Trade In Skill-Intensive Services - Through the Pandemic and Accelerating Digitalization

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Abstract: This paper examines how trade in services has navigated the pandemic crisis helped by the intensification of digitalization, highlighting the effects of this phenomenon on different categories of services in both developed and developing economies. The research carried out reveals that the pandemic had challenging effects on the trade in services, depending on the intensity of the skills required in their production-supply process and the level of digitalization. Our analysis also underlines that the end of the pandemic marks the beginning of a new era of restoring the service sectors severely affected by the restrictions imposed during this period, as well as their reconfiguration, depending on the continuous intensification of the implementation of new technologies in services. In the last part of this paper, it is highlighted the need to renew trade policy measures adapted to this phase marked by deep post-pandemic transformations in the field of trade in services, to take advantage especially of those related to the latest technologies.

Keywords: trade in services, skill intensity of services, countries' development, pandemic, digitalization

JEL Classification: F13, I25, J24, L86, O24

1. Introduction

Nowadays, the service sector represents an economic structure whose diversity and complexity of its subcomponents make it difficult to formulate general statements at the level of the sector as a whole (the World Trade Organization classifies approximately *160 sub-services)*. It is therefore necessary to classify them according to similar characteristics in order to highlight the specific developments in this field. Also, in addition to the growth and diversification of the service sector composition, it is also noteworthy that most of these services are traded at the global level, with the World Trade Organization (2023a) classifying the *international modes of supplying them into four categories* (mode 1 - cross-border supply, mode 2 - consumption abroad, mode 3 - commercial presence, and mode 4 - movement of natural persons).

Regarding the broad typology of services, the *intensity of skills required to provide services* is also a major element of an analysis that can divide them into two broad categories (Nayyar & Davies, 2023): (i) *low-skilled services*, which usually require *direct interaction* between supplier and consumer (such as transport, hospitality, personal services, or recreation), and (ii) *high-skilled services* (such as information and communication technologies - ICT, financial and professional services). All these types of services have been highly developed and intensively traded globally since the 1990s due to the development of ICT, ICT representing a service in itself (UNCTAD, 2015) and also a means of transaction for the majority of the other services.

In addition, the services are addressed to both the *private and the public sectors*, and many services that were previously provided only in the public system or only at the national level are now also traded in the private system, worldwide (e.g., telecommunication, but also education and health services), given the favourable regulations adopted at national and international level. Most of these services are weighty inputs for non-service sector activities (for example, transport and logistics services are used as infrastructure for international trade in agricultural and manufactured goods, while ICT services are increasingly important for the management of manufacturing processes).

Today, it is already noticeable the considerable size of the service sector and, implicitly, its contribution to global economic growth (Buckley & Majumdar, 2018). Over the last three decades, services have grown considerably: in 2019, before the outbreak of the devastating phenomenon with an impact on the world economy (the COVID-19 pandemic), services generated 63% of global production and provided 57% of jobs globally. Of

course, a closer look by country category reveals differences between developed and developing countries, with the second category of countries registering lower values (WBD, 2023).

The COVID-19 pandemic has almost completely disrupted the service sector, affecting all its components: most of them negatively (those relying on personal interaction, such as transport and hospitality, have been particularly hard hit by social distancing measures and restrictive regulations related to direct interaction), but some of them being influenced in a *positive* way (those stepping *already in the process of digitalization, such as ICT and professional services have been less affected due to their ability to be operated remotely*). However, the restrictions imposed by the pandemic had also an effect on traditional services, increasing their digitalization, and enabling greater scale and innovation in the service sector, with consequent benefits for other economic sectors.

Against this background, this paper addresses the following analysis directions: (i) the global service sector expansion over the last decades, (ii) the impact of the COVID-19 pandemic on services depending on the intensity of the skills required to provide them, (iii) the role of the digitalization process intensified during the pandemic in stimulating the growth of the service sector after the pandemic, where the entry into a new era of the globalization of services is discussed, and (iv) the need for renewed commercial policies in order to address the future growth potential of trade in services.

2. The global services developments over the last decades

The international literature offers us a lot of evidence of the *contribution of the service sector to global economic growth during the past three decades* (Jong & Vermeulen, 2003), focusing also on the *shift in the development model from manufacturing to services* (Calindi, 2021; WB, 2021), in both developed and developing countries. These claims are supported by the data presented in Table 1, which highlights the evolution of the main indicators related to services between 1990 and 2021.

