

A photograph of an elderly man with white hair and glasses, wearing a white button-down shirt, looking intently at a large fish on a market stall. The background shows a busy outdoor market with other stalls and people. The lighting is bright, suggesting a sunny day.

Chapter 9

Assessing trade facilitation implementation in the era of e-commerce: a comparative analysis of Jordan, Oman and Hong Kong, China

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Abstract

The emergence of e-commerce is driving important changes in the ways of conducting international trade. It has become clear that improvements in trade facilitation implementation should be supported by electronic systems. Through a comparative study of a number of reports issued by international organizations – the International Telecommunication Union (ITU), the Organisation for Economic Co-operation and Development (OECD), the United Nations Conference on Trade and Development (UNCTAD) and the World Bank – on topics of e-commerce, logistics and trade facilitation, we examined the status and performance of Jordan, Oman and Hong Kong, China. Based on this analysis, Hong Kong, China, shows one of the best practices of modern trade facilitation and customs, and we found that governmental willingness is influential in expediting trade facilitation provisions. Jordan and Oman recently made trade reforms to improve trade facilitation, but they still need to bridge the gap between policy and actual practice in all governmental organizations in terms of trade facilitation and e-commerce, as well as build citizens' capacity. By improving the implementation of trade facilitation measures and increasing e-commerce capacity as Hong Kong, China, has done, Jordan and Oman will succeed through trade prosperity driven by the global digital economy.

** The contents of this chapter are the sole responsibility of the authors and are not meant to represent the position or opinions of the WTO or its members.*

Introduction

When e-commerce crosses countries' borders, trade facilitation becomes one of the most critical issues to global consumers, because the status of trade facilitation implementation in each country significantly affects the cost of trade. Improving the efficiency of trade logistics is a key element to reducing trade costs and promoting global and regional trade. Trade costs are still high despite the reduction in trade barriers and improvement of communication brought by the digital technology. Trade costs are estimated to be equivalent to a 170 per cent tariff on international trade globally and 231 per cent for developing countries (WTO, 2016c). Trade facilitation has been referred to as the "the grease in the wheel" of international trade, as it focuses on reducing all the transactions costs associated with the enforcement, regulation and administration of trade policies (Staples, 2002). Available figures indicate that implementing the multilateral Trade Facilitation Agreement (TFA) would reduce trade cost by an average of 14.5 per cent (Hillberry and Zhang, 2015) and increase global export between US\$ 750 billion and US\$ 1 trillion per annum (WTO, 2016c). Developing countries gain proportionally more from trade facilitation as they have more room for improvement.

E-commerce and trade facilitation

Any sales activity, whether conducted domestically or internationally, is composed of a set of processes: ordering, paying, shipping and delivering. A transaction is considered to be e-commerce if the ordering takes

place digitally, while the delivery process can be either online or offline. E-commerce can facilitate the sales of goods and services whether domestically or across borders through reducing the final costs of transactions and enabling closer customer relations among different actors from businesses, households and governments. However, to succeed on the e-commerce front, it is crucial to have a well-developed logistics system, that is, smoothly working road transport, ports, postal delivery services and customs, to help ensure effective order fulfilment. Trade logistics, including trade facilitation, is one of the seven policy areas that, according to the United Nations Conference on Trade and Development (UNCTAD), are essential to help create an environment that is more conducive to reaping the benefits of e-commerce (UNCTAD, 2017).

A large number of studies found a positive relationship between improving the trade facilitation environment and international trade flows. According to Anderson and Marcouiller (2002), a 10 per cent increase in a country's index of transparency and impartiality leads to a 5 per cent increase in its imports. Hoekman and Nicita (2008) found that improvements in logistics performance and trade facilitation have a greater effect on increasing trade for a country than lowering tariffs. According to gravity trade model, reducing transaction costs related to trade, by changing public policies and improving regulations and procedures for import and export supply chains, is critical for enabling a country to expand its trade opportunities.

The emergence of e-commerce is driving the huge movement in the

international trade arena. Estimated global sales through e-commerce are expected to surpass US\$ 2.3 trillion (Gain, 2017). In order to provide e-commerce-based services, other technologies, such as telecommunications, internet, logistics, transportation and electronic systems, should be available in advance. Therefore, it is important to identify whether current infrastructures are available to support e-commerce and trade facilitation implementation in the selected economies – Jordan, Oman and Hong Kong, China – for the comparative study.

Logistics, trade facilitation and e-commerce

Jordan

Transportation infrastructure in Jordan has been evaluated as comparatively well-developed among the Middle East and North Africa (MENA) region (Jordan Investment Commission, 2018). Thanks to Jordan's strategic location, the transport sector contributed around 10 per cent of the GDP in Jordan, and employed about 7.2 per cent of the work force (Harake, 2019). The annual growth of the transportation and logistics sector is estimated to increase from 5 to 6 per cent by 2030 (Jordan Investment Commission, 2018). In Jordan, the air transport infrastructure and connectivity is among the highest in the MENA region (World Economic Forum, 2017). Jordan's abundance of electricity and telecommunications services support

the provision of efficient infrastructure of transportation and logistics (Jordan Investment Commission, 2018). Jordan identified digital development as a high priority for the country's social and economic development (Harake, 2019). The launch of 4G LTE services in Jordan has led to a growth in data revenues for mobile operators (De Rosbo, 2020).

