking at location differences, residents in Benghazi were generally more confident in their skills compared to other locations in Libya, but overall, living in a big municipality (>400,000 residents) was not a significant driver of confidence in skills. Interestingly, an individual's level of experience, when controlling for other factors, was not a significant driver of self-confidence in skills. The preference for working in the public, private or informal sector also did not impact on self-confidence in skills.

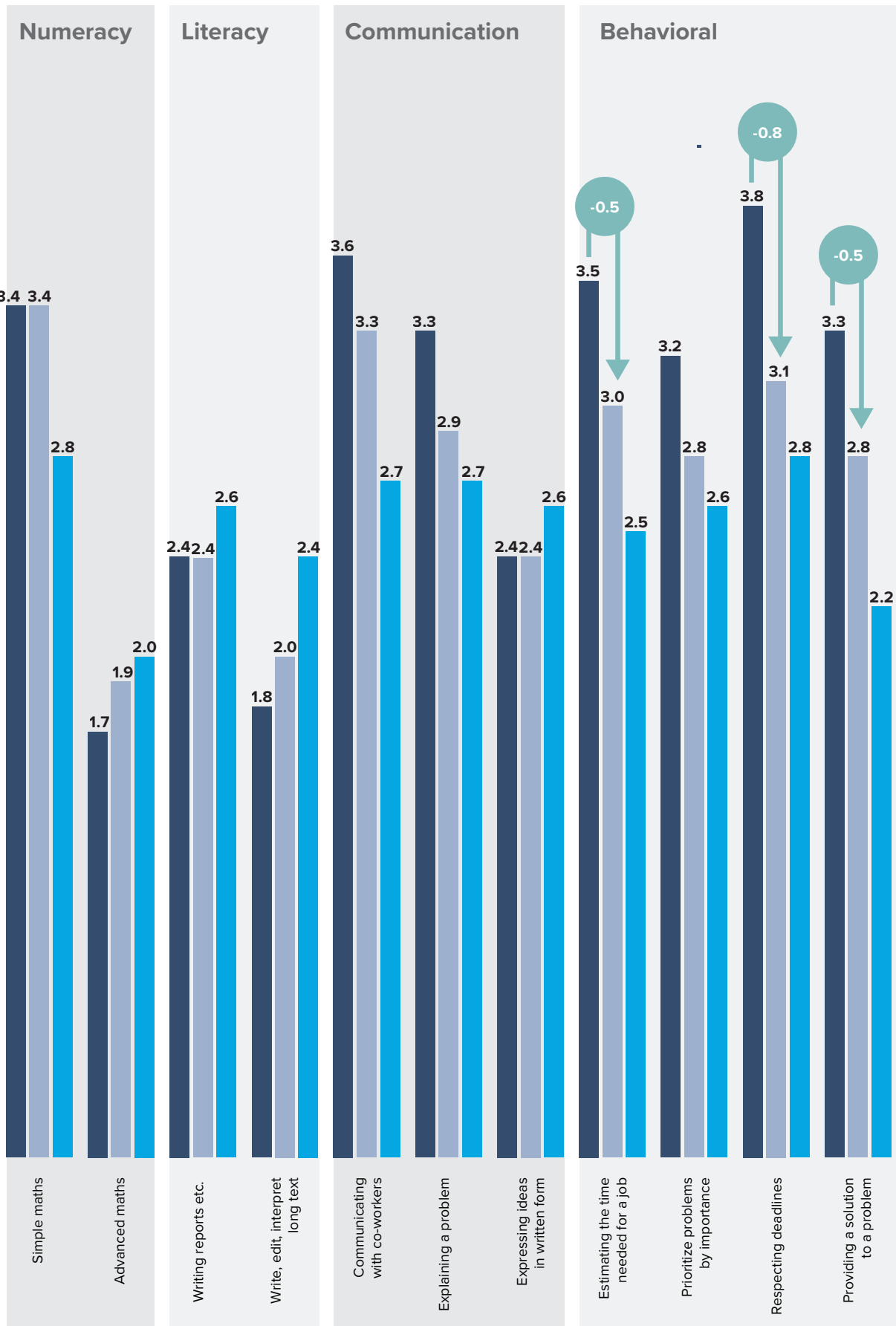
Segmenting the population based on age, gender and employment status shows that the population segments that have the least confidence in their own skills are unemployed women entering the labour market, as well as working-age women (26 and above) mostly in full-time employment (61% full time versus 39% part-time). The most self-confident segments are young women (mostly <25) working part-time (78% versus 22% full-time), and older men (>36) mostly in full-time employment (52% full-time, 9% part-time and 39% unemployed).

The gap between the importance and availability of skills is highest when it comes to behavioral skills in the workplace, which were also considered one of the most important skill sets.

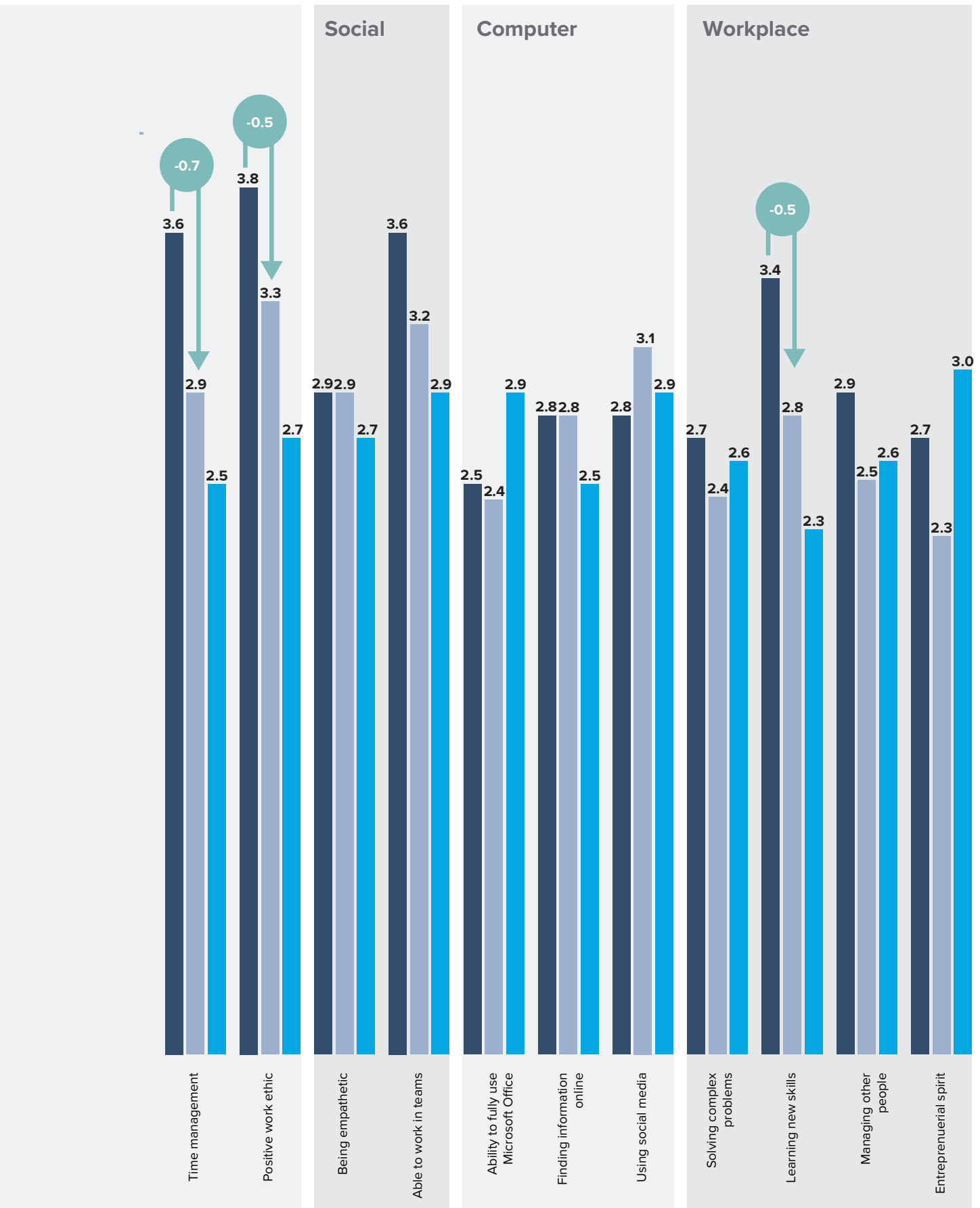
Gap analysis

Within the behavioral skills skill set, the biggest gap between companies' perceived importance, companies' perceived ability, and Libyan's self-confidence in performing skills is seen in **respecting deadlines**, followed by **time management**. Other big gaps are found when it comes to having a positive work ethic, estimating the time needed to do a job, providing a solution to a problem and learning new skills.

Figure 17: Average importance and availability of skills and self-confidence of Libyans performing these skills



● Companies' perceived importance ● Companies' perceived ability ● Libyans' confidence performing tasks



Explanations for this gap could be related to the disconnect between the Libyan academic curriculum of the Libyan university and school system and the private sector labor market. Previous literature presents the argument that higher education in post-conflict states has the potential to contribute towards more effective post-war reconstruction and recovery – but that this has “escaped the attention of both academics and policy-makers engaged in reconstruction.”³² Whilst the skills gap analysis highlights the difference between the skills available in Libya and the importance of those skills relative to the private sector, interview data also presented the opinion that there is a mismatch between academia and the needs of the labor market.

For example, students receive limited career counselling services at university and rarely participate in internships while they study. Upon graduation, they are often ill-prepared to start engaging in a workplace and unskilled in the behavioral requirements that the workplace entails.³³ The online survey touched upon this, as most of the survey respondents expressed that they are currently working on developing skills that are different from their academic field (82.3%). Skills that respondents are working on include basic computer skills (such as Microsoft Word); IT skills including programming; management and administration; marketing; graphic design; and learning languages. Two-thirds of the respondents who said they worked on these different skills did so by using online training programs, while only a few participated in training at occupational training centers. The reasons participants gave for working on these skills were primarily to gain experience & knowledge (28%), to increase their source of income (19%) and to increase job opportunities (13%).

For a few skills there is a positive gap, in that there is an oversupply of skills. This includes the ability to do advanced math (considered the least important skill), writing reports, writing and editing long text and using social media.

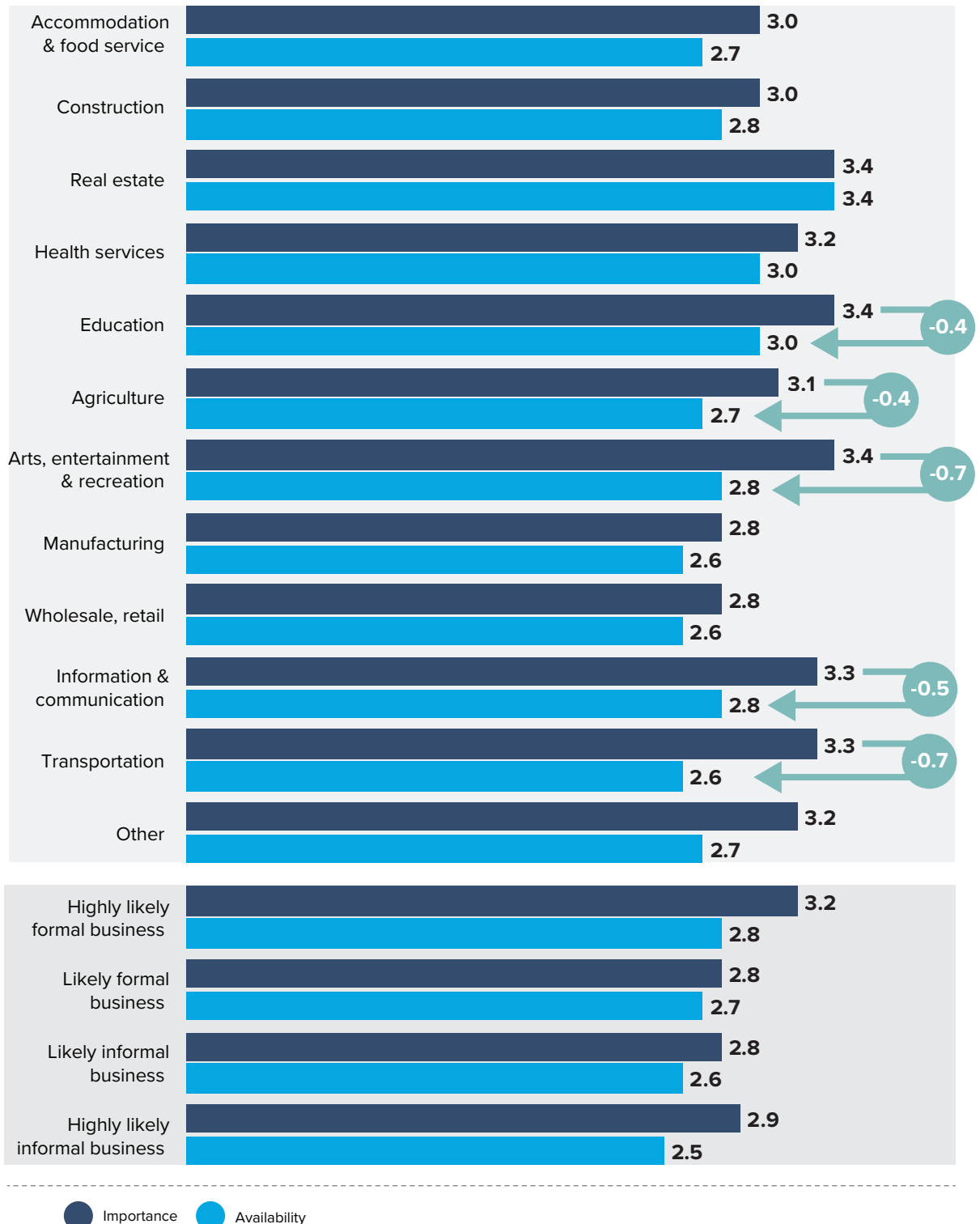
Arts, entertainment and recreation, together with transportation, are the sectors exhibiting the biggest gap between the importance and availability of skills. Other sectors where significant skills gaps are indicated are in agriculture, education, and information and technology sectors. This is, however, likely due to the type (size, ownership, location, formality) of companies in the sector, rather than something inherent to the sectors specifically. When controlling for other factors,

32 Sansom Aran Milton (2013) THE NEGLECTED PILLAR OF RECOVERY: A STUDY OF HIGHER EDUCATION IN POST-WAR IRAQ AND LIBYA. <https://core.ac.uk/download/pdf/20077721.pdf>

33 <http://jusoor.ly/wp-content/uploads/2018/10/SPARK-report-ENG-v4.pdf>

it is only wholesale/retail businesses that have a significant difference compared to other sectors, as these businesses tend to perceive a smaller skill gap than other sectors. Finally, the more informal businesses are, the more they tend to perceive a smaller skills gap.