Table 1: The contribution of services to the macroeconomic indicators, globally and by economies, over the period 1990-2021 (%, USD billion)

Indicators and groups of countries	**1990**	**2000**	**2010**	**2019**	**2020**	**2021**
Services, value added (% of GDP)						
World	-	63.5	62.7	64.8	65.3	64.4
High income economies	-	66.8	69.0	70.3	71.03	70.75
Low- and middle-income economies	42.4	48.8	49.2	54.0	53.94	52.47
Trade in services (% of GDP)						
World	7.7	9.2	11.7	13.6	11.6	11.8
High income economies	7.9	9.2	13.2	16.5	14.6	14.95
Low- and middle-income economies	6.7	9.2	8.5	8.7	6.5	6.7
Employment in services (% of total employment)						
World	-	39.4	44.5	50.6	-	-
High income economies	-	67.7	73.0	74.5	-	-
Low- and middle-income economies	-	32.7	38.1	45.3	-	-
Service exports (USD billion)						
World	886	1713	4049	6275	5188	6073
High income economies	796	1442	3260	5025	4,285	4,928
Low- and middle-income economies	102	283	811	1285	914	1158
Service imports (USD billion)						

Indicators and groups of countries	1990	2000	2010	2019	2020	2021
World	936	1651	3870	5912	4900	5570
High income countries	824	1383	2961	4.381	3769	4249
Low- and middle-income countries	121	273	905	1531	1125	1315

Source: Author based on World Bank Data (2023).

According to data published by the World Bank, before the COVID-19 pandemic, *the added value of services in the GDP* of high-income countries exceeded 70%, and of low- and middle-income countries reached 54%. Also, with regard to the *share of trade in services in the GDP*, a considerable evolution can be noted (in 2019, the developed countries recorded 16.5%, and the emerging and developing countries 8.7%). Also, a relevant indicator for assessing the importance of services in the economies is the share of the *labour force employed in the service sector* in the total labour force employed. Thus, at the level of all the countries analysed by the World Bank, the value of this indicator has been in a continuous upward trend, in 2019, the service sector ensuring 74.5% of the jobs in high-income countries and 45.3% in low- and middle-income ones (WBD, 2023).

A remarkable evolution was observed at the level of *international trade in services,* which increased almost five times for export and four times for import over the three decades, with large differences among countries. Thus, in 2019, high-income countries recorded USD 5 trillion in exports and USD 4.3 trillion in imports (which represents a five-fold increase in exports and four-fold in imports compared to 1990), and low- and middle-income countries recorded USD 1.2 trillion in exports and USD 1.5 trillion in imports (which is a ten-fold increase in both exports and imports from 1990). This development is mainly explained by *changes in international regulations, emerging technologies and marketing challenges, all supporting outsourcing, automation and digital based business models* (Lazzari, 2019).

In 2020, all the analysed indicators were affected by the COVID-19 pandemic crisis, their values decreased compared to the levels of previous years. However, given the *diverse structure* of the service sector, the analyses carried out at the level of the main categories of services reveal different developments: (i) *a sharp decline in services requiring personal interaction* (such as tourism and international transport, in the context of the lockdown measures adopted by most countries and the consequent restrictions on personal mobility), and (ii) an *increase in high-skilled and digitalized services, as well as in services that could be provided remotely*. After the *severe decline in the first year of the pandemic*, in 2021 international trade in services returned to an upward trend, by removing the restrictions imposed in 2020, which made it possible to resume international transactions in services, mainly those related to personal mobility.

The statistical data published by the World Trade Organisation (WTO) reveal the effects of the pandemic on international trade in services (-18% in 2020), a recovery trend after the pandemic crisis (+17% in 2021) and a slowdown of the growth rate in 2022 (+15%). During the pandemic, travel and transport were the most affected segments, with a decrease of 61% and, respectively, 18%, caused by the mobility restrictions, while other commercial services (IT and professional services, financial and insurance) were less affected due to their characteristics and, in particular, the progress of digitalization (Table 2).

Table 2: International trade in services, globally and by segments, between 2019-2021 (year-on-year change, %)

Types of services	2019	2020	2021	2022	2022 versus 2019
Total commercial services	3	-18	17	15	12
-Transport	0	-18	35	25	40
-Travel	2	-61	13	79	-22
-Goods related services	5	-12	14	6	6
-Other commercial services	5	0	13	2	16

Source: Author based on data published by WTO (2023b).

