

Opportunities and Challenges of International Trade in Digital Services

Xuan Yu

University of Warwick, Coventry, CV4 8UW, UK

Abstract: *Digital trade has a significant impact on the way that labour is distributed in international trade, and it is crucial for nations to develop new competitive advantages in the digital period. The study, which is based on an exhaustive examination of the development trend of digital trade services, examines the development of digital trade services in the context of macroeconomic data, relevant legislation, and governmental rules and regulations. It also examines the effects of related technologies, industries, and government regulations and rules on the development of digital trade services. The study's findings suggest that national development strategies should also take into account the active formulation and implementation of a number of policies and regulations to facilitate the development of internal and external digital trade because the trend towards the digitisation of trade in services is unavoidable. Additionally, the study recommends that the development of digital infrastructure and education be accelerated.*

Keywords: *international trade, digital trade, services business, policy*

1. Introduction

International trade in digital services, such as videoconferencing, online-shopping and some professional services, has developed rapidly recently which is growing at a faster rate than trade in goods. Especially, during the lockdown caused by COVID-19 when people stay at home, digital services do help keep the world's economies running and keep people staying connected. In this article, the author will focus on that how international trade in digital services develops in the special period of pandemic. Then, the author will analyse whether it is an opportunity or challenge for digital services by using some case studies and data analysis.

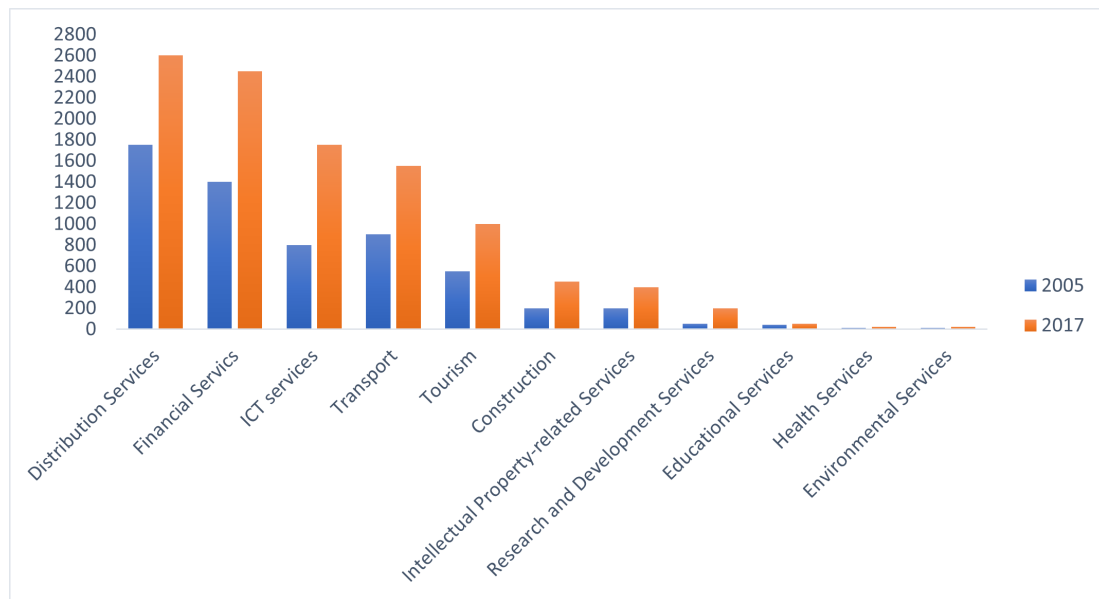
Digital Services trade means digitally enabled trade in services business. This kind of trade can be delivered digitally and/or physically. Firstly, international trade in services refers to a wide range of activities, including financial consulting services, tourism, telecommunication, video platforms and many other professional services. Digital trade means any trade results from digitally placed orders and/or is digitally delivered (OECD and WTO: Handbook on Measuring Digital Trade, 2020). In practical, although, digital technology enables, to some degree, all forms of digital services but some digital services trade still involves physical delivery. For example, when shopping online, customers can search wanted items, compare prices and place orders. These services are enabled by digital technology, while the goods are delivered physically. Thus, digital services trade is not fully proceeded digitally, it should rely on physically transportation sometimes. Generally, companies running traditional services trade are geographically restricted due to that content of services such as in-store shopping. However, companies operating international trade in digital services has advantage of providing services to a wider range of customers from all over the world as long as they use digital platforms.

