

Global and European Foreign Trade during the COVID–19 Pandemic

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Abstract

The article aims to answer the following questions: 1) How has the European Union's international trade developed in terms of goods and geography in the last two years, and to what extent has it been resilient to the effects of the COVID–19 pandemic? 2) To what extent has the ambitious path to the development of the digital economy, including the particularly dynamic development of e-commerce in recent years, contributed to reducing the negative effects of the COVID–19 pandemic?

The results of the research show that the global economy experienced a huge decline in trade in goods and services during the COVID–19 pandemic: World trade in goods fell by 7.4% in 2020, which means that global exports amounted to USD 17.6 trillion, i.e., USD 1.4 trillion less than in the previous year. It was the largest annual decline since the 2009 recession, when trade fell by 22%. However, a much stronger decline was recorded in world trade in services, which in 2020 shrank by 20% compared to 2019. During the COVID–19 pandemic, the dynamic development of global e-commerce was noted. According to the data presented in the UNCTAD report of May 3, 2021, global e-commerce increased to USD 26.7 billion. Business-to-business (B2B) sales dominate in e-commerce. E-commerce accounts for 30% of the world's gross domestic product (GDP) and covers both business-to-business (B2B) and business-to-consumer (B2C) sales.

Keywords: European Union, international trade, e-commerce, digital economy, Digital Europe, Digital Compass

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Introduction

The effects of the COVID–19 pandemic have become very severe for many sectors of the global and European economies in recent years. This is indicated by the results of analyses and assessments of the International Monetary Fund (IMF), the United Nations Conference on Trade and Development (UNCTAD), and the European Commission (EC). Fundamental here is the latest IMF forecast from January 2022. The world economy and most of its regions started 2022 (International Monetary Fund 2022b) with a weaker position in terms of the achieved economic growth rate than expected in 2021 (International Monetary Fund 2021).

However, data on world trade in goods are slightly more optimistic. An UNCTAD report from December 2021 (UNCTAD 2021c) showed that in that year, the value of global trade in goods and services increased by approximately USD 5.2 trillion compared to 2020. The report showed that the value of global trade in goods exceeded the pre-COVID–19 level by 15%, but in the services sector, performance was weaker as the trade value has not yet reached pre-pandemic levels. On the other hand, good results of the increase in trade intensity were recorded during the pandemic in e-commerce in both its forms, i.e., Business to Business (B2B) and Business to Customer (B2C). It was related to the intensive development of the digital economy at the European level and especially at the global level.

However, according to the IMF, the economic damage caused by the conflict in Ukraine from March 2022 will contribute to a significant slowdown in global economic growth in 2022 and a substantial increase in inflation. Fuel and food prices have risen sharply, hitting vulnerable populations in low-income countries the hardest. Global growth is expected to slow down from an estimated 6.1% in 2021 to 3.6% in 2022 and 2023. After 2023, global growth is projected to decline to around 3.3% in the medium term. War-induced increases in commodity prices and rising price pressures led to an inflation forecast of 5.7% for 2022 in developed economies and 8.7 percent in developing and emerging economies (International Monetary Fund 2022a).

This article aims to try to answer the following questions:

1. What major changes have occurred in global and European trade in goods and services during the COVID–19 pandemic?
2. To what extent does the ambitious path to the development of both circular and digital economies in the global and European economy – including the particularly dynamic development of e-commerce in recent years – contribute to reducing the negative effects of the COVID–19 pandemic?

Table 1. Latest *World Economic Outlook* projections

| Real GDP, annual percent change | 2021 | 2022 | 2023 |
|---|------|------|------|
| World Output | 6.1 | 3.6 | 3.6 |
| Advanced Economies | 5.2 | 3.3 | 2.4 |
| United States | 5.7 | 3.7 | 2.3 |
| Euro Area | 5.3 | 2.8 | 2.3 |
| Germany | 2.8 | 2.1 | 2.7 |
| France | 7.0 | 2.9 | 1.4 |
| Italy | 6.6 | 2.3 | 1.7 |
| Spain | 5.1 | 4.8 | 3.3 |
| Japan | 1.6 | 2.4 | 2.3 |
| United Kingdom | 7.4 | 3.7 | 1.2 |
| Canada | 4.6 | 3.9 | 2.8 |
| Other Advanced Economies | 5.0 | 3.1 | 3.0 |
| Emerging Market and Developing Economies | 6.8 | 3.8 | 4.4 |
| Emerging and Developing Asia | 7.3 | 5.4 | 5.6 |
| China | 8.1 | 4.4 | 5.1 |
| India | 8.9 | 8.2 | 6.9 |
| ASEAN-5 | 3.4 | 5.3 | 5.9 |
| Emerging and Developing Europe | 6.7 | -2.9 | 1.3 |
| Russia | 4.7 | -8.5 | -2.3 |
| Latin America and the Caribbean | 6.8 | 2.5 | 2.5 |
| Brazil | 4.6 | 0.8 | 1.4 |
| Mexico | 4.8 | 2.0 | 2.5 |
| The Middle East and Central Asia | 5.7 | 4.6 | 3.7 |
| Saudi Arabia | 3.2 | 7.6 | 3.6 |
| Sub-Saharan Africa | 4.5 | 3.8 | 4.0 |
| Nigeria | 3.6 | 3.4 | 3.1 |
| South Africa | 4.9 | 1.9 | 1.4 |
| <i>Memorandum</i> | | | |
| Emerging Market and Middle-Income Economies | 7.0 | 3.8 | 4.3 |
| Low-Income Developing Countries | 4.0 | 4.6 | 5.4 |

Note: For India, data and forecasts are based on the fiscal year, with FY 2021/2022 starting in April 2021. For the April 2022 WEO, India's growth projections are 8.9 percent in 2022 and 5.2 percent in 2023, based on the calendar year.