Overcoming the critical moment of the pandemic meant that, from 2021 onwards, service transactions entered into a recovery process, the data in Table 2 highlighting the steps undertaken to re-entry the pre-pandemic

trends, so that 2023 is expected to be a year of full recovery in many service segments. However, the forecasts of further growth in international trade in services in 2023-2024 are marked by the uncertainty generated by the intensification of geopolitical tensions (e.g., US-China commercial frictions, or the Russian-Ukrainian war), the extent of which is still difficult to anticipate, given the disruptions they cause to international markets.

3. The intensity of highly specialized skills – a key determinant of global services expansion

The fact that the service sector has led to economic growth in both developed and developing countries is very noticeable in all data collected before the COVID-19 pandemic. However, it is equally evident that there are significant *differences in terms of the evolution of categories of services* and *groups of countries*, and, consequently, in their contribution to economic development.

The *intensity of the skills* required to create, produce and deliver services, as well as the *capacity to be relocated to a foreign country,* also referred to as offshorable (Blinder, 2009) and the *possibility to be internationally traded* are the criteria of an in-depth analysis in this field, but rather difficult to capture in terms of statistical indicators. Accordingly, two main types of services can be identified: (i) *high-skilled offshorable services* (including ICT, finance, and professional, scientific, and technical services), and (ii) *low-skilled contact services* (including transportation; hospitality; wholesale trade; arts, entertainment, and recreation; retail trade; administrative and support services; and personal services) (Nayyar & Davies, 2023).

The ***high-skilled offshorable services*** are intensively traded at the international level, due to very low personal interaction with customers, the remote delivery not causing any quality losses. The industries providing these services have a low level of employability of workers with face-to-face customer interaction tasks and can therefore be easily *relocated to other countries, without major cultural adaptation efforts*. In addition, these services are often used as *intermediate inputs* by other industries in the domestic economy, offering new business opportunities (for example, three-quarters of the output of professional services are intermediate inputs for other sectors, mainly manufacturing industries).

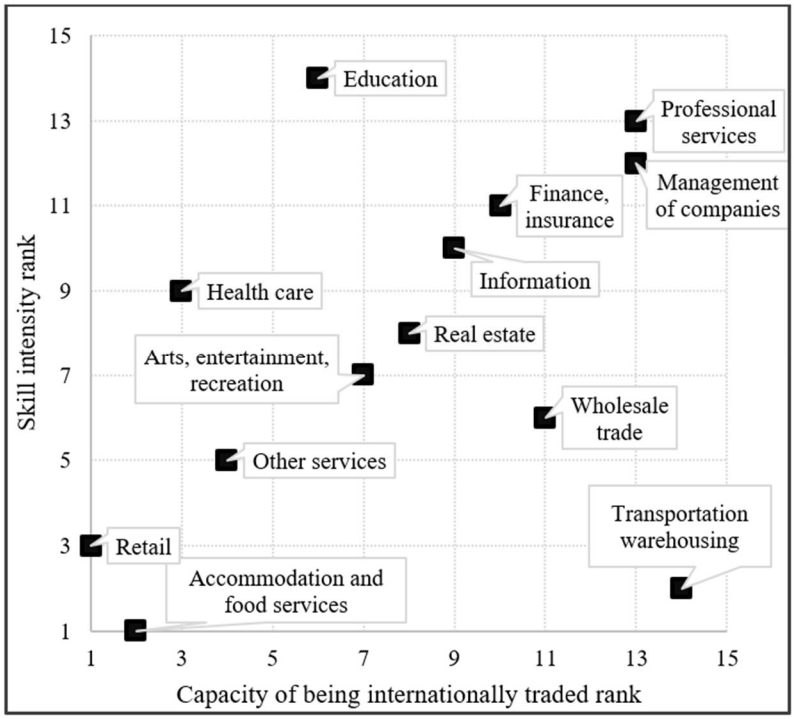
The ***low-skilled contact services*** rely more on human interaction, are labour intensive and thus less internationally tradable than the first category. Some of these services (such as transport and wholesale trade) are highly operated internationally, either separately or as intermediate services associated with international trade in goods. In contrast, hospitality services (accommodation and restaurant services) are largely traded through consumer travel abroad as part of tourism-related travel services.

