

**COUNTRY PRIVATE SECTOR DIAGNOSTIC** 

# CREATING MARKETS IN JORDAN

Volume II: Sector Assessments



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### **CONTENTS**

AC	KNOWLEDGMENTS	IV
1.	TOURISM SECTOR ASSESSMENT	1
	Introduction	1
	Sector Performance	2
	Jobs	11
	High Impact Product Segments and Breakthrough Opportunities	12
	Constraints to Attaining the New Vision for the Tourism Sector	23
	Cross-cutting constraints	26
	Policy recommendations	35
2.	LOGISTICS SECTOR ASSESSMENT	36
	Introduction	36
	Potential Demand for Logistics Services	37
	Supply of Transport Services	41
	Trade Facilitation/Customs	47
	Trade Finance	49
	Logistics Service Providers	50
	Market dynamics and competition among logistics service providers	53
	Opportunities for Improving Logistics Services	56
3.	INFORMATION AND COMMUNICATION TECHNOLOGIES SECTOR ASSESSMENT	62
	Motivation: Potential and challenges	62
	Government Strategy	66
	Digital Infrastructure	68
	Digital Entrepreneurship Environment	74
	Digital Skills	77
	Digital Platforms	79
	Digital Financial Services	80
ΑP	PENDIX D. E-COMMERCE LOGISTICS HUB	82

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# 1. TOURISM SECTOR ASSESSMENT

#### INTRODUCTION

With its strong resource base and varied tourism enterprises, Jordan has many of the building blocks for an economically productive and sustainable sector. Across the country, there is no shortage of culturally and historically rich tourism resources. The leading cultural and heritage site, the ancient city of Petra, alone attracted approximately 1 million visitors in its peak year of 2010, with 2018 numbers nearly on par. Jordan is also home to important holy sites for Muslims, Jews, and Christians, along with the ancient Roman ruins at Jerash, the crusader castle at Karak, and Byzantine mosaics at Madaba. Jordan today has a critical mass of five United Nations Educational, Scientific, and Cultural Organization (UNESCO) World Heritage sites, the Dead Sea, the expanding sun and sea resort destination of Aqaba, and natural beauty in diverse ecosystems, along with vibrant cities such as Amman and Jerash. Add to this a great climate, and it seems inevitable for Jordan to be a leading tourism destination.

Yet, Jordan has not been able to fully leverage its tourism potential economically, socially, and environmentally. Rather than a sector of widespread excellence, it is one mired in business environment uncertainties and bureaucracies; minimal hiring of women and youth; and uneven delivery of what should be highly competitive products. However, it is a sector that has great potential to drive breakthrough developments, fuel entities across the private sector, and contribute significantly to Jordan's fiscal accounts. The call to action is clear: determine how Jordan can fully leverage its tourism as an economically productive, socially enriching, and environmentally strengthening activity. Achieving this breakthrough—which can cascade positively to many other sectors—is possible only with the private sector's trust, engagement, and meaningful partnership.

The COVID-19 pandemic has hit the tourism sector particularly hard and recovery is likely to only be gradual. Significant changes are likely in the sector, including a tendency towards consolidation and perhaps to vertical integration. The issues raised in this chapter, however, remain essential to the recovery and long-term sustainability of tourism in Jordan. Advances in ensuring a greater degree of contestability and ease of entry to the sector will ease the recovery; understanding and monitoring shifts in consumer preferences and demand is essential to the resurgence of the sector; an upgrading of service range and quality will separate successful tourism destinations from the pack; investment in capacity building and training can help to bridge the hiatus created by the pandemic and meet an identified quality gap; and a more focused strategy, pursuing excellence, competitiveness and differentiation will support a more rapid and robust return to tourist activity.

1

This sector assessment suggests a path to structuring and shaping Jordan's tourism beyond current pockets of activity. With the adoption of a series of key actions, Jordan's tourism sector can build on its foundation and prove to be an inclusive export powerhouse. The sector could better benefit Jordanians in their communities through establishing a streamlined and functional business-enabling environment that attracts investment, generates jobs, employs women and youth, and fosters entrepreneurship.

#### **SECTOR PERFORMANCE**

#### **Demand**

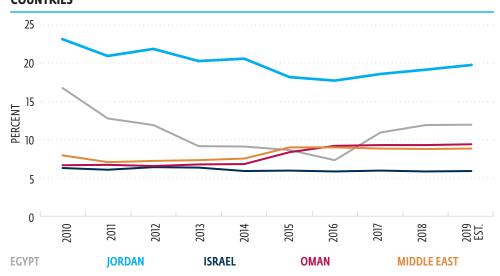
Tourism is more important to the Jordanian economy than it is for many comparators and has been a resilient contributor to GDP and jobs; investment in the sector is lagging, however.

Tourism is an important contributor to Jordan's economy and is prioritized by the government as a key sector for economic growth. The total contribution (direct, indirect, and induced) of tourism to Jordan's GDP was 15.8 percent of GDP in 2018 (equivalent to US\$7.2 billion), far greater than other countries in the region, and close to triple the average share of tourism across the Middle East and North Africa, which was 5.3 percent in 2019. The World Travel and Tourism Council (WTTC) reports that the direct contribution of travel and tourism to Jordan's GDP in 2018 was US\$2.3 billion or 5.2 percent of GDP, an increase from US\$1.9 billion in 2016 (4.8 percent of GDP), which was the lowest level in the past decade.<sup>2</sup> Although this contribution is indicative of Jordan's emphasis on tourism, it does not tell the full story of potential and constraints.

Inbound tourist expenditures as a share of GDP are many times higher in Jordan than in other countries in the region, with the exception of Lebanon (13.8 percent in Jordan compared with 2.1 percent in Israel, 3.9 percent in Oman, 4.4 percent in Egypt, and 15.6 percent in Lebanon in 2017) (figure A.1). Visitor arrivals in Jordan have shown resilience through challenging times and unexpected local and regional events. From 2007 to 2017—through the global financial crisis, Arab Spring events, terrorism, and refugee influxes—overnight arrivals fluctuated between 3 million and 4 million. Overnight visitors in 2018 reached 4,150,173, up from 3,567,195 in 2016, according to Jordan's Ministry of Tourism and Antiquities (MoTA).<sup>3</sup>

International visitors to Jordan are a heterogeneous group with a mix of motivations, activities, and spending patterns, although the bulk of overnight visitors are from the region or are Jordanians living abroad. The top three source markets, accounting for 63 percent of overnight visitors, are Jordanians living abroad, Saudi Arabia, and West Bank and Gaza. Other important source markets outside the region include the United States, Russia, and Germany (see table A.1). Source markets vary by purpose, products, and ease and cost of air access. It is notable that, by purpose of visit, 58 percent of all visitors identify themselves as "VFR" (that is, visiting friends and relatives) (figure A.2). Many of these individuals are Jordanians living abroad.<sup>4</sup> The concentration of visitors in a few source markets suggests the potential for increasing the number of visitors from other largely untapped regions (Europe, the Americas, and Asia).

**FIGURE A.1.** TOTAL CONTRIBUTION OF TOURISM TO GDP FOR SELECTED MIDDLE EAST COUNTRIES



Source: WTTC data.

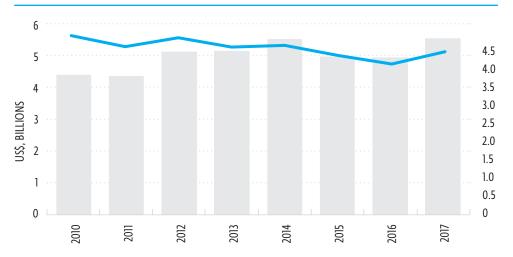
Note: JD = Jordanian dinar; VFR = visiting friends and relatives.

#### FIGURE A.2. PROFILE OF INTERNATIONAL VISITORS, 2017

Internationa	l Visitors to Jordan				
Purpose o	of Visit		Key Mar	kets (by nationality)	
10	VFR	58%		Jordan	36%
7 )	Leisure	18%		Saudi Arabia	18%
	Business/Conference	8%		Palestinian Territories	11%
Top Socia	l Media Used		Key Leis	ure Markets (by nationality)	
<u> </u>	Facebook	38%	<b>EXEM</b>	Saudi Arabia	29%
Ö	Instagram	18%		USA	7%
	Twitter/Snapchat	12%		Russia	6%
Package <sup>-</sup>	Tours		Average	Length of Stay	
=	Percent of all Visitors	12%		Overnight Vistors 15.5 nights	
\$ 5			~~~	Day Visitors 7.5 hours	
Most Pop	ular Destinations		Accomm	odation Used	
M	Amman	48%	00	Friends/Relatives	38%
	Dead Sea	9%	" ( ) "	Own House/Aprtment	28%
	Petra	7%		Rented Apartment	24%
Petra 7%  Most Popular Activities		Expenditure			
[8]	Shopping Nature and Eco	30% 18%	*	Overseas Visitors Average Spend/Day	JD 54
	Historic Sites	12%		Day Visitors Average Spend/Day	JD 172

Source: MoTA, DoS and USAID; Jordan International Visitor Survey 2017.

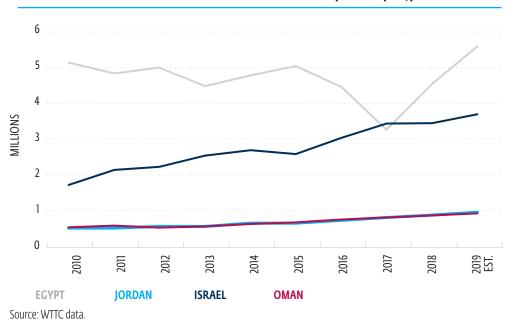
FIGURE A.3. VISITOR ARRIVALS AND RECEIPTS, 2010-17



INTERNATIONAL TOURISM, RECEIPTS (CURRENT US \$)
INTERNATIONAL TOURISM, NUMBER OF ARRIVALS

Source: WTTC data.

FIGURE A.4. CAPITAL INVESTMENT IN TRAVEL AND TOURISM, 2010–19, US\$, BILLIONS



Inbound tourism spending has been growing gradually, and tourists to Jordan tend to spend more than they do in peer countries. Tourism receipts stood at US\$5.4 billion in 2018, the highest level in the past decade, up from US\$4.0 billion in 2011 (figure A.3). Inbound tourism expenditures increased by an average of 3 percent per annum over the period 2012–16, according to Jordan's 2016 Tourism Satellite Account tabulations.<sup>5</sup> Leisure is by far the most important driver of visitor spending in the country, constituting 90 percent of total expenditures in 2018. When compared with those of other countries, Jordan's receipts per international arrival are higher than average. Estimated at US\$1,207 per international tourist arrival (2017), the receipts per international arrival are higher than in neighboring Egypt and nearby Morocco and are even higher than the global average (see table A.2).

TABLE A.1. TOP 15 INBOUND MARKETS—TOURISTS OVERNIGHT, 2018

NATIONALITY		TOURISTS OVERNIGHT	% OF TOTAL
1.	Jordanians abroad	1,421,663	34
2.	Saudi Arabia	739,563	18
3.	West Bank and Gaza	444,091	11
4.	Iraq	171,044	4
5.	United States	120,384	2
6.	Israel	95,854	2
7.	Kuwait	86,481	2
8.	Syria	82,376	1
9.	Lebanon	48,682	1
10.	Egypt, Arab Rep.	48,537	1
11.	Russian Federation	47.979	1
12.	Germany	44,521	1
13.	India	43,292	1
14.	Italy	40,284	1
15.	France	40,001	1

Source: Ministry of Tourism and Antiquities.

TABLE A.2. COMPARISON OF INTERNATIONAL TOURISM RECEIPTS PER ARRIVAL AND PER CAPITA, 2017

COUNTRY	INTERNATIONAL TOURIST ARRIVALS (MILLION)	INTERNATIONAL TOURISM RECEIPTS (US\$, BILLION)	SHARE IN MENA (%)	RECEIPTS/ ARRIVAL° (US\$)	RECEIPTS/ CAPITA°° (US\$)
Egypt, Arab Rep.	8.2	7.8	10.1	953	82
Jordan	3.8	4.6	6.0	1,207	651
Lebanon	1.9	7.6	9.8	4,099	1688
Saudi Arabia	16.1	12.1	15.6	748	372
Morocco	11.3	7.4	9.6	656	214
MENA region (avg)	79.0	77.0	100.0	975	199
World (avg)	1,329	1,340		1,008	180

Source: UNWTO 2019.

Note: MENA = Middle East and North Africa.

An unusually large gap exists between spending by foreigners and locals. Foreigners are responsible for the bulk of travel spending (91.8 percent), with domestic travel spending generating only 8.2 percent of direct travel and tourism GDP in 2016 (WTTC data). This is an unusual gap: many countries are able to cultivate a higher percentage of domestic tourism to smooth seasonality as well as to encourage spending in areas not typically frequented by international visitors. For example, almost a third of all tourism revenue in Thailand comes from the domestic market (Netherlands Embassy in Bangkok 2017). Development of Jordan's domestic tourism over time is fundamental to the sector's growth and resilience.

Capital investment in the travel and tourism sector has increased steadily over the past decade, although it is significantly lower than in regional comparators<sup>6</sup> (figure A.4). Capital investment in the sector reached \$0.9 billion in 2018 and generally corresponds to increases in tourism's contribution to GDP over the same period.

#### **Supply competitiveness**

Tourism resources are concentrated geographically, limiting the sector's contributions to job creation and inclusion; the emphasis on high-grade accommodations has left an important gap in the tourism value chain; competitive performance suffers from a difficulty to deliver high-quality services at a fair price.

The World Economic Forum's (WEF) 2019 Travel and Tourism Competitiveness Report ranked Jordan's overall competitiveness 84th out of 140 countries, below a number of other regional destinations such as Qatar (51), Israel (57), Oman (58), Bahrain (64), Egypt (65), Morocco (66) and the Kingdom of Saudi Arabia (69). Supply issues include the geographic concentration of tourism resources—limiting the sector's contributions to job creation and inclusion—and the shortage of lower-grade accommodations, which has left an important gap in the tourism value chain.

<sup>\*2017</sup> data (latest available)

<sup>\*\*\*</sup>Complied by UNWTO from IMF World Economic Outlook and UNWTO 2018.

Competitive advantage comes from the ability to consistently provide locally defined experiences at culturally, environmentally, or historically unique destinations for a reasonable price/value.<sup>8</sup>

Jordan offers a diversity of products and experiences, and distinctive attractions, but the country is challenged by difficulties in delivering a consistent quality of services at a fair price; moreover, site management can be subpar and access difficult. Although the country has some stunning hotels and resorts with international branding, operators struggle to achieve international standards of service. Older four- and fivestar hotels often need investment and upgrading, but because they have experienced several market shocks and business environment uncertainties, they have often delayed reinvestment. Some sites are unique, such as Mt Nebo, where Moses first viewed the promised land, and Bethany beyond the Jordan, which marks the baptism site of Jesus. Many attractions, primarily managed by the public sector, however, are not visitor friendly and lack signage, site interpretation, and basic clean amenities. Others are overcrowded, such as Petra and the Dead Sea's natural areas. Many attractions are difficult to access unless travelers use a hired car with a driver or take a package tour with transportation provided, typically in old or oversized buses. Moreover, Jordan is widely viewed as being difficult and expensive to reach by air, with limited direct flights and lengthy connections with several key markets. Royal Jordanian, the national airline, dominates the market with limited flights that are often unattractive to leisure visitors who can easily shop online for direct and less expensive flights to other interesting destinations.

Jordan's efforts to achieve its tourism potential face another challenge in the concentration of tourism activities in a few key areas around major attractions; this contributes to an uneven distribution of hospitality and tourism establishments (figure A.5). Tourism establishments are heavily concentrated in the central region, which is home to 75 percent of all hotels, 89 percent of restaurants, and 80 percent of accommodations. All the water sport and diving center establishments are located in the south region, where the Agaba Special Economic Zone has been developed as a tourism destination. Although the number of hotels and similar establishments has increased steadily over the past few years, the distribution of major hotel and lodging operations to be opened in Jordan between 2019 and 2022 suggests that supply will continue to be concentrated in the three already-developed destinations for the near to medium term. Such concentration is partly explained by the pull of Amman and tourism infrastructure developed in the Dead Sea area, both in the central region. But that centralization is an obstacle to the country's ability to achieve its goals of economically productive, quality, niche-based tourism. For Jordanians throughout the country to benefit from tourism's ability to contribute to job generation, employ women and youth, and attract investment, the development of the sector outside of obvious, limited locations needs to be fostered as a priority. This effort requires improved support to, and engagement of, the private sector.

Outside a sizable stock of four- and five-star hotels, especially in Amman, Aqaba, and the Dead Sea, Jordan suffers a significant shortage of "local hotels", long-stay hotels, and peer-to-peer accommodation, for domestic and budget travelers and Jordanians living abroad in these and other sites across the country (table A.3). The limited development of three-star hotels, while supply continues to exceed demand in the four- and five-star segments, is problematic. The present unbalanced lodging portfolio limits Jordan's capacity to attract and accommodate the mix of visitors necessary for a vibrant and sustainable sector. Moreover, domestic tourism represents a potential source of demand during the COVID-19 recovery phase, and lack of lodging options represents a missed opportunity. Further, this uneven development has significant implications for the availability and readiness of employees, as highlighted in the following section. The emphasis on four- and five-star properties can lead to oversupply and a top-heavy accommodations subsector, and to undesirable discounting and diminishing profitability. Interventions to attract new investment and support to existing operators of lower-grade properties could help balance the development of the sector and its geographic reach. Attracting investment, particularly in threestar local hotels, can be difficult given the perception that these are high-risk and less profitable ventures than higher-graded properties. Typically, three-star lodging entities are operated by families with limited operational experience who are not inclined to obtain finance through commercial banks. Nevertheless, relatively small investments in two- and three-star properties could have proportionally higher impact than investments in five-star properties by attracting and catering to more domestic and regional visitors.

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% ٥% **HOTELS AND RESTAURANTS** ARCHEOLOGICAL WATER SPORTS, DIVING **APARTMENTS** SITES, MUSEUMS, ART CENTERS GALLERIES SOUTH **NORTH CENTRAL** 

FIGURE A.5. NUMBER OF ESTABLISHMENTS BY REGION, 2018

Source: Jordan Hotel Association.

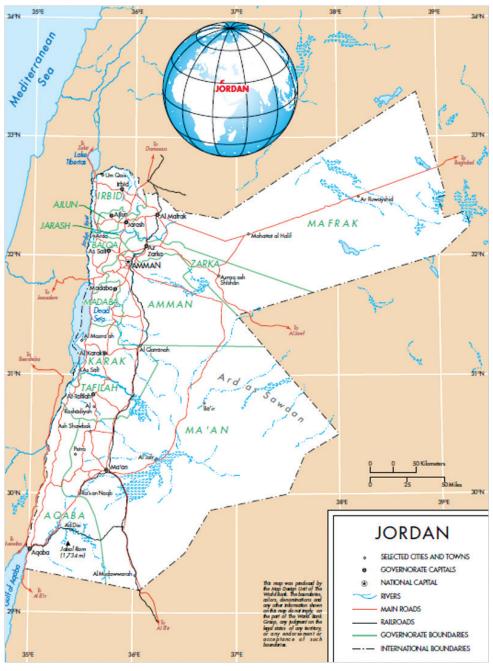
TABLE A.3. GRADE, NUMBER, AND ROOMS IN REGISTERED HOTEL ACCOMMODATIONS (2018)

GRADE	NUMBER OF HOTELS	NUMBER OF ROOMS	AVERAGE NUMBER OF ROOMS PER PROPERTY
5-star	36	8,965	250
4-star	34	4,083	120
3-star	59	3,214	55
2-star	64	2,285	36
1-star	65	1,538	24
Total	258	20,085	

Source: MoTA 2018.

The food and beverage subsector has seen its profits decline, and its growth is constrained by regulations that distort the market. A recent study conducted for the Jordan Restaurant Association compared the profitability of Jordan's food and beverage outlets to that of similar outlets in Cyprus, Egypt, Lebanon, and the United Arab Emirates. Jordan's 900 officially registered outlets achieved a lower profitability of only 9.6 percent profit after taxes. During the 2014–16 period, Jordan's food and beverage outlets experienced a 6 percent fall in sales and a 25 percent decrease in average profit margin after taxes. This drop was attributed to (a) the increasing cost of utility bills and fuel prices; (b) high taxation, fees, and charges; (c) licensing requirements; and (d) increasing costs of wages, among other factors. Although the subsector continues to grow, the number of serving establishments has declined.

# FIGURE A.6. MAP OF JORDAN



#### **JOBS**

Tourism is an important employer for a range of skills, and a springboard to a diverse set of occupations in the economy, but it suffers from constraints that affect the employment of women and non-lordanians.

Tourism and hospitality offer a wide range of opportunities from entry-level through mid-level and higher-skilled jobs. The sector provides career paths for varying levels of experience and qualifications and an important opportunity to address Jordan's high unemployment rates. Flexibility in work schedules and diversity of employment opportunities, especially beyond hotels and restaurants, in emerging areas such as digitalization and technological applications in the tourism sector provide even more opportunities. A 2019 study by the US Travel Association found that travel and tourism is the number one industry for first jobs, with nearly 4 in 10 workers employed for the first time formally in travel and tourism. These are noted as first jobs that provide workers with skills, confidence, and experience that are integral to diverse careers across technical and nontechnical occupations. Also, those starting in travel and tourism have a higher rate of entrepreneurship and of owning their own businesses than those initially employed in manufacturing and health care. With targeted training and education, Jordan's hospitality and tourism sector could provide economic opportunity to a wide swath of works—young and old, male and female, and Jordanian and non-Jordanian.

Yet growth of employment in the sector has been relatively slow, perhaps as a result of the volatility of the sector in recent years. In 2018, travel and tourism contributed 51,499 direct jobs to the Jordanian economy (in businesses registered with the government), up from 41,900 in 2010, an annual growth rate of less than 3 percent per year, despite significant population growth. Most people employed in the tourism industry are employed in accommodations services (40 percent), followed by the food and beverage services (39 percent) (table A.2).

Globally, the tourism sector is noted for hiring proportionally more women and youth than men; this is not the case in Jordan. In 2017, 90 percent of hospitality employees in Jordan (46,400) were male and only 10 percent (4,800) were female, according to United Nations World Tourism Organization (UNWTO). At the same time, and as noted in earlier sections of this report, Jordan faces pressing challenges to incorporate more women into the labor force. Non-Jordanians are also absent as employees in the sector, at least formally. According to the Jordan Hotel Association, classified hotel properties, apartment hotels, and other accommodations in 2018 employed a very small percentage of non-Jordanians (see figure A.7), although this is an economic activity that is labor intensive and could benefit from hiring more non-Jordanians of all ages, particularly for positions not attractive to Jordanians. Even with the small number of Jordanian women employed in the hospitality sector (1,242), Jordanian women outnumber non-Jordanian women by a factor of three in the accommodations subsector.

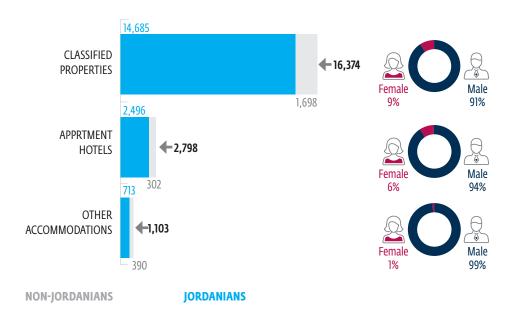


FIGURE A.7. JORDAN EMPLOYMENT IN ACCOMMODATIONS, 2018

Source: Jordan Hotel Association 2018.