Source: International Monetary Fund (2022a, p. 6).

The European Union's new trade policy towards third countries

In times of the digital revolution, geographic barriers and distances are becoming less important, which has a huge impact on the economy and society worldwide. It also means new opportunities for trade, including for European Union (EU) SMEs and consumers, thanks to the global e-commerce market, estimated at over EUR 12 trillion. Compliance costs tend to be higher for small businesses than for large businesses when trading cross-border. However, e-commerce gives even small internet businesses the ability to access customers from all over the globe. As the largest exporter of services in the world, the EU can benefit from e-commerce. However, in the age of the digital economy, new types of trade barriers have emerged. Some of them concern companies for which trading in digital channels is their primary activity. The collection, digitization, storage, processing, and transfer of data (including economic, financial, statistical, and scientific information) have become an integral part of modern business models, including in manufacturing companies. These data are vital for the development of global value chains.

Consequently, the importance of the free flow of data across borders for Europe's overall competitiveness has increased. Regulatory cooperation, mutual recognition, and the harmonization of standards are the best tools to solve the problems of the digital economy. Many of these issues are addressed in the Digital Single Market Strategy, but only in the EU context. European companies still face significant barriers around the world, such as non-transparent rules, state interference, and unjustified data localization and storage requirements. Data security is of paramount importance to all companies that process data. Digital infrastructure, encryption, and common standards are also important for global value chains, so these issues also fall within the scope of trade policy.¹

On February 18, 2021, the EC published *Trade Policy Review – An Open, Sustainable and Assertive Trade Policy*, which presents a new balanced, open, and assertive European Union trade policy (*Trade Policy Review...* 2021, see also European Commission 2021c). In it, the EC sees sustainable development as an element of the necessary green transformation of economies, which will have to be reflected at the global level, i.e., within the World Trade Organization (WTO) and at the level of other trade organizations. The EU is also working with individual WTO members to implement parallel environmental initiatives related to the circular economy.

The WTO also has a vital role in supporting the Sustainable Development Goals of Decent Work and Gender Equality, which are extremely important both outside and within the EU. In relation to decent work, the WTO supports the analysis and exchange of experience on how

¹ https://trade.ec.europa.eu/doclib/docs/2016/january/tradoc_154149.pdf (accessed: 2.05.2022).

trade policy can contribute to social development, how stronger protection of workers' rights is beneficial for growth and development, and how to ensure that both within and outside the EU the benefits of trade liberalization will reach all workers and disadvantaged communities. This action can be supported by continued and more active cooperation between the WTO and the International Labor Organization. The EU is also cooperating internationally to further integrate this social dimension of globalization into the work of the WTO. Concerning gender equality, the EU can play a leading role in raising awareness of the importance of ensuring that a gender mainstreaming approach is at the heart of trade policy. It can be achieved through initiatives such as the Declaration of the WTO Ministerial Conference on the trafficking and economic empowerment of women, organized in Buenos Aires in December 2017 (*Gender Equality in EU's foreign and security policy...* 2021).

The EU also intends to prioritize the engagement in dialogue with African countries on the WTO's reform agenda, in particular by intensively supporting the building of the African Continental Free Trade Area. In this context, the EU supports obtaining observer status in the relevant WTO bodies by the African Union (AU). The EC ensures that it will continue to engage in discussions with China and India on specific aspects of the WTO's reform agenda. China's GDP per capita has increased tenfold since its accession to the WTO, and it also became the largest exporter to the WTO in just two decades (European Commission 2021a).

In the face of new internal and external challenges, particularly the new, more sustainable development model set out in the EU Green Deal Strategy and the European Digital Strategy, the EC believes that there is a need for a new approach to trade policy. The policy should help achieve internal and external policy goals and promote more sustainable development in line with the commitment to achieve the United Nations' *Sustainable Development Goals* (SDGs) by 2030. An important task of trade policy is also to play a positive role in recovering from the COVID-19 pandemic and building the ecological and digital transformation of the European economy.

Global uncertainty fueled by political and geo-economic tensions is now increasing. Globalization, technological development, and the creation of global value chains have dichotomous effects on economies and societies. On the one hand, they led to enormous gains in labor productivity, stimulating sustained trade-based economic growth in many parts of the world and helping lift millions of people out of poverty. On the other hand, these changes sometimes had a strong disruptive effect, which increased income inequality and left some individuals and communities behind. What was meant to be transitional adjustment costs sometimes resulted in the ongoing deterioration of living standards, employment opportunities, wages, and other working conditions. In many cases, governments insufficiently responded to economic adjustments and insufficiently mitigated their adverse effects. It sparked calls for deglobalization, and there are increasing particular and isolationist reactions.