The ***intensity of skills in service sector*** can be ***measured*** *by the employed workforce*, where *university graduates represent the highly qualified* workforce and those with high school education or below the less qualified workforce, which corresponds to a relative level of services productivity (Pertold-Gebicka, 2010). Another way to measure skill intensity in services is to look at the share of workers employed in manual intensive tasks compared to automatic tasks (Nayyar & Davies, 2023).

The ***degree of offshorability*** is usually used for services traded by developed countries and is measured by the *share of tasks performed by workers* in a country that (i) do not involve face-to-face contact between the provider and the consumer (the only interaction is between co-workers within the same service provider company); (ii) can be done without physical presence at the place of delivery; and (iii) do not experience a decrease in quality when delivered remotely (Nayyar & Davies, 2023). Therefore, the offshorability, seen as the ability to perform work duties in a foreign country (Blinder & Krueger, 2013), reflects the possibility that work tasks may be *shifted from developed countries to emerging and developing countries* where labour costs are lower (MKGI, 2005) and obviously workforce skills are adequate to the required level.

The identification of service categories according to trading and skill intensity was the research interest of Eckert et al. (2019), whose studies, based on US economy data, constructed a graph of the main service categories, where skill intensity was considered as the share of university-educated workers in a service sector, and the level of trading by dividing the sum of exports and imports by output. This graphical representation presented in Figure 1 is very suggestive in understanding the categories of services in relation to the two characteristics analysed in this section.

Figure 1: The place of service categories in relation to international tradability and skill intensity criteria



Note: The rank takes value between 1-15, where 15 is the maximum.
Source: Author representation based on Eckert et al. (2019).

While the contribution of low-skilled contact services to value added growth in developed and developing countries is rather similar in percentage terms (35.8% and 31.9% respectively, the contribution of ***high-skilled offshorable services increases with the level of income per capita*** (Table 3). Thus, high-skilled offshorable services account for around 25.6% of GDP value-added growth in developed countries compared to 14.8% in emerging and developing ones, and for 50% employment growth in developed countries compared to 9.5% in developing ones. These differences are due to the fact that the increase in low-skilled contact services is little related to the increase in exports (these services being dependent on the increase in domestic demand) and the increase in total factor productivity (these services being characterized by high intensity of unskilled labour and low intensity of capital inputs) (Nayyar & Davies, 2023).

Table 3: Contribution of skill-intensive services to value-added growth and employment growth, by economy, between 1990-2018 (average %)

Indicators and categories of countries	High-skilled services	Low-skilled services
Services contribution to GDP value added growth		
Developed economies	25.6	35.8
Emerging and developing economies	14.8	31.9
Services contribution to employment growth		
Developed economies	50.0	38.8
Emerging and developing economies	9.5	43.4

Sources: Author calculations based on data published by Nayyar & Davies (2023).

Over the last three decades, trade in services has evolved and nowadays, many services are no longer constrained by the personal interaction between service providers and consumers, mainly due to the technological advance and its use in many service transactions (digitalization). In the case of low-skilled contact services, such as transport and wholesale trade, exports play a more important role where they are *related to trade in goods*. The share of exports in final demand is also quite large for some highly skilled offshorable services, such as professional services and ICT, where *digital electronic content has made them more storable, codifiable and transferable.* As the constraints of physical interaction between consumers and suppliers have diminished,

professional services can apply *cost-driven business models* comparable to those in manufacturing industries (Gervais & Jensen, 2019), generating significant economies of scale (Thomson et al., 2018). However, international transactions with these services deal with some trade obstacles or impediments, as WTO members are engaged in completing the international regulatory framework to overcome them.

4. The impact of the COVID-19 pandemic on skill intensity services evolution

The economic *contraction during the COVID-19 pandemic was significant for the service sector* (Ando & Hayakawa, 2022). Unlike previous recessions (such as the one in 2008), the supply and consumption of many services declined due to lockdowns and precautionary measures taken by authorities. Even now, after the end of the COVID-19 pandemic, the considerable change in consumption patterns from that period has implications for post-pandemic recovery and new developments in the service sector.