### HIGH IMPACT PRODUCT SEGMENTS AND BREAKTHROUGH OPPORTUNITIES

Jordan's principal challenge is to deliver sustainable growth in targeted segments, for increasingly demanding markets. The tourism industry is changing rapidly, and what spelled success for tourism development in the past is not the template for success in the future. Globally, the sector is changing rapidly, given the "democratization of travel" made possible through increased internet access and a growing number of electronic platforms that channel both large and small tourism activities. It is reinforced by the growth of sharing economy services such as home stays and locally developed independent tours. Jordan possesses considerable potential for the development of new tourism markets, products, and services. But the new environment also invites overextension and poor implementation, marked by a noncompetitive price-value relationship, inconsistent delivery of services, and low productivity. The way forward is to build smartly on Jordan's tourism investment to date, with a focus of achieving excellence in delivering market-driven products.

The greatest opportunities for Jordan are in repositioning and further developing three segments: adventure, faith-based, and medical tourism. This recommendation emerges from an analysis of demand trends, Jordan's tourism resources and assets, and the need to spread tourism more widely across the country for greater economic and social benefit. Building beyond what Jordan is known for in tourism today can drive the sector's competitiveness and economic productivity going forward. Jordan's key product segments are (a) culture and heritage, (b) adventure, (c) faith, (d) film, (e) medical and wellness, and (f) meetings, incentives, conferences, and exhibitions (MICE), according to the MoTA. Attempting to successfully deliver in all of these subsectors, particularly in a cumbersome business environment, with constrained resources, is not realistic or advisable. It is critical to resist the temptation to try to develop too many products for diverse markets—and thus risk not being able to deliver quality, price, and value. Instead, Jordan needs to undertake targeted and focused product improvement and development with an emphasis on improved quality and on price and value so it can achieve high-impact breakthroughs. Table A.4 summarizes activities to pursue in each of these product segments.

The next phase of tourism in Jordan must be to raise—and consistently maintain—overall industry competitiveness to support medium- and long-term growth. This goal will be achieved by working with the private sector to address constraints, strengthen existing products, and target high-value markets. Concerted effort is needed, by both the public and private sectors, to understand demand, develop core resources, improve the business-enabling conditions, and coordinate development of tourism "soft" and "hard" infrastructure. In addition to developing new products and innovative tourism experiences, Jordan also needs to build reasons for tourists to stay longer and spend more.

**TABLE A.4. JORDAN'S KEY TOURISM SEGMENTS** 

PRODUCT	OVERVIEW	DEDICATED STRATEGY DEVELOPED?	STATUS AND POTENTIAL
Culture and heritage	Includes the country's iconic sites of Petra, Wadi Rum, Dead Sea, Jerash and the baptism site; driving force of much of Jordan's tourism.	No—woven into the Jordan National Tourism Strategy (2018–22)	Established. Jordan has established unique and iconic sites and others which need improved site management, professional staffing, and effective promotion. These issues are being advanced with existing mechanisms.
Adventure	Global tourism activity in this segment is growing significantly as new and experienced travelers look for novel experiences "off the beaten path."	Not formally developed or approved; segment suffers from inadequate regulation and monitoring	Emerging. High-potential product segment, given Jordan's unusual and untapped natural resources. Offers strong opportunities for expanded inclusiveness as well as new product development.
Faith	Travel to Christian and Muslim sites for history and religious experiences.	Drafted although not formally approved	Somewhat established but suffering from being considered an add-on for religious tourism to neighboring countries such as Israel, West Bank and Gaza, and Saud Arabia.
Film	Tourism experiences inspired by iconic films produced in Jordan as a further development of cultural heritage tourism.	Yes, with Royal Film Commission	A niche market that is somewhat opportunistic on the basis of actual filming and popularity of films (such as "Lord of the Rings" movies popularizing New Zealand); not high potential in the near term.
Medical and wellness	Expanding spectrum of products and experiences, including eight distinct subsegments: dental, medical, wellness, accessible, spa, sport, gastronomy, and retirement offerings.	Ambitious "Health Tourism" strategy drafted through the concerted efforts of multiple public and private sector entities; upcoming challenge is implementation	Expanding in product offerings and locations. High potential in medical tourism in particular, given the number and quality of medical facilities already in place. Two new hospitals to open this year. Increasing demand from across the region. High potential but needs a focused approach and favorable busines environment.
Meetings, incentives, conferences, and exhibitions (MICE)	Meetings are a growing industry worldwide. Meetings and events in the Middle East and North Africa region lag behind many other welldeveloped Asian and European offerings.	Yes, developed through support of U.S. Agency for International Development and under implementation	Through Jordan Tourism Board and Ministry of Tourism and Antiquities, the national Jordan Convention Bureau was established in 2017. Efforts are underway to attract major business agreements along with consideration of development of a new convention center. Segment has a long lead time and needs additional investments.
Sports tourism	Tourism related to global and regional competitions and events.	No; positioning and possible development of offering under consideration	Preemerging. Will require significant investment and promotion. Longer-term initiative.

#### **High-impact segment: Adventure tourism**

Globally, the adventure tourism subsector <sup>11</sup> has been growing rapidly; Jordan has tapped into this subsector and, notably, was ranked in the top 10 developing countries for adventure tourism in the 2018 Adventure Tourism Development Index (ATTA 2018a). Worldwide, the sector has expanded with the development of new destinations and iconic experiences and has been driven by demand for individualized and unforgettable trips. A recent IFC report estimated global soft adventure alone to be worth US\$745 billion. <sup>12</sup> The Adventure Travel Trade Association (ATTA) estimates a 21 percent compound annual growth rate (CAGR) for the industry since 2012 (ATTA 2018). In Jordan, the establishment of the Jordan Trail in 2016 is an indicator of the opportunity and challenge of adventure tourism development. The 650 km trail, at various stages of development, passes through 52 villages between Um Qais in the north and Aqaba in the south, with great potential throughout to foster entrepreneurship, inclusive businesses, and community engagement.

Adventure tourism is the most unregulated subsector in Jordan's tourism portfolio, with a pressing need for specific policies, regulations, and technical human capital development. Managing risk and enabling competitiveness along the trail, in canyons and in caves, is pressing. Establishing clear requirements for business—including, for instance, first aid certification and quality assurance of equipment used for hard and soft adventure tourism—is integral to the growth and sustainability of this subsector (table A.5).

#### **TABLE A.5. ADVENTURE TOURISM SNAPSHOT**

#### **SEGMENT ADVENTURE TOURISM** What it is • The global "soft" adventure market (low-risk adventure activities and demand such as camping, canoeing, cycling, hiking, and so on) is profile estimated to consist of 238 million tourists who took 357 million trips and spent \$470 billion in 2016. The global average soft adventure trip expenditure is estimated at \$1,315/trip. This market is expected to grow at 20 percent compound annual growth rate (CAGR) from 2016 to 2020. Demand for "hard" adventure (caving, climbing, trekking, paragliding, and so on) is also growing. Hiking demand is growing in popularity (especially in Jordan's source markets), and the International Federation of Sport Climbing estimates 25 million regular climbers worldwide. The average trip is estimated at seven-to-eight days.

#### Keys to success: What it takes to be outstanding

- According to Adventure Travel Trade Association (ATTA), 49
   percent of adventure tourists are ages 41–60 years with an
   average age of 47; a further 20 percent are ages 20–39. Adventure
   tourists are slightly more likely to be female (51 percent) and many
   travel as couples (37 percent). Adventure tourists are generally
   well educated and affluent.
- Europe and North America are top source markets. Adventure travelers want customizable trips for unique, "trophy" experiences.
- Key considerations for travel to soft adventure destinations are ease of access to activity site, cost, quality of accommodations, attitudes toward foreigners, and distance from country of residence.
- This segment thrives in a pro-entrepreneurship context, with many individual and small operators sourcing local goods and local labor. It is recognized for proportionally high levels of local economic impact.

#### Top constraints in Jordan

- Rapid growth without adequate regulations. In 2001, the estimated average number of adventure travelers per week was 50; in 2018, the weekly number at times reached 800. Lack of regulation results in inadequate insurance and insufficient liability coverage.
- Lack of coordination and trust and poor site management. The lack of regulation to control the maximum number of people in a canyon at one time could lead to hundreds of people in one popular canyon in one day. This crowding compromises the desired experience and contributes to improper waste management.
- Local communities are not economically or socially integrated into mountaineering and adventure travel. This situation has been exacerbated by village-based and cultural barriers as well as a lack of market incentives for tour operators to engage with local communities.
- **Health and safety.** Hard and soft adventure tourism typically takes place in remote areas and involves some risk. Adequate systems and facilities to respond to emergencies are required for a viable sector. Unfortunately, Jordan had 11 adventure tourism—related deaths in 2014–15. Very few guides have first aid training.
- **Regulatory environment.** Burdensome regulations include office, employment, and foreign language requirements that discourage tour operators from formalizing and prohibit vertical integration of businesses. The recent cabinet decision to abolish licenses and to regulate the sector through classifications is welcome and needs to be implemented. Category licenses required JD 25,000–100,000in capital.

#### **Opportunities**

- Jordan has over 600 km of hiking and cycling routes across the country in multiple topographies, and biodiversity. Further, 140 canyons and 500 rock climbs of varying difficulty are resources that can be developed into economically productive assets by addressing constraints.
- Jordan was already recognized as one of the top 10 emerging adventure tourism markets by the 2018 Adventure Travel Development Index.
- Ease of access to safe and pristine adventure experiences needs to be expanded.
- Investments made in waste management, signage, and tour guide competence would build capacity and safety. Carefully selected investments in small-scale, low-impact lodging would enable overnight stays, which could facilitate longer stays and expanded product development.

#### **High-impact segment: Faith-based tourism**

Jordan has an important competitive advantage in faith-based tourism as the home to unique sites, but it has not leveraged its strengths. Faith-based tourism is a resilient and growing segment that reaches across religions and regions. An estimated 330 million tourists visit major religious sites annually worldwide (UNWTO 2014). Jordan competes with its neighbors—Israel and the West Bank and Gaza—for this growing segment, but its sites are often viewed as a brief add-on rather than meriting a dedicated itinerary in the country. Israel receives upwards of 344,000 Christian travelers and 325,000 pilgrimage travelers on an annual basis, according to the country's Ministry of Tourism. Jordan attracts some of these faith-based visitors from Israel. The visitors travel by bus for brief (one- to three-day) package tours to sites with limited and unreliable services.

The market has significant potential to grow through attracting more visitors, expanding offerings, and improving quality of experiences (table A.6). The introduction of expanded low-cost carrier (LCC) air services in Jordan could also stimulate this subsector. Requirements for achieving the full potential of this subsector include development and implementation of a strategy that aligns government and the private sector to establish a brand for Jordan religious tourism, improve and link sites, expand visitor experiences, and develop specialized guides.

#### **TABLE A.6. FAITH-BASED TOURISM SNAPSHOT**

#### **SEGMENT**

#### **FAITH-BASED TOURISM**

## What it is and demand profile

- The United Nations World Tourism Organization estimates 330 million tourists visit key religious sites annually worldwide
- The United States has more than 50,000 churches that have international faith-focused travel programs.
- Two main segments: Christian faith pilgrimage (spiritual enrichment and desire to visit biblical sites) and Religious/ cultural (visit sites because they are sacred; leisure/experience oriented).
- Jordan has 34 official biblical sites, including a number of unique sites (Mt Nebo; Bethany beyond Jordan, visited by 143,000 in 2018; and King Herod's Palace).
- Israel, Italy, and England are the top three most desirable Christian religious destinations.

#### Keys to success: What it takes to be outstanding

- Promote "Holy Land Jordan" as a crucial, rather than incidental, stop in Christian faith tourism.
- Develop longer, Jordan-intensive itineraries and position and promote them to grow market share based on demand.
- Improve management of products and amenities.
- Focus on key source markets in the United States, United Kingdom, and Europe and on low-cost carrier connectivity
- Extend stays and expenditures with events, meetings, culinary, and nature-based tourism options.

#### Top constraints in Jordan

- Lack of top-of-mind association for potential travelers. Jordan (unlike Israel and the West Bank and Gaza) is not widely identified as the "Holy Land."
- Minimal strategic marketing or on-going dedicated promotional campaigns. With limited packaging, marketing, and promotion, religious tourism currently accounts for only 15,000 travelers to Jordan annually (on standalone or multicountry itineraries).
- Non-competitive site services and management. The quality
  of visitor experiences at religious sites is uneven and not fully
  developed.
- **Limited availability of professional guides** who are specifically trained for multiple sites and different types of groups.
- Access and transportation. Generally complicated, expensive, and inconvenient, transportation challenges diminish travelers' motivation to visit Jordan.

#### **Opportunities**

- Build Jordan-intensive religious tourism products and packaging.
- Attract and book more religious tourists already coming to the region to come to Jordan.
- Improve site management and interpretation to be of a higher standard and more inclusive.
- Pull market share from Israel. Currently, 344,000 Christian travelers to Israel visit another country. If Jordan increased its share of these visitors to 10 percent, this would yield 34,400 travelers—more than double current visitation. Currently only 5.2 percent visit another country, so this would require a major effort.

#### **High-impact segment: Medical tourism**

The medical tourism segment is seen as burgeoning globally. Although measurement obstacles tied to the protection of privacy make accurate measurement difficult, Patients Beyond Borders, a major global organization focused on this segment, estimates medical tourism's global worth at US\$74 billion—\$92 billion.<sup>13</sup> This is based on estimates of approximately 21–26 million cross-border patients worldwide spending an average of US\$3,550 per visit. These expenditures include medically related costs, cross-border and local transport, and inpatient stay and accommodations. Worldwide, the medical tourism market is estimated to be growing at a rate of 15–25 percent, with inbound patient flows highest in Mexico, and Southeast and South Asia (figure A.7). Global and regional demographics, combined with the expense and nuances of medical insurance, contribute to the growing number of trips motivated by medical needs. Such travelers are typically looking for the right combination of affordability, accessibility, quality, and availability.

Jordan has an established record across the spectrum of medical and wellness tourism and has recently prepared a comprehensive strategy for developing this segment. Over a decade ago, medical tourism revenues in Jordan exceeded US\$1 billion, with more than 250,000 patients seeking treatment in the country. After overcoming a variety of market shocks and security issues related to visa restrictions, the sector is experiencing renewed interest in Jordan. A strategy for the segment has been developed by the Jordan Tourism Board, in consultation with key stakeholders. Under the umbrella term "Health Tourism," a consortium of public and private sector organizations is working to address product definition and delivery. In Jordan, health tourism includes eight distinct subsegments: dental, medical, wellness, accessible, spa, sport, gastronomy, and retirement offerings. Initiatives are underway to address quality assurance, accreditation monitoring, specialized marketing, investment, and digital platform development. However, an adequate insurance and liability regulatory framework, acceptable to diverse demand and medical providers, continues to be lacking.

Jordan has the potential to attract travelers to its extensive offering of public and private hospitals and approximately 700 health care centers and clinics. It has in the past been a significant destination for medical travelers from across the region, some funded by their home governments. During the 2016–17 period, an estimated 160,000 medical tourists used services in Jordan, although it is difficult to definitively measure demand. Many of these patients traveled with companions or family members, contributing to the economic impact of this segment. Jordan's Private Hospitals Association estimates that 35 percent of economic impact is through payments to service providers such as hospitals and clinics, with the remaining 65 percent of economic impact spilling over to other sectors.

Medical tourism has significant potential for Jordan, across the spectrum, and the multiplier effects associated with the segment are significant. The potential can be tapped with the engagement of the private sector, open technical collaboration, and up-to-date accreditation with global medical and hospital commissions (such as the Joint Commission on Accreditation of Healthcare Organizations and its international arm, the Joint Commission International).<sup>17</sup> Repositioning and further development of medical tourism could respond to the growing regional and global demand from a wide range of ages and travelers in near and far source markets, while also generating employment within and beyond traditional tourism supply chains. The breakthrough pay-off with medical tourism is its cascading potential for creating employment, inclusion, public sector revenues, and public-private partnerships.

**Cutting-edge** Population without access to surgery, % Selected hotspots for treatment By region, %, 2015 20 40 60 80 100 Croatia Poland Turkey Hungary Hips and knees Orthopaedic surgery Dentistry Hair transplant, ophthalmology Mexico Bariatric surgery, UAE dentistry Spain South Korea Bariatric surgery, Cosmetic surgery cardiology **Barbados** Egypt Thailand lepatitis C Sex change India Costa Rica Cardiology Dentistry Australia Bariatric surgery Brazil South Africa and IVF Cosmetic surgery Cosmetic surgery Sources: Medigo; Qunomedical; Keith Pollard, LaingBuisson; Valorie Crooks, Simon Fraser University; "Global access to surgical care: a modelling study" by B.C. Alkire, N.P. Raykar et al., Lancet, 2015; The Economist

FIGURE A.7. MEDICAL TOURISM DESTINATION AREAS, BY SPECIALIZATION, 2018

Source: The Economist Intelligence Unit 2018. Note: IVF = in vitro fertilization. Medical tourism is, however, an extremely competitive and shifting subsector and demands a robust and conducive environment (table A.7). The segment requires (a) extensive collaboration across ministries and agencies in the public sector; (b) an open business environment for the private sector with transparency of regulations, licensing, and taxation; (c) consistent investment and technical upgrading; d) wideranging international insurance agreements; and (e) ethical promotion. Further, to attract a wide array of medical tourists from various source markets, medical liability laws and recognized insurance standards will need to be fully developed in Jordan to be competitive and to assure greater patient confidence. Wellness tourism, already established in the Dead Sea area, requires continuous upgrading to tap emerging trends, such as in mindfulness, and to consistently capture market share in the dynamic, trending marketplace.

#### **TABLE A.7. MEDICAL TOURISM SNAPSHOT**

#### **SEGMENT**

#### **MEDICAL TOURISM**

# What it is and demand profile

- Medical tourism is typically defined as activities for individuals choosing to travel across international borders to receive a medical treatment.<sup>a</sup>
- The Turkish government aims to generate around US\$20 billion in annual revenue from the health care sector by 2023 by attracting 1.5 million health tourists per year. Turkey served 183,000 medical tourists in the first half of 2017 alone—and government data suggest the number reached 433,000 tourists for the entire year. Turkey welcomes medical tourists from countries such as Greece, Iraq, Uzbekistan and Kazakhstan.
- India's medical tourism is growing and diversifying. A primary survey conducted by the Directorate General of Commercial Intelligence and Statistics estimated medical tourist arrivals in India at 460,000 and export revenues from medical tourism at US\$620 million (only medical treatment) in 2015–16. Bangladesh accounted for 35 percent and 55 percent of the estimated medical tourists and revenues, respectively.
- Dubai attracted 296,491 medical tourists from overseas in 2015, generating US\$400 million. By 2020 the government is targeting 500,000 people a year. Medical tourism brought in revenue of US\$400 million in 2015, according to local media reports. Dubai's health care sector has grown at a rapid rate, with more than 3,000 health care facilities—many franchises or subsidiaries of US or European brands—and some 35,000 health care specialists in 2016.

#### Keys to success: What it takes to be outstanding

- Developing excellence in a specialized area is integral to building a vibrant and sustainable segment, as shown by experience in other markets. Jordan, in contrast, is looking to offer services and to excel across the medical-to-wellness spectrum. A more focused strategy may be more appropriate. Destination countries have built their sectors through specializing in certain procedures and typically attract patients seeking those medical services through word of mouth and targeted promotion and marketing activities. India is popular for orthopedic and cardiac surgery, organ transplant, and fertility treatment. Brazil and Thailand are recognized for cosmetic surgery, while Costa Rica, Mexico, and Poland are popular for dentistry.<sup>b</sup>
- Some variables that contribute to success are high-quality services at a fair price, manageable wait times, accredited facilities and new technologies that aid in communication, and the easy transmittal of medical records. Medical tourism is a response to key global trends, including growing global demand for medical services due in part to aging populations and increasing longevity; cost savings; the desire for shorter wait times and faster access to medical care; lack of available quality health care in some countries; and the availability of quality health care and a growing number of accredited facilities in destination countries.

#### Top constraints in Jordan

- Limited direct air access from target markets. Many medical tourists are looking for convenience, especially if traveling with discomfort.
- Complicated and limited visa availability for patients from certain countries. Visas on arrival are not an effective vehicle for attracting serious medical tourists, who must plan ahead and want to be assured of entry into the country.
- **Limited affiliations.** Although the Jordan government has enacted mandatory accreditation, it is not effectively enforced. There are no hospital chains or franchises in Jordan. The country needs greater standardization and certification.
- **Difficult business environment for private hospitals.** Taxes have increased (jumping from 14 to 21 percent in three years) with utility costs while the Ministry of Health, which sets medical services fee schedules for both public and private operators (last fully reviewed in 2007), is reluctant to raise prices.
- **Human capacity challenges**. Top management positions have been difficult to staff and the number of Jordanian female nurses is limited because of a brain drain to Gulf Cooperation Council countries.

#### **Opportunities**

- Jordan's medical tourism strengths are widely noted and include high-quality physicians; little to no wait times for tests, treatments, and even surgeries; multilingual and culturally sensitive staff and caretakers; a large selection of facilities to choose from; modern technology; generally positive reputation; and reasonable costs. Continuing to ffer these is requisite to Jordan's achieving its goals.
- Developing strong medical tourism supply chains through public and private sector collaboration would enable seamless experiences for patients and companions that would underpin growth in market share.
- Improved data collection and tracking systems to measure and monitor growth, markets, and emerging trends are needed.
- Specific, targeted, and well-funded multiyear marketing and promotional programs to raise awareness and tap into immediate, short-term, and mid-term patient demand are needed.
- Two new state-of-the-art private medical hospitals scheduled to open in 2019 should be promoted as state-of-the-art, accessible, and reasonably priced.
- Streamline visa access for key demand markets.

a. Lunt and others 2014.b. Youngman 2013.

## CONSTRAINTS TO ATTAINING THE NEW VISION FOR THE TOURISM SECTOR

The tourism sector in Jordan faces a number of constraints, both cross-cutting as well as sector specific. Access to Jordan is costly and time consuming, with often lengthy and inconvenient connections due to limited direct flights and the dominance of the national airline, Royal Jordanian. Concerns regarding security, stability, and refugee flows may deter some travelers. Within the country, sector growth is hampered by unpredictable policy, a business environment that diminishes open collaboration—critical to success in a sector characterized by a complex ecosystem (figure A.8)—and a visa regime that is selectively welcoming.

Jordan's tourism sector is at a critical juncture: The country can choose to continue in the numbers race, "growing" tourism as it has tried to do in the past. Or it can leverage its current tourism development efforts; and truly aim to achieve the government of Jordan's own stated goals to become

"[...] a top of mind choice for discerning, responsible travelers wishing to engage in authentic, life changing experiences to be treasured and shared" (MoTA vision statement) and

"To invest in and develop a destination of choice, bringing with it sustainable socioeconomic advancement of societies, increased jobs in tourism and more micro and small sized enterprises engaged in more equitable, sustainable and inclusive tourism, resulting in enhanced livelihoods for society overall" (MoTA mission statement).

#### **FIGURE. A.8. TOURISM ECOSYSTEM**

#### **TOURISM ENTERPRISES CLUSTERS (JOBS AND RESOURCE BASE SECTOR MANAGEMENT ENABLERS GROWTH)** AND GOVERNANCE (SUSTAINABILITY) Coods and Services Training and Education **Supplying Tourism** Legal and Regulatory Access and Transport Licensing and Standards Accommodation Activities, Facilities and Investments and Access to Finance Image and Marketing Community Based and Civil Society Competitive Sustainable inclusive Value Chains Involvement Planning and Monitoring **Results Framworks** Environmental and Information and Cultural Management Statistics Public Private Dialogue Business Efficiency and Competitiveness Mechanism

Moving forward requires a new understanding of tourism as a highly fragmented service sector that must deliver a "bundle of experiences." In today's—and tomorrow's—market of increasing global and regional competition, these experiences must be seamless in delivery and competitive in price and value. This implies a need for extraordinary collaboration, coordination, and trust among all players. It also requires the dexterity, agility, and investment of the private sector, supported by a suitable policy framework and business climate. Jordan's achievements can be sustained through policies such as a more welcoming visa regime and subsidized packages (for local and international tourists through, for example, discount and subsidized airfares) with careful monitoring to ensure that Jordan does not create an image or reputation for inexpensive packaged tourism. Improved policies could generate the needed volume for building message momentum that Jordan is safe and "the place to go." Continuing business with the opportunistic addition of some product diversification could leave Jordan's tourism vulnerable to tumbling with the next shock and susceptible to continued declines in competitiveness, uneven product quality, and inconsistent delivery. Simply rolling through one shock after another looking to surpass previous visitor volumes is not a vision for growth that is sensitive to sustainability challenges, innovative, nor focused on improved productivity and employment.