2. Development Trends

2.1. Overall trend

International digital services trade accounts for a large proportion in daily life and is developing rapidly at present, particularly trade in telecommunication and IT services. In details, according to the World Trade Organisation, the fastest-growing service sector in terms of worldwide exports in 2018 was telecommunications, computer, and information services, which increased by 15% (Stephenson and Sotelo, 2020).^[1] Another example could be that digital services accounted for 69% of U.S. cross-border services exports in 2019. Referring to the specific development trends of international digital services

trade, the following (figure 1) is some data showing that.



(Source: WTO Services Trade Report 2019)

Figure 1: World trade in commercial services by industry, 2005 and 2017

The table above shows the development in services trade by industry in 2005 and 2017. Overall, the fastest-growing industries between 2005 and 2017 were computer services, research and development services and health services. Also, the two most widely traded services internationally are distribution services and financial services, according to the World Trade Organisation figures.

2.2. Trend in distribution services

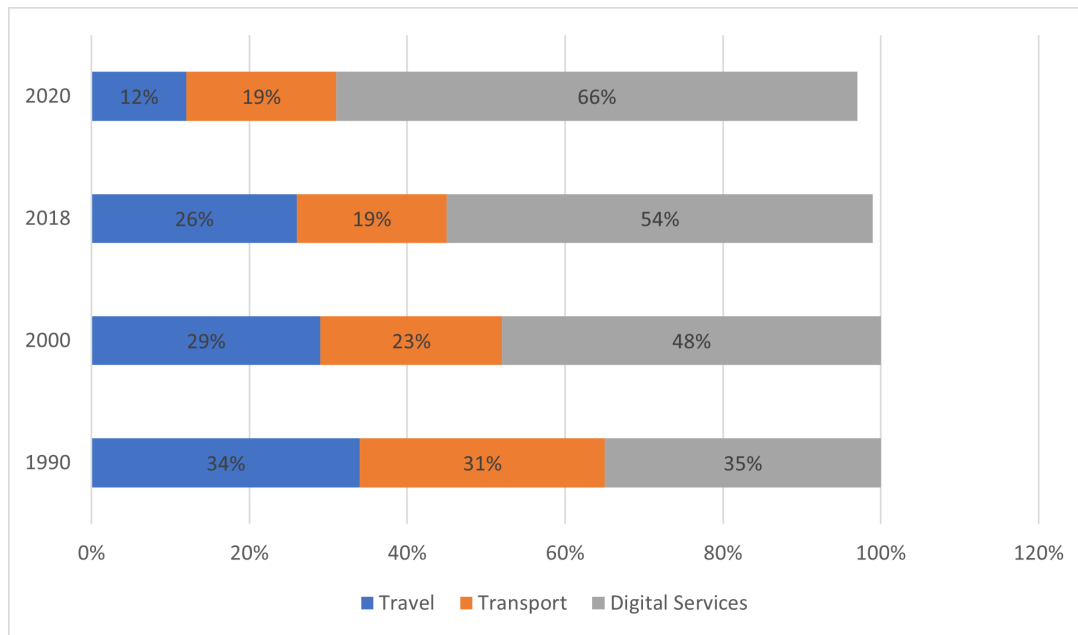
To be exact, in terms of distributors in distribution Services, they are up against stiff competition, particularly on the internet. They must be able to meet customers' demand of rapid delivery. With the help of digital service, customers can now place online orders from any location. A good example could be Amazon, people can buy any item they want on the website from anywhere, typically with a delivery time of two to three days. Customers who open an Amazon Premier account can also get free shipping opportunity. Additionally, people can use their mobile app to complete their purchase and track the status of their orders directly from their mobile phone, making it even more convenient for customers. Meanwhile, customers tend to choose shopping online due to good experiences on the website. Under such circumstance, distributors can benefit from scale economic and develop quickly. This is why digital distribution services keeps accounting for the largest proportion in 12 years.

2.3. Trend in digital financial service

However, digital financial service is not as familiar to people as distribution service but accounts almost the same proportion of digital trade as a whole as distribution service. The potential reason could be that Financial Services sector makes it possible for people and businesses to conduct business across borders. In that the amount of trades between international companies, normally, is huge, financial services accounted for about 77% of all global trade in 2017(WTO Services Trade Report, 2019). Due to the need of international operations, banks and other financial institutions keep their subsidiaries abroad and adjust to different consumer preferences. Digital services such as mobile banking, e-banking and digital shopping are reshaping the financial services industry.