However, the impact of the pandemic on the service sector has not been uniformed across either subsectors and countries, a tie-breaking criterion being the ***qualification level of the skills needed to provide the services***. *Low-skilled contact services* dependent on direct interactions with consumers, such as accommodation, food, and transportation services, have been among the *harmfully affected* sectors. But the *high skilled offshorable services* group, consisting of ICT, professional and financial services, (i) has generally resisted the pandemic disruptions (largely because *digitalization* has helped to make these services flexible for remote delivery and home-based work) and (ii) has even seen growth of output and investment. Even among some low-skilled contact services, the pandemic has accelerated *digitalization*, including in countries where the use of digital technologies was poor.

The overall impact of the pandemic was different depending on the groups of the wide variety of services according to their characteristics, among which, in what follows, we refer to the intensity of skills. In the *low-skilled contact services* group, *hospitality* (accommodation and food services) and *transportation* services were the *most negatively affected*, with ***gross value-added*** *declining* by 40% and 21% respectively in April 2020 compared to April 2019 in emerging and developing countries. In contrast, in the *high-skilled services,* ICT experienced an *increase* of 8.7% in developed countries and the smallest decrease of 2.5% in developing countries at the peak of the pandemic, in April 2020 (Table 4).

Table 4: The changes in value added of services segments, by countries, in April 2020 compared to April 2019 (%)

Categories of services		Emerging and developing countries	Developed countries
High-skilled offshorable	Professional	-7.5	-6.2
	ICT	8.7	-2.5
Low-skilled contact	Commerce	-7.8	-7.2
	Transport	-21.0	-27.8
	Hospitality	-40.2	-51.2

Source: Author based on data published by Nayyar & Davies (2023).

The World Bank data collected over the period 2020-2021 emphasize that the ***largest negative impact on sales*** occurred in *low-skilled services* such as accommodation (-66.9% in 2020), food services (-53.6%), and transportation (-46.6%). The negative impact in these sectors continued through 2021 in developing countries, but some recovery became visible in developed economies due to the advance in taking measures to control the pandemic. In the case of *high-skilled offshorable services* (ICT and financial), a considerable decrease is also observed (-18.4% in 2021), but less compared to the category of low-skill services (Table 5).

Table 5: The changes in services sales during pandemic crises period, globally (year-on-year change, %)

Categories of services		Mid-2020	Early 2021	Late 2021
High-skilled offshorable	Financial	-30.3	-18.3	-18.4
	ICT	-34.4	-22.8	-18.6
Low-skilled -contact	Commerce	-34.1	-22.2	-21.2
	Transport	-46.6	-31.0	-29.1
	Accommodation	-66.9	-53.9	-43.4
	Food services	-53.6	-40.9	-32.9

Source: Author based on data published by Nayyar & Davies (2023).

A similar trend was observed for ***foreign direct investment*** (FDI) inflows into developing countries, where for the majority of service subsectors, the *greenfield projects were lower in 2020 and 2021* than pre-pandemic levels. The largest declines were in *low-skilled contact services*, such as hospitality and other services (including personal services). *High-skilled offshorable services* performed slightly better, although both professional services and financial services saw significant declines. ICT services was the only group that saw an increase in greenfield FDI, rising by one-third between 2019 and 2021.

Table 6: The evolution of greenfield projects in services in developing countries, during pandemic crises (2019 = 100)

Categories of services		**2020**	**2021**
High-skilled offshorable	Professional	50.4	54.9
	Financial	89.9	49.9
	ICT	122.4	135.4
Low-skilled contact	Hospitality	30.1	10.2
	Administrative	38.9	51.8
	Retail	81.5	77.4
	Transport	38.1	46.2

Source: Author based on data published by Nayyar & Davies (2023).

5. The potential of digitalization for the continuous growth of service sector

The pandemic crisis has affected the outlook for service-driven growth. After the peak of the crisis, the need to adopt some recovery models was imposed, as well as the evaluation of future opportunities related to the ***acceleration of digitalization***, strongly exploited during this period.

Therefore, the intensification of digitalization during the pandemic gives hope for growth prospects in the service sector. The developments during the pandemic at the level of *highly qualified offshore services* supported the actions taken in all countries in the direction of encouraging the necessary actions to intensify this process. For example, the share of ICT and digitally deliverable professional services in total service exports of developing countries increased from 40% in 2019 to 50% in 2020.