Revenue in the e-commerce market in Jordan is expected to reach US\$ 525 million in 2020, and the number of e-commerce users will be around 3.3 million (Statista, 2020b). Jordan became one of the first countries in the MENA region to enact laws regarding information and communications technology (ICT) related transactions following the spread of internet use. The Electronic Transaction Law (ETL), drafted first in 2001, covers a wide

area of internet transactions including computer information transactions, general sale of goods and services via the internet and other inter-party transactions conducted online (Yaseen, 2016). Jordan and the United States signed the Joint Statement on Electronic Commerce in 2000. However, a clear set of regulations and tax laws

covering e-commerce transactions has not been prepared yet.

In 2019, the Cabinet decided to impose customs fees on online purchases of foreign clothes, shoes, foodstuffs and children's toys over JOD 200 per month, with an annual cap of JOD 500 (Jordan Post, 2019).

“Improving the efficiency of trade logistics is a key element to reducing trade costs and promoting global and regional trade.”

The Jordanian people were concerned that imposing higher customs fees on e-commerce commodities might have a negative effect on online trade. Still, Jordan Post referred the establishment of a special centre to deal with e-commerce items and took the first step to develop an electronic tracking system for serving the global market and its customers (Jordan Post, 2019).

Oman

The logistics sector plays a vital role in Oman's modern economy and is viewed not only as a core sector but also as the backbone of the economy, facilitating the growth of many other sectors. With revenues amounting to US\$ 7.87 billion in 2013 (Ithraa, 2016), the sector contributed 4.9 per cent to Oman's GDP in 2015 (Ithraa, 2016). The logistics industry is expected to grow at an annual growth rate of 7 per cent between 2015 and 2020, enhanced by government investments in ports (Duqm and Sohar), free zones (Sohar, Duqm, Salalah and Al Mazunah), industrial estates, roads, airports (Sohar, Muscat, Salalah, Adam and Duqm) and the rail network. These investments would facilitate trade with neighbouring Gulf Cooperation Council countries and also open a window with Asia and Sub-Saharan Africa as trade destinations (Ithraa, 2016).

An empirical assessment was conducted to look at the probable economy-wide and sectoral impacts of improving efficiency in the logistic sector in Oman (Al Shammakhi, Akintola and Boughanmi, 2018). The assessment considers a scenario of trade facilitation whereby Oman improves its trade facilitation by 10 per cent. This scenario is built on the fact

that, in its five-year development plan, Oman is expecting to invest OMR 6 billion in building and expanding airports and seaports in three main hubs: Salalah, Sohar and Duqm). The full operation of these three main ports is expected to reduce trade cost by 10 per cent (Al Shammakhi, Akintola and Boughanmi, 2018). The results show that trade facilitation improvement will have a positive gain in terms of GDP (an increase of 4.3 per cent) and welfare (an increase of almost 1.3 per cent) (Al Shammakhi, Akintola and Boughanmi, 2018).

The Omani government issued the Electronic Transactions Law in 2008, which covered the fast development of technology and the internet in processing operations and concluding transactions locally and internationally (Al Barwani, 2018). Furthermore, the government established the Information Technology Authority (ITA) to ensure proper implementation of the provisions of the Law. ITA indicated that the development of e-commerce depends on policies and laws, as well as access to goods and services via the internet and logistics services, among other factors (Times of Oman, 2019). Oman's Ministry of Commerce and Industry announced new regulations that will be issued to maintain the rights and the confidence of e-traders (Al Nasserri, 2020). The revenue in the e-commerce market in Oman will be expected to reach US\$ 800 million in 2023 (Statista, 2020c).

Hong Kong, China

The Hong Kong Trade Development Council (HKTDC) states that trading and logistics accounted for 22 per cent of the city's GDP and provided 727,500 jobs in 2017 (2019). Also, the logistics industry alone contributed

3.2 per cent to the GDP and 180,600 jobs in same year (HKTDC Research, 2019). E-commerce revenue in Hong Kong, China, is estimated to be US\$ 5,511 million in 2020, and the number of e-commerce users will be 5.7 million in 2020 (Statista, 2020a). “Given the externally-oriented and open nature of Hong Kong’s economy, the development of international trade policy in and through the WTO is of vital importance to Hong Kong because of the possible impact on external trade, and its knock-on effect on industry and employment” (GovHK, 2016). As a matter of fact, Hong Kong, China, became the first member to ratify the TFA (WTO, 2015a). Hong Kong, China, offers customs procedures that are among the easiest and fastest worldwide, with virtually all customs declarations and related documents processed electronically in its entirely free port.

Doing business in Hong Kong, China, is beneficial to e-commerce store owners in particular because it has access to the planet’s leading manufacturing centre: mainland China (Yatprom, 2019). The government of Hong Kong, China, first enacted the Electronic Transactions Ordinance to provide a clear legal framework for the conduct of e-business in 2001. The ordinance was mostly focused on the use of electronic records and electronic and digital signatures. The Commerce and Economic Development Bureau has taken responsibility for the operation of e-commerce, and the Hong Kong Monetary Authority has ensured

different forms of digital payment (Ince, 2018).