#### Clarity of vision: Mass or niche tourism?

Jordan's travel and tourism decision-makers have publicly stated that Jordan is not in the business of mass tourism; however, in some segments, it is. Mass tourism is a function of numbers and a type of programmed and packaged tourism experience that has little opportunity to be tailored or adjusted for individual preferences; examples are packaged tours in Egypt and Jamaica. While Jordan has many sites, tourism is concentrated in a few key areas where sites are adequately developed. Further, with limited infrastructure, services, and product development, relatively small volumes of tourists can create a sense of mass tourism. This effect has happened where 80 percent of tourism development, infrastructure, and services are clustered in 20 percent of Jordan in key nodes such as Amman, the Dead Sea, Petra, and Aqaba.

In contrast, niche tourism is a function of numbers and experience quality for specialized types of tourism. It allows for much more tailored or particular experiences for different groups. Niche offerings can still attract large numbers of tourists (for example, exotic religious and cultural tourism in Thailand), whereas specialized and targeted products are offered to large, growing volumes of visitors. Jordan's policies and strategies seem to point to offering a very wide variety of "niche" products to a growing volume of visitors; that is difficult to pull off. Focusing on a few niches—while safeguarding cultural tourism assets and deriving higher value from visitors to those sectors is likely to be a more effective approach. This approach would require significant investment in training staff, improving the quality of services, and competing with leading destinations.

A focus on a limited number of tourism niches does not imply disregarding Jordan's achievements to date. With a streamlined and competitive business environment, Jordan can offer both mass and niche tourism. Jordan has built its tourism industry to support organized tours. Much of the growing tourism packaging and experiences are being organized in a formulaic manner that seeks more tourists on tightly programmed itineraries. Even Aqaba, which is primarily a fly-in and fly-out destination, is built for high-volume tourism and continues to expand with the development of major resorts and significant increases in the supply of rooms, which are likely to outstrip demand. There is a clear market for these kinds of limited-itinerary packaged tourism offerings, which Jordan can continue to tap. Moreover, providing mass tourism products for select segments, such as faith-based and traditional cultural-heritage offerings, can contribute broadly to private sector development and employment. Alongside this, targeted product development and support for limited niche offerings could enable wide inclusion and employment in marginalized areas. It is in that effort to develop a high-quality set of niche offerings—limited in number—that Jordan has struggled so far.

Globally, disintermediation is increasingly enabling travelers to search (and travel) widely, customize, and direct their travels—far more than what is offered in Jordan. The mainstreamed sharing economy provides more options for supporting individualized, niche experiences. In Jordan, in contrast, individual travelers looking for off-the-beaten-path, individualized experiences are rarely catered to. Many major sites are supported by infrastructure and services developed to serve a high volume of low-value visitors and designed to offer set experiences (examples are "See Petra in four hours" or "do" Wadi Rum in a day). Less well-known sites that might attract individual travelers have little tourist infrastructure at all. The concentration of fourand five-star hotels in a few destinations, along with restaurants and a transportation network that cater primarily to tour operations, reinforces volume rather than customization delivered by a creative and engaged private sector. For instance, it is difficult for travelers to get to the country's various sites unless they travel on a bus tour. Such tours are expensive and do not allow for flexibility or customization. Hiring a car and driver for an individualized experience is cumbersome and priceprohibitive for the quality provided. Circuits are defined and delivered by inbound tour operators who focus on a few key markets (such as the United States and Europe) with three- to seven-day recipe-like "highlights tours" of iconic sites. This is particularly unfortunate when the country is trying to extend the average length of stay and increase meaningful employment, a key priority for economic advancement. Development of accommodation establishments that are locally owned and operated is growing but still very limited, in part because access to finance is scarce for smaller operations catering to the market segments for three-star and below options. Jordan can complement its existing strengths in providing accessible tourism products with a high-quality set of niche offerings for more individual experiences. This requires reducing the number of niches it attempts to serve and improve the quality of offerings within those niches.

#### **CROSS-CUTTING CONSTRAINTS**

Jordan's tourism sector is challenged by a number of constraints that threaten sustainability and economic productivity of the sector. Private investment in the sector is weak because the business-enabling environment is uncertain and the regulatory framework is inconsistently enforced. This is especially true in locations other than the "Big 4" (Amman, Petra, Dead Sea, Aqaba). Perhaps the main cross-cutting obstacle to more dynamic private sector participation in the sector is the legal and regulatory framework that has generated an uncertain, unpredictable, and noncompetitive business environment with a pattern of regulating by exception. That is the subject of the first part of the following section. Subsequently the section considers other pressing constraints to tourism: (a) site infrastructure and services that are not able to respond to demand, (b) lack of appeal to the workforce, (c) insufficient public sector capacity and funding for the sector, and (d) unreliable and untimely sector data.

#### Noncompetitive environment in tourism

The tourism sector in Jordan is highly regulated, with laws and bylaws that affect the whole value chain and often create barriers to entry, facilitate collusion, and discriminate between market players. The 1988 Tourism Law sets out the overall structure of the sector, assigning to the Ministry of Tourism the responsibility to oversee the sector's functioning while establishing business associations to further regulate the main service providers—namely, tour operators, specialized land transport companies, guides, and accommodations. Although some legitimate policy goals, such as safety and consumer protection, inform the need to regulate tourism services, the current framework unnecessarily distorts market dynamics without effectively promoting policy objectives. These limits include the imposition of restrictive licensing rules, setting minimum prices, and discriminating against foreign workers and investors.

The discretion granted to ministries, government authorities, and business associations reduces transparency and facilitates discrimination between market players. The Tourism Law states that the Ministry of Tourism may revoke licenses and sanction licensees who practice illegal competition with others or harm the national economy. However, the law does not define what illegal competition is, and does not refer to the Competition Law or the role of the Competition Directorate. At the same time, the Council of Ministers may issue the necessary regulations for the implementation of the provisions of the Tourism Law, including the prices and fees of tourism services. Finally, the Tourism Law not only creates associations for each type of tourism service, but it also assigns regulatory roles and mandatory membership to these associations. This can further distort market dynamics by preventing entry, facilitating collusion, and discriminating among competitors. However, the discriminating among competitors.

To understand the scope and breadth of regulatory restrictions affecting the tourism sector, the following sections map the value chain and how the different players are affected by the various government interventions. The tourism value chain in Jordan can be divided into four main categories: (a) tour operators, (b) guides, (c) providers of special transport services, and (d) other services such as accommodations and restaurants.

#### a. Tour operators

The regulatory requirements affecting tour operators and travel agents impose significant restrictions on entry and investment without necessarily promoting quality of service, consumer protection, or safety standards. There are at least five kinds of restrictions that merit discussion:

• General requirements are highly discriminatory against foreigners. For a Jordanian applicant establishing as a tour operator, there is a minimum capital requirement of JD 5,000. If the company has a foreigner partner or owner, the minimum capital rises to JD 250,000. The office manager must be Jordanian (with a high school certificate, no less than five years' experience in travel and tourism, and knowledge of a foreign language).<sup>21</sup>

- Bank guarantees are significant, create artificial barriers to service diversification, and further discriminate against foreigners. The applicant must submit bank guarantees of (a) JD 25,000 for flight ticketing services (category A); (b) JD 25,000 for inbound services (category B); and (c) JD 75,000 for offices specialized in outbound tourism (category C). Each operator must provide an additional JD 15,000 for each of its branches. Finally, if the operator has a foreign partner, an additional JD 500,000 in bank guarantees is required. Moreover, tour operators offering two or more services of the listed categories must submit bank guarantees covering the amount for each category, up to JD 100,000 if it offers services from all three categories.<sup>22</sup>
- Requirements on minimum office space and number of employees limit the entry of digital providers and impose unnecessary costs to entry. Office space must not be less than 40 square meters (sq. m), fulfilling safety and health requirements.<sup>23</sup> An office must employ no fewer than three Jordanian nationals, who must speak a minimum of one foreign language and pass training in their fields of expertise.<sup>24</sup>
- License fees stipulating annual payments by branch could potentially limit the expansion of players. The initial license fee for operation is JD 1,000 and must be renewed every year for JD 500. For each additional branch, there is an initial license fee of JD 500 plus JD 250 for renewal, for each branch annually. <sup>25</sup> A license is considered void if not renewed by March of the same year. <sup>26</sup>
- The tour operators' association enjoys legal mandates that can facilitate the exchange
  of sensitive information, may generate conflicts of interest, and reduces incentives
  for merit-based competition. In addition to a mandatory membership, the board of
  the association, at the ministry's request, gives its opinion on the economic viability
  of new entrants. The board, composed of tour operators, can thus block the entry of
  competitors.

Those requirements and regulations are exacerbated by complex, lengthy, and opaque procedures. Multiple enforcing and oversight entities (such as the MoTA, the Ministry of Islamic Affairs, business associations for each type of player, and tourism police) and their mandates are overlapping or unclear. There have also been cases of individual exceptions to the rules—for example, the waiving of capital and guarantee requirements for some foreign players. The combination of restrictions can limit competition, investment, and productivity by restricting entry, facilitating coordination among competitors, and discriminating among players. In 2016, there were more than 700 registered companies employing around 5,000 people in the sector.<sup>27</sup> Jordan appears to have potential to establish a much larger tourism market if the government clarified the policy goals it wants to promote and designed less restrictive interventions.

#### b. Guides

Obtaining a guide license is demanding and costly in Jordan, and several regulations create barriers to entry and limit the capacity of market players to expand their business and innovate. As of 2016, only 1,200 (individual) guides were licensed in Jordan.<sup>28</sup> Only about half could speak English, and the average age was above 50 years old. Sector stakeholders point to a shortage of well-qualified guides as well as concerns regarding collusion. At least five types of regulations contribute to underperformance in this segment:

- Minimum requirements to become a guide discriminate against foreigners, restrict the capacity of professionals to offer other types of services, and impose training courses that are either insufficient or inadequate for the responsibilities of a guide. Applicants need to (a) hold Jordanian nationality and be at least 20 years of age; (b) hold a university degree or equivalent, or a diploma in the services of tour guiding from an accredited college; (c) pass an English language exam, be proficient in the language, and well-versed in tourism information; (d) pass the tourism course exam organized by the ministry; and (e) not engage in any other job or profession, including trade and brokerage.<sup>29</sup>
- Prohibition to be employed full time or to set up a company. In addition to prohibiting guides from holding any other job, legislation prohibits guides from full-time employment. The legislation precludes (a) tour operators from hiring guides as full-time employees and (b) guides from organizing themselves as a company that provides guiding services. These restrictions limit the capacity of guides to innovate and compete for market demand, and it dictates how providers should offer their services. Such restrictions generate informality.
- The law allows for discrimination through discretionary exceptions. The minister has the capacity to exempt guides from some of these requirements (stipulated in Article 3/A) on an individual basis, creating room for discretion and discrimination. For example, the minister may, upon the recommendation of the Tourism Committee, exempt any person from the English test requirement.<sup>31</sup>
- The regulation also allows for price fixing and market allocation. The minister may, upon the recommendation of the Tourism Committee, determine the fees and wages of guides.<sup>32</sup> In practice, the association of guides sets a minimum price of JD 70 per day. If this threshold is not respected, guides may have their licenses suspended by the Guides Association. The association also serves as a source for market allocation by publicizing the list of available guides for tour operators and providing background information and reference for contracting.
- The mandatory training course is provided by only one educational entity, which charges relatively high prices and delivers low-quality courses following an inadequate curriculum. The ministry also plays a role in this inadequate system by setting the curriculum and accrediting the institution responsible for providing courses and exams.<sup>33</sup> The mandatory course, even though it is relatively long and expensive (six months at JD 1,700), does not—according to stakeholders—provide adequate training for some of the most promising segments of the industry, such as adventure and medical tourism. At the same time, because only one private institution is accredited to offer the course, there is no competition in the provision of the mandatory training. Stakeholders reported that the overall quality and minimum standards of the final exam are insufficient to ensure high-quality guides.

#### c. Special land transport

Regulation establishes that the transport of tourists is a specialized service, demanding specific licensing and fulfillment of a set of regulatory criteria.<sup>34</sup> Generally, transportation is a fixed variable, with the transportation component representing 10–15 percent of the total tour package.<sup>35</sup> There are just eight registered specialized tourism transport companies in Jordan, and only six are operational. The available fleet is 600–700 buses, which are an average of more than 12 years old. The number of buses and transport vehicles is insufficient to meet demand throughout the season, while stakeholders report that prices are high and the overall quality of transportation is low. In order to provide land transport for tourism, a business needs to be registered, as demanded by the Company Law, as well as to <sup>36</sup>

- Limit its business activities to special tourism transport only (in other words, unlike other firms, the company may not undertake another business activity);
- Hold a minimum capital of JD 3 million;
- Own or lease no fewer than 20 tourism vehicles, with each vehicle's age not exceeding one year at the time of initial registration, classified as follows: (a) 7 vehicles equipped for the transport of no fewer than 31 persons and a maximum operating age of 12 years from manufacture date; (b) 7 medium vehicles equipped for the transport of no fewer than 23 persons and a maximum operating age of 10 years from manufacture date; (c) 6 medium vehicles equipped for the transport of no fewer than 10 persons and no more than 23 persons and a maximum operating age of 10 years from manufacture date;
- Provide an annual bank guarantee of JD 50,000; and
- Provide special parking spaces for the vehicles, with the consent of the relevant authorities.

Most of those requirements significantly restrict entry, investment, and expansion without contributing to other policy objectives. The level of inefficiency is so high that nonspecialized players are willing to acquire transport assets and internalize these services (illegally) rather than contract what is provided by the specialized companies. Because vertical integration is restricted by the regulations listed, several stakeholders enter into informal agreements with other types of transport providers (such as rental car companies) to guarantee vehicles on an exclusive basis, mimicking ownership. This illustrates the inadequacy of the specialized transport services and the restrictive regulations that create obstacles to entry, investment, and expansion in the market.

Less-restrictive regulatory strategies could better serve relevant policy goals, such as road safety and consumer welfare, without imposing unnecessary market distortions.

The government has recently issued partial reforms—for example, changing the mix of buses required per company—from 30 large buses to a combination of large, medium, and smaller vehicles. At the same time, a prime minister's decision was issued granting full tax and customs exemptions to renew the fleet of tourism transport vehicles during 2019. These options, while moving in the right direction, are still restrictive and are unlikely to spur the investments needed to improve quality and reduce prices. A simpler, less restrictive option would be to (a) allow companies in other segments to acquire vehicles and (b) allow smaller players to enter the market with lower capital and fewer vehicles required. These changes are key for the sector to realize its economic potential: of more than 4 million tourists entering Jordan every year, 55 percent arrive by bus.<sup>37</sup> Gross value added from passenger transport via land and sea reached JD 142 million, the second-largest component in the tourism sector. <sup>38</sup> (For information on air transport, see box A.1.) New investments would improve quality, increase availability, and boost competition. The result would be lower prices and more opportunities for private activity, and perhaps more, or better, employment—a top priority for Jordan that could be supported through a more competitive and vibrant sector.

### BOX A.1. REGULATORY RESTRICTIONS AND MARKET BEHAVIOR AFFECTING PASSENGER AIR TRANSPORT IN JORDAN

In addition to all the restrictions affecting the provision of land transport, regulations affecting air transportation also harm the overall performance of the tourism sector in Jordan. Some of the challenges are as follows:

- Royal Jordanian (RJ) airlines has a dominant position in the market.
- Services provided by RJ are inadequate for the tourism sector: a low number of international
- connections and number of flights. Even though Ryan Air and Easy Jet have introduced flights into Aqaba—counting on government subsidies—there seems to be a resistance to accommodate other airlines in Amman.
- RJ has exclusive access to the domestic market, and the timing slots are not granted in a way that ensures efficiency—for example, on the Amman-Aqaba route.

Source: IFC based on Jordan Inbound Tour Operators Association information.

#### d. Hotels, accommodations, and restaurant services

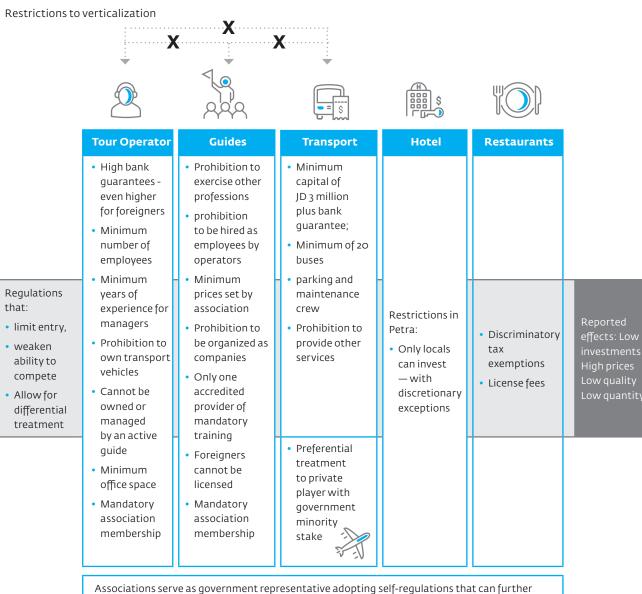
To fully unleash the potential of restaurant and accommodation services, it is necessary to remove distortions caused by rules that allow for discrimination among market players. This segment comprises café, restaurants, and fast food outlets (approximately 900 registered outlets) and represents the largest portion of tourism gross value added (JD 217 million in 2016) (USAID and JRA; USAID, 44–47). A level playing field is constrained by a number of rules and measures:

- Some regions in the country known for their touristic potential suffer from restrictive rules of entry and investment. For example, in Petra there are limits on the ability of nonlocals to build hotels.
- The investment law grants a customs tax exemption and reduced income tax only to tourism restaurants inside hotels, even though they compete in the market against providers outside hotels.
- Licensing and municipal fees are considered high and unpredictable.
- Restaurants were not included in investment law No. 30 of 2017 and, as mentioned, only tourism restaurants inside hotels benefit from incentives for investment.
- The 2016 investment law initially offered incentives only to hotels and recreational parks. In 2017 a prime ministerial decree offered additional incentives to restaurants in Amman and governates (excluding ASEZ, Petra, and the centers of large cities) to attract investments to the governates. Incentives include (a) total customs exemptions, (b) reduction in income tax from 20 percent to 5 percent for 10 years, and (c) reduction in sales tax from 16 percent to 7 percent. This benefit applies to restaurants, hotels, convention centers, and recreational parks.

The combination of restrictions may contribute to low sector performance. As pointed out by various stakeholders and complemented by a review of the regulations, tourist guides in Jordan are insufficient in number, are poorly trained, and operate in a regulatory environment that limits competition. Air transport offers limited connectivity, and Jordan plays the role of only an add-on destination: extra days added to a vacation to Israel or Egypt, completed by land rather than by air. At the same time, the supply of land transport for tourism is insufficient in quantity, low in quality, and expensive. Efficient tour operators face several barriers to expansion, including restrictions to (a) foreign employment and investment, (b) vertical integration, and (c) diversification of services. Restrictions on investment and the development of the accommodations industry in key touristic sights help generate shortages and lead to low quality given the prices, such as in Petra for most of the year. Figure A.9 summarizes the regulatory restrictions affecting the tourism value chain in Jordan.

# FIGURE A.9. GOVERNMENT RESTRICTIONS AFFECTING TOURISM SERVICES IN JORDAN

# In an environment that lacks effective antitrust enforcement or competition advocacy



Associations serve as government representative adopting self-regulations that can furthe restrict competition by sharing sensitive information, controlling entry and setting prices

Regulations are needed, but should be directed at solving market failures in the least restrictive manner

Source: Markets and Competition Policy Team for the Jordan CPSD.

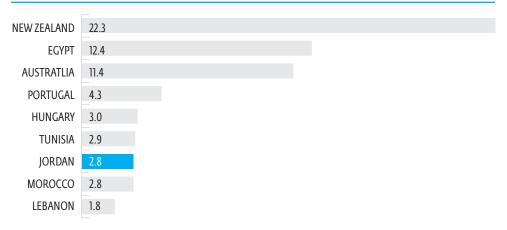
# **Sector-specific constraints**

Jordanians seem to have a limited appetite for working in tourism and hospitality. Various reasons appear to underlie this situation, including seasonality, market shocks, cultural taboos, and the widely held perception that jobs are short term without a professional career path. Despite 16 vocational training corporation (VTC) centers and a growing "Pathways to Professionalism" program, which offers inclusive, industry-based training and certification in eight hospitality and tourism professions at four levels, training remains limited and not widely available. Entrepreneurship, integral to hospitality and tourism, needs to be nurtured as it is in ICT and technology, with special training involving both technical and "soft" skills. Alternatives, including the opportunity to live and work in GCC locations, can be more appealing monetarily although they require moving away from family and friends.

Capacity at MoTA is not commensurate with the requirements of a rapidly changing sector that is being disrupted by new technologies and the growth of sharing economy business models. Institutional capacity in the public sector is undermined by a revolving door, limited skilled human capital, and only partial willpower to implement an impactful tourism reform agenda. Limited, fluctuating budgets exacerbate the problem despite the priority placed on the sector in Jordan's five-year reform matrix. In conjunction with supporting desperately needed institutional capacity, adequate and predictable multiyear funding for marketing and promotion is critical for empowering growth and improved yield per visitor. Jordan spent US\$2.80 in marketing per tourist arrival in 2017, slightly lower than spending in countries of similar size, such as Hungary and Portugal, and significantly lower than Australia and New Zealand, which are known adventure travel destinations and aspirational models for Jordan's targeted development. While Jordan's spending per tourist is comparable to that of regional peers, it is significantly lower than Egypt's, which is US\$12.40 (figure A.10).

Another constraint hindering the tourism sector is the limited availability and quality of sector data. Sector data must inform policy in support of productivity and sustainability. Data are also essential to guide the private sector to make investments, build businesses and commit for the long term. New technologies, combined with emerging big and small data resources, are being embraced by the tourism sector globally. Previous efforts through the MoTA and private sector partnerships have facilitated the pioneering use of user-generated content to promote the sector online. The next step is to embrace technologies for timely, consistent, and credible data collection and wide dissemination. This requires technical expertise, financial resources, and high-level commitment to implementation of an enduring program. Data are crucial to achieving private sector engagement, job generation, productivity, and inclusiveness objectives.

# FIGURE A.10. COMPARATIVE MARKETING SPENDING PER TOURIST (US\$, 2017)



Source: Government of Lebanon 2018. Lebanon Economic Vision.

# **POLICY RECOMMENDATIONS**

Addressing business costs and regulatory uncertainty; market competition; labor markets and fragmentation; and infrastructure, particularly in the tourism sector is crucial as this sector is often viewed as a demonstration sector that catalyzes job generation and strengthening of the private sector overall. Failure to address these constraints in the sector will lead to continued undermining of productivity and limited growth. There are actions that can enable breakthroughs beneficial to the tourism sector and beyond.