Figure 18: Skills Perceptions, by sector



The perceived skills gap is also smaller among companies with a higher share of skilled workers, which is also reflected in businesses that have a higher share of employees with secondary education. While it could be assumed that a higher gap between the importance and availability of skills would lead to a lower expected employment growth, this is not the case, as the skills gap is not found to be a significant driver.

Figure 19: Skills Gap Analysis

Sector	Top 3 highest skills gap		Top 3 lowest skills gap	
	Skill	Gap	Skill	Gap
Accommodation & Food service	Time management	-0.67	Using social media	0.46
	Respecting deadlines	-0.56	Finding information on internet	0.34
	Positive work ethic	-0.54	Write. edit. interpret long texts	0.30
Agriculture	Entrepreneurial spirit	-1.19	Write. edit. interpret long texts	0.67
	Providing a solution to a problem	-1.08	Using social media	0.33
	Explaining a problem	-1.07	Writing reports etc.	0.22
Arts, entertainment & recreation	Being empathetic	-1.05	Write. edit. interpret long texts	0.61
	Respecting deadlines	-1.00	Advanced math	0.37
	Explaining a problem	-0.93	Finding information online	0.16
Construction	Respecting deadlines	-0.61	Finding information online	0.44
	Positive work ethic	-0.56	Using social media	0.28
	Solving complex problems	-0.54	Write. edit. interpret long texts	0.17
Education	Managing other people	-1.13	Simple math	0.95
	Time management	-1.07	Advanced math	0.13
	Entrepreneurial spirit	-1.03	Using social media	0.05
Health & social services	Time management	-0.61	Simple math	0.35
	Respecting deadlines	-0.55	Write. edit. interpret long texts	0.27
	Positive work ethic	-0.44	Advanced math	0.21

7.2 Labor Market Motivations

Salary

Better salaries are expected in the private sector; however, a wider range of employee benefits is perceived to be offered from the public sector

The current minimum salary, as stated in law, is 450 LYD. For most professions, maximum working hours stand at 48 hours a week and ten hours per day, with overtime being payable at 50% higher than an employee's wage. In regard to the average monthly salary, at the time of writing in February 2021, it was between 580 LYD (\$107) to 2290 LYD (\$423)³⁴. According to Salary Explorer, the current highest paying occupations in Libya are surgeons, judges, lawyers, bank managers, CEOs, CFOs, orthodontists, university professors, pilots and marketing directors. Salaries for these positions range from 3,060 LYD (\$567) up to 8,510 LYD (\$1,575).³⁵ Furthermore, salaries vary between employees who have similar levels of experience but different educational levels. The salary differences are as follows: with a bachelor's degree, an employee's average salary is 24% higher, with a master's degree it is 29% higher than that of a bachelor, whilst having a PhD further increases an employee's salary by 23%. This clearly demonstrates that education is a highly valuable asset in recruitment and confirms the earlier finding that companies in the PSS sample value high-skilled labor. This also indicates that businesses are willing to pay higher salaries for higher-skilled labor in terms of education. However, gender accounts for significant differences, as men with the same experience as women are paid 7%-10% more.³⁶

Of the companies in the PSS sample, 54% think they provide a competitive salary; 50% say they provide bonuses and rewards; and 45% provide overtime pay. Indications that the private sector is capable of offering a competitive salary, often in comparison to the public sector, is corroborated by the key informants interviewed for this study.

34 Average Salary in Libya 2021, Salary Explorer <http://www.salaryexplorer.com/salary-survey.php?loc=122&loctype=1>

35 Salary Explorer <http://www.salaryexplorer.com/salary-survey.php?loc=122&loctype=1>

36 Salary Explorer <http://www.salaryexplorer.com/salary-survey.php?loc=122&loctype=1>

“ Due to the economic crises, people have been moving to the private sector to make money. People in the private sector can make money averaging in the thousands while some government jobs can [only] net you around 450 dinars.”

Ministry of Labor, Kikla

“ Only the private sector provides high salaries, but that’s the only incentive, it has nothing else for the employee except for them to finish their work and get their money...most of the youth are heading towards trade business, because it provides a way higher profit than other sectors and it provides a high level of flexibility and maneuverability, which is a very important thing to have in the current circumstances.”

Senior at the Social Security Center, Ubari

While the latter quote suggests that youths in particular seek to engage in the private sector due to competitive salaries, this is not confirmed by the online survey data. Here, regression analysis reveals that youth expect a competitive salary to a lesser extent than older Libyans.

Other Employee Benefits

Current labor legislation for all sectors emphasizes family rights, entitlement to periods of marriage leave, maternity leave, and emergency leave. According to Libyan Labor Relations Law, emergency leave is defined in the context of compulsive reasons with which an individual cannot seek absence permission from his superiors in advance. Other types of leaves are also legislated, such as sick leave, bereavement leave, leave to perform Hajj, and leave for taking exams.³⁷ As highlighted earlier, it is important to note that there is large dissonance between the de jure and de facto state of these laws: what the law states is not often how it is implemented in practice. Currently, the minimum entitlement to paid leave is 30 days, increasing to 45 for those 50 and older, with 20 days paid leave to perform hajj once employed. The law also permits females to take 14 weeks paid

³⁷ Law Number 12 of 2010 Concerning Labor Relations <https://ssf.gov.ly/wp-content/uploads/2012/09/2-حضانة-علاقات-العمل-القانون-رقم-12-لسنة-2010.pdf>

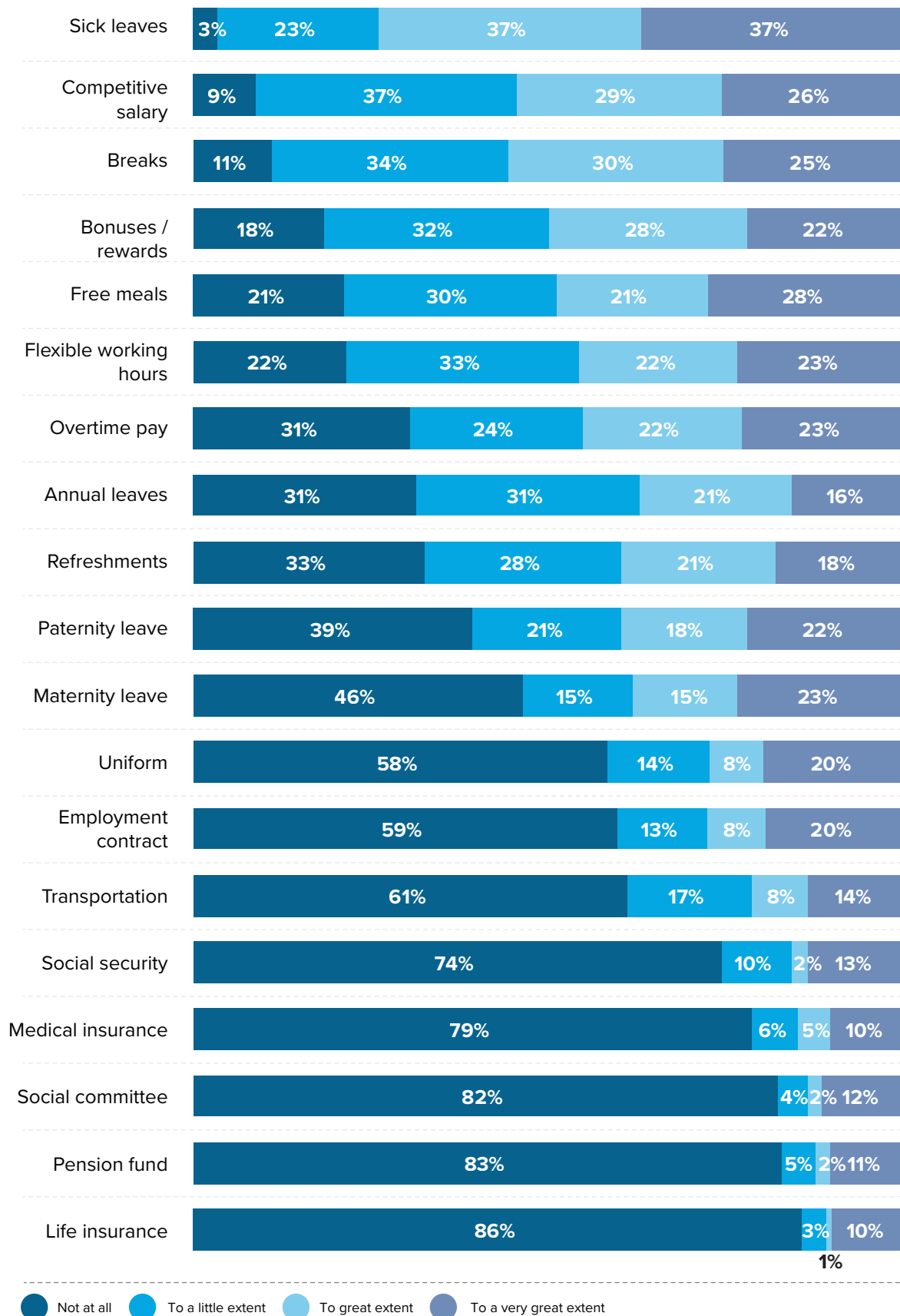
maternity leave, including six weeks leave following delivery, and thus meets the ILO minimum standard. This is similar to other North African countries, such as Algeria, Egypt and Morocco.³⁸ Women with more than one child enjoy an extension, to 16 weeks paid leave. Some labor policies that were in place under the previous Libyan regime have also been upheld, including the prioritization of Libyan nationals in the workplace. This requires companies to ensure that a minimum percentage of 75% of employees are Libyan nationals in some industries. However, in other industries, this is low as 30%, with exceptions being given to attract investment in specific cases that are seen to benefit the public.

Despite the fact that the private sector can offer a competitive salary, especially compared to the public sector, it is still facing challenges in its ability to attract Libyan employees, as the public sector provides attractive benefits to employees. This includes favorable working hours, a stable and secure salary, an employment contract, and a social security fund, amongst others. Qualitative data also highlighted incentives that the public sector provides, again highlighting social protection, the very low prevalence of dismissals, and a stable salary. Social protection generally means a social retirement pension, but also health insurance in certain cases. This has given rise to 'welfare-employment' or 'ghost workers', whereby salaries are paid to workers who show no presence or productivity in the workplace. The benefits offered by public sector employment have impacted on attitudes of Libyans, resulting in a general reluctance to undertake manual jobs, jobs perceived to be 'tough', and private sector posts perceived to be more demanding.

The PSS sample also indicates that private sector businesses generally provide few benefits. Only 28% of the companies say they provide an employment contract, 15% provide social security or medical insurance and 13% contribute to a pension. The most common benefits provided include sick leave (74%), a competitive salary (55%), paid leave (55%), bonuses/rewards (50%) and free meals (49%). Generally, the private sector was described by informants as providing a better salary, but with few other benefits, little job security and, resultingly, little trust between employers and employees. A lack of employee incentives was said to impact on slow growth, job dissatisfaction and high staff turn-over in the private sector. Interviewees felt that motivation not only comes from benefits such as a high salary, paid holidays or training, but also with social security and insurance, perceived to be missing in the private sector.

38 https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_242615.pdf

Figure 20: Benefits provided by companies in PSS sample



“No security is provided in the private sector. Nor is insurance, although it should be legally provided, but no employer does that. One of the problems that the private sector is having is the lack of social protection. Most of the workers who work in the private sector are not listed or covered by the social protection.”