Comparative analysis

In order to understand the e-commerce environment and trade facilitation implementation in each country, international organizations have developed several indices. UNCTAD, for example, developed the B2C E-commerce Index to measure a country’s preparedness to support online business. The UNCTAD B2C E-commerce Index includes various indicators, such as share of individuals using the internet, share of individuals with an account, secure internet servers and postal reliability. The 2019

ranking of Jordan, Oman and Hong Kong, China, were 87th, 59th and 15th, respectively, among 152 economies (Table 1). Jordan’s score on the B2C E-commerce Index shows that it needs to improve in all indicators, whereas Oman received relatively good scores except in the category of secure internet servers. Hong

“The emergence of e-commerce is driving important changes in the ways of conducting international trade.”

Kong, China, received better scores for all indicators than did Jordan and Oman. The percentages of internet users in Jordan, Oman and Hong Kong, China, were reported as 85.3 per cent, 78.5 per cent, and 89.3 per cent in other sources (Internet World Stats, 2020).

On the ICT Development Index 2017, which reflects ICT access, ICT use and ICT skills, Jordan, Oman and Hong Kong, China, were ranked as 70th, 62th and 6th, respectively, among 176 economies (ITU, 2017)

Table 1: UNCTAD B2C E-commerce Index, Jordan, Oman and Hong Kong, China

	2019 B2C E-Commerce rank	Share of individuals using the internet	Share of individuals with an account	Secure internet servers	Universal Postal Union (UPU) postal reliability score
Hong Kong, China	15	89	95	85	92
Oman	59	80	74	47	72
Jordan	87	67	42	43	44

Source: UNCTAD (2019).

(Table 2). ICT access indicators include the data of the available ICT infrastructure and individuals' access to basic ICTs. ICT usage indicators reflect ICT intensity and usage. Also, ICT skills were determined by years of schooling and secondary and tertiary enrolment ratios. In the 2017 ICT Development Sub-Index, Hong Kong, China, was ranked higher than Jordan and Oman in all three subcategories. However, although Oman had better ranking than Jordan in the main index, Jordan scored better than Oman in the Sub-Index of ICT use and ICT skills.

Both the UNCTAD B2C E-commerce Index and the ICT Development Index help us to understand the general level of support for e-commerce, but they cannot indicate the nature of the relationship between e-commerce and trade in the three countries. To study

the specific aspect related with trade, the World Bank's Logistic Performance Index (LPI) was used to compare the performance of the three economies. Jordan, Oman and Hong Kong, China, ranked 84th, 43th and 12th, respectively, out of 160 economies in the LPI Index (Table 3). Jordan's ranking is in the middle range, while Oman ranked 3rd in the MENA region in 2019 following the United Arab Emirates (UAE) and Qatar. As per the LPI Index, Hong Kong, China, stands as the world's top performer in logistics, particularly in the categories of international shipments and customs. The World Bank indicates that global logistics have changed as a result of the development of e-commerce, use of technology, new risks (cybersecurity), etc. Six indicators in the LPI Index are closely related to ICT development, however, they have

Table 2: ICT Development Index, Jordan, Oman and Hong Kong, China

	2017 ICT Development Index ranking	2017 ICT access sub-index	2017 ICT use sub-index	2017 ICT skills sub-index
Hong Kong, China	6th	3rd	10th	32th
Oman	62th	48th	55th	90th
Jordan	70th	83th	54th	77th

Source: ITU (2017).

Table 3: World Bank LPI indicator ranking 2018 of the MENA Region, Jordan, Oman and Hong Kong, China

Indicators	MENA		Jordan		Oman		Hong Kong, China	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank
Overall LPI	2.78	-	2.69	84	3.20	43	3.92	12
Customs	2.54	-	2.49	88	2.87	44	3.81	9
Infrastructure	2.76	-	2.72	70	3.16	39	3.97	15
International shipments	2.73	-	2.44	119	3.30	36	3.77	8
Logistics competence	2.68	-	2.55	93	3.05	49	3.93	12
Tracking and tracing	2.79	-	2.77	84	2.97	66	3.92	15
Timeliness	3.18	-	3.18	76	3.80	29	4.14	15

Source: World Bank (<https://lpi.worldbank.org/international/global>).

a limited ability to explain the effect of e-commerce on logistics.

According to the Doing Business report Trading Across Borders, both the cost of and the time to export and import are decreasing in Jordan, Oman and Hong Kong, China (Table 4). The report shows that Hong Kong, China, takes only 2 hours of procedures to export and 20 hours to import. Cost

and time to import are declining in all three economies, but not as much as cost to export in Hong Kong, China. It can be inferred that the recent reduction of cross-border trade cost and time was supported by electronic infrastructure.