Even in *low-skilled contact services*, digitalization has been the vehicle for many traditional services. Thus, although they had been on the market for several years and had been already enjoying success, during the pandemic crisis the *streaming platforms*[1] offered the chance to art and entertainment service providers to deliver their creative contents to international markets even to very advantageous costs. Digitalization has offered extraordinary solutions even where physical interaction is a critical condition. This is the case of *e-commerce platforms* which, during the pandemic, allowed retailers and restaurants to offer their services outside their commercial locations. In addition, ICT and management practices have facilitated the standardization in many manufacturing businesses. Thus, digitalization together with the intangible capital enlarged business opportunities, therefore service businesses managed to gain important economies of scale.

Table 7: The evolution of personal interaction index and change in services sales, in 2020 (index, %)

Categories of services		**Direct personal interaction index***	**Remote work index***	**Change in sales 2020/2019 (%)**
High-skilled offshorable	Financial	0.57	0.73	-36.74
	ICT	0.31	0.68	-35.32
Low-skilled contact	Hotels	0.82	0.03	-64.10
	Restaurants	0.82	0.03	-56.73
	Retail and wholesale	0.73	0.32	-41.96
	Transportation & storage	0.33	0.18	-49.39

Note: *Direct personal interaction index and remote work index take value between 0 and 1, where 1 is maximum.
Source: Author based on data published by Nayyar & Davies (2023).

In recent years, in service industries, innovation has largely occurred through the accumulation of tangible and intangible ICT capital. *IT and telecommunications equipment, computer software and database assets* are included in the *tangible capital* category, with a significant development in financial and professional

[1] Netflix was launched in 2007, and now it has 230 million of subscribers worldwide. Google-YouTube was launched in 2015, and now it has 80 million of subscribers worldwide.

services, mainly among developed countries. The *intangible capital* has also increased considerably, here including the *means of disseminating digital technologies* where *software and computer-related data* are contained, but especially intellectual property acquired through research and development and design, accompanied by business skills such as branding, company-specific training and business process engineering. Intangible capital is dominant in the investments of companies in ICT, finance and professional services in developed countries

The accumulation of intangible capital in these highly skilled offshore services has growth prospects due to the spectacular development of artificial intelligence-based machine learning algorithms used in predictive, cognitive problem-solving tasks.

The share of intangible capital in investments is already also a priority in low-skilled contact services such as trade and hospitality, where online ordering facilities dominate the market. Therefore, the increasing complexity of ICT, such as artificial intelligence and machine learning, motivates and attracts complementary investments in intangible capital. As a consequence, the diffusion of ICT services using machine learning algorithms will be equally widespread in many low-skilled services in the coming years.

Table 8: The use and new investments in digital technologies in services industries, during the pandemic, globally (%)

Indicators and categories of services			**Mid-2020**	**Early 2021**	**Late 2021**
The use of digital technologies by companies	High-skilled offshorable	Financial	46.4	55.4	60.7
		ICT	43.6	55.2	60.3
	Low-skilled contact	Commerce	32.8	46.3	46.5
		Transport	21.0	35.7	37.6
		Food services	22.6	40.3	42.9
The new investment in digital technologies by companies	High-skilled offshorable	Financial	30	34	38
		ICT	28	46	41
	Low-skilled contact	Commerce	15	23	25
		Transport	13	21	24
		Food services	14	23	23

Source: Author based on data published by Nayyar & Davies (2023).

Increased digitalization and investment in intangible capital provide ***opportunities*** for innovation and productivity gains *in low-skilled contact services* in many ways: (i) they enable improvements in the efficiency of internal business processes, such as inventory management, accounting, marketing and payments (for example, big data analytics can increase the efficiency of transport services, by enabling real-time tracking of shipments and ensuring the improvement and expansion of navigation, WB, 2020); (ii) ICT-related investments can substitute for rare skills (e.g. ICT applications allow drivers to operate with limited geographical expertise); (iii) the expansion of company capabilities associated with digital technologies, such as marketing and branding, facilitates the increasing of low-skilled contact services that are less suitable for remote delivery (e.g. restaurant chains have invested in ICT and management practices that help them to determine human resources and purchasing optimisation). This type of standardization has allowed many companies to expand by replicating the same process, thanks to the use of information technology in areas that previously seemed unapplicable in this field.