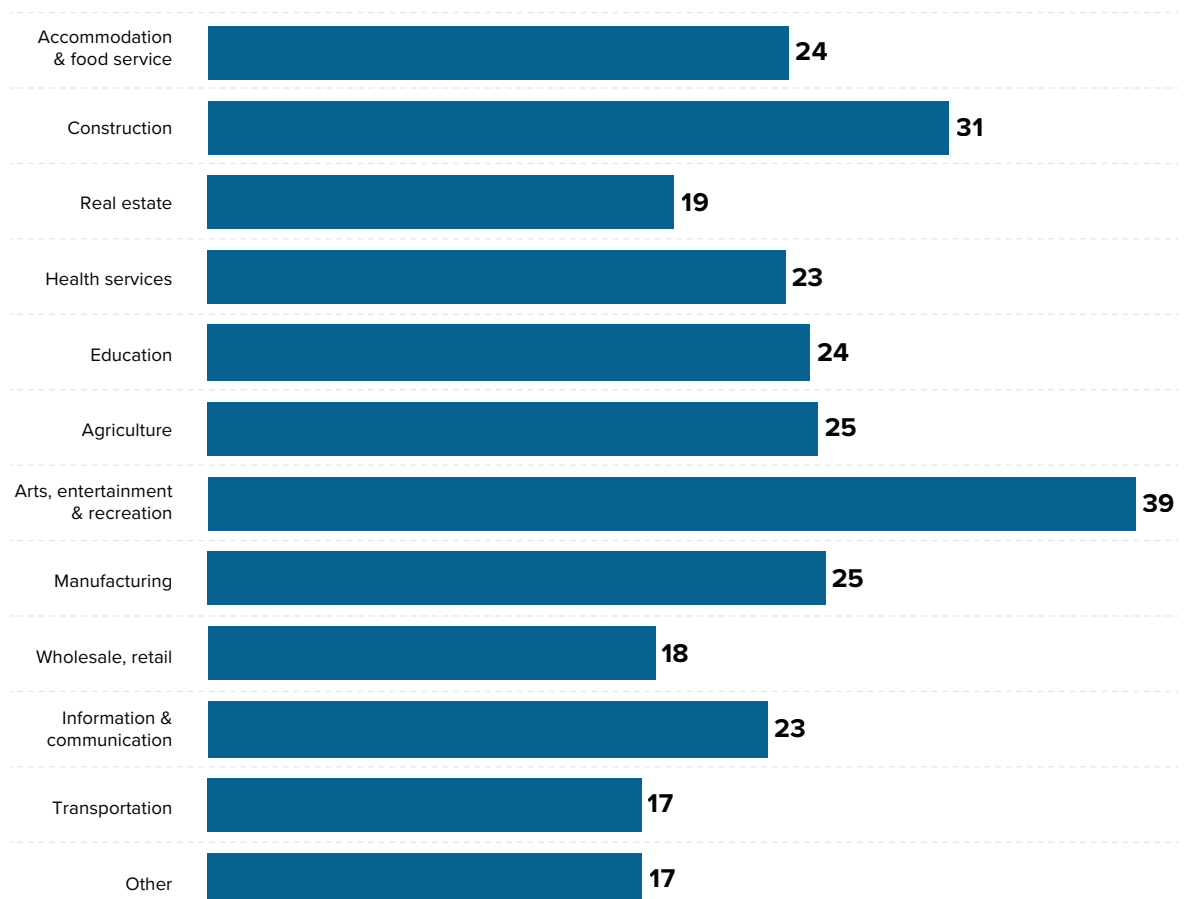
Professor of Accounting, Tripoli

“The private sector does not offer such a thing (referring to social protection).”

Employee

Some sector differences exist. The sector that appears to be providing most benefits is the arts, entertainment and recreation sector, followed by construction. At the other end of the spectrum are sectors such as transportation, wholesale/retail and real estate, which provide far fewer benefits to employees.

Figure 21: Benefits provided by sector



Employee development also does not appear to be prominent among the private sector companies in the PSS sample. For example, 89% of the surveyed businesses confirmed that they lack any retention plans for their employees. Additionally, 60% of those who answered that they offer retention plans indicated that employees are not familiar with them. Some key informants suggest, however, that private sector companies pay more attention to their employees and their skills. This was referenced in the form of training, certificates and upskilling.

“ The private sector provides training courses to its employees, a full package of training courses inside and outside the country. There is a sort of attention paid to keep workers updated, regardless of their certificates.”

Computer engineer

“ Actually, I’ve given training courses in an English language company and I also worked in Siemens, a German company. Siemens was good, but the one after it isn’t. There weren’t any financial motivations. As for the public sector, it lacks the financial resources. For example, the health ministry is very good at that [training]. They used to take their employees abroad for training courses. Even in the planning sector, there are training courses. As for the private sector, I don’t think it has [courses].”

Senior at municipality human resources management, Derna

Many libyans have, or would like to have, a job in both the private and public sector, in order to benefit from varying employee benefits. Salary is not the only motivation.

Primary and secondary data shows that many Libyans work two jobs: one in the private sector and one in the public sector.

Indeed, the online supply-side survey shows that the preferred job situation for 71% of the respondents is to have one job in the public sector and one job in the private sector. Despite the public sector being the major source of employment in Libya and most preferred sector, only 5% of the online survey respondents said they would prefer to have only a job in the public sector, as opposed to 20% that would settle for having only a job in the private sector. Therefore, even though 82% of respondents prefer working in the public sector, this higher preference is primarily only true when also combined with a job in the private sector. This is also confirmed by the qualitative data.

“ Here in Sirt, we have no incentives to talk about, everyone is seeking employment in the public sector just to have the guarantee, then goes directly to the private sector to really try to make money. Because the public sector’s salaries are not enough at all and in most cases, it is dominated by certain tribes that might even dominate an entire sector.”

Sirt Women’s Union for Development and Charitable Activities, Sirt

“ For the majority it [the salary] is insufficient. Taking a thousand Libyan dinars per month while having a level 13 degree, it is not enough... for the majority their average salary is under one thousand.”

Senior Employee, Ministry of Economy

Salary, however, is not necessarily the only reason why Libyans prefer to supplement public sector employment with a job in the private sector. Employee satisfaction and motivation in the public sector is also limited according to key informants, due to a range of demotivating practices. Such practices include favoritism-based recruitment, systematic and time-bound promotions, as well as cultural context, which could also be termed as ‘office politics’.

One particular challenge for the private sector is the mismatch between the expectations of potential employees and the benefits provided by companies. For example, 45% of the online supply-side survey respondents expected an employment contract, making this

the highest expected benefit, together with work experience. Yet, as mentioned previously, only 28% of the companies in the PSS sample indicated that they provide this range of employee benefits. Similarly, 35% of supply-side respondents expect to receive a pension, and another 35% expect social security, while only 13% and 15% of the companies in the PSS sample provide this respectively. On the other hand, 55% of the companies in the PSS sample say they provide breaks, yet this is only expected by 18% of the supply-side survey respondents.

Regression analysis shows that the key driver of benefit expectations among online supply-side survey respondents is their confidence in skills: the more confident a person is in their skills, the more benefits they expect to receive. Furthermore, the older Libyans are, the higher the expectations they have of receiving benefits. This suggests that younger people are less focused on benefits being provided and more willing to take a job, regardless of the benefits provided (or not). People working full-time also have higher expectations than those that work part-time, or those that are unemployed. In terms of area-specific findings, people from Misrata have higher expectations of receiving benefits compared to people in other areas, while people from Tripoli have lower expectations. Reasons for this are unclear, considering they are both amongst the largest cities in Libya.

In terms of sector-specific findings, people that are interested in working in finance/insurance and arts, entertainment and recreation have higher expectations, while people interested in working in wholesale, education, scientific and technical services have lower expectations. Interestingly, interest in working in the formal or informal sector was not a significant driver of benefit expectations, suggesting that the choice of working in the informal or formal sector is not perceived as a trade-off in terms of benefits. The same goes for preference for working in the public or private sector. The descriptive data does, however, suggest that people interested in working in the private sector have higher expectations of benefits compared to those not interested in working in the private sector. The regression analysis suggests that this is attributable to other factors, namely skills, age, employment status and sector preferences.

Segmentation analysis reveals that like confidence in skills, unemployed women aged 26-35 years have the lowest expectations of benefits. And, again similar to findings concerning confidence in skills, older men (aged upwards of 36 years) mostly in full-time employment (52% full-time, 9% part-time and 39% unemployed) have the highest expectations of benefits.

7.3 Recruitment and Hiring

Poor recruitment strategy and a poor range of incentives have led to unfair and ineffective recruitment processes

According to key informants, the recruitment strategies in the Libyan labor market are one of its primary weaknesses. Businesses are perceived to have little understanding of how to employ the people they require, and jobs seekers have little understanding of how to best showcase their range of skills when applying for a job. Whilst 95% of the companies in the PSS sample use some form of recruitment method, 44% rely on a single recruitment method, and only 16% use a diverse range of methods (3 or more). The most common methods that companies use are friends/family (87%), online recruitment (40%) or personal networks/*wasta*³⁹ (28%). Recruitment methods are thereby fairly informal and only 13% of the companies in the PSS sample use public recruitment agencies, whilst 15% use private recruitment agencies. With few professional recruitment companies in the country, poor recruitment strategies and a lack of professional recruitment standards, this has created a culture of favoritism in the labor market. These findings were also corroborated by qualitative data.

“It’s random. We don’t have companies that function to assess people who are looking for jobs. The recruitment strategy is to make an advertisement that you need employees or by recommendations. In Libya we don’t have a clear recruitment strategy.”

Professor, Albayda

“The recruitment processes happen through personal networks and societal bonds.”

Ministry of Labor branch, Kikla

³⁹ Arabic term referring to nepotism/ clout/ personal connections.

“ The biggest challenge is the connection challenge; most people get recruited by the strategy of favoritism and connection. Employers usually hire people they know.”

*Senior member in the administrative branch
at the Almadar company, Benghazi*

The growing use of social media, however, and a few online platforms may help to improve the efficiency and reach of private sector recruitment and break the culture of favoritism in the labor market.

“ Currently, through social media or through private relationships. If the employer is employing in a formal way, he can use social media, where he can set certain conditions, but if he wants to hire in an informal way, it will be through his personal relationships.”

Teacher, Faculty of Economics, Ajdabiya

“ Favouritism is the first method, and for people who have a background on *libyainvestment* or *libyajobs* platforms (two online recruitment platforms). Almost daily, new jobs are added, so those who persevere, and search, will get a job. But this requires you to be a person who knows how to write or prepare your CV, your motivation letter, and that you also have experience. The *libyainvestment* platform is aimed at people with ready-to-use experience and skills (the educated class) without targeting skills development. So, if you ask me how to get a job that does not require a lot of skills or experience, it is still through connections and word of mouth. As for the complex positions or jobs, most of them are via *libyainvestment* and social media.”

Entrepreneurship expert, Tripoli

The online supply-side survey reveals that the majority of participants also rely on friends and family for recruitment (60%), in addition to online recruiters (48%) and personal connections (24%). Traditional recruitment agencies remain the lowest methods used for job searches. As such, the methods used by the private sector companies and jobseekers do match, but these methods are, however, not optimal in ensuring proper linkages between employers and job-seekers.

Another concern highlighted by the data is the lack of understanding of the importance of CVs on the part of both employers and job seekers, which was highlighted by key informants.

“ Job seekers make 15 copies of their Certificate of Graduation and prepare 15 files, then they start looking for a job by submitting these files in all the sectors they can reach. After two months or so of not being able to find a job, people will tell you they must have a good connection with those in charge in order to be employed.”

Student Union, Benghazi University

The issue of favoritism is also perceived by online survey respondents as being among the main challenges they face in finding a job. Indeed, it is the most frequently mentioned challenge, with 24% mentioning this. Other key challenges include a lack of opportunities (20%), experience required (14%) and skills required (8%). In relation to this, however, survey results showed a more positive outlook on how long participants have been looking for a job. 52% of respondents expressed it has been less than a year, whilst 32% of respondents answered 1-2 years. Only 6% expressed that they have had great difficulties in searching for a job (6+ years).

08

**Private sector
growth forecast**

8.1 Economic Growth

Business owners are optimistic about the growth of the private sector, despite challenges identified; some sectors more so than others

Overall, Libya's economy is expected to bounce back in 2021 and grow by 76% in 2021 following -66.7% in 2020. The subsequent years are also forecasted to experience high growth up until 2024 where annual GDP growth is expected to settle at 0.3%.⁴⁰

Business owners in the PS survey sample are also optimistic when it comes to growth for the following year and in three years' time. When asked about their perceptions and estimates regarding the short-term growth of their business, business owners, on average, in the best-case scenario, estimated their potential growth for the next year (2021) at 52%. On the other hand, in the worst-case scenario, they estimated their growth at a value of 21%. The general optimistic outlook was also highlighted by KIs where some said in the right environment all sectors have potential to grow.



I don't think there is a sector that is not important or has less potential to grow."

Professor of Accounting, Tripoli



The private sector has potential to grow in all the fields in Libya, whether it is communication, oil services, health services."

Journalist, Tripoli

Survey respondents from the arts, entertainment and recreation sector gave the second highest average best-case scenario in terms of growth estimates (63% growth – second to education with 65% growth). Interestingly arts, entertainment and recreation are also the sectors with the second lowest worst-case scenario (18% growth on average – second worst to transportation). This suggests a fairly high degree of uncertainty with regards to this sector's future performance,

40 IMF, Libya <https://www.imf.org/en/Countries/LBY>

which is likely contingent on several contextual factors. For example, COVID-19 has hit the sector hard in Libya with the sectors in the PSS sample having the fewest companies that did not have to terminate employees. Despite this uncertainty, arts, entertainment and recreation are the sector with one of the lowest ranges in responses to both the worst and best-case growth scenario in the short-term, which suggests that it is homogenous as a sector. In other words, while there is a higher degree of uncertainty around the sector's performance in general, there is a higher degree of certainty that the companies in the sector will perform in a similar manner.

In addition to education and arts, entertainment and recreation, construction (61% growth in best-case scenario) and real-estate (57% growth in best-case scenario) were the most optimistic sectors. Construction, education and the real estate sector also had the highest expected growth in the worst-case scenarios (all three 25%).

The sectors with the least optimistic outlook in the short-term were agriculture, transportation and wholesale (their predictions range from 44% to 47% when asked about best-case scenario growth).

When asked about their medium-term growth expectations, business owners in the sample also reported an optimistic outlook. On average, the best-case scenario for growth in three year's time was 66%, while the worst-case scenario was 30%. The sectors with the highest medium-term expectations were the same as in the short-term (education, construction, and arts, entertainment and recreation). The KII data confirms these findings to some extent. The KIIs also found the health and construction sectors as sectors with a high growth potential. As highlighted by this KII in Benghazi:



Construction, health and food manufacturing are major avenues for growth and providing jobs.”