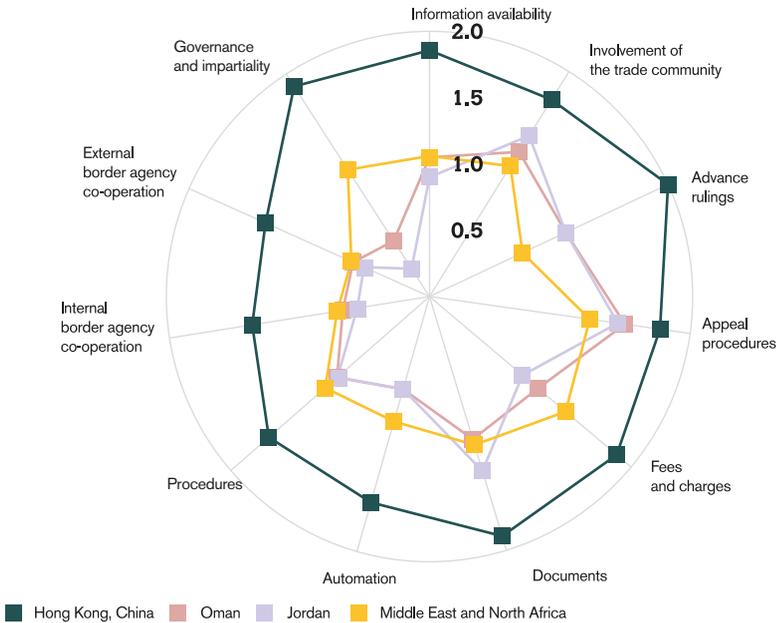
To understand the trade facilitation efforts in Jordan, Oman and Hong Kong, China, OECD Trade Facilitation

Table 4: Changes in cost and time to export and import in Jordan, Oman and Hong Kong, China (2013, 2016 and 2019)

Indicator Year	Jordan			Oman			Hong Kong, China		
	2013	2016	2019	2013	2016	2019	2013	2016	2019
Cost to export (US\$ per container)	825	577	231	745	630	386	575	557	12
Average time to export (hours)	312 (13 days)	38	59	240 (10 days)	91	59	120 (5 days)	22	2
Cost to import (US\$ per container)	1,335	606	396	680	674	518	565	619	323
Average time to import (hours)	360 (15 days)	141	134	216 (9 days)	101	77	120 (5 days)	22	20

Source: World Bank, *Doing Business Report* (2013, 2016, 2019).

Figure 1: Trade facilitation performance by OECD indicators in Jordan, Oman, MENA and Hong Kong, China, 2019



Source: OECD, 2019.

Indicators and the OECD “Compare your country: trade facilitation” tool was also used for the analysis. The Average Trade Facilitation Performance scores of Jordan and Oman are 0.93 and 0.97, respectively out of 2, while Hong Kong, China’s score is 1.72 (Figure 1). Hong Kong, China, received the highest score, 2, on the “Advance rulings” indicator, and it received high scores on “Fees and charges” and “Documents”. By examining 11 OECD indicators, we found that all subcategories of “Automation” and parts of subcategories of “Information availability”, “Fees and charges” and “External border agency co-operation” have a close relationship with internet and ICT technology. Hong Kong, China, shows better performance than both Jordan

and Oman in most subcategories related to e-commerce, with the exceptions of “Processing system-electronic payment” and “ITC quality”. Both Jordan and Oman got the best score in “Customs website”, “Online feedback” and “ITC quality”. Jordan is working better than Oman in “Electronic import declarations” and “Full-time automated processing”. Oman performs better than Jordan in “Information on fees”, “Electronic pre-arrival processing”, “Electronic payment”, “Processing system-electronic system”, “Automated risk management” and “External data harmonisation”. The comparative analysis of subcategories of OECD Trade Facilitation Indicators clearly shows the specific areas in which Jordan, Oman and Hong Kong, China,

need to make improvements regarding e-commerce infrastructure for trade.

Recently, the governments of Jordan and Oman introduced a number of trade reforms to address some of the issues outlined above and to improve trade facilitation. For example, Jordan also implemented the UNCTAD Automated System for Customs Data (ASYCUDA) to administer customs' clearance operations (WTO, 2015b). The WTO stated that Jordan's customs practices lead the Middle East in the implementation of a "single window" system (WTO, 2015a). In addition, Jordan makes trade-related information available in a transparent manner. Jordan completed the implementation of UNCTAD ASYCUDA (Automated System for Customs Data), computerization of customs procedures in 2010, which has resulted in reduced declaration processing time and increased accuracy of verifying declarations without additional manpower (UNCTAD, 2011). Likewise, in 2016, Oman transferred all cargo operations from Sultan Qaboos port to the more modern Sohar port. This will reduce time for border compliance for both exporters and importers. In 2017, Oman also introduced a new single window, a one-stop facility, to allow for fast electronic clearance of goods. The empirical assessment indicates that other countries in the region can be affected by trade facilitation improvement in Oman (Al Shammakhi, Akintola and Boughanmi, 2018). Both Jordan and Oman are making efforts to improve trade facilitation implementation with more advanced systems and ICT development in order to meet the rapid changes of global trade environment.

Conclusion

The emergence of e-commerce is driving important changes in the ways of conducting international trade. We can say that every single improvement of trade facilitation implementation should be supported by an electronic system. In order to provide e-commerce-based services, other technologies, such as telecommunications, internet, logistics, transportation and electronic systems, should be implemented in advance. Fortunately, the statistics show that Jordan and Oman have better infrastructures than surrounding countries. Jordan and Oman issued laws to oversee electronic transactions early on, and trading activities through e-commerce have been increasing in both countries.