The rapid growth in the importance of China, which shows global ambitions and follows a separate state-capitalist model, has fundamentally changed the world's economic and political order. This situation poses an increasing challenge to an established global economic governance system and helps ensure a level playing field for European companies that compete globally and nationally. Accelerating climate change, biodiversity loss, and environmental degradation, combined with tangible examples of their devastating effects, have made green transformation a decisive goal of our time. The *European Green Deal*, as a new strategy for the EU's sustainable development, facilitates the change of economic policy to better respond to the challenges of the 21st century. Its overarching goal is to transform towards a climate-neutral, environmentally sustainable, resource-efficient, and resilient economy by 2050, aiming to reduce greenhouse gas emissions by at least 55% by 2030 and protect, preserve, and enrich the EU's natural capital. As such, this strategy is to be a driving force for the growth of competitiveness, leading to a gradual but profound transformation of the member states' economies, which will significantly impact the trade structure.

Green transformation must go hand in hand with social justice. In many parts of the world, severe deficits in decent work persist in global supply chains, ranging from severe violations of the freedom of association to poor working conditions.² Depriving workers of their fundamental rights puts pressure on worsening social conditions around the world and fuels people's disillusionment with globalization and open trade. Digital transformation is not only a key factor in enabling sustainable development. In light of Europe's entry into the digital decade, supporting its transformation in this direction is a priority at both internal and external policy levels, including for trade policy and its instruments.³

At the same time, the nature of trade is systematically changing. In the future, it will be more based on innovation, supported by the protection of intellectual property, and trade in services and products based on respecting intellectual property rights will play an increasingly important role compared to traditional trade in goods. Services not only directly contribute to the value chain (financial services, telecommunications, IT, transport, and logistics), but, even more importantly, they are incorporated into manufactured products. The servitization of the economy and the advancement of digital technologies create well-paid and high-quality jobs and fuel economic growth.⁴

2 According to estimates by the International Labour Organization (ILO), there are still some 25 million victims of forced labor and 152 million victims of child labor, and 2.78 million workers worldwide die each year from work-related accidents or illnesses. See: International Labour Organization 2017a; 2017b.

3 For more on this topic, see Wysokińska and Witkowska 2021, pp. 102–122 and 128–133.

4 The EU's position in the world trade in services is high. Before the Pandemic, the EU's share was 32%, and in trade in goods, about 29%. In the EU's commodity structure of sold production of technologically advanced goods, almost 50% are commodity groups that are the basis for the development of digitalization, such as electronics and telecommunications, scientific and research apparatus, computer and office machinery manufacturing (see Wysokińska and Witkowska 2021, p. 139).

The EU is also the world's largest provider of Aid for Trade.⁵ The COVID-19 pandemic has increased the need to fully implement the 2017 EU Aid for Trade Strategy. The EU's strategic interest is to foster greater integration into the world economy of vulnerable developing countries, many of which are geographically adjacent to Europe. The EU's strength lies in its openness and the attractiveness of a single internal market. Its openness and commitment on the international stage make it a credible supporter of international cooperation, multilateralism, and a rule-based order, which in turn are crucial to the EU's interests. The EU works with its partners to ensure that universal values are respected, particularly in promoting and protecting human rights. It includes core labor standards, social protection in line with the European Pillar of Social Rights, gender equality,⁶ and the fight against climate change and biodiversity loss. Strengthening the resilience and sustainability of the EU economy and its supply chains is a pillar of its pursuit of open strategic autonomy.

Intense global competition in the digital sphere will change the configuration of global economic relations, and trade policy will play a significant role in achieving the EU's digital transformation goals. European businesses depend on digital services, and this dependency will only increase. Data is vital for many businesses, and it is also an essential part of EU supply chains. Digital technologies provide the productivity gains needed to maintain the competitiveness of the economy, also leading to the transformation of traditional industrial sectors where European companies will need to improve their competitive position. At the same time, the digital transformation and the emergence of new technologies are essential for Europe from a security point of view. The EC believes that the emergence of new digital technologies, including artificial intelligence, should be considered on a global scale by setting more ambitious global standards and rules.

Supporting the Digital Agenda for Europe is a priority of the EU's trade policy. It should ensure EU leadership in digital trade and technology, notably by promoting innovation. The EU should continue to play a leading role in digital standards, particularly when it comes to data protection, where the EU General Data Protection Regulation is often seen as a source of inspiration (European Commission 2020a; 2020b; Regulation (EU) 2016/679... 2016).

Data will be crucial for the EU's future. Regarding cross-border data transfers and the ban on data localization requirements, the EC has announced that it will

⁵ Aid for Trade aims to support developing countries in using trade as a lever for poverty reduction. Target 8.a under the Sustainable Development Goals in the resolution "Transforming Our World: 2030 Agenda for Sustainable Development" refers to increasing Aid for Trade, particularly for least developed countries (LDCs). Sustainable Development Goal 17 includes efforts to increase exports from developing countries, particularly LDCs.

⁶ See: European Parliament resolution of 23 October 2020 on Gender Equality in EU's foreign and security policy (2019/2167(INI)); *Gender Equality in EU's foreign and security policy...* 2021.

take an open but assertive approach based on European values and interests. It will strive to ensure that EU companies can benefit from an international free flow of data that is fully compliant with EU data protection and security and public order rules. In particular, the EU will continue to address unjustified obstacles to data flows while maintaining its regulatory autonomy in the area of data protection and privacy.⁷

Main trends in the world and European trade during the COVID-19 pandemic. The position of the three major players in world trade

According to the 2021 UNCTAD Report (UNCTAD 2021d), which presents the impacts of the COVID-19 pandemic in 2020, there was a decline in trade in goods and services in the global economy. Global trade in goods decreased by 7.4% in 2020, which means that global exports amounted to USD 17.6 trillion, i.e., USD 1.4 trillion less than in the previous year. It was the most significant annual decline since the 2009 recession, when trade fell by 22%. However, a much stronger decline was recorded in world trade in services, which shrank by 20% in 2020 compared to 2019. It was also the largest decline in trade in services since its inception (UNCTAD 2021b).