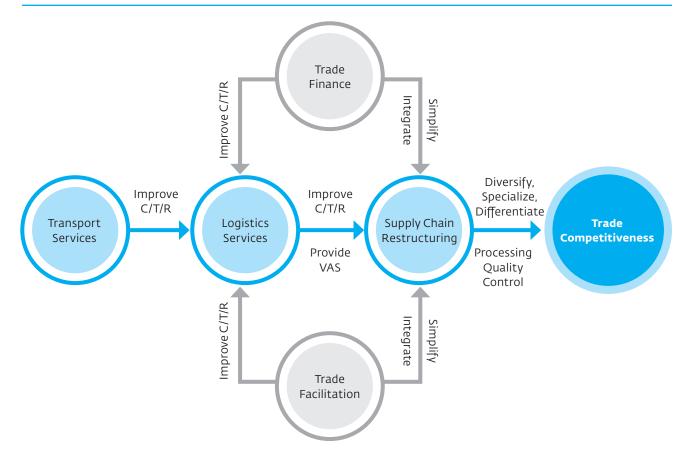
The set of recommendations for the Tourism sector are included in the Tourism chapter in the main body of the Report.

# 2. LOGISTICS SECTOR ASSESSMENT

# **INTRODUCTION**

This sector analysis proposes a shift in Jordan's vision and policies in the logistics sector. Jordan aspires to become a regional logistics hub (Economic Policy Council 2018). Competition is intense, however, in the provision of traditional regional logistics services, and the country is at a disadvantage because of a number of factors outlined in this chapter. There is scope, however, to transition into the new and exportable business of e-commerce, based on electronic transactions and supported by more efficient physical logistics. To support such a transition, and also to reinforce traditional trade competitiveness, it will be necessary to accelerate reforms in trade facilitation, improve the level of service and sustainability of road transport, invest in improved distribution of consumer goods domestically, and harness logistics services to add value to exports. All of these efforts will also require regulatory reforms that make the investment climate less cumbersome and that facilitate a smoother functioning of markets.

The logistics sector plays a critical role in the structuring of the supply chains serving both domestic and foreign trade. The physical services provided include not only cargo handling and storage services but also collection, distribution, and value-added services such as packaging, assembly, and bundling of goods for delivery to the buyers. The information services include not only forwarding and clearing but also inventory control, coordination of activities within the supply chain, and transfer of data on the goods moving through the supply chain. The latter supports greater diversification of products and markets through digital technologies, including blockchains. Finally, the structure of the supply chains is evolving to take advantage of improvements in trade facilitation and trade finance to reduce cost and time, and to increase reliability in the delivery of goods (figure B.1).



# FIGURE B.1. FACTORS AFFECTING SUPPLY CHAIN PERFORMANCE

In order to improve sector performance, an understanding of the structure of the supply chains used in domestic and international trade is necessary, including how these elements contribute to the value chains for traded goods in Jordan. It is also important to consider the physical and regulatory constraints that limit improvements in logistics services. In addition to addressing the constraints, this chapter will examine the potential for export of logistics services, in particular those associated with modern commerce.

# POTENTIAL DEMAND FOR LOGISTICS SERVICES

As elsewhere, in Jordan logistics is a service that depends on the underlying demand for trade in goods. This simple fact has sometimes been ignored in discussions of the sector that focus on logistics as a source of economic growth and on the need to develop a logistics strategy.<sup>39</sup> Jordan has experienced considerable volatility in its foreign trade over the past decade; stagnant economic growth, closure of trade routes to neighboring countries, and a small domestic market have all taken a toll on the logistics sector. Efforts to improve the structure of supply chains and associated logistics services face a challenge because of the distance between Amman and the major gateway in Aqaba, the imbalance in foreign trade, the concentration of economic activity in the area around Amman, and the low density of population and economic activity elsewhere in the country. <sup>40</sup>

Difficult economic times have discouraged investment and innovation in production and in domestic and international trade, and thus in logistics services. The significant decline in trade began in 2014 as a result of border closures and the collapse of demand in surrounding countries that resulted from the Syrian Civil War and Daesh (Islamic State) presence in northwestern Iraq. The ensuing economic insecurity has reinforced traditional business practices that focused on small family-owned business, a cash-based economy with limited use of finance, and disjointed supply chains. A stronger economy, nationally and regionally, and more vibrant trade are needed to dynamize the logistics sector. The following section considers the demand for logistics services in Jordan.

The types of logistics services demanded are determined by the value and supply chains that characterize trade. Jordan's foreign trade includes a significant amount of homogenous goods with well-integrated supply chains that are relatively easy to manage. These bulk and neo-bulk cargoes include phosphates, petroleum-based fuels, grain, iron, steel, and paper. The more challenging trades in terms of the logistics services required are machinery and equipment, garments, pharmaceuticals, and processed foods and other fast-moving consumer goods.

# **Exports**

The principal logistics-intensive exports from Jordan are garments, pharmaceuticals, vegetables, machinery, and plastic goods. Most of these goods are transported in containers, making the long-distance movements relatively straightforward. Collection, distribution, and transit storage present the major challenges. The value of exported goods has fluctuated around US\$8 billion for the past decade, with garments accounting for a growing proportion of exports, exceeding 20 percent over the past two years. The top five commodity groups account for half of total earnings; in addition to textiles, these include fertilizers, minerals, and precious metals (all bulk goods with limited logistics complexity), and pharmaceuticals. The five principal destinations for these exports are the United States, Saudi Arabia, Iraq, India, and the United Arab Emirates, which together account for about half of Jordan's export trade.

- Most of the garments are knitwear, primarily sportswear, produced under a free on board (FOB) arrangement.<sup>41</sup> These are medium-valued products, worth \$10-\$20 per piece, and orders are typically in the hundreds of thousands. About 83 percent of such exports (by value) are shipped to the United States as part of the free trade agreement for garments produced in the qualified industrial zones (QIZs). They are shipped by to either Aqaba or Haifa, Israel. Delayed shipments are shipped by airfreight.
- Pharmaceutical exports are shipped in bulk or packaged form. These are lower-value pharmaceuticals, about \$40 per kilogram, but they also include active pharmaceutical ingredients that are shipped by air. Most are exported to countries within the region.
- Vegetables are shipped in fresh or chilled form and distributed primarily within
  the region. These are primarily low-value products. Fresh vegetables are usually
  transported in open trucks over short distances to the airport or border crossings.
  Cold chains are used for long-distance shipments of higher-value products.

# **Imports**

The logistics-intensive imports are consumer goods: both fast-moving consumer goods, including food products, and slow-moving goods, including white goods and electrical equipment. Some of these are e-commerce shipments delivered by air and distributed by third-party logistics companies such as DHL and Aramex. Others are delivered to Aqaba in containers, nearly all of which are then transported to Amman, where the containers are unloaded and the goods are placed in warehouses from which they are distributed to retailers (or producers in the case of semi-finished goods).

# **Transit**

Jordan provides a gateway for transit movements to Iraq via the port of Aqaba; it is also at the center of transit routes connecting Eastern Europe with the Persian Gulf. Transit shipments to Iraq at one time accounted for as much as 30 percent of the tonnage moving through Aqaba. The volume peaked around 8 million tons in the period 2008–10 but has since decreased to 4 million tons (figure B.2). With the opening of the border crossing at Karameh in August 2017 and the agreement to restore transit between Jordan and Iraq, trade is proceeding and there is an expectation of a significant amount of transit traffic through the Port of Aqaba. The government of Jordan has given orders to facilitate the transit movement by ensuring that containers can arrive at the border within 36 hours of being unloaded in Aqaba and that customs procedures at the border will be expedited. The number of truck permits to be granted for each country is currently being negotiated.

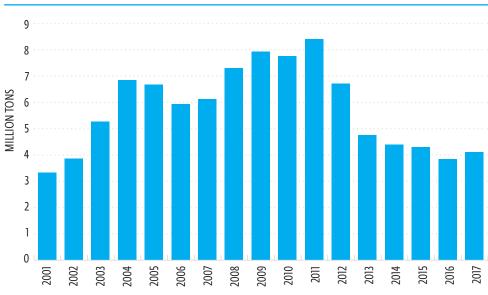


FIGURE B.2. VOLUME OF TRANSIT CARGO, JORDAN TO IRAQ, 2001–17

Source. Trademapz.

Note: About 2 million tons were goods imported to Jordan and then reexported through the Agaba Free Zone.

Substantial challenges to a return to past volumes of transit shipments to Iraq remain, however:

- First, clearance of goods on the Jordanian side will be delayed because of differences in the risk profiles used by the customs and security agencies for commodities such as hazardous goods;
- Second, there is no agreement at present on how to facilitate clearance on the Iraq side of the border and no commitment to introduce unified control;
- Third, the customs procedures within Iraq have not been unified, so there will be additional costs and delays along the way to Baghdad;
- Fourth, Umm Qasr, a deepwater port in Iraq near Basra, is in a much better position to compete for transit cargo because it is closer to Baghdad and has a modern container terminal with regular feeder services from Jebel Ali, Dubai, and because constraints on truck movement to Baghdad appear to have been resolved (table B.1);
- Fifth, newer trucks than those generally available in Jordan will be required to be competitive on these longer round trips, while the lack of backhaul cargoes will raise the costs for Jordanian trucks.

Jordan's border with Syria is open and passenger traffic is normalizing, but cargo volumes remain at a relatively low level. Syria's shipments through Aqaba, and the volume of bilateral trade, are expected to be limited in the future (Syrian drivers had the majority of this trade in the past). The Jordan-Syria border crossing is on the principal transit route to Turkey and Eastern Europe, and there are some hopes that trade flows to Turkey and Eastern Europe might resume through this route. However, the border between Syria and Turkey remains closed. Even if the border with Turkey were to open, Jordanian drivers would have to compete for the longer transit movements to Eastern Europe with drivers from several countries. There would also be limited options for backhaul cargo, and new trucks would have to be purchased to meet European Union standards.

TABLE B.1. COMPARATIVE TRANSPORTATION COSTS OF FREIGHT CORRIDORS TO IRAO, US\$

	MERSIN	UMM QASR		KUWAIT	AQADA
	ROAD	ROAD	RAILWAY	ROAD	ROAD
Iraq North	\$ 3,077	\$ 4,120	\$ 4,970	\$ 4,626	\$ 4,662
Iraq Center	\$ 4,177	\$ 3,620	\$ 3,920	\$ 4,126	\$ 4,462
Iraq South	\$ 5,277.40	\$ 2,920	(No Railway)	\$ 3,526	\$ 4,662

Source: ALG Transportation Infrastructure and Logistics 2018.

As a result, Aqaba's future share of the traffic to Iraq (or to Syria) is likely to be substantially smaller than it was prior to the closing of the border and will probably not be sufficient to provide the foundation for a substantial boost to trade or for the development of a logistics hub in the country. Although the volume of goods will increase temporarily for reconstruction, it is still unknown how large the increase will be and when reconstruction will occur. While the transit volumes may be significant, they are unlikely to come close to previous levels.

# SUPPLY OF TRANSPORT SERVICES

Of the major components of supply chains in Jordan, road transport, local distribution and collection, and storage and inventory management present the greatest opportunities for improvement in terms of level of service, efficiency, and technological improvement. The structure of supply chains used to distribute traded goods in Jordan includes four basic components: (a) the international gateways, which have been operating with increasing efficiency and reliability and have sufficient capacity to meet future demand; (b) the line haul movement to and from international gateways to the production and consumption nodes; (c) local distribution and collection activities, which are relatively inefficient because of the small size of the enterprises that dominate retail and local production; and (d) intermediate storage and inventory management services, which are in a transition period; there are economic pressures to minimize inventory, but the majority of warehousing and inventory management systems do not incorporate the advances made over the past quarter century that would allow this approach.

# **Road transport**

The domestic freight transport market is dominated by trucking, with rail transport confined to the transport of phosphates for export.<sup>43</sup> The road transport industry is characterized by two very different markets:

- Containers and general freight, which is highly competitive with many operators (individual truckers and truck companies) and many clients, and is characterized by excess supply and relatively low quality of transport services, low tariffs, restrictive regulations, and low profitability;
- Dry and liquid bulk products with much less competition, fewer operators and clients, limited supply, high tariffs, reliable services, and high profitability (World Bank 2018).<sup>44</sup>

Jordan has a large truck fleet relative to its size and population. The capacity may have been required when transit traffic was at its peak, but currently the oversupply is considerable, especially for large fixed-axle trucks and semi-trailers. About 10,000 tractor-trailers, most of which are owner operated, are registered. Less than a third are operated by companies, and about half of those companies are small, with 10 trucks or fewer. Just 10 percent of the trucking companies have fleets of 50 or more trucks. The average age of trucks is 17 years. In an attempt to address the oversupply of trucks, a prohibition against the purchase of new vehicles is in place. That prohibition was preceded by a requirement that any new truck purchased should be a replacement for an existing truck. Neither initiative has had an effect on the excess capacity.

# Four major markets are served by tractor-trailers in Jordan:

- 1. Container shipments to and from Aqaba port are arranged by the consignees in a regulated spot market. About 5,600 trucks are involved in this market.
- 2. Oil and grain imported through Aqaba are transported to Zarqa, Amman, and other locations through haulage contracts bid out by the government. About 3,700 trucks are involved in this market.
- 3. Transit cargo is carried in Jordanian trucks to and from neighboring countries under bilateral agreements.
- 4. Other freight moves within Jordan using the originator's own account or third-party transport. About 730 trucks are operated on the originator's account. Third-party transport includes contract haulage and spot market transactions.

The first three markets are regulated by the public sector. The first is rationed among operators who are registered to transport containers. The second is government cargo that is contracted out to the larger trucking companies. The third is restricted to operators with permits allocated under the bilateral agreements. The trucks registered to transport containers are restricted in the number of round trips they can make. They are also limited to carrying one container—either 20 foot or 40 foot—inbound but may carry two 20-foot boxes outbound. For each shipment, the consignee, or designated forwarder, negotiates directly with a trucking company to carry the cargo. The trucking company must own a fleet of at least 10 trucks but can also hire independent operators to supplement its fleet. These independent operators must be registered with the company. None of the truck operators registered to carry containers may participate in the haulage contracts for oil and grain, and vice versa. However, they are allowed to participate in the other two markets. Jordan regulates the first two markets using Nafith, the Jordanian logistics company, through a web-based system to monitor the eligibility of the driver. Nafith also operates dispatch yards to control the movement of trucks into the terminals and prevent queuing on the surrounding road network. This system has been in operation since 2005 and has significantly improved the efficiency of port operations.

The most immediate concerns are the oversupply of capacity and the age of the trucking fleet. Although the regulation of the movement of containers is intended to spread the demand over as many operators as possible, market pressures have reduced the rates to JD 375 per round trip. This is not only below the long-run marginal cost for second-hand trucks but barely covers the marginal cost of labor, operations, and maintenance. As a result, there is a steady reduction in the equity of the owners and no option for renewing the fleet because there would be no efficiency gains. More recently, there has been growing concern that the payment received by independent operators from the trucking companies is significantly less than the payment received from the consignee, with the difference being appropriated by intermediary companies that may add little value beyond providing access to the port gained through another restrictive rule that limits the entry to Aqaba to companies (rather than to individuals).

The social issue related to the oversupply of trucks and the difficulties that individual truckers face in covering the marginal costs of operation has led to a number of government rules and instructions. Although these new rules are intended to address problems of oversupply, they have unfortunately led to problems for transport services. The following government measures have pervasive market effects:

- The various prohibitions in place tend to increase transport costs and reduce efficiency, affecting the competitiveness of Jordanian products, among other problems. Restrictions on the transport of two 20-foot containers on a truck, on undertaking more than one trip per 48 hours, and on conducting more than eight trips per truck per month have been put in place in an attempt to address the social issues related to the oversupply of trucks, spreading trips across a larger number of truckers. However, they have had<sup>47</sup> negative environmental consequences in addition to causing inefficient market reactions. They also reduce the incentives for truckers to reallocate resources to other more profitable activities. Less distortive ways of supporting individual truckers would include enhancing policies to scrap trucks, improving training and access to financing, or providing direct financial support;
- The imposition of minimum prices prevents more efficient players from competing on price and can facilitate price coordination. Minimum prices for transport services for containers and general cargo in the Aqaba-Amman route<sup>48</sup> do not reflect market conditions and are therefore ineffective in practice given truckers' willingness to supply the service at lower prices. Nonetheless, minimum prices can provide a focal point that may facilitate collusive outcomes;
- Discriminatory treatment favors incumbents, particularly companies, and reduces
  market entry and the growth of efficient players. The barriers to entry—and
  to expansion of more productive suppliers and the exit of inefficient or rentseeking suppliers—do not appear to have promoted higher revenues and instead
  have reduced the incentives for greater productivity and lowered quality and
  competitiveness:
  - The stipulation that only trucking companies may access the Nafith system for the pickup and delivery of cargo at the Aqaba port encourages the operation of trucking companies that serve as intermediaries between individual truckers and the owner of the cargo or the freight forwarder and that give trucking companies artificial bargaining and market power that reduces the compensation for individual truckers.<sup>49</sup> The same is true for a rule that requires individual truckers to have contracts with a maximum of two transport companies. Market solutions such as digital platforms and effective brokers may be alternative means of solving the informational asymmetry between truckers and cargo owners without the need for such regulation. Although the reliance on transport brokers is common and efficient, the rules in place require these companies to present themselves as trucking companies, generating an additional regulatory burden on them and making this market less contestable;

- Rules that suspend the registration of heavy trucks that weigh more than 21 tons in the name of individuals<sup>50</sup> and that set a minimum number of owned/ leased trucks as a requirement for obtaining a license as a company<sup>51</sup> restrict the ability of more efficient and reliable players to expand and create incentives for informality (reportedly, operation without a license or acquisition of registration plates of scrapped trucks);
- The prohibition on the transfer of truck ownership from companies to individuals and from individuals to individuals<sup>52</sup> and absence of a buy-back program limit the ability of people and firms to sell off trucks and exit the market.<sup>53</sup> Currently, truck owners are not provided with any option to exit and move to another activity;
- The incentive scheme for fleet renewal that allows for imports of trailer heads that are less than five years old in return for scrapping or re-exporting older ones has had a limited effect and has not focused on individual truckers who own approximately 80 percent of trucks whose average age above 19 years.<sup>54</sup>

# **Ocean transport**

The only significant problem regarding infrastructure at Aqaba port is the lack of rail connections to the new port facilities. Dry bulk and liquid cargoes are transported primarily in chartered vessels, which call at dedicated terminals located in the new Aqaba port facilities. <sup>55</sup> The handling of these cargoes is part of integrated supply chains that include pipelines and rail lines. The rail connections to the previous main port were never extended to the bulk terminals in the south because the difficult terrain made it prohibitively expensive. Even now, with all the cargo terminals except the container terminal relocated to the south, there are still not enough potential cost savings to justify investment in an extension of the rail line.

Container traffic is handled at the Aqaba Container Terminal (ACT), which is operated under a 25-year concession and has steadily improved its performance. In 2013, the wharf was extended to 1,000 meters, which enables it to handle two of the largest container vessels. The storage area has also been increased to 55 hectares but is located on multiple levels because of the topology of the site, and the dwell time for containers has been reduced to seven days through a combination<sup>56</sup> on of improvements in cargo clearance procedures and a reduction in free time. Further improvements are expected to reduce the average time to six days, allowing an annual throughput of 1.4 million TEU, 57 which is 75 percent more than the current throughput. With the addition of three more cranes, the capacity will reach 2 million TEU. Within a decade, improvements in technology and coordination in the supply chain should allow the capacity of the terminal to reach 2.5 million TEU. It is unclear, however, whether the storage area, access roads, and entrance gates could be configured to handle this volume. The volume of truck traffic has been increasing steadily and currently averages about 700 per day. Because the topography prevents the current terminal from being expanded, it is expected a new terminal will be required by about 2030.

The volume of container traffic increased dramatically over the past two decades but has recently leveled off because of the loss of Iraq transit traffic. All the inbound containers are loaded whereas 70 percent of the outbound boxes are empty. About 15 percent of the inbound containers are transported as less-than-container-load shipments and are deconsolidated at the Aqaba Logistics Village and transported to Amman and other destinations as loose cargo. About 30 percent of the inbound containers are reloaded with export containers, and the rest are returned directly to the port as empties for repositioning. A number of yards around Amman are used to store inbound containers that have been unloaded and will subsequently be dispatched to an exporter's warehouse for loading. The containers are transported on scheduled liner services. These include eastbound and westbound services provided by the major container alliances.<sup>58</sup> Currently there is an average of one vessel call per day, mostly from feeder services originating in Jeddah, Saudi Arabia. Direct services from the Far East are also available, despite the one-day diversion from the main east-west shipping route through the Suez Canal.<sup>59</sup>

The introduction of the larger vessels in recent years has meant that the number of containers transferred per vessel has increased significantly while the number of calls has not. The larger vessels have also helped to moderate the freight charges, but the principal factor affecting these charges has been the volatility in international freight rates, which have fallen as a result of overcapacity following the introduction of ultra large container vessels. Currently the rates for shipments to Europe are about \$800 for a 20-foot container and \$1,300 for a 40-foot container, whereas to the US East Coast the rates are \$1,600 and \$2,800, respectively. It is unlikely that these low rates are sustainable. The transit times are three to four weeks for deliveries from Asia and two to four weeks for shipments to the US East Coast.

As noted, Aqaba competes with a number of ports in the region for container traffic<sup>60</sup> (figure B.2). Dubai offers more frequent sailings plus faster transit time and lower freight rates to Asia, although it requires a 2,500 km truck movement to Amman. Haifa and Ashdod, Israel, provide direct access to the Mediterranean Sea, bypassing the Suez Canal. These options reduce the transit time and provide more efficient service, but the savings in costs are marginal and reliability is reduced because of delays in crossing the King Hussein Bridge. Jeddah competes with Aqaba for direct services by providing access to more frequent sailings on larger vessels, but it adds the time and cost for transfer of containers to feeder services. Salalah, Oman, also competes for this transshipment business. For cargo transiting Aqaba to Iraq, Umm Qasr presents significant competition with similar capacity and a shorter road connection to Baghdad. For transit cargo from Europe, Aqaba has competition through the port of Mersin, Turkey.

# Air transport

Queen Alia Airport is Jordan's only international gateway for airfreight traffic. The number of aircraft movements at Queen Alia has leveled off in recent years at an average just above 200 per day. The number of passengers has increased, reaching 8.4 million in 2018 or about 115 passengers per aircraft movement. The level of traffic per thousand population puts Jordan is in the middle range for comparably sized countries in the region.

The principal export shipped by air is vegetables, while imports include foodstuff, spare parts, and textiles. Cargo is transported both on air freighters and as belly cargo on scheduled passenger flights. The scheduled airfreighter services include those operated by Royal Jordanian, Cargolux, Emirates, Qatar Airways, and DHL. The volume of airfreight reached 110,000 tons in 2017 before falling to about 100,000 tons in 2018. Royal Jordanian has only one small airfreighter (Airbus 310), and most of its cargo is carried as belly cargo on foreign carriers; its market share has been declining. Its primary competitive advantage is that it is the only carrier in the region that provides service to Israel and Qatar. Most of its cargo is in transit to the Persian Gulf, Egypt, and Qatar.



**FIGURE B.3. COMPETING REGIONAL CONTAINER PORTS** 

Source. Trademapz.

Note: Red circles = container ports; Circle size = relative size of port.

The Queen Alia Airport is operated under concession to Airport International Group (AIG) with cargo-handling services provided by Royal Jordanian. The existing air cargo terminal provides 20,000 sq. m of storage, but the terminal is old and the layout is inefficient. Additional capacity (inaugurated in September 2019) is being introduced in the form of a new 6,000 sq. m warehouse and a 1,000 sq. m expansion of the existing warehouse. These will be used for e-commerce and pharmaceutical shipments, respectively. There is additional storage in the free zone next to the airport, used primarily for consolidation and distribution of the airfreight shipments. The storage rates are low relative to the bonded alternatives. The efficiency of these airport warehouses is limited, however, by delays in clearing imports, principally due to high rates of physical inspection by customs as well delays in obtaining approvals from other inspection agencies. Sufficient space is available to accommodate the inefficiencies in cargo handling, but efforts are underway to improve efficiency by increasing the storage charges for imports, reducing the maximum receiving time for exports to 12 hours (from 24 hours), and designing the new facilities to facilitate inspections.