2.4. Changes in the share of several digital services in services trade

When referring to the digital services trade globally, it has accelerated, particularly after the spread of COVID-19. The following chart (figure 2) shows changes in the share of several digital services in services trade.



(Source: World Bank, World Development Indicators, years 1990, 2000 and 2018; WTO-UNCTAD estimates, year 2020, cited in WTO, World Trade Statistical Review 2021)

Figure 2: The share of several digital services in services trade

From the chart, in 2018, even prior to the corona-virus pandemic, more than half of the services traded could be delivered via digital means. Digital services trade is growing significantly in recent years, comparing one-third of all services exports in 1990 with two-thirds in 2020 according to data from World Bank. In the future, the upwards development of digital services trade is inevitable, to which is contributed by the ease of digital trade.

3. Opportunities

3.1. Influence of multiple external factors

A growing number of opportunities for digital services trade are opening up as a result of increasing international exchange in terms of technology, country policy, consumer psychology and perceptions of value and some other factors. Taking China as a good example, the China Digital Services Trade Development Report 2020 states that the scale of China's digital trade is expected to keep growing rapidly in the future, with the percentage of services trade steadily growing as well. Additionally, digital trade will be on a more stable footing. As a result of the initial formation of a system of digital trade laws, regulations and policies, the digital trade sector will be able to develop in an orderly manner. As global market players are expanding aggressively and the expansion of international markets for digital trade will continue in the foreseeable future as well, in the recent years, the Chinese government places a high value on the development of digital trade, stating unequivocally that the government will speed up the development of digital trade, encourage the construction of digital services export bases and establish digital trade demonstration zones. One of these actions taken is that China applied to join the Digital Economy Partnership Agreement (DEPA) on November 1, 2021, expressing a desire to strengthen cooperation with DEPA member countries in the digital economy in order to promote innovation and sustainable development. The booming global digital economy will propel the rapid expansion of global digital trade, bringing up a plethora of opportunities for digital trade in a number of different countries.

Furthermore, due to the rapid promotion and application of new digital technologies such as big data, cloud computing (including artificial intelligence) and blockchain, a solid industrial foundation for the development of digital trade has been established. During COVID-19 pandemic, cross-border travel for people from many countries was restricted and a significant amount of traditional services trade, which had previously relied on face-to-face transactions, was moved online, paving the way for the future growth of digital trade in the world economy.

3.2. Example

As an illustration, consider the case of Netflix in the United States, which developed rapidly in these two years after a long platform period. To be exact, in 2020, the market capitalization of Netflix increased sharply by 68.5% from \$141.98 billion to \$238.89 billion (Netflix- Market capitalization, 2021).^[2] The potential reason is that for one thing, Netflix was actively seeking the possibility of collaboration with companies in other countries and, at the same time, improving the technology behind its own platform; for another thing, worldwide lockdown accelerates technological innovation, as well as the inclusiveness and openness of international policy on digital services trade. Both internal and external factors enabled Netflix, who grasped this opportunity, to grow at such a rapid pace in less than two years,