Employee at a financial services company, Benghazi

Arts, entertainment, recreation and construction also have the most optimistic worst-case scenarios in the medium-term, joined by health services in the top three. Unlike the short-term outlook, arts, entertainment and recreation thus exhibit more certainty when it comes to growth as a sector. Yet, they have a higher range of responses and thus greater uncertainty with regards to how specific companies in the sector might perform.

Agriculture is the sector with the least positive outlook in the medium term, both in terms of best- and worst-case scenarios. However, in certain areas of Libya, the agriculture sector might have positive opportunities, as exemplified here in KII data from Ajdabiya (no agriculture company was included in the survey sample from Ajdabiya).

“Agriculture industry because there are many places here in the city of Ajdabiya suitable for agriculture, but due to the lack of resources, this sector is not active. Also, the factories.”

CEO of a development academy, Ajdabiya

Additionally, key informants frequently commented on the huge potential of natural resources in the country, which indicates “numerous doors that have yet to be opened.” Agricultural produce and natural minerals and metals were described as huge untapped potential for growth in the economy as well as opening up jobs in the market. Processed agricultural products such as tomato paste, chili sauce (harissa) and juice could be potential outputs from the sector that is currently underutilized, leading to import of these products from neighboring countries, according to the key informants:

“Libya imports no less than half a billion tons of tomato paste each year, yet we throw away tens of thousands of tons of tomatoes because farmers can’t sell them in the current market.”

University Dean, Albayda

Key informants also mentioned wholesale/retail and manufacturing, which were not identified as high growth sectors in the sample of business owners in the survey. It is also worth noting that when controlling for other factors, sectors are not a significant driver of economic growth outlook, i.e., the differences in expected growth in the short- and medium-term is attributable to other factors than the specific sectors.

Analyzing the drivers of the economic growth outlook of the private sector sample, it is evident that female-owned businesses are more likely to have a positive growth outlook both in the short and medium term, when controlling for business size. This underscores the strong business potential among Libyan women that to a large

extent remains untapped. While size was not found to be a significant driver of growth, KII data suggests that smaller companies have a positive outlook:



Small businesses such as workshops and malls are rapidly growing.”

University Professor, Sabha

Companies based in Tripoli have a more positive medium-term outlook compared to other cities, when controlling for gender and size, but more negative in the short term. Companies in Benghazi, Misrata and Bayda also have more negative outlook in the short-term compared to other areas and Benghazi is also more negative in the medium-term. Some of the areas expecting high growth are places such as Sabratha, Bani Walid, Sirt, Kufra, Sebha and Ghat. This seems to indicate that there is an expected catch-up effect in some of smaller areas in Libya, while the key economic hubs will see less high-paced growth.

When controlling for gender, size and location, more formal businesses tend to have a more positive outlook in the short-term than the more informal businesses, yet in the medium term there is no significant difference. When adding skills to the analysis, formality is no longer significant, suggesting that the effect of formality is related to a difference in the perceived availability of certain skills. In the short-term, a higher perceived availability of workplace skills improves businesses' perceived economic growth outlook, but not in the medium term, where the availability of numeracy skills is a positive driver. This highlights that skills do, to some extent, contribute to determining the expected economic growth. Although companies did not highlight this factor as among key challenges they faced.

The self-perceived challenges, and the extent to which companies felt they impacted on them was not found to be a significant driver of perceived economic growth. This seems to suggest that the challenges companies experience are either generally shared among companies regardless of performance, or that the extent to which these challenges impact on companies is driven by the same factors (gender, location, formality, skills availability) that drive economic growth expectations.

8.2 Employment Growth

Economic growth and employment growth are correlated in short-term estimates; longer term perceptions of growth may be more influenced by wider factors such as technological advancements

In the short-term, economic growth expectations and expectations for employment growth are fairly strongly correlated (Pearson correlation of 0.479). In the medium-term, the relationship is less correlated (Pearson correlation of 0.228), suggesting that this growth to a large extent may be driven by technological or other advances in the value creation process.

Business owners generally expect lower growth rates when it comes to employment compared to economic growth. When asked about their perceptions and estimates regarding the short-term growth of their business, business owners, on average, in the best-case scenario, estimated their potential growth for the next year at 28%. On the other hand, in the worst-case scenario, they estimated their growth at a value of 14%. Among the sectors with the most optimistic best-case scenarios is construction, which is also highlighted in the KII data as a sector with good employment potential:

“Construction work is always requested in Kikla, and the workers are mostly Libyans due to the lack of migrants into the city.”

Ministry of Labor, Kikla

Construction is also highlighted by 54% of the companies⁴¹ in the PSS sample as having a high potential to create jobs. The two other sectors in the top three most optimistic short-term employment growth scenario are education and accommodation and food services. However, education is among the sectors with the least optimistic worst-case scenario and also have a fairly high range of responses, suggesting some uncertainty around the sector's likely employment

⁴¹ Disregarding companies from the same sector in the sample i.e. construction companies' responses are not included in analysis of companies' perception of the construction sector's employment potential.

performance. Also, only around a third of the companies in the PPS sample perceive education to be a sector with a high potential for job creation.

Arts, entertainment and recreation and wholesale/retail are the two other sectors in the bottom three together with education when it comes to worst-case scenario growth, and these two sectors are also in the bottom three in the best-case scenario together with agriculture. Wholesale/retail is however highlighted by 76% of the companies in the PSS sample as having a high job creation potential. This is potentially a reflection that despite the relatively pessimistic outlook, the sector remains the biggest employer in the private sector in Libya.

In the medium-term, accommodation and food services and education are also in the top three, having the most optimistic best-case scenarios together with the real estate sector. While accommodation and food services thus appear to have a strong self-perceived employment potential, KII data suggests that smaller food projects are among the industries with the least potential for employment growth, together with garment factors and other niche construction companies due to limited amount of manpower required in those industries. Also, only around a third of the companies in the PSS sample highlighted food and accommodation services as having a high employment potential.

Again wholesale/retail and arts, entertainment and recreation are in the bottom three in terms of optimism when it comes to medium-term employment growth together with the information and communication sector.

As with economic growth, the expected employment growth is largely determined by the cities where companies are located. When controlling for gender and size, companies based in Tripoli, Benghazi and Bayda have a more negative employment growth outlook in both short and medium-term. This is worrying given that Tripoli and Benghazi are among the key economic hubs in Libya and of course the most populous areas. Companies based in Misrata have a more positive employment growth outlook in the medium, but no difference to other areas in the short term. The areas that expect higher employment growth are generally similar to the ones that expect higher economic growth i.e., Sabratha, Bani Walid, Sirt, Kufra and Ghat.

Also, like economic growth, formality is a driver of expected employment. Both in the short and medium-term, more formal companies have more positive employment growth outlook than more informal companies. This could indicate that formal companies generally find it easier to attract employees than informal companies. Company size also drives employment growth as the larger a business is, the more positive their employment growth outlook is in both the short and medium-term.

The higher the perceived availability of workplace skills are, the more positively businesses perceive their employment growth outlook both in the short- and medium-term. It seems intuitive that perceived availability of this important skills set would also lead companies to be more inclined to hire more people.

While it could be expected that the recruitment strategies would impact on the expected employment growth, i.e., that companies that employed different recruitment strategies would find it easier to identify employees and thereby also expect higher employment growth, this was not found to be the case. The few companies that use public or private recruitment agencies did estimate higher mean expected employment growth in both the short- and medium-term, but when controlling for other factors, this did not appear to be a significant driver.

The different challenges facing companies is not a significant driver of expected employment growth outlook, as with economic growth outlook.

8.3 Initial Prioritization

Construction, education, health, and accommodation and food services are put forward for prioritized support for growth, based on growth estimates

Based on the expected economic and employment growth, it is possible to map out the sectors according to growth potential. Sectors that expect both strong employment growth and economic growth to underpin this are likely to be able to act as employment generators that can absorb unemployed labor. Expected employment growth

without economic growth to support it is likely to be more fragile and insecure. While you can have sectors that expect high economic growth without associated increase in employment (because the growth is derived through technological advancements, for example), this may not suit all sectors. Based on this it allows for clearer prioritization of sectors to focus on for their expected employment generation potential. The analysis suggests those sectors would include the following:

- 1. Construction:** Construction exhibits both high short and medium-term economic growth expectations and also positive worst-case scenarios. The economic expectations are also confirmed by key informants. Construction is also among the sectors with the highest short-term employment growth expectations and positive worst-case scenario outlook. Furthermore, KII data confirms the employment potential, as well as a majority of companies in the PSS sample. Generally, if Libya enters a period of relative calm and recovery, the construction sector will be a key actor in the rebuilding of damaged infrastructure across the country. While the PSS sample suggests there are a few medium or large construction companies, there are at the same time a lower than average number of micro-enterprises as most of the construction companies in the PSS sample fall in the small company size category. As the sector is among the most impacted by COVID-19, the short-term trajectory will likely depend on how the pandemic unfolds.
- 2. Accommodation and food services:** The sector is not among the ones with the strongest economic growth outlook, but not among the worst either. The sector however has a very optimistic employment growth outlook both in the short- and medium-term. This is also reflected by the fact that it is the sector with the highest proportion of medium-to-large companies in the PSS sample. Furthermore, it is among the sectors with the highest share of entry-level positions making it easier for new entrants to the labor market to find opportunities. It is also one of the sectors with a higher degree of formality, which has generally been found to be a positive driver of both economic and employment growth. Lastly, there are quite a few female-owned businesses in the sector.

- 3. Education:** The education sector shows consistent positive economic outlook both in short- and medium term and ranks among the highest in the worst-case scenarios. The economic growth is underpinned by a positive outlook on employment growth as well in both the short- and medium term. The short-term employment performance comes, however, with some uncertainty as the sector also features among the sectors with the least optimistic worst-case scenario and has a high range of responses among the companies within the sector. Also, only around a third of the companies in the PPS sample perceive education to be a sector with a high potential for job creation. It is also a sector with few micro enterprises, but rather more small and medium-sized enterprises that typically will have better employee absorption capacity than micro-enterprises. The sector also has a fair share of female-owned businesses and many formal companies.
- 4. Health services:** While the economic growth outlook in the sector is not overly optimistic in the best-case scenarios, the worst-case scenarios on the other hand are not very pessimistic either. The sector was highlighted by KIs as having potential for good economic growth. In the medium-term the sector appears to have good employment potential both in the best-case and worst-case scenarios. The sector also has a fairly high number of formal, medium and large companies in the PSS sample and few microenterprises. It is further a key sector for employment of Libyan women.

Other sectors that should also be prioritizing, potentially only in specific cities or regions are:

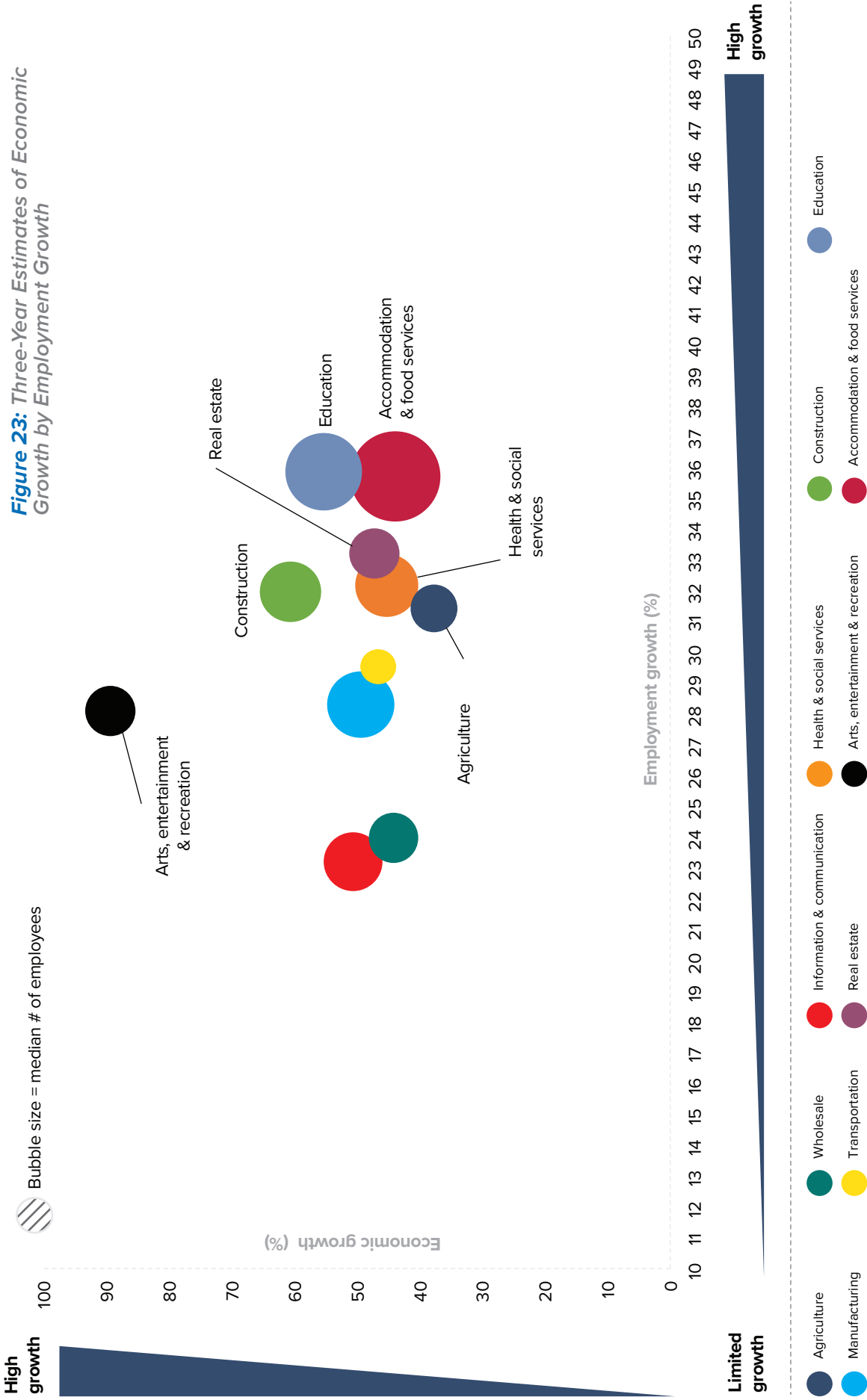
- 5. Arts, entertainment and recreation:** Arts, entertainment and recreation is mainly on the list of potential priority sectors as it exhibits very high potential economic growth in both the short- and medium-term. In the short-term it is however also the sector with the second lowest worst-case scenario growth and the sector with the second highest average best-case economic growth scenario. However, both growth scenarios come with a great deal of uncertainty in the short-term due to the wide range between the best and worst-case scenario and in the medium-term due to the wide range of responses from companies within the sector. As a sector highly influenced by both conflict and COVID, the trends related to these two

contextual factors will likely be key in determining the trajectory. In terms of employment potential, currently the companies have a fairly pessimistic outlook. Yet, if the best-case economic scenario materializes it seems plausible that this would also generate a fair amount of employment opportunities, not least to fill the positions that have been left vacant due to COVID-19. It should however be noted that the sector is fairly top-heavy with a limited share of entry-level positions.