There is little potential for handling airfreight shipments in Aqaba or air-sea shipments via Aqaba, given the limited amount of passenger traffic. So far, customs has been unwilling to approve road freight services between Queen Alia (Amman) and King Hussein International Airport (Aqaba) similar to those between Abu Dhabi and Dubai and other airports in the region.

The volume of e-commerce shipments has been increasing significantly, but delays due to inspection are a challenge. Although these are mostly packages valued at less than the JD 120, delays will continue to be a problem as the volume of e-commerce grows.

# TRADE FACILITATION/CUSTOMS

The current challenge for Jordan customs is to complete the agency's ambitious trade facilitation initiatives, many of which have already been introduced in the other countries in the region. The modernization program is at the end of its second decade, but some reforms begun a decade ago have not yet been completed. Furthermore, a new era of technological opportunities and threats has already begun and will require a new reform agenda.

A reform and modernization program was begun in 1997 to streamline processes, facilitate cross-border trade, and enhance transparency and accountability, emphasizing the introduction of ICT applications.<sup>61</sup> The electronic single-window project began in 2008 with traders submitting documents at a physical site. As an early adopter of ASYCUDA World (2009), Jordan Customs was able to quickly develop an internet-based, single-window portal. Since then customs has been expanding the scope of documents that can be submitted. The new Customs Law enacted in June 2018 allows the use of scanned documents, e-certificates of origin (rather than original copies), and e-signatures. It also allows for prearrival declaration with shipments assigned to a specific channel prior to their arrival.<sup>62</sup> In early 2019, transit documents were included in the custom single window. Currently the single window is being used to integrate the information required for trade between Jordan and Nuweiba (Egypt ferry route). If successful, this process will be extended to include imports into Aqaba. A web portal to provide information on tariffs and on the information required to prepare customs declarations was introduced at the same time as the electronic single window. This system was subsequently made accessible through mobile devices.

As a result of continuing efforts, much has already been achieved in improved outcomes. The clearance times for imports have been reduced from an average of four weeks in 2008 to two to three days today. More recently, greater reliability in clearance times has been attained. This has allowed officials to preplan the movement of containers through ACT and up to Amman so as to minimize the use of storage and improve the scheduling of the trucks transferring goods to Amman.<sup>63</sup>

Nevertheless, Jordan Customs still has an exceptionally high rate of physical inspection despite having introduced green/yellow/red channels, X-ray inspection, risk management, and intelligence sharing with other countries. Officials generally cite concerns regarding security to explain this situation, but such a concern is not unique and other countries have been able to manage their risk requirements.

In Jordan, as in most other countries, the rapid improvements in customs processes have not been matched by improvements in the processes of the OGAs responsible for clearing cargo. Customs has used ASYCUDA World to coordinate its activities with a number of OGAs, including the Jordan Institution for Standards and Metrology, Jordan Food and Drug Administration, Ministry of Environment, Ministry of Agriculture, and Aqaba Container Terminal, as well as security agencies, customs brokers, and major logistics companies. This coordination has evolved into a collective effort to increase the use of electronic processing in the activities of regulatory agencies. However, delays caused by inspections and approvals by these agencies remain one of the major challenges for trade facilitation. A steering committee comprising ministers representing six OGAs was recently established in an attempt to streamline the activities of these agencies. However, this process will take time. So far, the OGAs have been able to agree on acceptance of international certificates from recognized foreign labs.

Jordan Customs has also been active in establishing an authorized economic operators program. Its Gold List has been in place for 10 years and now has about 100 members. This accounts for only 18 percent of the value of trade due to the small number of large companies in Jordan. Mutual recognition of Gold Lists is in place between Jordan and four other countries, including Egypt and Morocco. The government is now seeking to expand the use of the Gold List to all the OGAs. It has also established a Silver List, which is based on firms' compliance history as reported in customs records. While the Gold List offers a 1 percent random inspection rate, the inspection rate for the Silver List is 5–10 percent.

# TRADE FINANCE

Trade finance plays a critical role in improving the structure and performance of supply chains by facilitating transactions. However, in Jordan the use of trade finance is limited because of the predominance of small enterprises in trade, absence of audited accounts, and high levels of perceived risk. Small and medium exporters face a severe lack of trade finance, both pre- and postshipment:

• Preshipment trade finance (working capital finance) is not widely available in Jordan and is limited to overdrafts and revolving loans. Small and medium enterprise (SME) exporters resort to general banking facilities secured by a mortgage on real estate assets and the owners' personal guarantees. Loans are rarely made on the strength of the balance sheet largely because of the lack of audited accounts and personnel familiar with risk assessment. Mortgages are expensive and restrain borrowing capacity. SME loan guarantee schemes, such as those run by the Jordan Loan Guarantee Corporation (JLGC) and the Overseas Private Investment Corporation, expose lenders and their guarantors to the general credit risk of the borrowers, with a higher cost and incidence of default.

Some imports are financed though letters of credit. These have relatively long tenors because of the lengthy order cycles for imports of intermediate goods. Standby Letters of credit are used for trade with the United States, in particular between garment manufacturers and their American buyers. Some trading is on account, also primarily between garment manufacturers and their buyers.

 Postshipment trade finance services in Jordan mostly consist of remittances and collections. SMEs do not have access to supply chain finance and cannot use accounts receivable to expand their borrowing capacity because of the local banks' lending practices, limited or nonexistent credit information on buyers, and weaknesses in the local legal system.

The availability of trade credit insurance in Jordan is also very limited, with insured flows equivalent to less than 1 percent of GDP, less than other developing markets such as South Africa (15 percent), Morocco (7 percent), and Tunisia (4 percent). To export competitively to advanced markets, Jordanian firms need to accept open-account sales terms instead of letters of credit. Unsecured sales expose exporters to the buyers' credit risk, which needs to be covered by trade credit insurance. Trade credit insurance facilitates market access and increases access to finance (sellers can use credit insurance policies as collateral for post- or preshipment finance). The insurance also increases the stability of the firms' cash flows, reducing the likelihood of insolvencies and their subsequent effects. At the national level, credit insurance increases value added, market penetration, geographic diversification, and the stability of value chains. Econometric studies have estimated the short-run multiplier effect of credit insurance on crossborder trade at between 2.3 and 3.2, with an even higher long-term impact (Petersen and Rajan 1997; van der Veer 2015).

Because of the moderate size of its economy, Jordan is not well served by international credit insurers. JLGC is mandated to address this market gap and has developed a strategic plan supported by a JD 100 million long-term concessional loan from the Central Bank (45 percent shareholder of JLGC). JLGC has requested technical assistance and support from the World Bank and other international donors to improve its service to Jordanian exporters and increase market penetration by upscaling systems and operations, improving its access to international reinsurance, and optimizing the use of the concessional loan received from the Central Bank.

# **LOGISTICS SERVICE PROVIDERS**

# **Customs clearance**

Jordan Customs requires that all declarations be prepared by licensed customs clearance agents. These agents must meet a number of specific requirements, some of which appear to be an obstacle to new entrants, such as the requirement to maintain a minimum of three offices; the justification for that requirement is unclear given that today most transactions are performed electronically. Currently, Jordan has several hundred licensed customs clearance agents, but it is not clear how many are active; most who are active handle a relatively small number of shipments.

The introduction of the single-window system, tariff portal, scanned documents, e-signatures, and e-payments has greatly simplified the process of preparing, checking, and filing declarations and supporting documents. The number of agents is declining because of the efficiency of these information technology (IT) systems and also the limited growth in shipments. Most countries continue to use customs clearing agents, because they are trained to manage the interaction with customs.

# **Freight forwarding**

The demand for freight forwarders is expected to decrease sharply in the future as a result of advances in business-to-business (B2B) applications, in particular e-booking services. For some time, the ocean shipping lines have provided internet services for arranging shipments. More recently, new applications have been introduced that offer fixed rates and online payment for ocean freight. Most recently, shipping lines have introduced door-to-door multimodal services with fixed rates. Unlike earlier arrangements, which integrated these services through combined bills of lading, the new booking services offer a standard package arranged in collaboration with an international forwarder. Increasingly, these forwarders are affiliates of the shipping company, because transport carriers face diminishing returns on their core business.

Licenses for freight forwarding are issued by the Ministry of Trade and Industry<sup>65</sup>, although in most countries freight forwarding is not a regulated activity. As the procedures for arranging international shipments have been simplified, there has been less need for local regulation; the changing nature of logistics has also made it difficult to regulate. The larger international freight forwarders in Jordan tend to specialize in exports of garments, pharmaceuticals, and other major commodities and to act as designated forwarders for foreign buyers. Most serve only a few clients and handle mostly large shipments. Some freight forwarders provide additional logistics services, such as storage and transport, but this is less common than in other countries because of the small volumes and low returns.

# Third-party logistics

While most of the big international third-party logistics providers (3PLs) have a presence in Jordan, their primary activity is providing forwarding services for airfreight.<sup>66</sup> Because there are relatively few large shippers in Jordan, there are only about five domestic 3PLs.

Two of the larger 3PLs, DHL and Aramex, provide domestic distribution for airfreight, primarily packages and documents. DHL operates a weekly airfreight service but relies primarily on other airfreight carriers as well as belly cargo. It operates its own 1,800-sq. m distribution warehouses near the airport but contracts out the delivery services to local trucking companies. In contrast, Aramex relies entirely on contracted airfreight services but operates its own delivery service in the Amman metropolitan area.<sup>67</sup> It also has a 2,000-sq. m distribution center near the airport and is developing a 3,500-sq. m warehouse in the Airport Free Zone.

Because 3PLs are typically asset light, they are relatively flexible in locating their activities. The regional headquarters for nearly all international 3PLs is Dubai. Their local offices are then sized to the current demand. The Jordanian market offers few opportunities because importers and exporters tend to be small, family-owned firms that follow traditional business practices. Even the larger manufacturers, such as in garments and pharmaceuticals, focus on minimizing costs rather than on the value-added services that the 3PLs offer.

# **Modern warehousing**

Most of the warehouses in Jordan are old structures that offer only basic services. Modern warehousing differs in that it provides a range of services and is able to manage a more diverse inventory with faster turnover. Typically, the newer warehouses have high storage racks and telescoping forklifts to increase the density of storage. They track inventory using bar code or radio frequency identification. Storage and retrieval is typically semiautomated. Value-added services include kitting, bundling, pick-and-pack, inventory management, and order processing. A few modern warehouses have been established in Jordan by firms such as DHL and Aramex.<sup>68</sup> The new free zone at Queen Alia International airport offers a modern package of logistical services to support investment and exports, replacing the free zone that was established in 1998 in the airport cargo area.

# Information technology applications

Most of the benefits provided by modern logistics have been achieved through development and improvement of IT applications. Some of these are used internationally, including as the software systems ASYCUDA and SAP and platform applications such as PayPal, Uber, and Alibaba. But increasingly these applications have been developed to meet Jordanian needs such as eFAWATEER.com and ShopGo.

Two areas of particular interest for developing Jordan's logistics sector are warehouse management and e-commerce. A variety of applications are available for managing modern warehousing. These are used not only to organize the movement of goods into and out of storage, but more importantly to manage value-added services such as pick-and-pack, order assembly, labeling and shipping documentation, and distribution. Increasingly these systems interface with, or are integrated into, enterprise resource planning (ERP) programs to manage restocking and order processing. They provide the cargo owners with direct access to information on the status of the inventory and can facilitate distribution of the goods (through vendor-managed warehousing). Although most of the businesses in Jordan use traditional methods for managing their stock, there are about 10 companies currently operating on SAP or Oracle, the two most commonly used ERPs.<sup>69</sup>

Modern logistics is increasingly organized around transactions involving e-commerce. Jordan not only has access to the e-commerce giants but has also developed its own platforms. The best known is the Souk platform. It was subsequently commercialized as Souk.com in Dubai to take advantage of the emirate's capital market and role as a logistics hub. It then expanded its service to many of the countries in the region and was eventually bought by Amazon. Meanwhile, Jordan has developed simpler platforms, such as ShopGo and OpenSooq (the latter providing a service similar to Craigslist).

# **Aqaba Special Economic Zone**

The Aqaba Special Economic Zone (ASEZ) was established as a free zone to promote trade, tourism, and industry. It encompassed an area of 375 sq. km, which includes the seaport and its environs, as well as Wadi Rum. An authority (ASEZA) was established to administer the zone and adopted a master plan for developing its five main areas:

- a. Aqaba Town for tourist, commercial, and residential areas of development
- b. Main Port for an entertainment, residential, hotel, and cruises service center
- c. Coral Coastal Zone for a community beach resort
- d. Southern Industrial Zone for new and relocated port facilities
- e. Airport Industrial Zone for logistics and high-tech industries

Aqaba Development Corporation (ADC) was established in 2004 as a joint venture partnership between the government of Jordan and ASEZA. It owns and is responsible for development of Aqaba's seaport, airport, and strategic land parcels.

Although the zone was successful in attracting capital investment and in creating employment, it did not achieve one of its primary objectives—that of transforming Jordan into a transit hub. The zone has been successful in terms of attracting some US\$12 billion in capital investment and creating some 30,000 jobs; however, it did not transform Jordan's sole maritime gateway into a leading multimodal logistical gateway for the Levant region and transit hub for the GCC countries, North Africa, and the Levant region. Unlike comparably sized zones such as the Bayan Lepas in Penang, Malaysia (the original free trade industrial zone), and the more recently established Tangier Med free zone in Morocco, ASEZ was unable to attract an anchor tenant or establish a marketing identity despite providing similar incentives.

While comparable in size to zones such as Panama or Singapore (in the early days), Aqaba is not located on a main international shipping route or at the center of a huge consumer market with little competition. Because of these constraints, Aqaba was unable to establish itself as a transshipment hub like other ports in the region, including Jebel Ali, Jeddah, and East Said as well as the various ports on the Mediterranean, including Algeciras, Spain, and Tangier Med, located in the Strait of Gibraltar. Without significant baseload traffic, Jordan could not establish a logistics hub.

The effort to develop a major logistics hub in the Aqaba SEZ had limited success for a variety of reasons, including a growing number of new zones that were better positioned to compete for investors. Since 2004, ASEZ has succeeded in developing a small logistics hub, the Aqaba Logistics Village. However, future opportunities for growth in traditional logistics services are limited and margins are decreasing. If there is to be a future role for logistics in the zone, it will require a significant change in approach, both in terms of the target market and commercial regulations. The zone will have to compete in the modern environment, which is dominated by asset-light, information-intensive, rapidly evolving logistics services.

# MARKET DYNAMICS AND COMPETITION AMONG LOGISTICS SERVICE PROVIDERS

In addition to the providers of trucking services already noted, other players active in the transport and logistics value chain are also affected by anticompetitive regulations or act anticompetitively in the market. Shipping agents, clearance agents, and freight forwarders play a key role in logistics services in Jordan, yet a combination of restrictions appear to render the regulatory framework around these players' services restrictive and inefficient.

# **Shipping agents**

Acting on behalf of the shipping lines normally under exclusive, long-term contracts, shipping agents benefit from a list of minimum prices published by the sector association (Jordan Shipping Association)<sup>70</sup> that may facilitate collusion and that may contradict the Jordanian Competition Law. For instance, the agents levy additional port charges on the movement of empty containers from the truck to the vessel over and above the agreed charge for land transport for the return of empties; these charges are passed to the owner of the cargo even if the containers return full and are covered by the owner of the export cargo. Legislation also limits shipping agent activity to Jordanians (access is restricted to Jordanian natural or juridical entities subject to a limitation of 50 percent foreign equity), although arrangements are in place to allow international companies to have local associates conduct their operations.

# **Customs clearance agents**

These agents are mainly responsible for dealing with customs obligations on behalf of cargo owners, but they are also commonly integrated downstream with forwarding and trucking services. The suspension of the issuance of new licenses by Jordan Customs, as previously noted, reduces contestability and competitive pressure on incumbent agents. Although Jordan has about 600 licensed clearing agents, not all are in operation and only few agents handle most of the cargo. The regulated fees for customs clearance services—generally unregulated in other jurisdictions—can become a focal point for (tacit) coordination among competitors. Burdensome requirements abound, including the need to maintain at least three branches and the payment of annual fees per employee. Additionally, only Jordanian companies (access restricted to Jordanian natural and juridical entities subject to the limitation of 50 percent foreign equity) may be licensed to provide customs clearance services; while this may be common in other countries, it does not solve a market failure. These requirements are only loosely related to the ultimate goal of promoting quality and safe services but do restrict the level of market contestability, particularly in the absence of antitrust enforcement.

# **Non-official players**

Stakeholders have also reported the presence of informal factoring agents who take on midterm/delayed receivables from drivers in exchange for discounted upfront payments. This dynamic has been reported to be more common in general cargo transport. Although this practice might be efficient, it is worth monitoring market dynamics and the effects on individual truckers.

# **Business associations**

Associations also play a key role in the market dynamics of shipping agents, customs clearance agents, and freight forwarders. As experience in various other countries has shown, close-knit business associations in transport and logistics have played a relevant role in facilitating the exchange of sensitive information that has led to collusive behavior, which contravenes competition laws and has resulted in higher transport and logistics costs. In Jordan, the current behavior of associations could be contributing to potential concerted actions in contradiction with the competition law.

The Competition Directorate could play a more active role in advocating for less restrictive regulatory alternatives, in particular to tackle the problems faced by the trucking sector. While these regulations may be useful to mitigate social problems in the short run, a more sustainable package of reforms is needed. To increase efficiency, reduce prices, and improve services, policies should favor an ecosystem in which efficient and productive players coexist irrespective of size or legal form. In other developed and emerging economies, individual truckers coexist with trucking companies, and regulations help create an environment for efficient operation of both types of road transport operators. In this context, it is necessary to identify the most cost-effective and least distortive measures capable of simultaneously (a) mitigating the social impacts on individual truckers and (b) improving efficiency in the transport and logistics value chain. Figure B.4 illustrates how Jordan's restrictions affect the transport and logistics value chain for containerized cargo and increase the regulatory burden.

# FIGURE B.4. GOVERNMENT RESTRICTIONS THAT AFFECT ROAD CARGO TRANSPORT SERVICES IN JORDAN

### In an environment that lacks effective antitrust enforcement or competition advocacy Restrictive requirements on min number of trucks to license companies Discriminatory tax and customs systems Minimum Agaba Special Economic Zone Authority – ASEZA prices Aqaba-Amman; Max 8 trips per month per truck; **₩**Nafith 48h window between loads; Max one 20ft Trucking company (own Shipping Line Shipping container per truck Agent Agent Only trucking Individual Market Long term Ban on new companies concentration, exclusivity licenses; Owner can access multi-market contracts restrictive Bans affecting contact and with liners; requirements on the port individual international minimum min capital and proliferation of owers: (i) shell companies prices set # of branches; cartels new tracking by sector signs of collusion licenses, association (ii) transfer "Kiosk" of trucking informal licenses to factoring individuals, (iii) truck imports Freight Forwarders Verticalization and risk of foreclosure and exercise of maket power

Regulations are needed, but should be directed at solving market failures in the least restrictive manner

Source: Markets and Competition Policy Team for the Jordan CPSD.

Aqaba

# OPPORTUNITIES FOR IMPROVING LOGISTICS SERVICES

While different logistics services are distinct, they share a principal goal of improving the efficiency and competitiveness of the domestic and international trades that use logistics services. This goal can be achieved primarily through restructuring the supply chains, and in parallel the value chains, for these trades. Five specific strategies are proposed for improving the logistics services for both domestic and international trade. The strategies focus on improvements in

- Road transport services
- IT-based logistics services
- Export value chains
- Distribution of consumer goods
- Trade facilitation

# Managing the supply of road transport

The oversupply of trucks for transporting containerized cargo from the port of Aqaba to inland destinations minimizes the economic impacts on the owners of the vehicles registered to transport containers. The challenge has been to put in place a system for rationing the demand among the vehicle operators while waiting for a market equilibrium to be restored through natural wastage and growth in demand. The system of rationing in theory allows the shippers to select from the available providers and to negotiate the freight rate while ensuring the number of truck operators equal access to the demand for transport. The current price is at a level that will cover the short-run marginal costs but does not provide sufficient returns on capital to replace the older equipment.

In some ways this has been a successful compromise between the goal of maintaining employment and providing transport services—albeit in an unsustainable manner. However, three concerns emerge, with the current arrangement (in addition to the issue of leveling the playing field and enabling greater entry to and exit from the market, addressed in a previous section):

- Is there a more effective way to reduce the oversupply while avoiding a significant reduction in employment?
- Is there a way to reduce the economic rents currently captured by the trucking companies in their role as brokers for the independent operators?
- Is there a way to increase efficiency under the current rationing system?

With regard to the first question, the introduction of environmental standards as part of the annual inspection can complement the natural wastage that takes place as older vehicles experience an increase in maintenance costs and reduction in reliability. This would result in additional loss of employment but ensure that the remaining fleet is able to meet future environmental standards.

The second issue can be addressed through the introduction of an electronic market. This option would supplement the existing practice of direct negotiation between shippers and the trucking companies and would provide independent operators with direct access to the shippers. However, it would require the electronic market to provide the same level of comfort for the shippers as the current transactions with trucking companies. Considerable experience with such trucking markets in developed economies demonstrates that a regulatory environment can such comfort. More recently, the introduction of IT platforms such as Uber has provided a model for combining an electronic market with a guarantee of quality in the transport services. Aramex has developed a similar system for providing drivers to operate its fleet.

The third concern arises primarily because of limitations on the number of containers that trucks can carry on the inbound journey and the arrangements for carriage of outbound containers. The former may not be a serious problem because the weight of cargo carried in 20-foot boxes is generally equal to or greater than for cargo carried in 40-foot boxes. Strict enforcement of load limits may achieve the same effect. The latter is currently managed by the shipping lines, which maintain yards for storage of empty containers and then dispatch them to exporters in trucks hired by the shipping lines. If necessary, this could be supplemented by including those movements in the electronic market.

# **New e-commerce opportunities**

The supply of consumer goods through business-to-consumer (B2C) e-commerce is well developed but requires extremely efficient distribution services. Although there is opportunity for improving the delivery of these services in the domestic market, there is little opportunity for exporting these services to neighboring countries, which already have similar services. On the other hand, there may be potential for developing new B2B e-commerce services that could be exported.

One example is the provision of reverse logistics for goods sold through e-commerce. Reverse logistics takes many forms, including repair and replacement, disposal, and reselling of returned items. The latter offers the greatest potential because the rate of return for delivered goods has increased significantly, and often exceeds 50 percent, especially in markets such as Jordan where the sale is on a cash-on-delivery basis. Brick-and-mortar retail stores have a similar problem with returns but more stringent requirements in terms of where these goods can be resold. Reselling requires a separate B2Bplatform that includes an efficient gateway, a free-trade environment, and modern warehousing services.

ASEZ was originally conceived of as a logistics hub, but it never achieved that position, primarily because it was unable to develop an attractive value proposition. More recently, the Aqaba Logistics Village was established as a free trade zone platform for the physical distribution of containerized imports and vehicles. However, problems with overlapping and changing regulations have limited the expansion of similar logistics services. Given the lack of any physical competitive advantage, establishing a logistics hub that offers services similar to those in Dubai would be extremely difficult.

However, e-commerce is a new business based primarily on efficient electronic transactions and supported by efficient physical logistics. Success in that business requires a suitable enclave in which current regulations affecting commercial activities have been revised and harmonized and complemented by competitive trade facilitation. A more complete description of this initiative is presented in Appendix D.