4. Challenges and Barriers

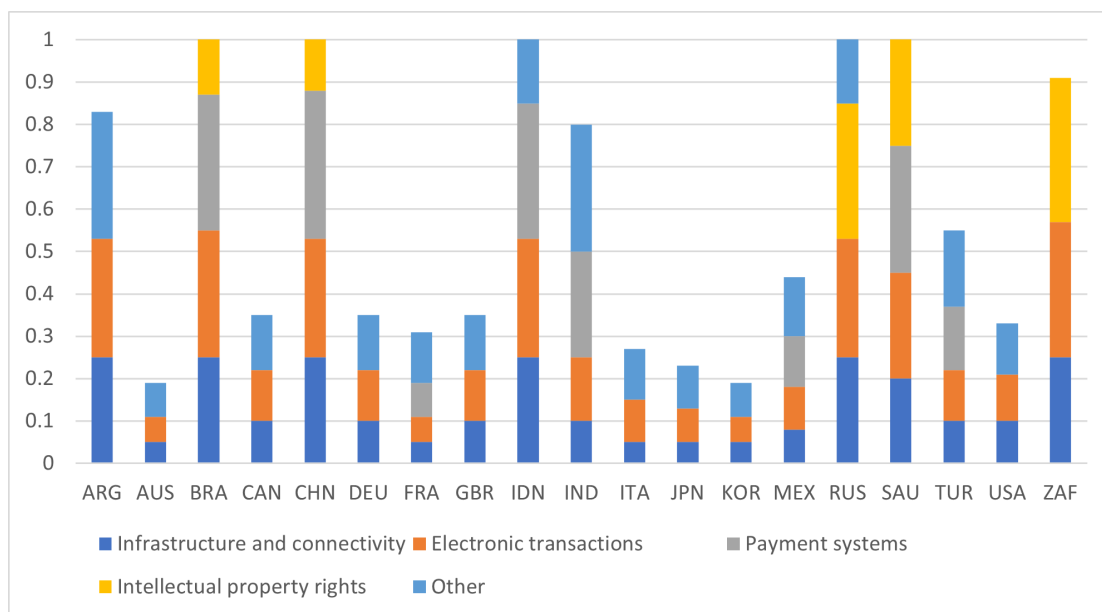
There are many challenges and trade barriers to be considered when it comes to the digital services trade, even though there are many opportunities for its growth. As with trade in goods, foreign government barriers prevent many countries from realising their full potentials in the trade of services globally. These barriers, as opposed to those that hinder trade in goods, are frequently found behind the border rather than in the form of tariffs or customs regulations.

4.1. Impact of government regulations and rules

In many cases, the impediments are government regulations and rules that appear legitimate on the surface, but which may discriminate against foreign providers either intentionally or unintentionally (Fefer, 2020).^[3] There are some examples of service trade barriers, including: (1) restrictions on international payments, which means depending on the country, customers may only be able to spend money in the local currency, and the customers may have to exchange their local currency for foreign currency before they can use it. (2) requirements that foreign professionals have local certification, training, and/or licensing. For example, foreigners who wish to work in local country in the financial services or such as consulting services sectors must first obtain a qualification that is recognised in that country. (3) localization restrictions, such as local content requirements and data flow limitations. Countries such as China place strict restrictions on the content of films and television shows that are broadcast on the video platforms. (4) government-owned monopoly service providers. Some countries have state monopolies in important services sectors, such as the broadcasting industry in China and the transporting industry in India, which makes it difficult for foreign competitors to enter these markets. (5) restrictions on FDI or movement of personnel. In the following section, the author will go into greater detail about the barriers to the globalization of digital service trade, drawing on data analysis and case studies.

4.2. The investigation of OECD Digital Services Trade Restrictiveness Index

In the following part, the author will use a tool called the OECD Digital Services Trade Restrictiveness Index to investigate the trade barriers where innovation and the movement of digital services across borders are slowed and made more difficult. The OECD Digital Services Trade Restrictiveness Index (Digital STRI) provides insights into the nature and extent of regulatory barriers which affect the trade in digitally enabled services (Ferencz and Gonzales, 2019). The goal of the tool is to identify regulatory bottlenecks and develop roadmaps for the adoption of a more open and competitive regulatory environment for firms that conduct business in the digital realm (Ferencz and Gonzales, 2019). The Digital STRI comprises of two components: (1) a regulatory database that collects information on regulatory barriers from countries' publicly available laws and regulations; and (2) composite indices measuring the trade restrictiveness of these policies (Ferencz and Gonzales, 2019). The indices range from zero to one, with zero indicating an open regulatory environment for digital services trade and one suggesting a completely closed regulatory environment for digital services trade, respectively. The following chart shows the Digital STRIs for G20 countries which presents the Digital STRI outcomes for 2018 compared to the results for 2014. (As shown in figure 3)



(Sources: OECD Trade Policy Papers, No.232)

Figure 3: Digital STRIs for G20 countries (2014 and 2018)

From the chart, on average, more than half the total index value comes from Infrastructure and connectivity. It includes policies that affect connectivity and cross-border data inflows, which are both necessary for engaging in digital trade. When it comes to electronic transactions, specific licenses to engage in electronic commerce are rarely required, however, when required, the conditions for obtaining them are less favourable for foreign providers than they are for domestic providers. Aside from that, non-resident foreigners in eight countries are unable to register and declare their taxes online. Although basic electronic authentication procedures such as the validation of electronic signatures are typically in place, international standards for electronic contracts are not enforced in the majority nations. In the section of payment methods, four nations put discriminatory limits on access to particular payment methods, such as foreign credit, charge, and debit cards, while national payment security requirements diverge from international norms in five countries (Ferencz and Gonzales, 2019). Other less common restrictions include quantitative constraints on the quantity of monies that may be moved through online payment services and bans on the use of international electronic payment services.