- 6. Real estate:** The sector has strong short-term economic growth expectations and a high worst-case scenario. This is coupled with a strong outlook on employment growth in the medium term. The PSS sample suggest that there is a mix of micro-enterprises, but also a fairly high share of medium sized companies that can absorb an adequate amount of labor. One caveat is however that the sector is fairly top-heavy and has a lower share of entry-level positions compared to other sectors.
- 7. Agriculture:** Generally, the agriculture sector does not have a very positive outlook either in economic growth or in employment growth. As the sector is among the most impacted by COVID-19, the short-term trajectory will likely depend on how the pandemic unfolds. But the medium-term employment growth expectations are among the better, especially in the worst-case scenario, where the sector has the third most positive outlook. In certain areas of Libya, the sector could have opportunities and it can play a key role in further focus on developing domestic products to decrease reliance on imports. This is challenging due to price fluctuations among other factors. Furthermore, it is among the sectors with the highest share of entry-level positions making it easier for new entrants to the labor market to find opportunities.

The following charts illustrate growth estimates from the Private Sector Survey. They show the average growth, taken from the respondents' best and worst-case scenarios. The size of the bubble represents the average number of employees in each sector. The position of the bubble represents the estimated employment growth alongside economic growth.

Figure 23: Three-Year Estimates of Economic Growth by Employment Growth



09

Conclusions and recommendations

The objective of the LMA was to “to gain a better understanding of the role host communities play in their (respective) local economies and in Libya as a whole” with a broader objective to “increase the engagement and participation of the Migrant and Domestic workforce in the PS industries/businesses, and therefore enhance the economic activity and social cohesion of the respective regions in Libya.”

The following conclusions and recommendations are based on the key findings from the research.

9.1 Growing the Private Sector

- There needs to be a scale-up in financial, organizational and academic support to the private sector. UNDP can work directly with companies, but also through intermediaries such as business chambers, local municipalities, etc. to set-up appropriate support programs that assist with establishing fair recruitment processes, setting official standards for hiring and firing, and financial support through economic crisis – such as the COVID-19 pandemic.
- The system of formalizing informal businesses needs development. Formal companies tend to have a stronger growth outlook, better access to labor market skills and more business opportunities. There is a need to work both with informal businesses as well as with relevant actors (registration authorities, business chambers, etc.) on making the process of registration and formalization easier. This can include reducing registration costs, simplifying procedures, creating one-stop-shops and incentive schemes. This should also help to ensure that an increasing share of companies provide decent work conditions, including employment contracts, which are in high demand. A private sector that provides more stability for employees is likely to attract and keep a stronger workforce.
- Capacity issues differed by sector; 93% in the construction sector, for example, felt they had poor capacity in terms of human assets (skills/qualifications/experience), and 60% felt they had poor capacity in terms of technological assets. The implications are that certain sectors may

need to be prioritized in terms of support required to build the capacity related to their growth.

- Addressing the self-identified challenges to growth, the skills gaps, employee motivations and expectations are needed before the private sector can realize its full potential as an employer in Libya. In addition, utilizing the country's natural resources to boost manufacturing and to reduce reliance on imports may support growth within agriculture specifically.

9.2 Increasing Engagement of the Domestic Workforce

- There is a need to improve image of the private sector, in particular the prioritized sectors. There is a mismatch between the sector preferences of Libyans and the sectors that can generate decent job opportunities. This can be achieved through job fairs, industry showcasing and offering work experience to students at the secondary and tertiary level of education.
- Further developing and strengthening apprenticeships and on-the-job training would benefit young Libyans entering the workforce. Many of the skills with high skills gaps are skills that employees learn on the job. It can turn into a *catch 22*: you need workplace behavior skills to get a job, but you cannot obtain these skills without having a job. One way to overcome this is to further develop, strengthen and support apprenticeships, on-the-job-training and paid internships as a way for the unemployed to gain some experience at limited risk and cost to the companies involved. At the same time this can also help to improve the image of the private sector by making the work conditions more transparent to job seekers.
- Engagement and coordination between local training institutions to develop soft skills training programs for jobseekers to help them build skills that are in demand and valued by potential employers in Libya is important. There are several local institutions that could be engaged

to further develop training programs targeting some of the key skills gaps identified. At a higher level, university institutions and the academic world could be better attuned to the longer-term higher-level qualifications required in the more senior and management positions within the private sector. They could offer more highly specialized management programs, funded by invested industry partners.

9.3 Responding to Labor Market Opportunities

- There is a clear need for stronger intermediary institutions linking jobseekers and job suppliers. This can be achieved either through working with existing agencies and online recruitment sites to expand their reach or by working with the appropriate authorities locally and nationally to create efficient recruitment agencies. Recruitment specialism could in itself be an area for growth.
- Building a strong, efficient and relevant labor market information management system is suggested. IOM is already providing support to the Libyan Government in developing a comprehensive Labor Market Information System (LMIS) to ensure proper data and analysis of both the demand and supply sides of labor on a real-time basis. UNDP should explore how best to support these potentially through local level engagement with municipalities.
- The lack of reliable statistical data constitutes a major constraint.⁴² Strengthening the monitoring and evaluation of labor market initiatives will help to chart their progress and effectiveness – and will provide evidence for which initiatives could be successfully scaled up. For example, Tatweer Research have established start-up incubators in Benghazi, Sebha and Tripoli, specifically targeting women and unemployed youth to provide a means of economic empowerment, and are well placed to evaluate how these types of initiatives perform within target populations, in the short and longer term.

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Annex: Skills Importance Regression Analysis Output

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,635 ^a	,403	,374	,46295
2	,753 ^b	,567	,518	,40627
3	,776 ^c	,603	,537	,39798
a. Predictors: (Constant), Bayda_dummy, background-q106, background-q101, Tripoli_dummy, Misrata_dummy, Benghazi_dummy				
b. Predictors: (Constant), Bayda_dummy, background-q106, background-q101, Tripoli_dummy, Misrata_dummy, Benghazi_dummy, Manufacturing_dummy, Arts_dummy, Food_dummy, Health_dummy, Likely_formal_informal_spectrum, Motivation_index, Wholesale_dummy				
c. Predictors: (Constant), Bayda_dummy, background-q106, background-q101, Tripoli_dummy, Misrata_dummy, Benghazi_dummy, Manufacturing_dummy, Arts_dummy, Food_dummy, Health_dummy, Likely_formal_informal_spectrum, Motivation_index, Wholesale_dummy, outlook-q206_5, outlook-q206_4, outlook-q206_2, outlook-q206_3, outlook-q206_1				

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17,542	6	2,924	13,641	,000 ^p
	Residual	25,933	121	,214		
	Total	43,475	127			
2	Regression	24,659	13	1,897	11,492	,000 ^c
	Residual	18,816	114	,165		
	Total	43,475	127			
3	Regression	26,211	18	1,456	9,194	,000 ^d
	Residual	17,264	109	,158		
	Total	43,475	127			
a. Dependent Variable: Skills_importance						
b. Predictors: (Constant), Bayda_dummy, background-q106, background-q101, Tripoli_dummy, Misrata_dummy, Benghazi_dummy						
c. Predictors: (Constant), Bayda_dummy, background-q106, background-q101, Tripoli_dummy, Misrata_dummy, Benghazi_dummy, Manufacturing_dummy, Arts_dummy, Food_dummy, Health_dummy, Likely_formal_informal_spectrum, Motivation_index, Wholesale_dummy						
d. Predictors: (Constant), Bayda_dummy, background-q106, background-q101, Tripoli_dummy, Misrata_dummy, Benghazi_dummy, Manufacturing_dummy, Arts_dummy, Food_dummy, Health_dummy, Likely_formal_informal_spectrum, Motivation_index, Wholesale_dummy, outlook-q206_5, outlook-q206_4, outlook-q206_2, outlook-q206_3, outlook-q206_1						

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	3,583	,134		26,755	,000
	background-q101	-,462	,133	-,247	-3,473	,001
	background-q106	,000	,000	,031	,423	,673
	Tripoli_dummy	-,013	,114	-,009	-,111	,912
	Benghazi_dummy	-,003	,161	-,001	-,018	,986
	Misrata_dummy	-,316	,119	-,204	-2,653	,009
	Bayda_dummy	-,900	,123	-,561	-7,325	,000
2	(Constant)	4,131	,178		23,228	,000
	background-q101	-,388	,122	-,208	-3,188	,002
	background-q106	2,269E-5	,000	,005	,076	,940
	Tripoli_dummy	-,120	,112	-,082	-1,070	,287
	Benghazi_dummy	-,171	,149	-,082	-1,148	,254
	Misrata_dummy	-,329	,114	-,213	-2,883	,005
	Bayda_dummy	-,824	,118	-,513	-6,954	,000
	Manufacturing_dummy	-,478	,143	-,220	-3,339	,001
	Wholesale_dummy	-,306	,094	-,251	-3,249	,002
	Arts_dummy	,104	,414	,016	,251	,803
	Health_dummy	-,129	,149	-,059	-,867	,388
	Food_dummy	-,278	,128	-,149	-2,165	,033
	Likely_formal_informal_spectrum	-,178	,041	-,305	-4,309	,000
	Motivation_index	-,003	,004	-,064	-,887	,377

Table continued next page...

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
3	(Constant)	4,115	,198		20,766	,000
	background-q101	-,353	,121	-,189	-2,912	,004
	background-q106	,000	,000	,063	,859	,392
	Tripoli_dummy	-,086	,114	-,059	-,759	,450
	Benghazi_dummy	-,252	,153	-,121	-1,652	,101
	Misrata_dummy	-,181	,136	-,117	-1,329	,187
	Bayda_dummy	-,835	,117	-,520	-7,161	,000
	Manufacturing_dummy	-,489	,143	-,225	-3,429	,001
	Wholesale_dummy	-,330	,094	-,271	-3,503	,001
	Arts_dummy	,043	,407	,006	,105	,917
	Health_dummy	-,210	,150	-,097	-1,400	,164
	Food_dummy	-,257	,128	-,138	-2,011	,047
	Likely_formal_informal_spectrum	-,202	,043	-,347	-4,714	,000
	Motivation_index	-,004	,004	-,084	-1,155	,250
	outlook-q206_1	-,236	,150	-,134	-1,577	,118
	outlook-q206_2	-,082	,158	-,044	-,523	,602
	outlook-q206_3	-,178	,101	-,131	-1,754	,082
outlook-q206_4	,086	,089	,071	,967	,336	
outlook-q206_5	,103	,101	,066	1,016	,312	

a. Dependent Variable: Skills_importance

Skills Availability Regression Analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,515 ^a	,266	,223	,44178
2	,603 ^b	,364	,286	,42365
3	,824 ^c	,679	,523	,34616
<p>a. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy</p>				
<p>b. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Arts_dummy, Manufacturing_dummy, Food_dummy, Health_dummy, Likely_formal_informal_spectrum, Wholesale_dummy</p>				
<p>c. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Arts_dummy, Manufacturing_dummy, Food_dummy, Health_dummy, Likely_formal_informal_spectrum, Wholesale_dummy, Free meals, outlook-q206_5, Transportation, outlook-q206_3, Employment contract, outlook-q206_1, Sick leaves, outlook-q206_4, Competitive salary, Flexible working hours, Paternity leave, Annual leaves, Refreshments , Uniform, outlook-q206_2, Bonuses / rewards, Medical insurance, Overtime pay, Pension fund, Breaks, Social security, Social committee, Maternity leave, Life insurance</p>				

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7,346	6	1,224	6,273	,000 ^b
	Residual	20,297	104	,195		
	Total	27,643	110			
2	Regression	10,054	12	,838	4,668	,000 ^c
	Residual	17,589	98	,179		
	Total	27,643	110			
3	Regression	18,776	36	,522	4,352	,000 ^d
	Residual	8,867	74	,120		
	Total	27,643	110			
<p>a. Dependent Variable: skills_availability_index</p>						
<p>b. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy</p>						
<p>c. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Arts_dummy, Manufacturing_dummy, Food_dummy, Health_dummy, Likely_formal_informal_spectrum, Wholesale_dummy</p>						
Table continued next page...						