# **Enhancing the value of exports**

The use of logistics increases product value in several ways. A reduction in delivery time not only decreases the amount of inventory required but also provides greater flexibility in marketing new products and lowers the chances of overstocking goods. An increase in reliability provides similar benefits. Logistics has become essential for delivering inputs for lean manufacturing and for conducting major marketing programs for consumer goods. Finally, information transmitted through the supply chain has become an important contributor to product value. For goods such as garments and perishables, improvements in time and reliability and increases in product information are essential components of product value.

The garment industry is one of the trades most affected by improvements in the design of the supply chain. The industry has changed dramatically over the past 20 years as a result of improvements in logistics. These improvements have enabled the repositioning of processing activities. One of the most important changes has been the shortening of the order cycle, which allows the frequency of style changes to increase. This, combined with a just-in-time marketing strategy, has enabled brand manufacturers to significantly enhance the value of their products.

Garments are among Jordan's leading exported goods. However, the exports are predominantly sportswear shipped to the United States under a free trade agreement. The industry is a basic FOB operation in which the manufacturers procure inputs from suppliers designated by the buyer and then arrange shipments of garments through forwarders and shipping lines, also designated by the buyers. The current order cycle is three to six months. The products are lower-middle value (US\$10-\$15 FOB per piece) with order sizes of up to a few hundred thousand.

To diversify the market and, more importantly, to increase the unit value of exports, the involvement of exporters in the supply chain must be extended from FOB to original equipment manufacturing (OEM) (figure B.5). Also, the supply chains need to be restructured and the order cycle reduced to two months. Doing so requires the selective use of airfreight, greater flexibility, reduced time for setting up production lines, greater reliability of delivery for both raw materials and products, less time for clearing cargo, and multiple sequential shipments to allow early delivery. It will also require improvements in the transactions and flow of information between supply chain participants in order to reduce the time and increase the reliability of delivery to the market.

These changes will increase the cost of production but will be more than compensated by the increase in value of the product. Without the changes, local manufacturers will face increasing competition from Chinese and other manufacturers that are in transition from contracts for large-volume, low-value garments to smaller-volume, higher-value garments.

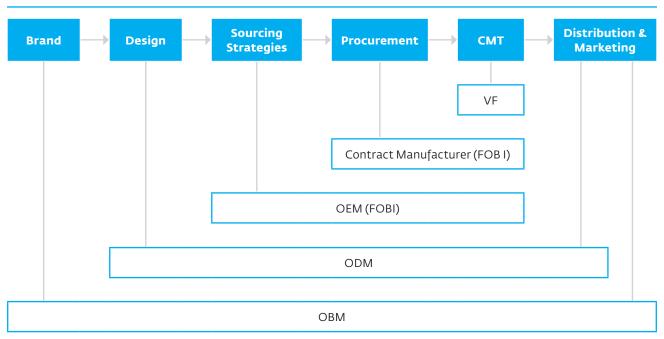


FIGURE B.5. DIFFERENT BUSINESS MODELS FOR PRODUCTION OF GARMENTS

Note: CMT = Cut, Make, and Trim; FOB = free-on-board; OBM = Original Brand Manufacturing; ODM = Original Design Manufacturing; OEM = Original Equipment Manufacturing; VF = A specific brand

# Improved distribution of consumer goods

The efficiency of distribution of consumer goods to the retail sector in Amman has been improving. An increasing proportion of those goods, especially the international brands, are being delivered to retail outlets from modern distribution centers by distributors rather than by wholesalers. However, the procedure for supplying about 16,000 retail outlets within the Amman area remains inefficient in terms of both cost and use of the road network.

Although efforts have been made to introduce modern retailing through the establishment of local chains, these attempts have been very limited in size and scope. Even with a continuation of this effort, most retail activity likely will remain with small, family-owned stores providing unique services to their immediate community. To improve the efficiency of distribution while maintaining the local character of these stores, it will be necessary to change the structure of the supply chains, especially the management of the information related to demand for products at individual stores.

# Such an effort will require improvements in the ability of firms to

- Collect and process sales data,
- Monitor inventory,
- Process orders,
- Consolidate product shipments, and
- Plan and execute delivery to individual stores.

Similar improvements have been used to develop large retail chains and big box stores. A growing number of digital applications and equipment is available to enable the same improvements for small-scale retail. For example, an increasing variety of internet-connected sales registers use point-of-sales information to monitor changes in inventory and generate restocking orders. The sales data also can be used to analyze and forecast demand for individual products. At the same time, applications have been developed to increase the efficiency of deliveries from the distributor to a large number of customers. Future applications are anticipated that will increase co-loading of deliveries, including the use of Uber-style dispatching systems. Although significant improvements have been made in the cost and availability of logistics systems, further local applications are needed to meet the specific requirements of retailers in the Amman area.

# **Enhancing trade facilitation**

Planned improvements in customs procedures and attempts to modernize the practices of OGAs involved in regulating trade need to be completed as soon as possible to advance the logistics sector. Two areas requiring immediate attention are tariff classifications for new products and changes in regulations and procedures to facilitate e-commerce.

Many of the issues raised by importers concern problems with the classification of imported goods that are not familiar to customs officials. These problem arise not only from confusion regarding the coverage of the harmonized system codes but also from the lack of knowledge of what the new products are used for. Efforts to address this problem, either through collaboration with other customs agencies or with importers and exporters, should begin as soon as possible. In the future, blockchain technology will address the problems by providing an additional level of confidence regarding information on the sources, handling, and characteristics of the products. Until that time, other measures must be taken.

Future changes in the structure of supply chains associated with the growth of e-commerce will create new challenges for clearing cargo, collecting duties and taxes, and detecting anomalies. In the case of containers with consolidated shipments, the forwarder will need clearance to act as the nominated consignee responsible for payment of all duties and taxes but should not be liable for sales tax on the goods transferred to the actual consignees.<sup>71</sup>

Jordan Customs is planning to update its ASYCUDA software to provide additional functionality but is also considering developing its own software in the future. This plan may make sense given the considerable advances made in IT, including database and artificial intelligence applications, since ASYCUDA World was first introduced. However, Jordan needs to avoid a complete redesign, given the resulting disruption during implementation. Typically, a transition is managed by running old and new systems in parallel despite the confusion for both officials and customers and the additional manpower needed.

The set of recommendations for the Logistics sector are included in the Logistics chapter in the main body of the Report.

# 3. INFORMATION AND COMMUNICATION TECHNOLOGIES SECTOR ASSESSMENT

# **MOTIVATION: POTENTIAL AND CHALLENGES**

Technology-enabled services offer significant potential in Jordan to contribute to employment, exports, and value addition. Jordan has a robust Information and Communications Technology (ICT) sector with a direct contribution to the GDP of 4 percent in 2018 (Innovative Jordan n.d.), and an estimated total contribution of about 12 percent of GDP (INT@J 2018). Employment in the sector increased from approximately 18,000 employees in 2016 to 21,811 in 2018, just over 1 percent of the labor force. ICT sector revenues increased from JD 677 million in 2017 to JD 750 million in 2018 (a growth rate of 10.7 percent) (INT@J 2018), five times total GDP growth in the same year (1.9 percent).<sup>72</sup> Women accounted for about 33 percent of employment in the sector in 2018, above the national average (DoS 2018). Moreover, ICT services accounted for 5.7 percent of exports<sup>73</sup> and 21.6 percent of value added in 2017.<sup>74</sup> With a small domestic market, the local ICT sector can scale only through exports. IT export revenue in 2018 constituted 35 percent of total IT sector revenue (INT@J 2018).

Political stability, proximity to GCC markets, abundance of university graduates, and good infrastructure are competitive advantages for Jordan. Jordan can potentially provide quality ICT services to the region and generate employment in high-value jobs. Proximity is increasingly becoming a factor in location decisions, as companies seek solutions to time zone differences, cultural issues, and operational challenges. The decline of mega outsourcing deals in favor of lower-value deals has opened a larger segment of the market to smaller and niche providers based in nontraditional locations like Jordan.

The global growth of ICT is expected to be very buoyant. The ICT sector's turnover worldwide is around US\$5 trillion and is expected to reach US\$6 trillion by 2022. The sector is growing and will continue to grow at twice the rate of GDP growth as new technologies begin to account for a larger share of the market. A recent report conducted by Technavio, a global technology research and advisory company, produced prior to the onset of the COVID-19 pandemic, indicates that the global information technology outsourcing (ITO) market will grow at a CAGR of over four percent during the period 2018–22; this is likely to be even higher as a result of COVID-19. Furthermore, the emergence of the internet of things (IoT) is already contributing to overall market growth, and within 5–10 years new technologies such as robotics and augmented reality/virtual reality will also expand to represent a significant and growing share of total ICT spending, led by investments in the manufacturing and transport industries.

The demand for information technology outsourcing has been growing and evolving worldwide, and in the Middle East and North Africa region. The global business process outsourcing (BPO)/ITO market is expected to expand 11 percent annually to reach \$335 billion by 2024 (Market Research Future 2020). ITO is the use of service providers to deliver IT-reliant business processes, application services, and infrastructure solutions. ITO can provide huge benefits in productivity, prices, profits, and wages—a strong combination in a highly competitive world. Growth in ITO demand from clients in the Middle East and North Africa region are significant, most notably from GCC countries. There is strong growth potential in consumer, business, and government adoption of ICT in the region, where there is a need to catch up with the rest of the world. For example, spending on local business outsourcing has grown by 11.7 percent, from \$324 million in 2016 to \$363 million in 2017 (IDC 2017). The number is expected to hit \$562.8 million by 2021. In financial services, the region is severely underbanked, meaning there is potential to develop innovative technologies with localized content to provide access to financial transactions and other banking services.

Jordan enjoys a strong blend of qualities that make it an attractive destination for ITO and business process services globally. An IFC study (2016)<sup>75</sup> validated Jordan's potential for developing IT and IT-enabled services—namely, high-value-added knowledge process outsourcing, including prospects for scaling up the country's software development outsourcing services. It identified Jordan's value proposition as centering on the availability of an educated technical and nontechnical, multilingual, labor pool, good infrastructure, and a liberalized telecom sector. This largely untapped, skills intensive and high growth sector constitutes 30 percent of Jordan's IT/ IT-enabled services (ITES) exports. Jordan's highly developed education and health sectors provide it with advantages in this regard. Jordan's location—situated between East and West, just outside the European Union and the GCC borders—makes it an attractive nearshore destination. Jordan is closer to major ITO consumers in GCC countries than India, the Philippines, and Eastern Europe. Proximity to major markets and suppliers puts Jordan at an advantage as companies seek proximity to overcome challenges related to time zones and attempt to overcome operational difficulties in facilitating productive business interactions. Jordan's ICT sector has an opportunity to supply software solutions for the region's education, finance, and health sectors among others (GIZ 2019).

# FIGURE C.1. REGIONAL CENTERS OF INTERNATIONAL ENTERPRISES

# **Examples of Regional Centers of International Enterprises**



Regional Engineering, Technical, Development Hub and Call Center

• Staffed by a team of around 750 Jordanians highly qualified service team



Regional Hub serving EMEA in partnership with "Estarta",

 Staffed by a team of more than 500 Jordanians highly qualified service team, trained to deal with the most complex of cases.



Fourth Microsoft Global Customer Service and Support Hub for EMEA

 Staffed by a team of more than 150 Jordanians highly qualified service team, fluent in several languages and trained to deal with the most complex of cases.

Jordan has already made some excellent progress in ITO. Global giants such as Cisco, Expedia, Amazon, Microsoft, and Oracle have established operations in the country, recruiting hundreds of highly qualified Jordanians and training them to deal with complex cases around the globe (figure C.1). Local companies specializing in ITO and BPO have expanded their operations over the past decade to service regional and international clients. Examples include Aspire, which is specialized in ITO services and targets the US market (retains 275 Jordanian employees); Extensya, which provides support to Vodaphone, Saudi Airlines, MBC, and others (retains 1,700 Jordanian employees); and Crystal, which is a call center that supports regional operations (retains 1,000 Jordanian employees). The support of the Royal Court and the Crown Prince Foundation has helped develop the King Hussein Business Park, establish the Al Hussein Technical University, and attract major technology companies.

Jordan also has potential as a source of digital entrepreneurship and start-ups itself. Fostering a start-up and entrepreneurial ecosystem would support the creation and growth of smaller tech companies. Today the focus is on copying existing international business models (for example, Careem as a regional version of ride-sharing), but a broader ecosystem could be encouraged with the right support to develop innovative homegrown business models that address local community issues. This approach could also enhance regional development within Jordan and inclusiveness of job opportunities in the ICT sector. The government is already planning to introduce 80 business incubators across the country to help grow opportunities for entrepreneurs outside of Amman. These could be adapted to provide rapid skills enhancement, job matching, outsourcing, and entrepreneurship development services.

There are, however, real challenges to the growth of both ITO and digital entrepreneurship in Jordan, including issues regarding regulatory stability, work permits, and institutional setup of the sector, which this assessment will discuss in further detail. Although the efforts of the Royal Court and other major political players have been extremely helpful in attracting ITO companies, establishing a less ad hoc and more institutionalized approach to attracting tech investors is important and would involve resolving regulatory challenges and developing an enabling ecosystem. Other challenges including regulatory instability and lack of transparency, constraints that affect the private sector as a whole and are discussed earlier in this report. To overcome these challenges, many private businesses and investment funds register holding companies offshore and then register local subsidiaries for ease of doing business. Firms also face issues regarding obtaining foreign skilled-worker permits. Indeed, Jordan suffers from a major shortage in qualified software engineers that is hindering the spread of innovation, including in the software development outsourcing sector, digital content creation, and big data analytics.

High business costs are a significant challenge for BPO in Jordan, suggesting that the country needs to aim for ITO at higher technical levels. For lower-skilled BPO such as basic call center work, cost is a central concern for potential clients. Jordan is considerably more expensive than its major competitor, Egypt, according to BPO companies. A call center worker in Egypt costs about \$600 per month, but in Jordan the cost is about \$1,100 per month. For higher-level ITO, which requires greater technical knowledge and ability, Jordan's cost disadvantage is less likely to matter. Thus Jordan's growth prospects may be strongest in that higher-level ITO. Businesses including Aspire and Cisco are already doing this in Jordan.

Although the entrepreneurship ecosystem in Jordan has been growing over the past decade, mainly in urban areas, it faces a number of challenges to growth and connectedness. The Global Entrepreneurship Index 2018, which measures both the quality of entrepreneurship and the extent and depth of the supporting entrepreneurial ecosystem (score ranges from 0–100 percent), scored Jordan equal to the Arab region's average score of 37 percent. Jordan outperformed the region in product innovation, technology absorption, competition, start-up skills, and cultural support indicators. On the other hand, Jordan lagged in high growth, risk capital, risk acceptance, networking, and human capital indicators. The key priority for nurturing an effective entrepreneurship ecosystem is to support entrepreneurs through the processes of designing, launching, and running a new business. Support is also important for pre-entrepreneurship activities, including raising awareness of the possibility of entrepreneurship as a career choice.

Given this potential, but also the real challenges, the following assessment will analyze the state of a range of aspects of the digital ecosystem, from digital infrastructure to digital payments. The goal is to help shine a light on the prospects for growth in the ICT sector in general and in particular on how Jordan could (a) improve as an ITO location for major international technology companies and (b) foster a start-up and entrepreneurial ecosystem for the creation and growth of smaller tech companies.

# **GOVERNMENT STRATEGY**

The ICT sector has relatively significant engagement, regulation, and support from the government of Jordan. The Ministry of Digital Economy and Entrepreneurship (MoDEE, formerly Ministry of Information and Communications Technology) and the Telecommunications Regulatory Commission (TRC) are the main government bodies overseeing ICT development. The ministry oversees developing sector policies and legislation, increasing investment in the IT and postal sectors, and delivering the government's national broadband network (NBN), as well as creating and supporting deployment of e-government services. The TRC is intended to act as an independent jurisdictional body responsible for regulating the telecoms and the ICT sector, as well as the postal sector. It is also responsible for overseeing mobile operator licensing and spectrum allocation.

In 2016 Jordan produced an ambitious and comprehensive ICT development and digitization strategy, REACH2025, with a vision to transform the country into a digital economy and a regional IT center. It targets boosting ICT development to contribute an additional 3–4 percent to GDP, increasing sector revenues by between 25 and 30 percent, creating 130,000 to 150,000 new jobs, and establishing between 5,000 and 7,000 new businesses active in the digital economy. To get there, the strategy recommends many reforms—including improved access to finance, investor incentives, and tax exemptions—many of which have been adopted recently. The plan's core elements include smart specialization and growth, public sector innovation, start-up and entrepreneurship support, skills development, improvements to the business environment, and the creation of smart digital infrastructure. REACH2025 was incorporated into the government's midterm economic development agenda, the Jordan Economic Growth Plan (JEGP), which was published in mid-2017 and runs from 2018 to 2022.<sup>77</sup>

Private sector ICT associations and bodies also play a major role in Jordan's ICT ecosystem, and the government has clearly acknowledged the importance of the private sector in driving growth in the sector. A wave of liberalization reforms launched in 1999, and concurrent adoption of progressive ICT development policies, saw the creation of the Information Technology Association of Jordan (INT@J), which plays a supportive role in the formation of national ICT strategies, data collection, and industry lobbying. In addition, Jordan has established Oasis500, a government-backed entrepreneur support organization that has grown to become one of the largest start-up seed investors in the region. Moreover, Jordan's National Information System has recommended a re-examination of current e-government initiatives in order to identify new modalities to attract private sector investment in developing and managing e-government services. Similarly, the JEGP reports that public-private partnerships (PPPs) will be essential for rehabilitating post offices and launching knowledge stations, which will provide financial and social support and a range of e-commerce and e-government services.

# Digital Financial Services Digital Skills Digital Skills Digital Skills Digital Platforms Digital Financial Services Digital Financial Skills Digital Financial Skills Digital Financial Skills Digital Financial Skills Digital Financial Skills

# FIGURE C.2. FIVE PILLARS OF THE DIGITAL ECONOMY

The remainder of this assessment follows the framework proposed in the World Bank Group's MENA Digital Economy Benchmarking report, which identifies five pillars of the digital economy—namely, digital infrastructure, digital entrepreneurship, digital skills, digital platforms, and digital financial services (figure C.2). The report benchmarks performance along these five pillars according to a set of indicators that reflect key components that make up each pillar. Figure C.3 summarizes the assessments for Jordan.

# FIGURE C.3. BENCHMARKING ITC IN JORDAN

Given the data available, Jordan appears to be **Advanced** in the **Digital Infrastructure** pillar



This is based on country performance within 16 indicators across topics related to: Broadband Access, Quality, Affordability. Market Competition, Government Ownership, and Legal Frameworks

Given the data available, Jordan appears to be **Advanced** in the **Digital Skills** pillar



This is based on country performance within 9 indicators across topics related to: Internet Use, Social Media, Digital Skills and Skills.

Given the data available, Jordan appears to be **Emerging** in the **Digital Financial Services** pillar



This is based on country performance within  $\eta$  indicators across topics related to: Payments and Legal Frameworks.

Source: World Bank.

Given the data available, Jordan appears to be **Advanced** in the **Digital Entrepreneurship** pillar



This is based on country performance within 7 indicators across topics related to: Access to Finance, Entrepreneurship, and Technology Adoption.

Given the data available, Jordan appears to be **Advanced** in the **Digital Platform** pillar



This is based on country performance within 19 indicators across topics related to: Government Platforms, Private Sector Platforms and Logistics.

# **DIGITAL INFRASTRUCTURE**

Jordan's digital infrastructure has both private and public components and has evolved overtime. Quality, reliable, and cost-competitive digital infrastructure is the basis upon which the development of the digital economy is built. Substantial liberalization happened in Jordan between 1999 and 2004 with private sector investment in telecom services permitted for the first time. The Telecommunications Corporation—now operating as the Jordan Telecom Group (JTG)—was privatized in phases ending in 2000. The government holds a minority stake today, with over 50 percent held by France's Orange. JTG is branded as Orange Jordan and stands as the kingdom's second-largest mobile operator, with a 31 percent market share. It is the only integrated operator offering fixed, mobile, wholesale, and internet services and was listed on the Amman Stock Exchange in 2002. Orange is one of three mobile operators active in the market. Zain Jordan is the largest by market share, with 40 percent, and was the first firm to introduce global system for mobile (GSM) mobile services in 1995, following the entrance of Kuwait's Zain Group the previous year. Rounding out the big three is Umniah, a subsidiary of Bahrain's Batelco. It was the last to enter the market, launching operations in 2005.

Jordan is also home to 16 internet service providers. Orange remains a major player, with a strong position in international gateway and local landline services, and all providers use the company's copper network to attain last-mile connectivity, especially for asymmetric digital subscriber line (ADSL) services. Orange launched fiber-to-the-home internet services in October 2014, followed by Zain in November 2014.

The government has also played a large role in the provision of broadband nationally through the National Broadband Network. The NBN aims to connect different health care, public, and educational entities through fiber optic networks. Originally launched in 2003 as a private governmental network to expand online education, health, and public service delivery, the NBN has not been completed as a result of fiscal constraints. As of 2019, the government has invested about US\$150 million to build and expand the network, which currently connects 1,361 sites, including 930 schools, 315 governmental entities, and 116 health care centers. Further expansion is currently under procurement by the government in the north and middle regions of Jordan. The government plans to add 840 km of backbone network and 600 km of access network by end of 2021, connecting a total of 3,268 public sector sites (MoDEE 2019).

The NBN rollout is currently expected by end of 2022. In its final stage, it will feature 2,840 kilometers of ring fiber cable, 4,200 kilometers of access fiber cable, and 130 aggregation sites. The National Information System notes three key points regarding the future of the NBN. First, the creation of large-scale demand and use of e-government services is necessary to make private investment in the NBN economically feasible. Second, a partial or complete handover to the private sector will reduce or eliminate the government's operational costs. Third, because the NBN holds significant excess capacity, the government is undertaking a study to evaluate the feasibility of commercializing the spare capacity through a PPP model, which should make it attractive to the private sector (DPF 2 2019). This step opens the possibility that in the future the NBN could become an independent broadband wholesaler. The NBN is connected to over 3,000 government entities (mostly schools), making it relatively cost-effective to extend lines from these entities to nearby households using aerial fiber cables. This offer of fiber to the household could then be sold wholesale to private service providers looking to serve households.

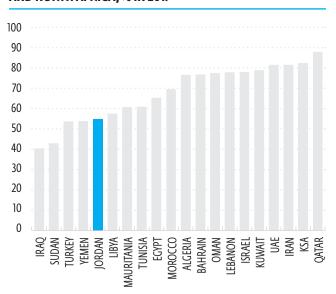
The expansion and commercial opening of the NBN would increase competition in the fixed broadband wholesale market. That development would lead to lower prices for end-users and a higher fixed broadband penetration rate at better quality across the country, including in secondary cities and villages. It would allow retail internet service providers (ISPs) to provide internet and ICT services outside the main cities, with a tangible impact on the IT industry in Jordan. Furthermore, fiber optic networks are critical for efficient operations of 3G/4G and upcoming 5G networks as they support the required bandwidth levels for operations. Access to high-speed broadband services may also broaden the employment base for people whose mobility is restricted by family, health, or other considerations. The access will promote self-employment through gig economy platforms as well as access to online business opportunities, as well as promoting e-commerce and digital trade.

Public and private investments in mobile and broadband infrastructure have enabled an increase in access to the internet. The use of the internet by individuals in Jordan is above the world average (53.4 percent, compared with 44 percent globally). Similarly, Jordan had 14.7 million mobile phone subscribers in Jordan in 2017, compared with 11 million in 2014, while fixed-line subscribers fell from 370,000 to 350,000 over the same period, according to telecom research firm BuddeCom. Broadband subscribership rose by 170 percent between 2014 and 2017 to 4.1 million, and BuddeCom predicts that 4G penetration could reach 70 percent by 2020, with 3G penetration at 70 percent in 2017.