Through a comparative study in terms of e-commerce, logistics and trade facilitation, we have reviewed the status and performance of Jordan, Oman, and Hong Kong, China. The study showed that Hong Kong, China, implemented modern trade facilitation measures compatible with its reputation of being the world's best open market. Hong Kong, China, provides the easiest and fastest customs procedures in the world with virtually all customs declarations and related documents processed electronically in its free port. Also, comparisons of data from the UNCTAD B2C E-commerce Index, the ITU ICT Development Index, the World Bank LPI and the OECD Trade Facilitation Indicators showed that Jordan and Oman need to prepare a better e-commerce environment and to work on several of the trade facilitation indicators in order to catch up with the performance of Hong Kong, China.

It is important to understand the goal of Hong Kong, China, of free trade influences in all areas related to customs, transportation, logistics and infrastructure. As the case of Hong Kong, China, shows, governmental willingness is influential in expediting each trade facilitation provision. Jordan and Oman need to bridge the gap between policy and actual practice in all governmental organizations in terms of trade facilitation and e-commerce. Oman's ITA calls attention to improve citizens' e-commerce skills through awareness and training programs (Times of Oman, 2019). It means that building citizens' capacity is also an important factor of e-commerce along with government intervention. By improving the implementation of trade facilitation measures and increasing e-commerce capacity, Jordan and Oman can better prepare for trade prosperity driven by the global digital economy.

Annex 1

Brief background on the economies of Jordan, Oman and Hong Kong, China, and their trade patterns

Jordan

Jordan was reclassified from an upper-middle-income to a lower-middle income country by the World Bank in 2017 (World Bank, 2017). Unlike other countries in the Middle East, Jordan's economy is not oil-dependent. Hence, Jordan mainly consumes the imported energy that accounts for 25-30 per cent of its imports (CIA, 2019). Jordan's economy is one of the smallest among Middle Eastern countries, and it heavily relies on foreign assistance due to the insufficient supplies of natural

resources, such as water and oil (CIA, 2019). Jordan had a budget deficit of approximately US\$ 9.78 billion in 2017, and the current account balance is estimated to minus 8 per cent of GDP in 2020 (World Bank, 2019a).

Since 2000, Jordan has been expanding foreign trade in order to attract foreign investment (CIA, 2019). Recently, Jordan revitalized trade with its neighbours, especially Iraq, Syria and Iraq, where crises disrupted major trade routes (World Bank, 2019b). The percentages of exports and imports were 34.2 per cent and 58 per cent of GDP, respectively, in 2017 (CIA, 2019). The simple average tariff rate was 9.9 per cent, and the final bound tariff rate went up to 16.3 per cent in 2017 (WTO, 2016a). Jordan's main exported products are garments, agricultural products, potassic fertilisers, medications, natural calcium phosphates and so on. Jordan's top imports are agricultural products (22.3 per cent), fuels and mining products (15.8 per cent) and manufactures (57.9 per cent), according to WTO statistics (WTO, 2018).

Jordan's export percentages by destination are the United States (21.5 per cent), the Kingdom of Saudi Arabia (11.3 per cent), Iraq (7.3 per cent), India (6.9 per cent) and the United Arab Emirates (UAE) (4.7 per cent). The most imports come from the European Union (28) (21.9 per cent), China (13.5 per cent), the Kingdom of Saudi Arabia (13.5 per cent), the United States (9.8 per cent) and the UAE (4.9 per cent). The statistics inform that Europe and China supply in total around 35.4 per cent of Jordan's total imports. Also, the Kingdom of Saudi Arabia is Jordan's biggest trading partner among Gulf countries.

Oman

As classified by the World Bank, Oman is considered to be an upper-middle income country with a relatively small oil-exporting sector compared to its GCC neighbours. However, the hydrocarbon sector (oil and gas) continues to be the main driver of the economy, accounting for 30 per cent of GDP, 73 per cent of government revenues and 53 per cent of merchandise exports in 2017 (CBO, 2017). Despite the recovery of oil prices and fiscal consolidation, Oman still had a budget deficit amounting to US\$ 9.1 billion, or approximately 13 per cent of GDP in 2017 (CBO, 2017). The government invigorated its economic diversification policy in recent years by improving the investment climate, promoting tourism and enacting laws to encourage investment in the logistics sectors and trade-related activities.

Over the years, Oman has opened up to international trade to boost its economy. In 2015, the value of exports and imports taken together equalled 108.5 per cent of GDP (WITS, 2015). The average applied tariff rate was 5.5 per cent while its bound tariff stood at 14.01 per cent (WTO, 2016a). Oman's main exports are crude petroleum, gas, refined petroleum, nitrogenous fertilizers and acyclic alcohols. Its top imports are food and agricultural products (12.9 per cent), fuels and mining products (13.4 per cent) and manufactures (73 per cent) (WTO, 2018).

The top export destinations of Oman are China (43.6 per cent), the UAE (7.5 per cent), India (3.8 per cent), Chinese Taipei (3.6 per cent) and the United States (3.3 per cent). The main imports originate from the UAE

(45.1 per cent), the European Union (28) (7.8 per cent), China (4.8 per cent) and India (4.8 per cent). Within the GCC, the UAE is Oman's biggest trading partner, supplying around 45 per cent of Oman's imports. The European Union and Central Asia supply around 11 per cent of Oman's total imports (WITS, 2015).