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
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d. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Arts_dummy, Manufacturing_dummy, Food_dummy, Health_dummy, Likely_formal_informal_spectrum, Wholesale_dummy, Free meals, outlook-q206_5, Transportation, outlook-q206_3, Employment contract, outlook-q206_1, Sick leaves, outlook-q206_4, Competitive salary, Flexible working hours, Paternity leave, Annual leaves, Refreshments , Uniform, outlook-q206_2, Bonuses / rewards, Medical insurance, Overtime pay, Pension fund, Breaks, Social security, Social committee, Maternity leave, Life insurance

Coefficients^a

Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	3,022	,145		20,805	,000
	background-q101	-,255	,141	-,152	-1,800	,075
	background-q106	,001	,000	,164	1,878	,063
	Tripoli_dummy	-,052	,112	-,045	-,467	,642
	Benghazi_dummy	,201	,147	,130	1,373	,173
	Misrata_dummy	-,040	,121	-,032	-,335	,738
	Bayda_dummy	-,635	,142	-,409	-4,468	,000
2	(Constant)	3,192	,178		17,920	,000
	background-q101	-,192	,141	-,115	-1,362	,176
	background-q106	,000	,000	,126	1,479	,142
	Tripoli_dummy	-,093	,121	-,079	-,769	,444
	Benghazi_dummy	,181	,146	,116	1,239	,218
	Misrata_dummy	-,080	,124	-,063	-,643	,522
	Bayda_dummy	-,588	,142	-,379	-4,143	,000
	Manufacturing_dummy	-,128	,178	-,062	-,720	,473
	Wholesale_dummy	-,225	,105	-,211	-2,156	,034
	Arts_dummy	,223	,314	,059	,710	,479

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
2	Health_dummy	,170	,147	,105	1,150	,253
	Food_dummy	-,149	,139	-,096	-1,071	,287
	Likely_formal_informal_spectrum	-,072	,047	-,143	-1,543	,126
3	(Constant)	3,296	,269		12,251	,000
	background-q101	-,251	,132	-,150	-1,904	,061
	background-q106	,001	,000	,164	1,268	,209
	Tripoli_dummy	-,142	,153	-,120	-,928	,356
	Benghazi_dummy	,005	,145	,003	,035	,972
	Misrata_dummy	-,061	,150	-,048	-,406	,686
	Bayda_dummy	-,662	,138	-,427	-4,810	,000
	Manufacturing_dummy	-,396	,181	-,193	-2,184	,032
	Wholesale_dummy	-,120	,099	-,113	-1,218	,227
	Arts_dummy	,154	,279	,041	,553	,582
	Health_dummy	,161	,145	,100	1,108	,271
	Food_dummy	-,180	,148	-,116	-1,221	,226
	Likely_formal_informal_spectrum	-,103	,051	-,205	-2,035	,045
	outlook-q206_1	-,527	,180	-,328	-2,937	,004
	outlook-q206_2	,174	,153	,122	1,137	,259
	outlook-q206_3	-,396	,098	-,341	-4,042	,000
	outlook-q206_4	-,063	,099	-,061	-,629	,531
	outlook-q206_5	,030	,110	,022	,268	,789
Competitive salary	,134	,055	,255	2,443	,017	
Overtime pay	-,036	,048	-,087	-,759	,451	

Table continued next page...

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
3	Bonuses / rewards	-,019	,053	-,040	-,361	,719
	Transportation	,021	,046	,043	,451	,653
	Medical insurance	-,045	,070	-,080	-,644	,521
	Refreshments	-,014	,047	-,032	-,305	,761
	Social security	,001	,090	,001	,010	,992
	Annual leaves	,063	,050	,131	1,255	,214
	Sick leaves	,016	,062	,025	,264	,793
	Free meals	,104	,050	,224	2,072	,042
	Breaks	-,232	,064	-,427	-3,650	,000
	Life insurance	-,110	,164	-,153	-,670	,505
	Uniform	-,047	,049	-,110	-,971	,335
	Social committee	,098	,085	,165	1,144	,256
	Flexible working hours	,135	,053	,283	2,559	,013
	Pension fund	-,085	,131	-,120	-,649	,519
	Maternity leave	,094	,063	,225	1,505	,136
	Paternity leave	-,150	,063	-,338	-2,393	,019
Employment contract	,063	,046	,153	1,372	,174	

a. Dependent Variable: skills_availability_index

Online survey skills confidence regression analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,191 ^a	,037	,012	,68271
2	,338 ^b	,114	,064	,66453
3	,641 ^c	,410	,310	,57055

a. Predictors: (Constant), Bayda_dummy, Gender, Misrata_dummy, Benghazi_dummy, Age, Tripoli_dummy

b. Predictors: (Constant), Bayda_dummy, Gender, Misrata_dummy, Benghazi_dummy, Age, Tripoli_dummy, International Organisations/companies, Private, Employment_dummy, Public, Voluntary, Experience_dummy, Informal/unregistered

c. Predictors: (Constant), Bayda_dummy, Gender, Misrata_dummy, Benghazi_dummy, Age, Tripoli_dummy, International Organisations/companies, Private, Employment_dummy, Public, Voluntary, Experience_dummy, Informal/unregistered, Petrol Field, Human health and social work activities, Agriculture/ Forestry/ Fishing, Education, Administrative and support services activities, Financial and insurance activities, Foreign Organizations, Construction, Entertainment and arts, Electricity / steam and air conditioning supplies, Professional, scientific and technical activities, Other services, Media and Communication, Public administration and defense, compulsory social security, Wholesale and retail trade, Repairing cars and motorcycles, Personal and home services, Manufacturing, Real estate, Water supply / sewage / waste management / repair activities, Mining and quarrying, Accommodation and food service activities, Transportation and storage

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4,155	6	,693	1,486	,184 ^b
	Residual	109,356	235	,466		
	Total	113,511	241			
2	Regression	12,991	13	,999	2,263	,008 ^c
	Residual	100,520	228	,442		
	Total	113,511	241			

Table continued next page...

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
3	Regression	46,575	35	1,331	4,088	,000 ^d
	Residual	66,936	206	,326		
	Total	113,511	241			
a. Dependent Variable: Skills_index						
b. Predictors: (Constant), Bayda_dummy, Gender, Misrata_dummy, Benghazi_dummy, Age, Tripoli_dummy						
c. Predictors: (Constant), Bayda_dummy, Gender, Misrata_dummy, Benghazi_dummy, Age, Tripoli_dummy, International Organizations/companies, Private, Employment_dummy, Public, Voluntary, Experience_dummy, Informal/unregistered						
d. Predictors: (Constant), Bayda_dummy, Gender, Misrata_dummy, Benghazi_dummy, Age, Tripoli_dummy, International Organizations/companies, Private, Employment_dummy, Public, Voluntary, Experience_dummy, Informal/unregistered, Petrol Field, Human health and social work activities, Agriculture/ Forestry/ Fishing, Education, Administrative and support services activities, Financial and insurance activities, Foreign Organizations, Construction, Entertainment and arts, Electricity / steam and air conditioning supplies, Professional, scientific and technical activities, Other services, Media and Communication, Public administration and defense, compulsory social security, Wholesale and retail trade ; Repairing cars and motorcycles, Personal and home services, Manufacturing, Real estate, Water supply / sewage / waste management / repair activities, Mining and quarrying, Accommodation and food service activities, Transportation and storage						

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	2,927	,153		19,165	,000
	Age	-,058	,034	-,114	-1,723	,086
	Gender	,143	,095	,104	1,514	,131
	Benghazi_dummy	,247	,130	,128	1,895	,059
	Misrata_dummy	-,001	,174	,000	-,007	,994
	Tripoli_dummy	-,080	,116	-,050	-,693	,489
	Bayda_dummy	-,002	,247	,000	-,006	,995
2	(Constant)	2,712	1,094		2,479	,014

Table continued next page...

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
2	Age	-,100	,036	-,197	-2,778	,006
	Gender	,155	,098	,113	1,594	,112
	Benghazi_dummy	,191	,130	,099	1,474	,142
	Misrata_dummy	-,003	,173	-,001	-,015	,988
	Tripoli_dummy	-,090	,114	-,056	-,796	,427
	Bayda_dummy	-,026	,242	-,007	-,106	,915
	Experience_dummy	,240	,113	,143	2,120	,035
	Employment_dummy	,192	,107	,120	1,790	,075
	Voluntary	-,063	,092	-,045	-,685	,494
	Public	-,380	,130	-,192	-2,917	,004
	Private	,051	,088	,037	,580	,562
	International Organizations/ companies	,669	1,017	,041	,658	,511
	Informal/unregistered	,101	,099	,071	1,022	,308
	3	(Constant)	3,583	1,109		3,231
Age		-,116	,034	-,227	-3,372	,001
Gender		,232	,109	,169	2,137	,034
Benghazi_dummy		,306	,124	,159	2,474	,014
Misrata_dummy		,304	,171	,116	1,781	,076
Tripoli_dummy		-,033	,117	-,021	-,287	,774
Bayda_dummy		,150	,220	,040	,684	,495
Experience_dummy		,076	,116	,046	,658	,511
Employment_dummy		,327	,114	,204	2,879	,004
Voluntary		,031	,100	,022	,313	,754
Public		,217	,156	,110	1,394	,165
Private		-,082	,089	-,060	-,924	,356
International Organizations/ companies		,270	,899	,017	,300	,764
Informal/unregistered		,115	,096	,081	1,198	,232
Agriculture/Forestry/ Fishing		-1,101	,283	-,288	-3,890	,000
Mining and quarrying		,889	,282	,307	3,150	,002
Manufacturing	-,094	,175	-,044	-,537	,592	

Table continued next page...

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
3	Electricity / steam and air conditioning supplies	,373	,154	,187	2,417	,017
	Water supply / sewage / waste management / repair activities	-,828	,266	-,282	-3,111	,002
	Construction	,142	,177	,070	,806	,421
	Wholesale and retail trade ; Repairing cars and motorcycles	-,040	,158	-,023	-,251	,802
	Transportation and storage	,300	,210	,143	1,426	,155
	Accommodation and food service activities	-,418	,285	-,147	-1,465	,144
	Media and Communication	-,485	,103	-,349	-4,704	,000
	Financial and insurance activities	,128	,138	,076	,928	,355
	Real estate	,087	,171	,046	,505	,614
	Professional, scientific and technical activities	-,055	,096	-,040	-,573	,567
	Administrative and support services activities	,181	,091	,131	1,978	,049
	Public administration and defense, compulsory social security	,072	,154	,042	,470	,639
	Education	,064	,103	,041	,624	,533
	Human health and social work activities	-,209	,106	-,127	-1,964	,051
	Entertainment and arts	-,149	,156	-,077	-,959	,339
	Other services	,056	,151	,027	,373	,710
	Personal and home services	,191	,244	,076	,782	,435
	Foreign Organizations	,091	,092	,066	,991	,323
Petrol Field	-,711	,303	-,137	-2,343	,020	

a. Dependent Variable: Skills_index

Skills Gap Regression Analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,275 ^a	,076	,032	3,55649
2	,455 ^b	,207	,129	3,37443

a. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy

b. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Manufacturing_dummy, Arts_dummy, Health_dummy, Food_dummy, Wholesale_dummy, Likely_formal_informal_spectrum

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	132,342	6	22,057	1,744	,116 ^b
	Residual	1619,026	128	12,649		
	Total	1751,368	134			
2	Regression	362,182	12	30,182	2,651	,003 ^c
	Residual	1389,185	122	11,387		
	Total	1751,368	134			

a. Dependent Variable: Gap_index

b. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy

c. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Manufacturing_dummy, Arts_dummy, Health_dummy, Food_dummy, Wholesale_dummy, Likely_formal_informal_spectrum

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	-2,828	,969		-2,919	,004
	background-q101	,684	,932	,063	,734	,464
	background-q106	,002	,002	,058	,645	,520
	Tripoli_dummy	-,185	,756	-,025	-,245	,807
	Benghazi_dummy	2,194	1,214	,173	1,807	,073
	Misrata_dummy	1,453	,932	,152	1,559	,121
	Bayda_dummy	1,779	1,209	,135	1,472	,144
2	(Constant)	-6,291	1,328		-4,737	,000
	background-q101	,664	,905	,061	,734	,465
	background-q106	,002	,002	,086	1,012	,314
	Tripoli_dummy	,971	,849	,129	1,143	,255
	Benghazi_dummy	3,866	1,241	,305	3,116	,002
	Misrata_dummy	1,737	,978	,181	1,776	,078
	Bayda_dummy	1,722	1,187	,131	1,450	,150
	Manufacturing_dummy	1,970	1,304	,129	1,510	,134
	Wholesale_dummy	1,574	,745	,201	2,113	,037
	Arts_dummy	-,471	1,601	-,025	-,294	,769
	Health_dummy	1,763	1,101	,144	1,602	,112
	Food_dummy	,117	1,042	,010	,112	,911
	Likely_formal_informal_spectrum	1,194	,350	,329	3,407	,001

a. Dependent Variable: Gap_index

Online Survey Benefit expectation regression analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,446 ^a	,199	,170	,76230
2	,532 ^b	,283	,225	,73667
3	,761 ^c	,579	,472	,60819
4	,812 ^d	,659	,569	,54941
<p>a. Predictors: (Constant), Bayda_dummy, Gender, Misrata_dummy, Benghazi_dummy, Age, Tripoli_dummy</p>				
<p>b. Predictors: (Constant), Bayda_dummy, Gender, Misrata_dummy, Benghazi_dummy, Age, Tripoli_dummy, International Organizations/companies, Employment_dummy, Voluntary, Informal/unregistered, Private, Public, Experience_dummy</p>				
<p>c. Predictors: (Constant), Bayda_dummy, Gender, Misrata_dummy, Benghazi_dummy, Age, Tripoli_dummy, International Organizations/companies, Employment_dummy, Voluntary, Informal/unregistered, Private, Public, Experience_dummy, Petrol Field, Water supply / sewage / waste management / repair activities, Accommodation and food service activities, Financial and insurance activities, Human health and social work activities, Agriculture/Forestry/ Fishing, Education, Construction, Administrative and support services activities, Foreign Organizations, Other services, Entertainment and arts, Public administration and defense, compulsory social security, Professional, scientific and technical activities, Electricity / steam and air conditioning supplies, Manufacturing, Media and Communication, Personal and home services, Wholesale and retail trade, Repairing cars and motorcycles, Real estate, Mining and quarrying, Transportation and storage</p>				
<p>d. Predictors: (Constant), Bayda_dummy, Gender, Misrata_dummy, Benghazi_dummy, Age, Tripoli_dummy, International Organizations/companies, Employment_dummy, Voluntary, Informal/unregistered, Private, Public, Experience_dummy, Petrol Field, Water supply / sewage / waste management / repair activities, Accommodation and food service activities, Financial and insurance activities, Human health and social work activities, Agriculture/Forestry/ Fishing, Education, Construction, Administrative and support services activities, Foreign Organizations, Other services, Entertainment and arts, Public administration and defense, compulsory social security, Professional, scientific and technical activities, Electricity / steam and air conditioning supplies, Manufacturing, Media and Communication, Personal and home services, Wholesale and retail trade ; Repairing cars and motorcycles, Real estate, Mining and quarrying, Transportation and storage, Skills_index</p>				