China, the EU, and the United States have been among the world's largest players in international trade since 2004, when China overtook Japan (Eurostat n.d., *The three largest global players...*; see also: Wysokińska and Witkowska, 2021, Chapter IV). The European Union, the United States, and China accounted for 43% of world trade in goods in 2020. In 2020, the total level of trade in goods (exports and imports) recorded for the EU was EUR 3,646 billion (excluding intra-EU trade), thus EUR 423 billion lower than for China but EUR 285 billion higher than for the US United. Due to the COVID-19 pandemic, there was a sharp fall in total trade in the EU (-10%) and the US (-9%), while in China, it increased by 2%. In the EU, the value of imports decreased (-12%, i.e., more than the value of imports, which fell -9%). The reverse was the case in the United States (-13% in exports, -6% in imports). In China, imports decreased by 1% while exports increased by 4%.

In 2020, the ratio of exports to imports (coverage ratio) was exceptionally high in favor of exports from Russia and China, which, in absolute terms, also had the highest annual trade surpluses. The United States had the largest deficit in 2020, continuing the trend seen throughout the last decade. By observing export and import flows, in 2020, the EU had the second-largest share in world exports and the third-largest share

⁷ Which is reflected in the title devoted to trade in the EU-UK Trade and Cooperation Agreement.

in imports of goods. The exports of goods from the EU accounted for 15.1% of world exports. With a share of 17.8%, China was ahead of the EU. The United States, with a 9.8% share, was in third place. However, in 2020 the United States had a larger share of world imports (16.2%) than the EU (13.1%) or China (13.8%) (Eurostat n.d., *The three largest global players...*; see also: Wysokińska and Witkowska, 2021, Chapter IV).

The chart below presents trends in international trade in EU goods (annual growth rates of exports and imports) between 2011 and 2020. It shows a strong downward trend in EU trade, both in exports and imports, from the third quarter of 2019 until the deep decline in turnover caused by the pandemic throughout 2020.

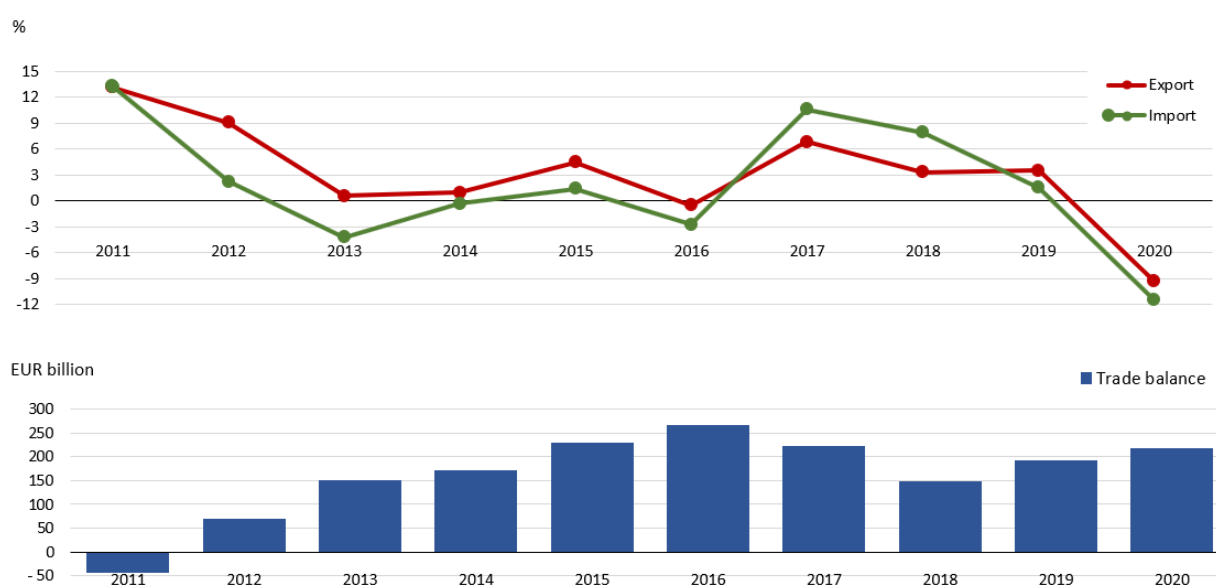


Figure 1. International trade in goods (annual growth rates)

Source: based on Eurostat (n.d., *EU trade in 2021 strongly...*).

Digital Europe – Digital Compass

The EC has outlined a vision of Europe's digital transformation by 2030. The program includes goals and key milestones, a common governance structure that includes a monitoring system to identify successes and gaps, and multi-country projects that allow integration of the EU, Member States, and private sector investments (European Commission n.d., *Europe's Digital Decade...*).

Europe's digital transformation vision is based on *Shaping Europe's Digital Future Strategy* (European Commission n.d., *Europe's Digital Decade...*). The strategy considers the enormous changes caused by the COVID-19 pandemic, which has significantly ac-

celerated the use of digital tools by showing their potential while exposing society's responses to new digital inequalities. The strategy also includes a system for monitoring the EU's progress against the key *UN Sustainable Development Goals* up to 2030.