Hong Kong, China

The economy of Hong Kong, China, depends heavily on the service industry and trade due to the lack of many natural resources. Hong Kong, China, is dedicated to providing the best trade-related services to international businesses and is a great example to study the trade facilitation experience. Therefore, Hong Kong, China, has earned the reputation of being the world's freest economy (Heritage Foundation, 2019). The economy of Hong Kong, China, is classified as high-income by the World Bank (World Bank, 2020). In addition, Hong Kong, China, was the first member of the WTO that decided to ratify the TFA.

In 2017, the total value of trade exceeded the GDP in Hong Kong, China, and the percentage of the value of trade over GDP was 189.2 per cent (WTO, 2018). Hong Kong, China, has no tariff on imported goods and levies excise duties on only four products: hard alcohol, tobacco, oil and methyl alcohol. The major exported products are electronic integrated circuits, gold and radio-telephony electrical apparatus. Trade in commercial services also accounts for a huge portion of trade in Hong Kong, China. Main imported goods are electronic integrated circuits, radio-telephony transmission tools, line telephony electrical apparatus, gold and automatic data-processing machines.

The main export destinations of Hong Kong, China, are mainland China (54.1 per cent), the European Union (28) (8.7 per cent), the United States (7.7 per cent), India (3.8 per cent), Japan (3 per cent) and Other (22.6 per cent). The high-ranked imports originate from China (44.6 per cent), Chinese Taipei

(7.2 per cent), the European Union (28) (6.5 per cent), Singapore (6.4 per cent), Japan (6.1 per cent) and Other (29.3 per cent). Because Hong Kong, China, is the world's best trade hub, many other countries engage in trade with Hong Kong besides main trade partner countries.

References

- Al Barwani, A. (2018), "The regulation of electronic transactions in Oman", Al Tamimi & Co., April 2018. <https://www.tamimi.com/law-update-articles/the-regulation-of-electronic-transactions-in-oman/>
- Al Nasser, Z. (2020), "New regulations for e-commerce coming soon", *Oman Daily Observer*, 1 January 2020.
- Al Shammakhi, A., Akintola, A. and Boughanmi, H. (2018), "Assessing the impact of WTO Trade Facilitation Agreement on Oman's economy", *International Journal of Trade, Economics and Finance* 9(6): 243-250.
- Anderson, J. and Marcouiller, D. (2002), "Insecurity and the pattern of trade: An empirical investigation", *Review of Economics and Statistics* 84(2): 342-352.
- Central Bank of Oman (CBO) (2017), *Central Bank of Oman Annual Report*, Oman.
- Central Intelligence Agency (CIA) (2019), "Jordan", *The World Factbook*. <https://www.cia.gov/library/publications/the-world-factbook/geos/jo.html>
- De Rosbo, S. (2020), Jordan – Telecoms, Mobile and Broadband – Statistics and Analyses, BuddeComm Reports. <https://www.budde.com.au/Research/Jordan-Telecoms-Mobile-and-Broadband-Statistics-and-Analyses?r=51>
- Department of Statistics, Jordan (2017), *Jordan Statistical Yearbook 2018*.
- Ferrantino, M., Kaushik, S., Lal Das, P. and Fredriksson, T. (2017), "Measuring the environment for e-commerce: A new tool", 28 March 2017, World Bank Blogs. <https://blogs.worldbank.org/trade/measuring-environment-e-commerce-new-tool>
- Gain, B. (2017), *E-Commerce & Trade Facilitation: Challenges and Opportunities*, World Bank Group.
- GovHK (2016), Hong Kong: The Facts: Trade and Industry. <http://www.gov.hk/en/about/abouthk/factsheets/docs/trade%26industry.pdf>
- Harake, W. (2019), *Strategic Assessment: The 2019 Project Pipeline for Jordan and Investment Opportunities*, World Bank Group.
- Heritage Foundation (2019), *2019 Index of Economic Freedom*. <https://www.heritage.org/index/book/chapter-3>
- Hillberry, R. and Zhang, X. (2015), "Policy and Performance in Customs: Evaluating the Trade Facilitation Agreement", Policy Research Working Paper No. 7211, Washington, DC: World Bank.
- HKTDC Research (2019), Logistics Industry in Hong Kong, Hong Kong Industry Profiles. <http://hong-kong-economy-research.hktdc.com/business-news/article/Hong-Kong-Industry-Profiles/Logistics-Industry-in-Hong-Kong/hkip/en/1/1X000000/1X0018WG.htm>
- Hoekman, B. and Nicita, A. (2008), "Trade Policy, Trade Costs, and Developing Country Trade", Policy Research Working Paper No. 4797, Washington, DC: World Bank.
- Ince (2018), An Introduction to E-Commerce in Hong Kong. <https://www.incegd.com/en/news-insights/introduction-e-commerce-hong-kong>
- International Telecommunication Union (ITU) (2017), ICT Development Index 2017. <https://www.itu.int/net4/ITU-D/idi/2017/index.html>