# Challenges and recommendations for digital infrastructure

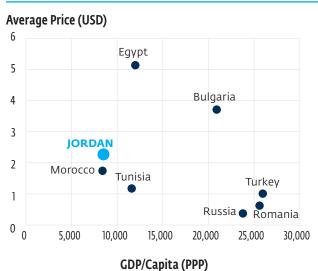
Despite the investments made, both mobile and fixed internet in Jordan are relatively expensive. Jordan's mobile internet affordability scores lower than Egypt, Morocco, Tunisia, Turkey, Russia, Bulgaria, Romania, or the United Arab Emirates on the GMSA mobile connectivity index (figure C.4). Indeed, it was one of the worst performers in the Middle East and North Africa region. Jordan's fixed broadband costs per month are also higher than those found in countries such as Tunisia, Russia, Romania, and Turkey, despite a lower GDP per capita (figure C.5).

FIGURE C.4. MOBILE CONNECTIVITY IN THE MIDDLE EAST AND NORTH AFRICA, % IN 2017



Source: GMSA Mobile Connectivity Index.

FIGURE C.5. AVERAGE COST PER MBPS IN US\$ A MONTH



Source: BRDRC Continental and Cable.co.uk 2017.

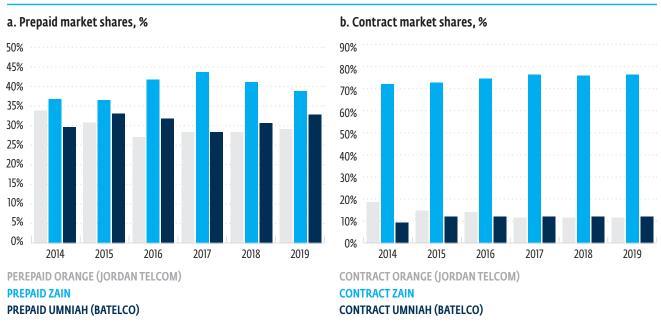
Note: GDP = gross domestic product; Mbps = megabits per second; PPP = purchasing power parity.

These relatively high prices would be more justified if internet speeds were high; they are not. Mobile internet speeds are below the global average, at 14.4 megabits per second (Mbps) download average, compared with 23.5 Mbps globally in June 2018. Jordan also has a fixed-broadband download speed (18 Mbps) that is significantly lower than the global average (46.1 Mbps download average in June 2018) (World Bank 2019b).

One source of the relatively high costs is substantial telecom taxes. Telecom operators have experienced years of successive tax increases beginning in July 2012, when the TRC announced plans to raise the industry's taxes and doubled revenue-sharing tax rates from 10 percent to 20 percent. The sector was already subject to a 16 percent sales tax and a 12 percent mobile subscription tax, and all operators pay a 24 percent income tax rate. The new framework has been in effect since August 2013. In May 2015 Deloitte reported that Jordan has some of the highest mobile taxes internationally, with taxes comprising over 35 percent of the total cost of mobile ownership. In addition, the special tax on prepaid and postpaid mobile subscriptions also increased from 24 percent to 26 percent. Jordan's substantial fiscal constraints have resulted in a series of tax increases, including the scrapping of tax exemptions for fixed and mobile internet services, effectively doubling the tax rate for these services to 16 percent, as well as a JD 2.60 (US\$3.67) tax charged on the purchase of every prepaid and postpaid SIM card, as of February 15, 2017.

Another underlying cause of high prices and slow speeds is the limited competition in both the broadband and mobile markets. Concentration in the market is high, with a Herfindahl Hirshman Index (HHI) above 6,000 for contract and postpaid services. It is striking that market shares for mobile providers have been stable through time, for both contract and prepaid segments (Figure C.8).<sup>78</sup> This stability, without changes in market leadership, could indicate a lack of competitiveness. Such a pattern would not be expected in markets characterized by fast-changing technologies if they were functioning under competitive dynamics.

FIGURE C.8. MARKET SHARES (PREPAID AND CONTRACT SERVICES, 2014–19)



Source: Markets and Competition Policy Team based on GSMA Intelligence data.

Some of the lack of competition in the sector may be due to a lack of enforcement of regulations that are in place, such as number portability. Number portability is a key measure to reduce switching costs to consumers and boost rivalry among providers. Although technically on the books since 2006, it is still not operational in Jordan. This situation translates into a substantial advantage for incumbent providers. Technical difficulties are not the barrier, because number portability is now commonplace in many markets worldwide.

Regulations that establish rights-of-passage and infrastructure sharing are similarly not enforced. The player that inherited the state-owned fixed infrastructure dominates the fixed-line data and can stall the entry of competitors, for example by denying access to its infrastructure or demanding usage fees that render competition unfeasible.<sup>79</sup> Margin squeeze is also possible in the current environment because of the lack of local loop unbundling and high interconnection rates.

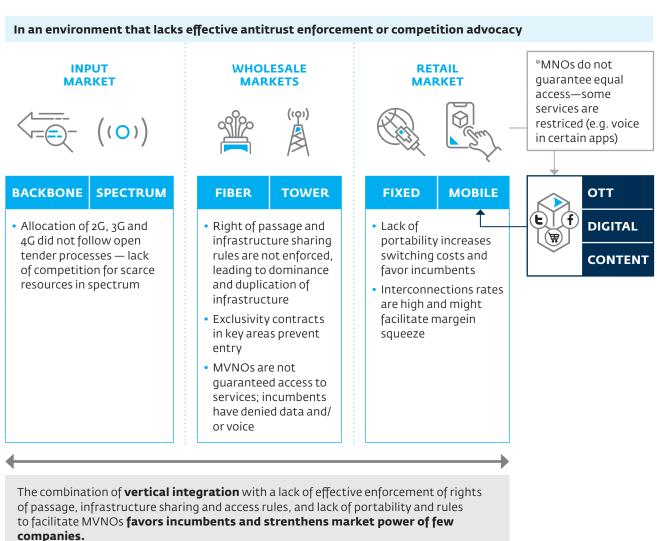
Another reflection of the lack of competition in the ICT market is the absence of bids for the spectrum auctions designed for 3G and 4G, despite the active presence of three large international players in Jordan. Spectrum was instead allocated through negotiations between market players and the government. Initial consultations for the 5G spectrum indicates that a similar pattern is expected—incumbents want to get their 4G licenses extended to 5G rather than participate in an open and competitive selection process.<sup>80</sup>

Over-the-top providers (OTTs) and mobile virtual network operators (MVNO) receive different treatment from that of providers of retail telecommunications services. Certain voice and video services offered by OTTs are not supported by mobile network operators (MNOs), with no explanation or technical reasons given. OTTs and MVNOs are services that may compete directly with the MNO services. In other countries, contracts between OTTs and MNOs provide for payment for connection. This is not occurring naturally in Jordan, so regulation may be needed. MVNOs are similarly not guaranteed access to the infrastructure they need to offer their services. The only company that has tried such a model in Jordan could not survive: two out of the three providers simply denied access. The third provider allowed access only to voice; without data, the MVNO could not compete effectively.

Price controls can be applied to all services, including retail services. According to the Telecom Law, the Telecommunications Regulatory Commission (TRC) has the power to fix prices of services, including for retail. <sup>81</sup> The law establishes that market players may not increase the charges or prices of their services except after placing an announcement in two local daily newspapers for a period not less than one month. Changes cannot exceed what is stated in the terms of the license agreement, instructions, or decisions issued by the TRC. In all cases, the licensee must inform the TRC of any amendments made to fees and prices. The current regulation does not differentiate between the prices that should be regulated, such as between interconnection rates because of their nature as a monopoly, and those that should follow market dynamics, such as retail prices offered under competition.

MoDEE and the Competition Directorate<sup>82</sup> have the mandate to identify and sanction anticompetitive behavior in the sector, but they have not chosen to do so.<sup>83</sup> The Competition Directorate has the mandate to advocate for pro-=competition interventions in the economy, including improving the regulatory framework affecting the telecommunications value chain. Figure C.9 summarizes conduct and regulations currently distorting market dynamics.

#### **FIGURE C.9. ICT MARKET DISTORTIONS**



companies.

Regulations are needed, but should be directed at solving market failures in the least restrictive manner

Source: Markets and Competition Policy Team for the Jordan CPSD. Note: MVNOs = mobile virtual network operators.

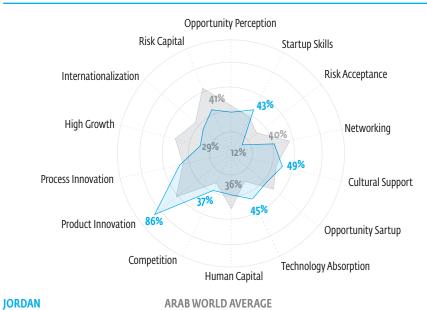
#### DIGITAL ENTREPRENEURSHIP ENVIRONMENT

A successful start-up can have an outsized impact on economic growth. Start-up companies have the potential to drive employment, particularly high-quality jobs, and to significantly boost GDP. In February 2017, the US International Trade Administration (ITA) noted that 600 active technology firms were operating in Jordan, of which 300 were start-ups. Those firms contributed 53 percent of total new jobs in Jordan from 2010 to 2013, even though they represented only 9 percent of all SMEs that employed more than 10 people. Jobs in start-ups are often of high quality, given the amount of training start-ups are willing to offer to get the right talent

Jordan's entrepreneurship ecosystem has been moving up the ranks in the Global Entrepreneurship Index, an annual index that measures the health of the entrepreneurship ecosystems in each of 137 countries and then ranks their performances. The index methodology collects data on the entrepreneurial attitudes, abilities, and aspirations of the local population and then weighs those against the prevailing social and economic "infrastructure," including aspects such as broadband connectivity and transport links to external markets. Jordan was ranked 73 in 2014 but has been steadily climbing up the ranks since 2014; it reached a rank of 49 in 2018. This marked improvement has been fueled in part by the establishment of the Innovative Startups and SMEs Fund (ISSF), a private sector—managed fund that invests in innovative start-ups and early-stage SMEs.<sup>84</sup> The ISSF objective is to provide investment support to partner investors and to improve the quality and variety of services provided by intermediaries and networks dedicated to the creation of deal-flow in Jordan's ecosystem.

Although the entrepreneurship ecosystem in Jordan has improved significantly over the past decade, particularly in urban areas, key challenges hinder its growth and connectedness. The Global Entrepreneurship Index 2018 measure of both the quality of entrepreneurship and the extent and depth of the supporting entrepreneurial ecosystem (from 0-100 percent), scored Jordan equal to the Arab regional average of 37 percent. Jordan outperforms the region in product innovation, technology absorption, competition, start-up skills, and cultural support indicators. On the other hand, Jordan lags in high growth, risk capital, risk acceptance, networking, and human capital indicators. The key priority for nurturing an effective entrepreneurship ecosystem is to support entrepreneurs through the processes of designing, launching, and running a new business. The Central Bank of Jordan has been an important player in this area and has set up a Sandbox platform to which start-ups and private companies can connect to test innovative payment solutions and service delivery. Nurturing the entrepreneurship ecosystem also requires supporting pre-entrepreneurship activities, such as raising awareness of the possibility of entrepreneurship as a career choice and improving the chances that individuals will choose it as a career by providing effective support systems.





Source: Global Entreprenurial Index 2018.

As with other business owners, the unpredictability of the business environment deters digital entrepreneurs. To overcome this challenge, some private businesses and investment funds register holding companies offshore and then register local subsidiaries for ease of doing business. Jordan has recently taken favorable steps by approving the insolvency and secured transaction laws in the Parliament, amending the Companies Law to allow for venture capital registration, and launching a unified, modern and notice-based collateral registry. However, additional steps are needed to develop a legal and regulatory environment that is friendly to entrepreneurs.

The growth of digital entrepreneurship in Jordan is also hampered by the loss of businesses to the Gulf region. Jordan's market is small, with relatively limited access to growth capital. Because Jordan is a traditionally hierarchical society, it can be difficult for a business to break into new networks without personal contacts. This yields tremendous benefits to well-connected entrepreneurs but constrains (and may even discourage) aspiring entrepreneurs without personal connections to rely on. Partly for this reason, entrepreneurs often seek to expand to wider regional markets for growth. This search can often lead to entrepreneurs to relocate to the United Arab Emirates, attracted by very strong incentives such as access to venture capital, tax breaks, and sometimes free office space. For example, following Amazon's acquisition of Souq.com in 2017 for US\$650 million, Souq.com's front-end and sales team moved to Dubai. To date, however, the growing 500-person engineering team is still based in Jordan.

A recent World Bank-supported survey of 230 Jordanian enterprises—the vast majority of which were in the ICT sector or were in ICT-enabled areas such as e-commerce—also gave a sense of characteristics and challenges facing digital entrepreneurs in Jordan. Notably, the founders of many digital start-ups and businesses in Jordan are not as young or inexperienced as sometimes assumed, with 40 percent of them between the ages of 25 and 34, and 38 percent between the ages of 35 and 44. Almost all hold at least a bachelor's degree, and a quarter also hold a graduate degree. Fully 90 percent had prior experience in the private sector, and almost three-quarters had mid-level or senior-level management experience. Nearly two-thirds of the entrepreneurs indicated that they had established a business before, and only one-third of those had managed to retain it, indicating a strong tendency to take business risks. Almost 80 percent of founders were male.

These ICT entrepreneurs identified enabling a friendly business environment as the most important contribution that government could provide the sector. Almost two-thirds of firms considered this to be a critical role for government. On the flip side, the entrepreneurs were most concerned with the impact of the tax law and the laws governing investments in start-ups. In line with concerns from other sectors, ICT entrepreneurs complained about vague regulations that were applied inconsistently or unpredictably.

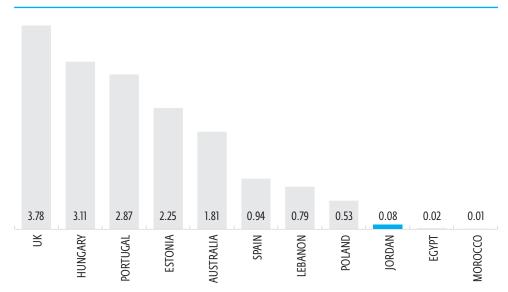


FIGURE C.11. SEED VENTURE CAPITAL INVESTMENT RATE PER GDP

Access to finance was seen as a significant challenge for ICT entrepreneurs. In particular, access to venture capital (VC) funding was considered the most difficult. Overall, the private equity and venture capital industry is underdeveloped. The ratio of VC investments to GDP is below 0.1 percent in Jordan (figure C.11). The US\$50,000 to \$200,000 stage was seen to have the biggest funding gap, with focus groups suggesting that it was often easier and quicker to access finance from the region rather than from within Jordan. Banks tended to be focused on existing metrics rather than on growth potential, and so very few ICT entrepreneurs reported even approaching banks for financing. Respondents identified angel investors, venture capital firms, and commercial banks as the three forms of support to the entrepreneurship system that they had the worst experience with.

The main challenge in terms of human capital that ICT entrepreneurs noted was retaining talent. Finding good technical talent was a significant challenge, although business- and management-level talent was a little less difficult to find. Retention difficulties seem to be driven in part by the brain drain of technical talent leaving for opportunities elsewhere in the region. However, for Jordanian start-ups to hire in talent from the region or beyond is much more difficult because of the country's restrictive criteria for hiring foreigners. Finally, the entrepreneurs surveyed rated the provision of shared services, such as discounted web hosting and legal and accounting services, as a critical area in which assistance is needed.

## **DIGITAL SKILLS**

Too many ICT graduates in Jordan do not find employment in the sector—or at all. Of the 8,000 annual graduates with specialization in ICT, only about 600 ICT graduates work in their field (7.5 percent). This problem may indicate a poor understanding in academic settings of actual market needs and a general weakness in the preparedness of graduates for work. However, it is also undoubtedly linked to a lack of overall demand for ICT workers from employers, combined with significant demand for Jordanian ICT workers in the Gulf, including some (although fewer) fresh graduates. This suggests that skills in themselves may not be as significant a constraint as the lack of job opportunities in the sector.

Nevertheless, despite producing a large and growing number of university graduates in computer science, mathematics, and engineering fields, many university programs in Jordan appear not to be adequately preparing graduates for the market. Graduates remain ill equipped with the specialized skills needed to thrive in an advanced digital economy. The findings of a 2016 labor market study conducted by the ICT Association of Jordan (INT@J) revealed five core weaknesses underlying the skills mismatch: (a) an outdated university curriculum; (b) lack of soft skills; (c) lack of awareness of and experience with global technology trends; (d) little to no practical hands-on experience; and (e) brain drain to neighboring countries. Furthermore, recent research of a leading Technical and Vocational Education and Training (TVET) provider in Jordan, Luminus, revealed that a mix of essential technical, English, and soft skills is needed to better equip youth for future jobs. Technical skills carry more importance and include Python programming, artificial intelligence, IoT, and cloud computing, among others. Soft skills include accountability, adaptability, communications, and creative thinking, among others. A further study by Luminus in January 2019 identified similar problems, adding that despite being outdated, curricula are difficult to update because of government rules and a combersome compliance and accreditiation process.

A two-pronged approach is required to address the gaps in the supply of digital skills: (a) immediate attention to the stock of educated youth with skills gaps and (b) a systematic focus on foundational issues in the education system that result in a flow of unprepared students. Innovative rapid skills enhancement models to train a few hundred graduates every year on skills for future jobs have been piloted by MoDEE and have produced promising preliminary results. These models represent a nimble approach to closing the skills gap among the stock of youth in the job market and could be part of the ongoing offering of skills-development programs to provide rapid response to the changing set of skills needed by the digital technologies sector. The models include ReBootKamp (RbK), Al-Hussein Technical University, Luminus, SAGO Training and Education, and others. Graduates from these programs have been rapidly absorbed by the private sector at a placement rate of more than 80 percent. In addition, some large incoming FDIs in the sector, such as Expedia and Webhelp, have paid the programs to train their newly recruited cohorts of staff. Scaling up these models in a sustainable manner remains a challenge but also presents an opportunity for development. Also, these models should inform the content of university curricula as well as providing an opportunity for PPPs. It may be wise also to consider whether employers are demanding graduates with a full-length university degree or whether there may be opportunities to meet market demand with shorter, more focused programs.

Finally, there is an opportunity to build relevant skills through the government's network of about 150 "knowledge stations" distributed across Jordan that operate under the MoDEE. A World Bank project under preparation aims to leverage these stations to create training and business hubs in unprivileged communities in Jordan. The stations would provide technical and soft skills training and coaching and coworking space facilities to Syrian and Jordanian youth to (a) work as employees for high-growth companies (physically or remotely), (b) provide back-office support through outsourcing units at the hubs, (c) work as freelancers on global portals (like Upwork and others) at a hub's coworking space, and (d) pitch to incubators, accelerators, and investors to receive mentorship, financing for their projects, or both. The government would be encouraged to partner with private entities (through concession agreements) to manage these hubs.

## **DIGITAL PLATFORMS**

Digital platforms can support greater digital exchange, transaction, and access to public and private services online; this includes e-government, national ID coverage, and private sector platforms, among others. The government has made significant gains in digitally transforming service delivery, including the development of a consolidated government portal (Jordan.gov.jo) that offers access to 240+ e-services to citizens and businesses, and development of a shared services infrastructure to reduce redundancies in systems and capital investments in ICT. Furthermore, MoDEE launched its unified mobile application for service delivery, Sanad, in February 2020. This single sign-on application currently includes 100+ e-services for eight government entities and is expected to offer 395 services by the end of 2020. Although citizens can access several e-services on the service portal, many of the services remain informational only at this stage. Some are transactional in the sense that the front end of the service is automated, but the back end of service processing and delivery is still completed manually. MoDEE is also enhancing the GBUS platform, which allows governmental entities to exchange and verify data, in order to ensure the interoperability and delivery of e-services.

The government of Jordan is keen to rapidly expand e-government services by partnering with the private sector on the development of applications, services, and solutions. By including the private sector in the transformation, Jordan can also strengthen national capacity, advance the local tech ecosystem, create economic opportunities, and support public sector innovations. Furthermore, commercializing some government services may foster new revenue streams while improving the experience for end-users, businesses, and investors, leading to job growth and opportunity.

With respect to the private sector platform, the Jordanian labor market is not realizing the full potential of using the gig economy to access economic opportunities in various tech and nontech sectors. New evidence is consistent with the positive effects of platform growth on overall employment and small negative or insignificant effects on dependent employment and wages, according to the OECD (2019). The emergence of gig economy platforms could raise consumer welfare, productivity, and overall employment (OECD 2019). According to McKinsey (2016), gig economy work could contribute to growth and economic dynamism with substantial pluses in terms of mobilizing more human capital and creating a more efficient labor market.

## **DIGITAL FINANCIAL SERVICES**

The digital payments ecosystem in Jordan is relatively new, and there is significant room for growth. The government of Jordan has committed to increasing the percentage of the population making or receiving digital payments from 33 percent to 50 percent by 2020 and to digitizing 80 percent of government-to-citizens payments by 2021. Jordan does have good infrastructure to support a strong payments system, with wide-reaching GSM coverage and smartphone penetration of 85 percent (Jordan Telecom Regulatory Commission 2019). Moreover, the CBJ has created an enabling regulatory and policy environment to overcome challenges faced in the sector. Jordan has relatively low, but gradually increasing, financial inclusion, although mobile wallets are only a small part of the financial ecosystem. The CBJ indicated that 33 percent of adults had a formal financial services account in 2017, a significant improvement from 25 percent in 2014, although only 1 percent of these were mobile wallets. By the end of 2018, Jordan Payments & Clearing Company (JoPACC) estimated that 7 percent of the population had a mobile wallet, although many of these were not active.

Difficulties with the agent network for mobile money are a reason for slow uptake of digital payments. There were only 901 registered agents at the end of 2018, down from almost 1,300 in 2017. Thus only about 15 are available per 100,000 adults, well below the 22 in other developing countries at a similar stage of maturity of the mobile money market. Payment service providers (PSPs) have not invested significantly in extending their agent networks and may also be paying commissions that are too low for the business model to work for many agents. Jordan also lacks regular retail outlets with mobile payment options at points of sale. Thus mobile wallets operate primarily in competition with automated teller machines (ATMs) and banks as a cash-in, cash-out services rather than being used to pay for day-to-day purchases without using cash at all. The CBJ considers the development of digital options like mobile money at points of sale a critical component of developing the mobile money sector. Nevertheless, while many Jordanians still do not have bank accounts, consumers are far more likely to have bank accounts in urban areas, where there are also strong ATM networks and wider access to card-based point-of-sale devices. Many of the most likely and highvalue customers already have access to a relatively well functioning banking sector that provides almost all the same services. In addition, the CBJ has recently required banks to offer basic bank accounts to low-income households with lower fees. This new source may also generate competition for PSPs even among low-income users, although the enthusiasm of banks to provide basic bank accounts remains to be seen.

The market for mobile payments is fragmented, with five licensed PSPs existing for some time and two more about to enter. Given the lack of outlets and shops that provide digital point of sale, there is also a lack of use cases beyond cash-in, cash-out services. eFAWATEER.com also competes with mobile wallets on bill payments. PSPs often rely on exchange houses as agents; this may not be an effective long-term approach, however, as exchange houses compete with mobile wallets for both over-the-counter bill payments and domestic person-to-person transfers.

In order to generate other use cases for mobile money that could help to drive up the volume of transactions, the government has embarked on a number of initiatives. These include using mobile money for national aid payments and bread subsidies (through the National Aid Fund), transportation payments (Greater Amman Municipality and Ministry of Transport), and health records and billing (Ministry of Health). The government has also implemented overarching digital infrastructure projects that act as an enabler for digitization of government payments, including nationwide identification and authentication, secure networking, and key payment system platforms. Although these initiatives are likely to help deepen use of the ecosystem, aid beneficiaries will not be high-volume or value users of mobile wallets. And so the most promising use case for driving up usage appears to be transport, in which rider might pay directly for buses from their mobile wallets. Efforts to digitize the transport sector have begun with a pilot in Jerash.