The Digital Europe Program (DEP) was established for the duration of the Multiannual Financial Framework for 2021–2027. It is a newly created European program that supports the European Union's Digital Single Market strategy. Its main objectives are to support European industry and society, accelerate the digital transformation of the European economy, provide citizens, public administrations and businesses across the Union with the benefits of digitization, and increase Europe's competitiveness in the global digital economy while reducing the digital divide within the EU and strengthening its strategic autonomy in this area.

Thanks to the widespread implementation of digital technologies in the economy and society, the **Digital Europe Program** will positively impact the achievement of common European climate and environmental goals set out in the *European Green Deal*, mainly in terms of achieving climate neutrality by 2050.

The Digital Europe Program has five specific interrelated objectives that reflect the critical areas of the European Union's digital policy: Large-scale calculations, Artificial intelligence (AI), Cybersecurity and trust, Advanced digital skills, Implementation and optimal use of digital capacities, and Interoperability (European Commission n.d., *Digital Europe Programme*). Another of its important goals is the creation of a network of *European Digital Innovation Hubs* (EDIHs), i.e., centers to gather knowledge and competencies in the digital transformation of economic activity. Their task will be to support the digital transformation of both entrepreneurs and public administration entities. Among entrepreneurs, particular emphasis will be placed on the SME sector, where there is a significant need to increase the adoption of the latest digital solutions in the business. Intervention in this area will remove the risk of a decline in European and Polish SMEs' competitiveness and prevent them from losing their market position.

The main pillars of the EU's Digital Compass

The first pillar – a digitally skilled population. The primary target concerning digital skills is that at least 80% of the population have basic digital skills. Another target is to employ 20 million ICT professionals, taking into account gender equality.

The second pillar – sustainable digital infrastructure. This pillar proposes that all households be included in the 5G gigabit network. The goal is to create high-performance computing and data infrastructures in Europe by 2030 to strengthen Europe's infrastructure for the introduction of leading quantum technologies. By 2025, the EU plans to have the first quantum accelerated computer. Mechanisms for measuring the ener-

gy efficiency of data centers and electronic communication networks used by European companies will be introduced.

The third pillar – the digital transformation of enterprises. It is planned that 75% of enterprises in the EU will use cloud computing, big data, and artificial intelligence services. The aim is also to ensure that more than 90% of European SMEs reach at least a basic digital intensity. Europe is expanding its innovative scale-ups and improving these firms' access to finance, thus doubling the number of “unicorns” (i.e., USD 1 billion start-ups).

The fourth pillar – the 100% digitization of public services. It covers the provision of key online public services. Already, 80% of EU citizens use the European digital identity in the following areas: secure electronic voting, which allows greater public participation in democratic life; administration as a platform; comprehensive and easy access to public services with advanced capabilities, such as data processing, artificial intelligence, and virtual reality; the widespread implementation of a trusted, user-controlled digital identity, enabling every citizen to control their interactions and online presence (European Commission 2021b).

The policy agenda for achieving the digital goals is to enable the EC to work with the Member States to launch and shape multinational projects and international digital partnerships.

Global and European e-commerce during the COVID-19 pandemic

According to data presented in the UNCTAD report from May 3, 2021, global e-commerce increased to USD 26.7 billion. The COVID-19 pandemic had a significant impact on this result. Business-to-business (B2B) sales dominated e-commerce. The report estimates the value of global B2B e-commerce in 2019 at USD 21.8 billion, making up 82% of all e-commerce, including sales via online marketplaces and Electronic Data Interchange (EDI) transactions. The report also notes that the proportion of online shoppers making cross-border purchases increased from 20% in 2017 to 25% in 2019. According to the estimates in the report, a significant increase in e-commerce occurred due to traffic restrictions caused by COVID-19. They contributed to an increase in the share of online retail sales in total retail sales from 16% to 19% in 2020. It also shows that the pandemic particularly affected the decline in profits of companies offering services such as transportation and travel. It said that online retail sales increased significantly in several countries, with South Korea having the highest share in 2020, at 25.9%, compared to 20.8% a year earlier (see Table 2).

The rise in global e-commerce sales to USD 26.7 trillion in 2019 represents an increase of 4% compared to 2018, according to UNCTAD estimates. It includes B2B and B2C (business-to-consumer) sales and accounts for 30% of the world's GDP in 2020. Table 2 presents the shares of online sales in retail sales in selected economies from 2018–2020, indicating three countries with the highest and similar positions in 2020, i.e., South Korea, China, and Great Britain. The United States, Singapore, Australia, and Canada followed. Particularly noteworthy is the very large increase in the share in the 2018–2020 period achieved by the United Kingdom (8.4 pp), South Korea (7.7 pp), Singapore (7 pp), and China (6.5 pp) – see Table 2.