5. Future

In the digital services sector, no transaction can be considered independent of the others; instead, they are intricately interconnected. A good example is that, in order to purchase an item on Amazon, a customer must first confirm the transaction with the seller, then pays for it online, and the seller ships it. Each of these services is so tightly connected that if any of them fails the transaction will not be successful. Any obstacles that arise during one of these transactions will have effects on the necessity or capacity to carry out the other transaction in its entirety. For example, for digital services trade in commodities to thrive, internet connectivity may be required, but it is not sufficient. Market openness must be treated in a more comprehensive manner, taking into account the entire spectrum of factors that influence every specific transaction. The use of new technologies by successful businesses in the digital era is closely linked to access to global markets, therefore trade policy must be considered in the context of a variety of other policies that are also important for the realisation of the shared advantages of digital adoption (OECD, 2019).

In the future, efforts are needed to better develop digital services trade. The following are some measures which may be useful for the development of digital services trade.

5.1. Strengthening digital infrastructure and the extent of digital education.

The basic environment for the development of digital trade exists in many countries, such as China, and includes technological advances as well as government policies and human resources. However, because the development of digital trade in China began late and also because the relevant policies and

systems have not yet been perfected, there are still some obstacles to the development of digital trade in China. Any industry's success is predicated on the development of its infrastructure, and the development of digital infrastructure is essential for the development of digital services trade. When it comes to digital trade governance, a country should prioritize the development of information and communication technology hardware infrastructure as well as the development of digital trade network platforms, such as online payment and digital banking, in order to create more convenient conditions for the development of digital services trade for small and medium-sized enterprises. There is also a requirement for countrywide digital education in order to continue to supply a competitive and integrated workforce for the digital commerce industry.

5.2. Elevating digital trade policy to a strategic position for national development

International trade is being increasingly dominated by the trade in services and the trend towards digitalization of trade in services is inevitable as the digital economy continues to grow and develop. Several countries have included the development of digital trade in their national development strategies, and these countries have actively developed and implemented a series of policies, rules, and regulations to facilitate the development of digital trade both internally and externally. These countries have also actively participated in the negotiation of digital trade rules in multilateral and regional agreements. Developed countries such as the United States, France, Japan, and the United Kingdom started their digital commerce development plans between the end of the twentieth century and the beginning of the twenty-first century. In the future, more countries will pay greater attention to digital commerce and the digital economy, and they will adopt policies, rules, and regulations that are appropriate for their own national situations and circumstances. In addition, the government should put in place an effective monitoring mechanism to guarantee that digital commerce development strategies are carried out effectively and efficiently.

6. Conclusion

Digital services trade opens up new possibilities for consumers and businesses of all kinds, but it also brings new obstacles (OECD, 2019)^[4]. There are significant disparities across nations in terms of infrastructure development, effective regulation, and the availability and strengthen of business services providers in fields as diverse as information technology, banking, insurance, and logistics (Stephenson and Sotelo, 2020). Encouraging commerce in digital services might assist in readdressing this imbalance by bringing together suppliers and customers from all over the world. It has the potential to reduce the disruptions that consumers and small businesses are experiencing as a result of the COVID-19, particularly in areas where there are fewer local choices.

Moreover, it has the potential to open up new markets for local enterprises as well as new export prospects for corporations in developing countries. Consumers and producers benefit from increased variety and quality in the services that are available for purchase through trade in services, as well as by allowing the more productive services firms to expand (WTO report, 2019).

Despite the fact that many countries continue to face numerous challenges and roadblocks in the development of digital services trade, as long as all countries cooperate, strengthen the communication and exchange, minimise the negative impact of challenges, develop practical cooperation plans, and strengthen their own digital trade infrastructure, digital services trade will have a better future and a broader market in the coming decades.

References

- [1] Information on: <https://www.weforum.org/agenda/2020/06/trade-in-digital-services-is-booming-here-s-how-we-can-unleash-its-full-potential/>
- [2] Information on: <https://companiesmarketcap.com/netflix/marketcap/>
- [3] Information on: <https://crsreports.congress.gov/product/pdf/IF/IF11706>
- [4] Information on: : <https://www.oecd.org/going-digital/trade-in-the-digital-era.pdf>