MoDEE has recently started the development process of the front-end solution to provide frontfacing citizens with diverse options and tools to make payments digitally. This project builds on the existing robust back-end system called eFAWATEER.com, which is an integration platform (electronic bill presentation and payment) launched in 2014 by the CBJ and operated by MadfooatCom. Front-end solutions will support the Ministry of Health, Ministry of Transport, Ministry of Finance, Income and Sales Tax Department, and others in enhancing their internal payment systems and processes as part of their introduction of e-services.

Some evidence shows alternative and innovative financial payments options are entering the market. A March 2016 report in online publication *Cryptocoin* News noted that several financial technology businesses, such as Emerging Markets Payments, GreenWallet, and MadfooatCom were already offering mobile financial services in Jordan, while PayFellow and Middle East Payment Services have been active in secure e-payment processing. Peer-to-peer (P2P) lending platforms, including Islamic P2P lending start-up liwwa, also offer alternative financing channels for small businesses and entrepreneurs, further supporting improved financial inclusion.

The set of recommendations for the ICT sector are included in the ICT chapter in the main body of the Report.

# APPENDIX D. E-COMMERCE LOGISTICS HUB

#### **Background**

The original attempt to develop a major logistics hub in the Aqaba Special Economic Zone (ASEZ) had limited success for various reasons, not the least of which were the economic climate at the time the project was proposed, the limited connectivity provided by Aqaba seaport and airport, and the growing importance of Dubai as a center for distribution activities for regional and international manufacturers and brands. Although significant reforms were introduced, investors had insufficient interest, and a growing number of new zones were competing for available funds. Since that time, ASEZ has succeeded in developing a smaller logistics hub, the Aqaba Logistics Village. However, future opportunities for growth in traditional logistics services are limited and margins are decreasing.

Over the past decade, the demand for value-added logistics services in international trade has changed dramatically. The principal causes for this change have been

- Migration of value-added activities away from intermediate hubs toward the beginning and end of the international supply chains, and
- Growth in e-commerce and, with it, a different set of demands.

The nature of this demand continues to change with the emergence of blockchains to document transactions and the increasing use of e-booking to build and manage supply chains.

# **Proposed Initiative**

In response to these changes, it is proposed to develop a commercially managed logistics hub similar to that originally envisaged for ASEZ but with

- Focus on modern trade, including the various forms of e-commerce and complementary physical value-added logistic services,
- Use of blockchains to manage transactions and, equally important, to provide traceability for traded goods,
- Simplified regulatory framework that is not only competitive with other regional hubs but can also respond to the fast-moving changes in demand, and
- Value proposition comparable to that available in Dubai.

This hub would take advantage of the ongoing customs reforms and e-governance initiatives, especially those involving the other government organizations involved in regulating trade.

Jordan has a number of attributes that would enable it to succeed in this increasingly competitive business. These include

- Proven domestic expertise in e-commerce,
- Rapidly evolving capacity in the area of modern warehousing and value-added logistics services,
- Modern container terminal with reasonable connectivity involving both direct and feeder eastbound and westbound services, and
- Evolving program of trade facilitation, including
  - Digital processing systems to expedite cargo shipments and clearance including e-booking services,
  - Single window for cargo clearing linked to all relevant government agencies,
  - Pre-arrival submission of electronic documentation and precleanse of cargo, and
  - Advanced risk management to limit physical inspections.

These attributes would need to be complemented by

- Coordinated effort of the relevant government agencies
- Improved access to modern financial services for trade
- Emphasis on innovation rather than regulation
- Transactions occurring within the hub to be treated as offshore activities.

#### **The Market**

The services provided in the enclave would focus on e-commerce and modern warehousing; these could be provided to various market opportunities, including

- Business-to-consumer (B2C) and business-to-business (B2B) transactions for imports that
  - Support development of modern retail involving Jordanian businesses, including kitting, bundling, and so on
  - Improve the distribution of goods imported by ocean
- B2B transactions for exports that
  - Open new markets for medium-sized producers of equipment and other exportable products that are shipped primarily by ocean
- Reverse logistics services for e-commerce and brick-and-mortar retail as well as producers of traded goods that include
  - Redistribution and sale of returned goods
  - Sale or disposal of excess inventory
  - Repairing/replacing damaged goods

While this hub would require capital investments in modern warehousing services and efficient transport connections, most of the investment would be in developing systems to manage transactions and the related back-office services.

Because these activities are scalable, the hub would begin by serving the Jordanian market but quickly expand to serve the broader regional market. The financial activities would remain centered in the special economic zone, but there would be opportunities to develop physical services in satellite facilities throughout the region in a manner similar to that characterized by the development of Amazon warehouses.

## **Benefits and Risks**

The anticipated benefits from such an initiative include

- Introduction of reforms in trade and commerce that would serves as a model for modernization of the economy and the rest of the country
- Generation of new business activity by offering economies of scale and increased efficiency despite the relatively small volume of Jordan's trade in consumer and intermediate goods
- Improved internal distribution of goods
- Increased trade in logistics services
- Increased employment in information technology and modern logistics
- Simplified collection of duties and taxes

The financial risks to the government would be limited because the development of the hub would be funded by the private sector. The risks associated with smuggling and security would be mitigated through a balance of improved monitoring using blockchain and other digital techniques, as well as advanced detection technologies.

#### **Next Steps**

The next steps required to establish a competitive hub are

- Conduct a market study of both domestic and regional e-commerce activities
- Promote the concept to potential locators, both regional and international
- Survey the ASEZ for available land with good access to the port and road transport
- Expedite introduction of proposed customs reforms
- Review rules to reduce conflicting regulations, simplify procedures, and provide a business environment comparable to that in competing hub

# **NOTES**

- 1 UNESCO World Heritage sites are Petra; Um er-Rasas, a Roman settlement dating to the third century CE; Quseir Amra, an eighth-century desert castle; the desert wilderness of Wadi Rum; and Bethany beyond the Jordan, the site of Jesus's baptism.
- "Total contribution of tourism includes direct contributions and wider impacts on the economy such as travel and tourism investments spending, government spending that helps travel and tourism sector such as tourism marketing and promotion, and domestic supply chain purchases by sectors directly dealing with tourists." "Direct contribution includes total spending within a country on travel and tourism by residents and non-residents for business and leisure and spending by government on travel and tourism services directly linked to visitors such as museums." See the WTTC website at <a href="https://www.wttc.org/-/media/files/reports/economic-impact-research/countries-2017/jordan2017">https://www.wttc.org/-/media/files/reports/economic-impact-research/countries-2017/jordan2017</a>.
- 3 MoTA 2018. Selected annual data indicators for 2018 activity in Q4 had not been finalized by the government of Jordan and thus were partially estimated
- 4 MoTA, DoS and USAID; Jordan International Visitor Survey, 2017.
- 5 Jordan Ministry of Tourism and Antiquities, Department of Statistics (DoS) and USAID (2018). Jordan Tourism Satellite Account (TSA) 2016.
- 6 Includes capital investment spending by all industries directly involved in travel and tourism. This also constitutes investment spending by other industries on specific tourism assets such as new visitor accommodations and passenger transport equipment, as well as restaurants and leisure facilities for specific tourism use.
- 7 The tourism sector in Jordan consists of a diversity of businesses that are part of the country's tourism ecosystem. Tourism resources are those endowments of Jordan that can be developed into productive assets. In contrast, assets indicate developed and economically productive resources. The categories for tourism services, accommodations, and restaurants (that is, food and beverages) comprise 90 percent of registered businesses in the sector. These, combined with attractions, amenities, and promotion, compose the country's tourism value chain.
- 8 When compared with regional competitors, Jordan scores well on safety and security and prioritization of travel. Jordan is recognized by governments and industry for maintaining a high level of security, ranking 38th globally by the WTTC (2017). Over the past decade, the overall impact of terrorism on tourism has been smaller than in neighboring countries, a circumstance that has helped Jordan considerably in maintaining the resilience of its international tourism arrivals.
- 9 The food and beverage subsector comprises restaurants, cafés, pubs, and other entities serving food and beverages.
- 10 From 1,014 in 2016 to 935 in 2017.
- 11 Adventure travel comprises a set of key elements and traveler experiences as defined by the Adventure Travel Trade Association (ATTA). Most simply, it is defined as a trip that takes an individual outside of his or her regular environment for more than 24 hours—and for no longer than one consecutive year—and includes at least two of the following three aspects: participation in a physical activity, a visit to a natural environment, and a culturally immersive experience. See ATTA 2018, 8.
- 12 This estimate included only hiking, kayaking, rafting, backpacking, viewing nature/ecotourism, bird watching, diving, and a cultural tourism estimate in its valuation (Euromonitor International 2017).
- 13 Patients Beyond Borders, "Quick Facts about Medical Tourism: How Big is the Market?," Patients Beyond Borders website, https://patientsbeyondborders.com/media.
- "Medical tourism" is a broad label for a segment that spans a continuum of products and services. It is generally defined as travel and activities related to securing medical treatments such as surgeries (including dental) in an international destination while "wellness tourism" is a broad term for "travel that allows the traveler to maintain, enhance or kick-start a healthy lifestyle, and support or increase one's sense of wellbeing". See the Wellness Tourism Association, glossary, https://www.wellnesstourismassociation.org/glossary-wellness-tourism-industry-terms/.
- 15 This group includes the High Health Council, Ministry of Health, tourism organizations and associations, Private Hospitals Medical Association, Royal Medical organization, and the ministries of Tourism and Antiquities. Foreign Affairs. Exterior, and Interior.
- 16 According to the Jordan Tourism Board, many services are done on an outpatient basis at a variety of public and private hospitals, clinics, and physicians' offices. In addition to issues of privacy, the prevalence of payments made in cash makes accurate tracking difficult.
- 17 See the Joint Commission on Accreditation of Healthcare Organizations website, https://www.jointcommission.org/, and the Joint Commission International website, https://www.jointcommissioninternational.org.
- 18 This should change as the ministry revises its legislation to abolish licensing and implement other types of penalties for noncompliant businesses.

- 19 See Articles 12(B), 15 (A)(2) and 16 of the Tourism Law No. 20 for the year 1988.
- 20 See Article 14 of the Tourism Law No. 20 for the year 1988.
- 21 See Article 6, Bylaw on Travel Tourism Companies and Offices No. 114 of 2016.
- 22 See Article 7, Bylaw on Travel Tourism Companies and Offices No. 114 of 2016.
- 23 See Article 8, Bylaw on Travel Tourism Companies and Offices No. 114 of 2016.
- 24 See Article 12., Bylaw on Travel Tourism Companies and Offices No. 114 of 2016.
- 25 See Article 11, Bylaw on Travel Tourism Companies and Offices No. 114 of 2016.
- 26 See Article 10/C, Bylaw on Travel Tourism Companies and Offices No. 114 of 2016.
- 27 Information provided by the Jordan Society of Tourism and Travel Agents.
- 28 USAID (US Agency for International Development) 2017, 38; interview with a Jordanian Tour Guide Association representative during a World Bank mission, April 2019.
- 29 See Article 3, Tour Guides Law No. 34 for the year 1998.
- 30 See Tour Guides Law No. 34 for the year 1998.
- 31 See Article 3/C, Tour Guides Law No. 34 for the year 1998.
- 32 See Article 8, Tour Guides Law No. 34 for the year 1998.
- 33 See Articles 3, 10, and 13, Tour Guides Law No. 34 for the year 1998.
- 34 Specialized Tourism Transport Bylaw No. 82 of 2012 and its amendments.
- This calculation was provided by Jordan Inbound Tour Operators Association, based on a seven-night tour, in four-star hotels. The cost changes if the hotel type or the duration of the stay changes.
- 36 See Articles 3 and 4, Specialized Tourism Transport Bylaw of 2012 and its amendments.
- 37 Land transport is the most used mode of transport, carrying 2.3 million visitors, followed by air transport, used by 1.9 million visitors. See Jordan Tourism Satellite Account/ TSA (by USAID BEST)
- 38 See Jordan International Tourism Visitor Survey (By USAID BEST, 44–47.)
- 39 While there is considerable discussion of the development of Dubai as logistics hub, its success is due to the nature of the country's trade in goods—in particular, imports—in an area facing significant instability.
- 40 Although this is not dissimilar to the situations in many of its neighboring countries, Jordan has a much smaller economy and a relatively low GDP per capita.
- 41 The international buyers nominate the suppliers of material and the forwarders that arrange the inbound and outbound movements, while the domestic producers are responsible for ordering the inputs, producing the garments, and delivering them to the port for shipment.
- 42 These movements are by road both for ocean shipments between Amman and Aqaba and for transit shipments to and through neighboring countries. They represent a significant portion of the supply chain costs, but the level of service is difficult to sustain.
- 43 This section of the report focuses on road transport services rather than on the physical corridors. The major freight corridors have suffered from inadequate maintenance and overloaded trucks, with the most noticeable damage occurring on the Desert Highway. The key corridors in Jordan are (a) the national highway from the Durra Crossing with Saudi Arabia to the Nassib Crossing on the Syrian border passing through Amman and Aqaba; (b) primary roads connecting Amman and Aqaba, with the Karameh border crossing to Iraq; and (c) the King Hussein Bridge connecting Jordan and Israel.
- 44 This CPSD does not analyze this market in detail because it is not central to improving logistics services for the broader Jordanian economy. Certainly, the market may be made more competitive, but it would likely have only limited impact on overall competitiveness and productivity of the country.
- This is a combination of a two-axle tractor with an attached semi-trailer.
- 46 Estimates of the percentage of independent trucks vary. The most recent estimate in 2018, prepared by ALG and others, estimated 31 percent were owned by companies.
- 47 See Land Transport Regulatory Commission circular No. 1/8/6/175 of January 3, 2018, Ministry of Transport decision No. 3/3/2/3979 of June 21, 2011.
- 48 See Prime Ministry's Decision No. 6216 of January 30, 2018, amended by Decision No.70 of June 24, 2018.
- 49 See Instructions on Regulating the Activity of Individual Owners of Vehicles and the procedures of Transporting Goods from and to Good's Loading and Unloading Centers of 2014.
- See Prime Ministry's Decision No. 4616 of October 3, 2017.
- 51 See Regulation No. 4 on Licensing and Classification of Carriers and Freight Brokers of 2013.
- 52 See Prime Ministry's Decision No. 4616 of October 3, 2017.
- 53 Buyback programs provide incentives, monetary or of a different nature, to the owners of the transport vehicle to voluntarily scrap their older, often more polluting vehicles. These incentives may be provided directly to the owner or to the vendor of the newer vehicle and may take the form of tax benefits or cash transfer. For a review of buyback programs, see Tanase and others 2016.
- 54 See Prime Ministry's Decision No. 7307 of December 29, 2014, amended by Prime Ministry's Decision No. 1444 of October 10, 2018.

- 55 The major cargo handled in the port, in addition to container traffic, is dry bulk, primarily exports of phosphates and potash. The volumes had been decreasing but recently have stabilized. Total dry bulk traffic is about 8 million tons per year. The volume of liquid bulk increased dramatically from 2002 but more recently has declined with the loss of Iraq transit cargo. The port also handles general cargo, but this is generally less than a million tons a year.
- The cranes now average 37 moves per operating hour, which equates with an annual operating throughput of 200,000TEU per crane or 1.4 million TEU for the seven cranes currently positioned on the terminal. That is, 37 boxes/hour x 1.54 TEU/box x 5,500 hours/year.
- 57 That is, 55 hectare x 70 percent useable space x 250 TEU slots/hectare x 3.5 stacking height x 70 percent occupancy x 365 days/year) / 6 days average dwell.
- 58 Ocean Alliance, which includes CMA CGM, Cosco Shipping, Evergreen, and OOCL; the 2 M Alliance, which includes Maersk and MSC; and the Alliance, which includes Hapag Lloyd, NYK, MOL, Yang Ming, and K-line.
- Direct calls are defined as calls by larger vessels serving a region. In the case of Aqaba, the containers are transshipped at the major transshipment hubs, such as Singapore and Jebel Ali for the Asian Services and Port Said, Egypt; Piraeus, Greece; and Tangier Med, Morocco, for the European and North American services. The feeder vessels are in the 3,000–6,000 TEU range, but the direct calls are in the 10,000–15,000 TEU range.
- 60 In terms of connectivity to container services, Jordan ranks in the lower third for the region, according to the UNCTAD index. However, this measure is affected by the volume of traffic generated domestically as well as proximity to the major trade routes. If an adjustment were made for these two factors, then Jordan's connectivity would be much better than expected.
- 61 Jordan Customs has benefited from a long tradition of innovation together with considerable support from donor countries. It also benefits from a reputation of professionalism and integrity.
- 62 Customs anticipates that about 35 percent of the traffic will use this option.
- 63 Jordan Customs in recent years has also done the following: (a) introduced X-ray units at all border crossings; (b) used GPS for tracking transit trucks; (c) resolved conflicts related to the guidelines and oversight activities of metrology and environment and in the process integrated the customs guidelines; (d) signed mutual assistance agreements with a large number of customs administrations in the Middle East and elsewhere; (e) introduced a blue lane for goods requiring clearance for specific other government agencies (OGAs); (f) reduced the supporting documentation required for exports to the certificate of origin and an invoice; (g) sent inspection certificates, when required, directly to the foreign importers (and in cases such as for the United States, a 24-hour notice may also be required); (h) established dry ports (which are actually inland clearance points because they cannot accept marine bills of lading); and (i) established inland quarantine facilities for animals waiting for results of tests on samples submitted at the point of entry.
- 64 A countervailing tendency is the use of Less than Container Loads (LCL), or groupage, where shipments take up only a portion of the entire container, and are shipped alongside other merchandize from other shippers in the same container. The demand for freight intermediaries may increase in this case, although we expect the advance in e-booking services to prevail.
- 65 This is in addition to licenses from relevant transport authorities.
- 66 Third-party logistics is different from the owner of the cargo (1PL service) or the provider of the assets used to transport and store the cargo. Although the 3PL may own some assets, the core business is coordination of the activities of cargo owners and the providers of transport and storage.
- 67 Aramex is a Jordanian company that operates throughout the region. It also acts as a distributor for Amazon. com delivering packages shipped from three US gateways to 35 countries. Its regional hub is in Dubai.
- 68 Other modern warehouses in Jordan include Agility's 20,000- sq. m facility in Aqaba for frozen and chilled products as well as other containerized cargo; Allayan's distribution warehouse for FMCGs with 5,000 sq. m of frozen and bonded storage; Nadar Group's distribution warehouse with 13,000 sq. m and capacity for 30,000 palettes; Sukhitian Group's 10,000 sq. m distribution center for pharmaceuticals and other FMCG; and Aqaba Logistics Village's 10,000 sq. m distribution warehouse, about half of which is temperature controlled. In addition to the 3PL warehouses, there is a 42,000 sq. m warehouse/retail space operated by IKEA and Carrefour's distribution center serving its 10 stores in Amman.
- 69 This is a relatively recent occurrence and has been facilitated by the introduction of a stripped-down version of SAP, which is accessible to smaller companies (SAP Business 1).
- 70 See the 2018 table available at http://www.shipping.com.jo/sites/default/files/2018-01/tariff%20final%20 2018%20in%20english%20\_1\_\_0.pdf.
- 71 This has not been a problem for air cargo because shipments are generally identified as separate items, and fewer items are shipped on air freighters than in container vessels.
- 72 World Bank National Accounts Data 2018
- 73 Atlas of Economic Complexity website, 2017.
- 74 Atlas of Economic Complexity website, 2017.
- 75 The study was joined by members of the TechChain team and the former head of the BPO association in India.

- 76 While Egypt has a far larger BPO sector than Jordan, the latter has apparently been able to compete in relatively low-skill call-center work because callers from the Arab-speaking world appear to prefer the more "neutral" Jordanian accent to the Egyptian one. This preference, however, may be subject to change over time and may not prove enough to overcome the price differential.
- 77 The government of Jordan reaffirmed its commitment to advancing the digital economy during the Digital Mashreq conference in Amman in June 2019 through the "Amman Communique," which covered the following areas:

Digital infrastructure: further developing access to internet broadband to reach a 100 percent penetration rate by 2021. As part of this effort, the government is opening the National Broadband Network (7,000 kilometers of fiber) for a PPP that will extend affordable fiber broadband to 1.3 million households.

Digital payments: increasing country-level cashless payments from 33 to 50 percent by 2020 and digitizing 80 percent of government-to-citizen payments by 2021.

Digital skills: launching a national skills development initiative to train 35,000 people in 21st-century skills and mainstreaming digital skills in public schools to train 300,000 people by 2022.

Digital entrepreneurship: launching a regulatory reform process in 2019 following a participatory approach with ecosystem representatives in order to enhance the business environment.

Digital platforms: automate key government services by 2021.

- 78 Orange Jordan was the first operator to receive a 3G license, paying US\$71 million to acquire 3G spectrum in 2009. The company was granted exclusive rights to 3G deployment from March 2010 to March 2011. Zain became the first operator to secure a 4G license in April 2014, at a cost of US\$76.75 million. Its commercial 4G LTE network went live in February 2015, while Orange Jordan acquired a US\$100 million 4G license using spectrum on the 1800-megahertz (MHz) frequency, and launched services in May 2015. Umniah secured a 4G license in September 2015 and commenced 4G LTE services in June of the following year. Although the TRC floated a bid offering new spectrum allocations in June 2013—paving the way for the entrance of a fourth mobile operator and fixed-broadband wireless access provider on the 800-MHz, 1800-MHz, 2100-MHz, 2300-MHz, and 2600-MHz frequencies—a new operator was not selected.
- 79 As a solution, one player partnered with the national electricity provider to use energy poles to deploy telecom infrastructure. Moreover, in some cases not even the will to invest is enough to overcome these regulatory restrictions: there are locations in which the government has granted exclusivity in service provision, such as in the Amman airport.
- 80 It is important to mention the role played by the "revenue share" system introduced in Jordan by the 1994 Telecommunications Law. Private stakeholders indicate that the parameters of this model are unbalanced, squeezing profits and capacity to invest. It may also be affecting their capacity for and interest in participating in an open bid for spectrum, considering they would have to pay significant shares of their revenues over time anyway.
- 81 See Article 12, (a) 7, Law of Telecommunications 1995: "The Council shall exercise all the powers necessary for the Commission to carry out its duties in accordance with the provisions of this law, including: Establish the basis for determining the prices and fees of telecommunications services provided to the beneficiaries of the licensees in accordance with the reality of competition in providing the service and its level and monitoring their compliance with their application if necessary."
- 82 And the Telecommunications Regulatory Commission (TRC).
- 83
- 84 The fund's total working capital is US\$98 million, comprising US\$48 million from the Central Bank of Jordan and a US\$50 million investment by the World Bank.
- 85 The humanitarian sector in Jordan is a significant user of broader digital payment systems, although mobile wallets still make up only a small share. Humanitarian agencies in Jordan (United Nations High Commissioner for Refugees [UNHCR], the World Food Program [WFP], and UNICEF, the United Nations Children's Fund) are at the forefront in digitally enabled humanitarian cash transfers. Over 90 percent of UNHCR's transfers are conducted through biometric iris scan, supported by a cloud-based database (IrisGuard), and UNHCR manages the common cash facility, a collaboration platform that provides technology and interfacing with the financial sector and currently includes 21 UN and nongovernmental organization partners accounting for more than 90 percent of cash assistance for refugees living outside of camps. UNHCR and WFP, along with smaller organizations, are beginning to pilot and prepare requests for proposals to launch mobile wallet—enabled transfers.

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