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24,169	6	4,028	6,932	,000 ^b
	Residual	97,139	167	,581		
	Total	121,308	173			
2	Regression	34,389	13	2,645	4,874	,000 ^c
	Residual	86,919	160	,543		
	Total	121,308	173			
3	Regression	70,202	35	2,006	5,423	,000 ^d
	Residual	51,106	138	,370		
	Total	121,308	173			
4	Regression	79,905	36	2,220	7,353	,000 ^e
	Residual	41,403	137	,302		
	Total	121,308	173			

a. **Dependent Variable:** Reduced_Motivation_index

b. **Predictors:** (Constant), Bayda_dummy, Gender, Misrata_dummy, Benghazi_dummy, Age, Tripoli_dummy

c. **Predictors:** (Constant), Bayda_dummy, Gender, Misrata_dummy, Benghazi_dummy, Age, Tripoli_dummy, International Organizations/companies, Employment_dummy, Voluntary, Informal/unregistered, Private, Public, Experience_dummy

d. **Predictors:** (Constant), Bayda_dummy, Gender, Misrata_dummy, Benghazi_dummy, Age, Tripoli_dummy, International Organizations/companies, Employment_dummy, Voluntary, Informal/unregistered, Private, Public, Experience_dummy, Petrol Field, Water supply / sewage / waste management / repair activities, Accommodation and food service activities, Financial and insurance activities, Human health and social work activities, Agriculture/Forestry/ Fishing, Education, Construction, Administrative and support services activities, Foreign Organizations, Other services, Entertainment and arts, Public administration and defense, compulsory social security, Professional, scientific and technical activities, Electricity / steam and air conditioning supplies, Manufacturing, Media and Communication, Personal and home services, Wholesale and retail trade ; Repairing cars and motorcycles, Real estate, Mining and quarrying, Transportation and storage

e. **Predictors:** (Constant), Bayda_dummy, Gender, Misrata_dummy, Benghazi_dummy, Age, Tripoli_dummy, International Organizations/companies, Employment_dummy, Voluntary, Informal/unregistered, Private, Public, Experience_dummy, Petrol Field, Water supply / sewage / waste management / repair activities, Accommodation and food service activities, Financial and insurance activities, Human health and social work activities, Agriculture/Forestry/ Fishing, Education, Construction, Administrative and support services activities, Foreign Organizations, Other services, Entertainment and arts, Public administration and defense, compulsory social security, Professional, scientific and technical activities, Electricity / steam and air conditioning supplies, Manufacturing, Media and Communication, Personal and home services, Wholesale and retail trade ; Repairing cars and motorcycles, Real estate, Mining and quarrying, Transportation and storage, Skills_index

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	1,995	,192		10,404	,000
	Age	,115	,043	,194	2,678	,008
	Gender	,291	,130	,173	2,245	,026
	Benghazi_dummy	-,002	,177	-,001	-,014	,989
	Misrata_dummy	,197	,212	,068	,926	,356
	Tripoli_dummy	-,667	,154	-,347	-4,341	,000
	Bayda_dummy	-,681	,379	-,126	-1,797	,074
2	(Constant)	1,290	1,248		1,033	,303
	Age	,077	,047	,131	1,658	,099
	Gender	,351	,131	,208	2,676	,008
	Benghazi_dummy	-,062	,174	-,026	-,354	,724
	Misrata_dummy	,200	,213	,069	,939	,349
	Tripoli_dummy	-,684	,151	-,355	-4,539	,000
	Bayda_dummy	-,564	,372	-,104	-1,515	,132
	Employment_dummy	,331	,137	,178	2,419	,017
	Experience_dummy	,134	,162	,063	,831	,407
	Voluntary	,142	,120	,084	1,178	,241
	Public	-,397	,163	-,176	-2,442	,016
	Private	,115	,122	,068	,939	,349
	International Organizations/ companies	,625	1,129	,037	,553	,581
	Informal/unregistered	,200	,130	,111	1,542	,125
3	(Constant)	1,722	1,443		1,194	,235
	Age	,054	,046	,092	1,172	,243
	Gender	-,034	,145	-,020	-,234	,816

Table continued next page...

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
3	Benghazi_dummy	,202	,166	,084	1,215	,226
	Misrata_dummy	,591	,211	,203	2,807	,006
	Tripoli_dummy	-,362	,156	-,188	-2,323	,022
	Bayda_dummy	-,183	,329	-,034	-,556	,579
	Employment_dummy	,518	,154	,278	3,373	,001
	Experience_dummy	,063	,152	,030	,416	,678
	Voluntary	,155	,124	,092	1,253	,212
	Public	,217	,216	,096	1,003	,317
	Private	-,096	,126	-,057	-,760	,449
	International Organizations/ companies	,333	,979	,020	,340	,735
	Informal/unregistered	-,055	,125	-,030	-,438	,662
	Agriculture/Forestry/ Fishing	-,593	,350	-,143	-1,695	,092
	Mining and quarrying	,827	,361	,272	2,288	,024
	Manufacturing	,623	,232	,221	2,679	,008
	Electricity / steam and air conditioning supplies	,293	,206	,112	1,423	,157
	Water supply / sewage / waste management / repair activities	-,505	,530	-,059	-,951	,343
	Construction	,261	,246	,089	1,063	,290
	Wholesale and retail trade ; Repairing cars and motorcycles	-,687	,213	-,305	-3,227	,002
	Transportation and storage	,454	,340	,165	1,334	,184
	Accommodation and food service activities	,077	,374	,017	,205	,838
Media and Communication	,026	,134	,015	,191	,849	

Table continued next page...

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
3	Financial and insurance activities	,534	,188	,267	2,836	,005
	Real estate	,216	,250	,091	,862	,390
	Professional, scientific and technical activities	-,350	,127	-,209	-2,761	,007
	Administrative and support services activities	,059	,127	,035	,461	,645
	Public administration and defense, compulsory social security	,025	,206	,012	,123	,902
	Education	-,265	,126	-,145	-2,109	,037
	Human health and social work activities	,104	,165	,047	,633	,528
	Entertainment and arts	,280	,198	,107	1,413	,160
	Other services	,362	,197	,134	1,831	,069
	Personal and home services	-,364	,314	-,097	-1,158	,249
	Foreign Organizations	-,029	,128	-,017	-,229	,819
	Petrol Field	-1,600	,576	-,167	-2,779	,006
	4	(Constant)	-,201	1,347		-,149
Age		,131	,044	,221	2,976	,003
Gender		-,075	,131	-,044	-,572	,568
Benghazi_dummy		,092	,151	,039	,612	,542
Misrata_dummy		,498	,191	,171	2,608	,010
Tripoli_dummy		-,319	,141	-,166	-2,262	,025
Bayda_dummy		-,248	,297	-,046	-,833	,406
Employment_dummy		,355	,142	,190	2,504	,013
Experience_dummy		,045	,137	,021	,327	,744
Voluntary		,120	,112	,071	1,072	,285

Table continued next page...

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
4	Public	,122	,196	,054	,622	,535
	Private	,009	,115	,005	,078	,938
	International Organizations/ companies	,457	,885	,027	,516	,607
	Informal/unregistered	-,086	,113	-,048	-,763	,447
	Agriculture/Forestry/ Fishing	,003	,333	,001	,008	,994
	Mining and quarrying	,488	,332	,161	1,471	,143
	Manufacturing	,707	,210	,250	3,357	,001
	Electricity / steam and air conditioning supplies	,040	,191	,015	,207	,836
	Water supply / sewage / waste management / repair activities	-,425	,479	-,049	-,886	,377
	Construction	,084	,224	,028	,373	,710
	Wholesale and retail trade ; Repairing cars and motorcycles	-,573	,193	-,255	-2,964	,004
	Transportation and storage	,247	,310	,090	,797	,427
	Accommodation and food service activities	,089	,338	,020	,262	,793
	Media and Communication	,216	,126	,129	1,717	,088
	Financial and insurance activities	,455	,171	,228	2,667	,009
	Real estate	,122	,227	,052	,539	,591
	Professional, scientific and technical activities	-,337	,115	-,201	-2,938	,004
	Administrative and support services activities	-,099	,118	-,059	-,839	,403
	Public administration and defense, compulsory social security	-,052	,187	-,025	-,277	,782

Table continued next page...

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
4	Education	-,251	,114	-,138	-2,215	,028
	Human health and social work activities	,208	,150	,095	1,390	,167
	Entertainment and arts	,327	,179	,125	1,827	,070
	Other services	,256	,179	,095	1,427	,156
	Personal and home services	-,208	,285	-,055	-,729	,467
	Foreign Organizations	-,102	,116	-,060	-,874	,384
	Petrol Field	-,996	,531	-,104	-1,875	,063
	Skills_index	,483	,085	,407	5,670	,000

a. Dependent Variable: Reduced_Motivation_index

Economic Growth Short term regression analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,380 ^a	,145	,105	17,24164
2	,433 ^b	,187	,117	17,13403
3	,490 ^c	,240	,125	17,05381

a. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy

b. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Manufacturing_dummy, Health_dummy, Food_dummy, Likely_formal_informal_spectrum, Wholesale_dummy

c. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Manufacturing_dummy, Health_dummy, Food_dummy, Likely_formal_informal_spectrum, Wholesale_dummy, Social_availability, Numeracy_availability, Workplace_availability, Literacy_availability, Behavioural_availability, Communication_availability, Computer_availability

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6582,485	6	1097,081	3,690	,002 ^b
	Residual	38942,928	131	297,274		
	Total	45525,413	137			
2	Regression	8534,948	11	775,904	2,643	,004 ^c
	Residual	36990,465	126	293,575		
	Total	45525,413	137			
3	Regression	10916,355	18	606,464	2,085	,010 ^d
	Residual	34609,058	119	290,832		
	Total	45525,413	137			
a. Dependent Variable: Short_term_econ_outlook						
b. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy						
c. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Manufacturing_dummy, Health_dummy, Food_dummy, Likely_formal_informal_spectrum, Wholesale_dummy						
d. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Manufacturing_dummy, Health_dummy, Food_dummy, Likely_formal_informal_spectrum, Wholesale_dummy, Social_availability, Numeracy_availability, Workplace_availability, Literacy_availability, Behavioural_availability, Communication_availability, Computer_availability						

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	64,050	6,275		10,206	,000
	background-q101	-18,490	5,589	-,276	-3,308	,001
	background-q106	,013	,012	,093	1,116	,266
	Tripoli_dummy	-7,252	3,949	-,186	-1,836	,069
	Benghazi_dummy	-14,711	5,178	-,273	-2,841	,005

Table continued next page...

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	Misrata_dummy	-13,469	4,452	-,290	-3,026	,003
	Bayda_dummy	-11,919	5,445	-,198	-2,189	,030
2	(Constant)	71,931	7,200		9,991	,000
	background-q101	-17,684	5,646	-,264	-3,132	,002
	background-q106	,008	,012	,059	,704	,482
	Tripoli_dummy	-9,659	4,232	-,248	-2,282	,024
	Benghazi_dummy	-15,104	5,208	-,280	-2,900	,004
	Misrata_dummy	-13,914	4,763	-,300	-2,922	,004
	Bayda_dummy	-11,431	5,504	-,190	-2,077	,040
	Manufacturing_dummy	-1,165	6,217	-,016	-,187	,852
	Wholesale_dummy	-3,617	3,606	-,094	-1,003	,318
	Health_dummy	,868	5,797	,013	,150	,881
	Food_dummy	-3,697	5,269	-,063	-,702	,484
	Likely_formal_informal_spectrum	-3,435	1,708	-,178	-2,011	,046
3	(Constant)	76,273	15,510		4,918	,000
	background-q101	-15,281	6,036	-,228	-2,532	,013
	background-q106	,008	,012	,057	,663	,509
	Tripoli_dummy	-10,121	4,540	-,260	-2,229	,028
	Benghazi_dummy	-19,136	5,748	-,355	-3,329	,001
	Misrata_dummy	-10,213	5,020	-,220	-2,034	,044
	Bayda_dummy	-12,197	6,044	-,203	-2,018	,046
	Manufacturing_dummy	,531	6,419	,007	,083	,934
	Wholesale_dummy	-3,290	3,766	-,085	-,874	,384
	Health_dummy	1,383	5,960	,021	,232	,817

Table continued next page...