Table 2. Online retail sales, selected economies, 2018–2020

| Economy | Online retail sales (USD billions) | | | Retail sales (USD billions) | | | Online share (% of retail sales) | | |
|--------------------|---------------------------------------|---------|---------|--------------------------------|--------|--------|-------------------------------------|------|------|
| | 2018 | 2019 | 2020 | 2018 | 2019 | 2020 | 2018 | 2019 | 2020 |
| Australia | 13.5 | 14.4 | 22.9 | 239 | 229 | 242 | 5.6 | 6.3 | 9.4 |
| Canada | 13.9 | 16.5 | 28.1 | 467 | 462 | 452 | 3.0 | 3.6 | 6.2 |
| China | 1,060.4 | 1,233.6 | 1,414.3 | 5,755 | 5,957 | 5,681 | 18.4 | 20.7 | 24.9 |
| Korea (Rep.) | 76.8 | 84.3 | 104.4 | 423 | 406 | 403 | 18.2 | 20.8 | 25.9 |
| Singapore | 1.6 | 1.9 | 3.2 | 34 | 32 | 27 | 4.7 | 5.9 | 11.7 |
| United Kingdom | 84.0 | 89.0 | 130.6 | 565 | 564 | 560 | 14.9 | 15.8 | 23.3 |
| United States | 519.6 | 598.0 | 791.7 | 5,269 | 5,452 | 5,638 | 9.9 | 11.0 | 14.0 |
| Economies above | 1,770 | 2,038 | 2,495 | 12,752 | 13,102 | 13,003 | 14 | 16 | 19 |

Source: UNCTAD, based on national statistics offices, UNCTAD (2020, p. 1).

According to the UNCTAD report, the COVID–19 pandemic also had mixed effects on leading B2C e-commerce companies. Data for the 13 largest e-commerce companies, 11 of which come from China and the United States, show a clear change in the platforms that offer services such as transport and travel (Table 3). They all experienced sharp declines in Gross Merchandize Value (GMV) and corresponding declines in the rankings. For example, Expedia fell from 5th place in 2019 to 11th place in 2020. Booking Holdings fell from 6th to 12th, and Airbnb, which launched its IPO in 2020, dropped from 11th to 13th. Despite the decline in the GMV of service companies, the total GMV for the 13 largest e-commerce B2C companies increased by 20.5% in 2020, more than in 2019 (17.9%). Shopify (up 95.6%) and Walmart (72.4%) reported particularly strong profits. Overall, GMV B2C for the top 13 companies amounted to USD 2.9 trillion in 2020 – see Table 3.

Table 3. Top B2C e-commerce companies by GMV, 2020

| Rank by GMV | | Company | HQ | Industry | GMV | | | GMV change | |
|-----------------|------|------------------|--------|---------------------------|----------------|-------|-------|------------|---------|
| | | | | | (USD billions) | | | (%) | |
| 2020 | 2019 | | | | 2018 | 2019 | 2020 | 2018-19 | 2019-20 |
| 1 | 1 | Alibaba | China | E-commerce | 866 | 954 | 1,145 | 10.2 | 20.1 |
| 2 | 2 | Amazon | USA | E-commerce | 344 | 417 | 575 | 21.0 | 38.0 |
| 3 | 3 | JD.com | China | E-commerce | 253 | 302 | 379 | 19.1 | 25.4 |
| 4 | 4 | Pinduoduo | China | E-commerce | 71 | 146 | 242 | 104.4 | 65.9 |
| 5 | 9 | Shopify | Canada | Internet Media & Services | 41 | 61 | 120 | 48.7 | 95.6 |
| 6 | 7 | eBay | USA | E-commerce | 90 | 86 | 100 | -4.8 | 17.0 |
| 7 | 10 | Meituan | China | E-commerce | 43 | 57 | 71 | 33.0 | 24.6 |
| 8 | 12 | Walmart | USA | Consumer goods retail | 25 | 37 | 64 | 47.0 | 72.4 |
| 9 | 8 | Uber | USA | Internet Media & Services | 50 | 65 | 58 | 30.5 | -10.9 |
| 10 | 13 | Rakuten | Japan | E-commerce | 30 | 34 | 42 | 13.6 | 24.2 |
| 11 | 5 | Expedia | USA | Internet Media & Services | 100 | 108 | 37 | 8.2 | -65.9 |
| 12 | 6 | Booking Holdings | USA | Internet Media & Services | 93 | 96 | 35 | 4.0 | -63.3 |
| 13 | 11 | Airbnb | USA | Internet Media & Services | 29 | 38 | 24 | 29.3 | -37.1 |
| Companies above | | | | | 2,035 | 2,399 | 2,890 | 17.9 | 20.5 |

Note: Alibaba year beginning April 1, Walmart year beginning February 1. GMV = Gross Merchandize Value (as well as Booking Value).

Source: UNCTAD based on company reports, UNCTAD (2020, p. 2).

Business-to-business sales dominate in e-commerce. The UNCTAD report estimates the value of global B2B e-commerce in 2019 at USD 21.8 trillion, representing 82% of all e-commerce, including sales via online marketplaces and electronic data interchange (EDI) transactions. The United States continued to dominate the entire e-commerce market, ahead of Japan and China (Table 4). B2C e-commerce sales were estimated at USD 4.9 billion in 2019, an increase of 11% compared to 2018. The three leading countries in terms of B2C e-commerce sales are China, the United States, and the United Kingdom. The European Union economies listed among the top 10 countries in the world (in terms of e-commerce B2C sales) are France, Germany, Spain, and Italy. Cross-border B2C e-commerce amounted to approximately USD 440 billion in 2019, an increase of 9% compared to 2018. For detailed data, see Table 4.