- Internet World Stats (2019), World Internet Usage and Population Statistics. <https://www.internetworldstats.com/stats.htm>
- Ithraa (2016), Briefings from Oman Logistics, Muscat, Oman. https://ithraa.om/portals/0/IthraaPDF/Brochures/PDF/ithraa_briefings_logistics_eng_AW.pdf
- Jordan Investment Commission (2018), Sector Profile: Transportation and Logistics. <https://www.jic.gov.jo/wp-content/uploads/2018/07/Sector-Profile-Transportation-Logistics-Final-Mar-2018-JIC-1.pdf>
- Jordan Post (2019), E-commerce. <https://jordanpost.com.jo/en/e-commerce>
- Organisation for Economic Co-operation and Development (OECD) (2019), Compare Your Country, Trade Facilitation Indicators. <https://www1.compareyourcountry.org/trade-facilitation>
- Staples, B. (2002), "Trade facilitation: Improving the invisible infrastructure", in Hoekman, B., Mattoo, A. and English, P. (eds.), *Development, Trade and the WTO: A Handbook*, Washington, DC: World Bank, 139-148.
- Statista (2020a), eCommerce: Hong Kong. <https://www.statista.com/outlook/243/118/ecommerce/hong-kong>
- Statista (2020b), eCommerce: Jordan. <https://www.statista.com/outlook/243/246/ecommerce/jordan>
- Statista (2020c), eCommerce: Oman. <https://www.statista.com/outlook/243/274/ecommerce/oman>
- Times of Oman (2019), "ITA lists conditions for e-commerce to thrive in Oman", 8 September 2019. <https://timesofoman.com/article/1890956/Business/ITA-lists-conditions-for-e-commerce-to-thrive-in-Oman>
- United Nations Conference on Trade and Development (UNCTAD) (2011), *ASYCUDA World Report 2011*, January 2011. https://unctad.org/en/PublicationsLibrary/dtlasycuda2011d1_en.pdf
- United Nations Conference on Trade and Development (UNCTAD) (2017), "Rapid e-Trade Readiness Assessments: A tool to help the Least Developed Countries (LDCs) drive economic growth, inclusive trade and job creation from e-commerce", 12 December 2017. <https://unctad.org/en/conferences/UNCTADatMC11/Pages/MeetingDetails.aspx?meetingid=1615>
- United Nations Conference on Trade and Development (UNCTAD) (2019), B2C E-commerce Index 2019. https://unctad.org/en/PublicationsLibrary/tn_unctad_ict4d14_en.pdf
- World Bank website. <https://ipi.worldbank.org/international/global>
- World Bank (2012), *Doing Business 2013: Smarter Regulations for Small and Medium-Size Enterprises*. <https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB13-full-report.pdf>
- World Bank (2015), *Doing Business 2016: Measuring Regulatory Quality and Efficiency*. <https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB16-Full-Report.pdf>
- World Bank (2017), Jordan Country Reclassification – Questions and Answers. <https://www.worldbank.org/en/country/jordan/brief/qa-jordan-country-reclassification>
- World Bank (2018), *Doing Business 2019: Training for Reform*, International Bank for Reconstruction and Development / The World Bank: Washington, DC. <https://www>

doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2019-report_web-version.pdf

World Bank (2019a), Jordan's Economic Update. <http://pubdocs.worldbank.org/en/837261553672494334/jordan-MEU-April-2019-Eng.pdf>

World Bank (2019b), The World Bank in Jordan: Overview. <https://www.worldbank.org/en/country/jordan/overview>

World Bank (2020), Hong Kong SAR, China. <https://data.worldbank.org/country/hong-kong-sar-china>

World Economic Forum (WEF) (2017), *Travel & Tourism Competitiveness Report 2017*. <https://www.weforum.org/reports/the-travel-tourism-competitiveness-report-2017>

World Integrated Trade Solution (WITS) (2015), Oman Trade Summary 2015. <https://wits.worldbank.org/CountryProfile/en/Country/OMN/Year/2015/Summary>

World Trade Organization (WTO) (2015a), Trade Policy Review: Report by Jordan, WT/TPR/G/325.

World Trade Organization (WTO) (2015b), Trade Policy Review: Report by the Secretariat, Jordan, WT/TPR/S/325.

World Trade Organization (WTO) (2016a), WTO Trade Maps. https://www.wto.org/english/res_e/statis_e/statis_maps_e.htm

World Trade Organization (WTO) (2016b), *World Trade Report 2015: Speeding Up Trade: Benefits and Challenges of Implementing the WTO Trade Facilitation Agreement*, Geneva: WTO.

World Trade Organization (WTO) (2018), Trade Profiles 2018, Geneva: WTO.

Yaseen, H. et al. (2016), "Facilitating e-commerce in Jordan: A qualitative analysis", *International Journal of Digital Society* 9(4): 1206-1213.

Yatprom, S. (2019), "How to enter the Hong Kong e-commerce market?", *ScandAsia*, 29 November 2019. <https://scandasia.com/how-to-enter-the-hong-kong-e-commerce-market/>

Comments



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Electronic commerce and digital trade have transformed both the nature of trade as well as the nature of trade facilitation in the last three decades. Digitalization has increased the scale, scope and speed of trade (Lopez-Gonzalez and Ferencz, 2018). On scale, digitalization enables firms to reach larger numbers of digitally connected customers across the globe and facilitates outsourcing. On scope, digitalization allows many services such as warehousing, logistics, e-payments, etc. to become more tradable and be combined with goods trade. Finally, trading has become faster, especially for services, but also enabling goods to move faster across borders by lowering the cost of customs clearance and processing of relevant paperwork. The latter are parts of what is commonly defined as trade facilitation.