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
3	Food_dummy	-4,799	5,403	-,082	-,888	,376
	Likely_formal_informal_spectrum	-3,605	1,919	-,186	-1,878	,063
	Numeracy_availability	-2,716	3,030	-,095	-,896	,372
	Literacy_availability	,236	2,542	,012	,093	,926
	Communication_availability	3,081	3,797	,104	,811	,419
	Behavioural_availability	-1,748	3,877	-,054	-,451	,653
	Social_availability	-4,956	3,019	-,173	-1,642	,103
	Computer_availability	-2,186	2,777	-,104	-,787	,433
	Workplace_availability	7,244	3,396	,243	2,133	,035

a. Dependent Variable: Short_term_econ_outlook

Medium term economic growth regression analysis

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	,363 ^a	,132		,091	30,62039
2	,416 ^b	,173		,099	30,47523
3	,507 ^c	,258		,142	29,74199

a. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy

b. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Manufacturing_dummy, Wholesale_dummy, Likely_formal_informal_spectrum, Health_dummy, Food_dummy

c. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Manufacturing_dummy, Wholesale_dummy, Likely_formal_informal_spectrum, Health_dummy, Food_dummy, Social_availability, Numeracy_availability, Workplace_availability, Behavioural_availability, Literacy_availability, Computer_availability, Communication_availability

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18185,605	6	3030,934	3,233	,005 ^b
	Residual	120013,865	128	937,608		
	Total	138199,470	134			
2	Regression	23964,519	11	2178,593	2,346	,012 ^c
	Residual	114234,951	123	928,739		
	Total	138199,470	134			
3	Regression	35587,508	18	1977,084	2,235	,006 ^d
	Residual	102611,962	116	884,586		
	Total	138199,470	134			
a. Dependent Variable: Medium_term_econ_outlook						
b. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy						
c. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Manufacturing_dummy, Wholesale_dummy, Likely_formal_informal_spectrum, Health_dummy, Food_dummy						
d. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Manufacturing_dummy, Wholesale_dummy, Likely_formal_informal_spectrum, Health_dummy, Food_dummy, Social_availability, Numeracy_availability, Workplace_availability, Behavioural_availability, Literacy_availability, Computer_availability, Communication_availability						

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	67,052	10,248		6,543	,000
	background-q101	-17,216	9,191	-,159	-1,873	,063
	background-q106	,014	,021	,056	,661	,510
	Tripoli_dummy	13,805	7,067	,198	1,953	,053
	Benghazi_dummy	-16,624	9,092	-,177	-1,828	,070
	Misrata_dummy	-4,592	7,765	-,057	-,591	,555
	Bayda_dummy	11,990	10,186	,107	1,177	,241
Table continued next page...						

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
2	(Constant)	80,928	12,287		6,586	,000
	background-q101	-16,970	9,351	-,156	-1,815	,072
	background-q106	,006	,021	,026	,301	,764
	Tripoli_dummy	10,442	7,591	,150	1,376	,171
	Benghazi_dummy	-17,605	9,170	-,187	-1,920	,057
	Misrata_dummy	-2,507	8,308	-,031	-,302	,763
	Bayda_dummy	11,438	10,301	,102	1,110	,269
	Manufacturing_dummy	-8,819	11,089	-,069	-,795	,428
	Wholesale_dummy	-10,864	6,453	-,160	-1,684	,095
	Health_dummy	-8,984	10,122	-,083	-,888	,377
	Food_dummy	-12,489	9,636	-,123	-1,296	,197
	Likely_formal_informal_spectrum	-3,797	3,022	-,113	-1,256	,211
3	(Constant)	65,497	26,428		2,478	,015
	background-q101	-20,303	9,701	-,187	-2,093	,039
	background-q106	-,003	,021	-,013	-,146	,884
	Tripoli_dummy	6,514	8,074	,094	,807	,421
	Benghazi_dummy	-18,202	9,971	-,193	-1,826	,070
	Misrata_dummy	,788	8,627	,010	,091	,927
	Bayda_dummy	15,407	11,188	,137	1,377	,171
	Manufacturing_dummy	-6,668	11,209	-,052	-,595	,553
	Wholesale_dummy	-7,697	6,733	-,113	-1,143	,255
	Health_dummy	-8,732	10,201	-,081	-,856	,394
	Food_dummy	-11,182	9,789	-,110	-1,142	,256

Table continued next page...

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
3	Likely_formal_informal_spectrum	-4,322	3,325	-,128	-1,300	,196
	Numeracy_availability	11,710	5,438	,230	2,154	,033
	Literacy_availability	-8,126	4,666	-,232	-1,741	,084
	Communication_availability	2,109	6,754	,041	,312	,755
	Behavioural_availability	9,901	6,780	,176	1,460	,147
	Social_availability	-13,614	5,443	-,269	-2,501	,014
	Computer_availability	3,928	4,844	,104	,811	,419
	Workplace_availability	,375	5,973	,007	,063	,950

a. Dependent Variable: Medium_term_econ_outlook

Short term employment outlook regression analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,595 ^a	,354		17,45766
2	,625 ^b	,390		17,30830
3	,682 ^c	,465		16,71015

a. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy

b. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Wholesale_dummy, Manufacturing_dummy, Likely_formal_informal_spectrum, Food_dummy, Health_dummy

c. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Wholesale_dummy, Manufacturing_dummy, Likely_formal_informal_spectrum, Food_dummy, Health_dummy, Social_availability, Numeracy_availability, Workplace_availability, Communication_availability, Behavioural_availability, Computer_availability, Literacy_availability

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21052,737	6	3508,789	11,513	,000 ^b
	Residual	38400,993	126	304,770		
	Total	59453,729	132			
2	Regression	23204,890	11	2109,535	7,042	,000 ^c
	Residual	36248,839	121	299,577		
	Total	59453,729	132			
3	Regression	27621,628	18	1534,535	5,496	,000 ^d
	Residual	31832,101	114	279,229		
	Total	59453,729	132			
a. Dependent Variable: Short_term_employment_outlook						
b. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy						
c. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Wholesale_dummy, Manufacturing_dummy, Likely_formal_informal_spectrum, Food_dummy, Health_dummy						
d. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Wholesale_dummy, Manufacturing_dummy, Likely_formal_informal_spectrum, Food_dummy, Health_dummy, Social_availability, Numeracy_availability, Workplace_availability, Communication_availability, Behavioural_availability, Computer_availability, Literacy_availability						

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	43,087	6,198		6,952	,000
	background-q101	-6,627	5,483	-,090	-1,209	,229
	background-q106	,020	,012	,122	1,655	,101
	Tripoli_dummy	-25,598	4,069	-,563	-6,291	,000
	Benghazi_dummy	-28,629	5,236	-,463	-5,467	,000
	Misrata_dummy	-5,928	4,458	-,113	-1,330	,186
	Bayda_dummy	-33,677	6,264	-,420	-5,376	,000
2	(Constant)	47,850	7,112		6,728	,000
	background-q101	-5,825	5,504	-,079	-1,058	,292
	background-q106	,017	,012	,106	1,437	,153
	Tripoli_dummy	-28,099	4,291	-,618	-6,548	,000
	Benghazi_dummy	-29,166	5,253	-,472	-5,553	,000

Table continued next page...

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
	Misrata_dummy	-7,989	4,756	-,152	-1,680	,096
	Bayda_dummy	-33,758	6,291	-,421	-5,366	,000
	Manufacturing_dummy	4,613	6,079	,058	,759	,449
	Wholesale_dummy	4,952	3,719	,110	1,331	,186
	Health_dummy	,042	5,764	,001	,007	,994
	Food_dummy	5,945	5,367	,089	1,108	,270
	Likely_formal_informal_spectrum	-3,944	1,723	-,176	-2,289	,024
3	(Constant)	39,188	15,096		2,596	,011
	background-q101	-3,566	5,608	-,048	-,636	,526
	background-q106	,012	,012	,075	1,014	,313
	Tripoli_dummy	-29,497	4,506	-,649	-6,546	,000
	Benghazi_dummy	-34,485	5,646	-,558	-6,108	,000
	Misrata_dummy	-3,024	4,924	-,058	-,614	,540
	Bayda_dummy	-34,250	6,530	-,427	-5,245	,000
	Manufacturing_dummy	2,981	6,102	,037	,488	,626
	Wholesale_dummy	3,586	3,814	,080	,940	,349
	Health_dummy	-,029	5,773	,000	-,005	,996
	Food_dummy	3,308	5,369	,049	,616	,539
	Likely_formal_informal_spectrum	-5,533	1,891	-,247	-2,926	,004
	Numeracy_availability	,339	3,041	,010	,111	,912
	Literacy_availability	-4,997	2,645	-,215	-1,889	,061
	Communication_availability	3,816	3,848	,106	,992	,323
	Behavioural_availability	,007	3,849	,000	,002	,999
	Social_availability	-3,034	3,077	-,090	-,986	,326
Computer_availability	-2,897	2,754	-,114	-1,052	,295	
Workplace_availability	11,096	3,370	,315	3,292	,001	

a. Dependent Variable: Short_term_employment_outlook

Medium-term employment outlook regression analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,606 ^a	,367	,336	17,91601
2	,630 ^b	,397	,340	17,85265
3	,690 ^c	,477	,391	17,15645
<p>a. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy</p>				
<p>b. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Wholesale_dummy, Manufacturing_dummy, Likely_formal_informal_spectrum, Health_dummy, Food_dummy</p>				
<p>c. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Wholesale_dummy, Manufacturing_dummy, Likely_formal_informal_spectrum, Health_dummy, Food_dummy, Social_availability, Numeracy_availability, Workplace_availability, Behavioural_availability, Communication_availability, Computer_availability, Literacy_availability</p>				

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22698,394	6	3783,066	11,786	,000 ^p
	Residual	39159,994	122	320,984		
	Total	61858,388	128			
2	Regression	24568,493	11	2233,499	7,008	,000 ^c
	Residual	37289,895	117	318,717		
	Total	61858,388	128			
3	Regression	29480,576	18	1637,810	5,564	,000 ^d
	Residual	32377,812	110	294,344		
	Total	61858,388	128			
<p>a. Dependent Variable: Medium_term_employment_outlook</p>						
<p>b. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy</p>						
<p>c. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Wholesale_dummy, Manufacturing_dummy, Likely_formal_informal_spectrum, Health_dummy, Food_dummy</p>						
<p>d. Predictors: (Constant), Bayda_dummy, background-q101, background-q106, Misrata_dummy, Benghazi_dummy, Tripoli_dummy, Wholesale_dummy, Manufacturing_dummy, Likely_formal_informal_spectrum, Health_dummy, Food_dummy, Social_availability, Numeracy_availability, Workplace_availability, Behavioural_availability, Communication_availability, Computer_availability, Literacy_availability</p>						

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	48,292	6,579		7,340	,000
	background-q101	-6,801	5,851	-,087	-1,162	,247
	background-q106	,019	,012	,115	1,550	,124
	Tripoli_dummy	-22,197	4,238	-,469	-5,237	,000
	Benghazi_dummy	-24,271	5,532	-,375	-4,387	,000
	Misrata_dummy	4,207	4,604	,078	,914	,363
	Bayda_dummy	-32,906	6,451	-,402	-5,101	,000
2	(Constant)	53,789	7,515		7,158	,000
	background-q101	-5,205	5,920	-,066	-,879	,381
	background-q106	,015	,012	,093	1,240	,218
	Tripoli_dummy	-24,724	4,522	-,522	-5,468	,000
	Benghazi_dummy	-24,532	5,559	-,379	-4,413	,000
	Misrata_dummy	2,287	4,936	,042	,463	,644
	Bayda_dummy	-32,261	6,531	-,394	-4,940	,000
	Manufacturing_dummy	4,778	6,546	,056	,730	,467
	Wholesale_dummy	1,852	3,876	,040	,478	,634
	Health_dummy	,894	5,961	,012	,150	,881
	Food_dummy	4,214	5,789	,060	,728	,468
	Likely_formal_informal_spectrum	-4,115	1,812	-,179	-2,272	,025

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Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
3	(Constant)	24,128	16,108		1,498	,137
	background-q101	-2,693	6,046	-,034	-,445	,657
	background-q106	,008	,012	,047	,625	,533
	Tripoli_dummy	-25,920	4,753	-,547	-5,454	,000
	Benghazi_dummy	-29,123	5,917	-,450	-4,922	,000
	Misrata_dummy	6,086	5,126	,113	1,187	,238
	Bayda_dummy	-26,568	6,832	-,324	-3,889	,000
	Manufacturing_dummy	3,993	6,501	,046	,614	,540
	Wholesale_dummy	2,433	3,970	,052	,613	,541
	Health_dummy	1,029	5,956	,014	,173	,863
	Food_dummy	2,549	5,806	,036	,439	,662
	Likely_formal_informal_spectrum	-4,689	2,000	-,204	-2,345	,021
	Numeracy_availability	-2,472	3,139	-,072	-,788	,433
	Literacy_availability	-4,028	2,809	-,167	-1,434	,154
	Communication_availability	3,556	4,040	,096	,880	,381
	Behavioural_availability	2,130	3,973	,054	,536	,593
	Social_availability	-1,254	3,193	-,036	-,393	,695
	Computer_availability	3,279	2,844	,126	1,153	,251
Workplace_availability	8,878	3,518	,241	2,524	,013	

a. Dependent Variable: Medium_term_employment_outlook





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