Table 4. E-commerce sales: Top 10 countries, 2019

| Rank | Economy | Total e-commerce sales (USD billions) | Share of total e-commerce sales in GDP (%) | B2B e-commerce sales (USD billions) | Share of B2B e-commerce sales in total e-commerce (%) | B2C e-commerce sales (USD billions) |
|----------|----------------|---------------------------------------|--|-------------------------------------|---|-------------------------------------|
| 1 | United States | 9,580 | 45 | 8,319 | 87 | 1,261 |
| 2 | Japan | 3,416 | 67 | 3,238 | 95 | 178 |
| 3 | China | 2,604 | 18 | 1,065 | 41 | 1,539 |
| 4 | South Korea | 1,302 | 79 | 1,187 | 91 | 115 |
| 5 | United Kingdom | 885 | 31 | 633 | 72 | 251 |
| 6 | France | 785 | 29 | 669 | 85 | 116 |
| 7 | Germany | 524 | 14 | 413 | 79 | 111 |
| 8 | Italy | 431 | 22 | 396 | 92 | 35 |
| 9 | Australia | 347 | 25 | 325 | 94 | 21 |
| 10 | Spain | 344 | 25 | 280 | 81 | 64 |
| 10 above | | 20,218 | 36 | 16,526 | 82 | 3,691 |
| World | | 26,673 | 30 | 21,803 | | 4,870 |

Source: UNCTAD, based on national sources, UNCTAD (2020, p. 4).

The Annex presents the results of the 2020 Global B2C-E-commerce Index in 10 leading countries belonging to three groups of economies: 1) the best economies, 2) the Top 10 developing economies, and 3) the Top 10 emerging and transforming economies.

Conclusions

According to the statistics of international statistical institutions, data on world trade in goods and, to a lesser extent, trade in services are more optimistic than data on the world and regional GDP and Gross National Product (GNP) growth rates. The data presented in the December 2021 UNCTAD report shows that finally, in 2021, the value of global trade in goods and services increased by approximately USD 5.2 trillion compared to 2020 (after significant decreases in 2020 compared to 2019 – by 7.4% in global trade in goods and by 20% in trade in services). The report found that global trade in goods exceeded pre-COVID-19 levels by 15%, but for the services sector, the results were weaker as the value of this trade had not yet reached pre-pandemic levels.

China, the EU, and the United States have been among the world's most prominent players in international trade since 2004, when China overtook Japan. The European Union, the United States, and China accounted for 43% of world trade in goods in 2020.

Satisfactory results of the increase in trade intensity were recorded in the era of a pandemic, especially in e-commerce in both its forms, i.e., B2B and B2C. It was related to the intensive development of the digital economy at the European level and especially at the global level. Therefore, the dynamic growth of e-commerce in recent years has helped reduce the negative effects of the COVID-19 pandemic, especially at the global level. It is mainly because, for several years, an ambitious path to developing a circular and digital economy has been set at the global and European levels. Both the EC and global institutions have presented visions for the transformation of Europe and the world by 2030, within the framework of the Sustainable Development Goals, including, in particular, goals 7, 8, and 12–17.

A significant increase in e-commerce took place due to traffic restrictions caused by COVID-19, which contributed to an increase in the share of online retail sales in total retail sales from 16% to 19% in 2020, according to the estimates in the May UNCTAD report.

During the pandemic, the countries that achieved the highest position in 2020 were South Korea, China, and the United Kingdom, followed by the United States, Singapore, Australia, and Canada. Particularly noteworthy is the considerable increase in the share in the 2018–2020 period achieved by the United Kingdom (8.4 pp), South Korea (7.7 pp), Singapore (7 pp), and China (6.5 pp).

The three countries that recently achieved the best results for B2C e-commerce sales are China, the United States, and the United Kingdom. In the EU, France, Germany, Spain, and Italy achieved the best results.

B2B sales dominate in e-commerce. The UNCTAD report (UNCTAD 2021a) estimates the value of global B2B e-commerce in 2019 at USD 21.8 trillion, representing 82% of all e-commerce, including sales via online marketplaces and EDI transactions. The United States dominates the entire e-commerce market, ahead of Japan and China.

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ANNEX

Table A1. Top 10 economies in the UNCTAD B2C E-commerce Index 2020

| 2020 Rank | Economy | Share of individuals using the Internet (2019 or latest) | Share of individuals with an account (15+, 2017) | Secure Internet servers (normalized, 2019) | UPU postal reliability score (2019 or latest) | 2020 Index value | Index value change (2018–19 data) | Rank 2019 |
|-----------|----------------------|--|--|--|---|------------------|-----------------------------------|-----------|
| 1 | Switzerland | 97 | 98 | 92 | 97 | 95.9 | 0.6 | 2 |
| 2 | Netherlands | 96 | 100 | 94 | 93 | 95.8 | 0.1 | 1 |
| 3 | Denmark | 97 | 100 | 100 | 81 | 94.5 | 0.1 | 6 |
| 4 | Singapore | 89 | 98 | 94 | 97 | 94.4 | -0.3 | 3 |
| 5 | United Kingdom | 96 | 96 | 84 | 98 | 93.6 | 0.1 | 4 |
| 6 | Germany | 93 | 99 | 90 | 91 | 93.4 | -0.1 | 9 |
| 7 | Finland | 95 | 100 | 88 | 91 | 93.4 | -0.1 | 5 |
| 8 | Ireland | 88 | 95 | 92 | 98 | 93.4 | 0.7 | 7 |
| 9 | Norway | 98 | 100 | 84 | 88 | 92.6 | -0.1 | 8 |
| 10 | China, Hong Kong SAR | 92 | 95 | 88 | 92 | 91.8 | 0.3 | 14 |

Source: UNCTAD (2021e).