Despite the spread of digital technologies, basic ICT use, which is positively associated with countries' per capita income, is far from widespread among many developing countries, where less than a third of firms use online communication tools in their businesses (Nayyar & Davies, 2023). According to the International Telecommunication Union data, 2.7 billion people worldwide were offline in 2022, with universal connectivity still a distant prospect in the least developed and landlocked developing countries, where on average only 36 % of the population is online (UNCTAD, 2023b).

6. Policy priorities for supporting the forthcoming services expansions

Developments in recent decades have shown an extraordinary increase in the frequency and intensity of interactions and interdependencies between people, companies and countries, both in terms of physical goods but also with services, which is nothing but globalization. Nowadays we can say that through the complex developments in the services field, we are more globalized than ever before, but mainly through intangible flows of goods.

Therefore, political decision-makers must adopt appropriate measures to enable countries to exploit the potential of the service sector to stimulate economic growth. National and international *policies to support the innovation and diffusion of digital technologies* at the level of all countries, especially those with modest possibilities, can bring great benefits to everyone, facilitating development and improving the quality of life around the world. Investing in ICT infrastructure, updating regulatory frameworks (especially with regard to data transfer) and strengthening management capacities and workforce skills can boost the adoption of digital technologies.

Countries can also promote the expansion of highly skilled offshore services by reducing barriers to foreign trade and investment and taking steps to improve skills allocating more investment for education. Last but not least, countries can support investment and implement regulatory reforms that encourage the revival of low-skilled contact services, as important sources for creating jobs and consequently drivers of economic growth. Policies considered include the *reform of regulatory barriers* and the *intensification of skill development by increasing the investment in education* for both high-skilled offshorable and low-skilled contact services.

At the global level, there are discussions about the new developments of economic relations against the background of globalization, which today is totally transformed by services and other intangible assets. The WTO claims that *globalization is entering a new stage*, in which the driving force of this process is represented by *digital technologies that will support international trade and investment in services.* Thus, international organizations are called to ensure the appropriate regulatory framework with the new developments of services and the digital economy at the global level (Ellard, 2023).

A suggestive example is the WTO, which is actively involved in the adoption of regulatory measures imposed by the development and intensive use of digital technologies. Here the member states take measures to reduce the digital gap between countries (in terms of developing digital infrastructure, connectivity, accessibility and strengthening countries' capacities), to eliminate the digital transmissions charging, and to agree other joint initiatives aimed at developing new disciplines on services, digital trade and investment (WTO, 2022; WTO, 2023c).

From all these perspectives, *new directions are highlighted*, namely (i) the *technological advances* that are the basis for the development of a new generation of internationally traded services through digital means (Javeus, 2023), as well as (ii) some *fragmentation* tendencies of the world economy (Georgieva, 2023, Ayhan Kose & Ohnsorge, 2023) that are about to reshape the current stage of globalization.

7. Conclusions

Our work has brought together some insights based on the available statistical analysis of recent trends in services correlated with *an important role of the intensity of skills required to supply services in the international market*. Throughout the paper, we have highlighted the differences between highly skilled offshorable services and low-skilled with high-contact services, and how they interact with recent technological changes, especially in terms of tradability and digitalization. Major differences between the countries are emphasised and also the need to find solutions at the level of political decision-makers within international organizations to reduce the gap between countries in order to offer them the chance to benefit from a modern service intensive development model. These differences have a significant impact on their citizens in terms of the access to certain services, but above all in terms of their possibility to increase the high skilled services in their economies.

The increased use of digitalization during the pandemic has given a strong impulse to service-based business models and their prospects. On the one hand, it has improved the opportunities for international trade in services, not only in highly skilled offshore services, but also through the streaming platforms that enable the remote delivery of services that were previously based on physical interaction. On the other hand, it paved the way to new and increased efficiency gains. Thus, the digitalization brings together labour-intensive services, ICT and intangible forms of capital, reducing the importance of physical interaction in market transactions, improving business processes and facilitating economic expansion.

Despite the current threats of global economic fragmentation, the services technological developments will become the main driver of the globalization process, given the fact that in recent decades the service-intensive economic development model proved to be dominant (as confirmed by the high share of services in GDP). Trade and investment in the service sector have the potential for rapid growth in the coming years, which lead us to believe that the *new generation of services could become the engine of the globalization trend*, a trend that, as in

its previous stages, will generate changes including in the level of positions and competitive advantages of world economies.

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