The efforts of countries to improve trade facilitation is based on the perceptions that trade facilitation reduces trade costs (Moisés, Orliac and Minot, 2011) and that lower trade costs increase trade (Hornok and Koren, 2015; Martincus, Carballo and Graziano, 2015). Moisés, Orliac and Minot (2011) estimate that the trade cost reduction potential of all trade facilitation measures could reach 10 per cent of trade values.

Trade facilitation via digitalization is affected by the degree of digital economy maturity, which in turn depends on communications and digital infrastructure, such as internet coverage of the area of the country, speed of connections and the proportion of the population who are knowledgeable users of digital platforms and the internet. Countries,

Table 1: Ratio of trade facilitation indicator value in 2019 to that of 2013 in the three economies analysed in Chapter 9

	Jordan	Oman	Hong Kong, China
Cost to export (US\$ per container)	0.28	0.52	0.019
Average time to export (hours)	0.189	0.246	0.034
Cost to import (US\$ per container)	0.297	0.762	0.572
Average time to import (hours)	0.372	0.356	0.167

Source: Computed from Chapter 9, Table 1.

* The contents of this commentary are the sole responsibility of the author and are not meant to represent the position or opinions of the WTO or its members.

Table 2: Logistic Performance Index rankings of top 10 and bottom 10 economies in 2007 and 2018 and world competitiveness report rankings 2019

Top 10 in 2007	LPI index ranking in 2007	LPI index ranking in 2018	World Bank world competitiveness ranking 2019
Singapore	1	7	1
Netherlands	2	9	4
Germany	3	1	7
Sweden	4	2	8
Austria	5	4	21
Japan	6	5	6
Switzerland	7	13	5
Hong Kong, China	8	12	3
United Kingdom	9	9	9
Canada	10	20	14
Bottom 10 in 2007	LPI index ranking in 2007	LPI index ranking in 2018	World Bank world competitiveness ranking 2019
Guyana	141	132	*
Chad	142	123	141
Niger	143	157	*
Sierra Leone	144	156	*
Djibouti	145	90	*
Tajikistan	146	134	104
Myanmar	147	137	*
Rwanda	148	57	100
Timor-Leste	149	*	*
Afghanistan	150	160	*

Source: Computed from World Bank Excel sheet on international LPI from 2007 to 2018; World Bank, Doing Business 2020.

* Not reported.

in turn, are uneven with respect to digital economy maturity, with developed countries more advanced than developing countries.

The heterogeneity of countries' digital maturity suggests that efforts to improve digital infrastructure and digital connectivity will produce uneven results, with advanced economies achieving faster and larger improvements in trade facilitation than developing countries. This is documented in Chapter 9 by Awad-

Warrad, Boughanmi and Hwang, who examine the improvements in trade logistics performance, in the form of cost and time to export, between 2013 and 2019 in the three economies they study, two of which are high-income economies (Hong Kong, China; Oman), while the other (Jordan) is considered as upper middle income. In Table 1, we use data from Chapter 9, Table 1, to indicate the ratio of the relevant indicator in 2019 to that of 2013. It is notable that all ratios are smaller than 1, with some being much

lower than 1, suggesting large trade facilitation improvements in a short period.

The point of the above is to indicate that advanced economies are likely to achieve faster trade facilitation decline than less developed ones. Hence trade costs are likely to decline faster in developed economies. This is likely to give these economies a further competitive advantage compared to developing ones.

To explore this idea, Table 2 indicates the Logistics Performance Index (LPI) compiled by the World Bank for the top 10 (in LPI score) and bottom 10 economies in 2007, and their ranking in 2018. It appears that the top 10 in LPI 2007 largely kept their relative position in 2018. Similarly for the bottom 10 in 2007 (out of 150), their rankings in 2018 (among 160 economies) apart from two economies (Rwanda and Djibouti) seem to have stayed near the bottom. The table also exhibits the 2019 world competitiveness rankings for the economies as reported by the World Bank. It appears that the LPI rankings are related to the world

competitiveness rankings for both developed and developing economies, and this suggests that competitiveness and trade facilitation go together.

An aspect of the new international economy is the proliferation of value chains, with products and services that are intermediate inputs to a final product going through many countries or many times through the borders of one country before reaching the final assembly. This suggests that the longer the product value chain the higher the proportion of final product value that

“Digitalization has increased the scale, scope and speed of trade.”

can be affected by border measures. It follows that the reduction in trade costs, via increases in efficiency of trade procedures, could expand the length of a given value chain, by reducing the costs of extra steps in the chain. This in turn could reduce obstacles for many small and medium-size enterprises to enter some segments of the value chain, and hence enlarge the production and trade opportunities for such firms. Countries with large improvements in trade facilitation will thus have more chances of entering long global value chains.

References

Hornok, C. and Koren, M. (2015), "Administrative barriers to trade", *Journal of International Economics* 96 (S1): S110-S122.

Lopez-Gonzalez, J. and Ferencz, J. (2018), "Digital Trade and Market Openness", OECD Trade Policy Paper, No. 217, Paris: OECD Publishing.

Martincus, C. V., Carballo, J. and Graziano, A. (2015), "Customs", *Journal of International Economics* 96: 119-137.

Moïse, E., Orliac, T. and Minot, P. (2011), "Trade Facilitation Indicators: The Impact on Trade Costs", OECD Trade Policy Papers, No. 118, Paris: OECD Publishing.