Table A2. Top 10 developing economies in the UNCTAD B2C E-commerce index 2020

| 2020 Rank | Economy | Share of individuals using the Internet (2019 or latest) | Share of individuals with an account (15+, 2017) | Secure Internet servers (normalized, 2019) | UPU postal reliability score (2019 or latest) | 2020 Index value | Index value change (2019–20 data) | Rank 2019 |
|-----------|----------------------|--|--|--|---|------------------|-----------------------------------|-----------|
| 4 | Singapore | 89 | 98 | 94 | 97 | 94.4 | -0.3 | 3 |
| 10 | China, Hong Kong SAR | 92 | 95 | 88 | 92 | 91.8 | 0.3 | 14 |
| 18 | South Korea | 96 | 95 | 68 | 100 | 89.8 | 0.0 | 19 |
| 30 | Malaysia | 84 | 85 | 71 | 85 | 81.3 | 1.5 | 31 |
| 37 | United Arab Emirates | 99 | 88 | 61 | 64 | 78.2 | 0.0 | 28 |
| 42 | Thailand | 67 | 82 | 59 | 97 | 76.0 | 0.5 | 48 |
| 44 | Iran | 70 | 94 | 57 | 79 | 75.0 | -1.5 | 45 |
| 49 | Saudi Arabia | 96 | 72 | 43 | 78 | 72.3 | 0.0 | 49 |

| 2020 Rank | Economy | Share of individuals using the Internet (2019 or latest) | Share of individuals with an account (15+, 2017) | Secure Internet servers (normalized, 2019) | UPU postal reliability score (2019 or latest) | 2020 Index value | Index value change (2019-20 data) | Rank 2019 |
|-----------|---------|--|--|--|---|------------------|-----------------------------------|-----------|
| 50 | Qatar | 100 | 66 | 50 | 73 | 72.1 | 0.0 | 47 |
| 54 | Oman | 92 | 74 | 43 | 73 | 70.6 | 0.0 | 60 |

Source: UNCTAD (2021e).

Table A3. Top 10 emerging and transforming economies in the UNCTAD B2C E-commerce Index 2020, by region

| East, South & Southeast Asia | West Asia | Africa | Latin America and the Caribbean | Transition economies |
|------------------------------|----------------------|--------------|---------------------------------|------------------------|
| Singapore | United Arab Emirates | Mauritius | Costa Rica | Belarus |
| China, Hong Kong SAR | Saudi Arabia | South Africa | Chile | Russian Federation |
| South Korea | Qatar | Tunisia | Brazil | Serbia |
| Malaysia | Oman | Algeria | Dominican Republic | Georgia |
| Thailand | Turkey | Ghana | Colombia | Ukraine |
| Iran | Kuwait | Libya | Uruguay | North Macedonia |
| China | Lebanon | Kenya | Jamaica | Moldova |
| Mongolia | Bahrain | Nigeria | Trinidad and Tobago | Kazakhstan |
| Viet Nam | Jordan | Morocco | Peru | Azerbaijan |
| India | Iraq | Senegal | Argentina | Bosnia and Herzegovina |

Source: UNCTAD (2021e).

Światowy i europejski handel zagraniczny w czasie pandemii COVID-19

Celem niniejszego rozdziału jest próba odpowiedzi na pytania: 1) „Jak pod względem struktury towarowej i geograficznej rozwijał się handel międzynarodowy Unii Europejskiej w ostatnich dwóch latach i w jakim stopniu był on odporny na skutki pandemii COVID-19?”, 2) „W jakim stopniu ambitna droga do rozwoju gospodarki cyfrowej – w tym szczególnie dynamiczny rozwój handlu elektronicznego w ostatnich latach, przyczyniły się do niwelowania negatywnych skutków pandemii COVID-19?”.

Rezultaty przeprowadzonych badań pokazują, że w dobie pandemii COVID-19 w gospodarce światowej miał miejsce ogromny spadek handlu towarami i usługami. Światowy handel towarami odnotował spadek o 7,4% w 2020 r., co oznacza, że globalny eksport wyniósł 17,6 bln USD, czyli o 1,4 bln USD mniej niż w poprzednim roku. Był to największy roczny spadek od recesji z roku 2009, kiedy handel obniżył się o 22%. Znacznie jednak silniejszy spadek odnotowano w światowym handlu usługami, który w 2020 r. skurczył się o 20% w porównaniu z 2019 r.

W okresie pandemii COVID-19 zanotowano natomiast dynamiczny rozwój globalnego handlu elektronicznego. Według danych zaprezentowanych w raporcie UNCTAD z 3 maja 2021 globalny handel elektroniczny zwiększył się do 26,7 mld USD. W handlu elektronicznym (e-commerce) dominuje sprzedaż *business-to-business* (B2B). Handel elektroniczny odpowiada za 30% światowego produktu krajowego brutto (PKB) i obejmuje zarówno sprzedaż między przedsiębiorstwami (B2B), jak i między przedsiębiorstwami a konsumentami (B2C – *business-to-customer*).

Słowa kluczowe: Unia Europejska, handel międzynarodowy, handel elektroniczny, gospodarka cyfrowa, Cyfrowa Europa, Cyfrowy Kompas