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**THE LATEST CRISES CHALLENGING THE EU'S EXPORTS. ANY
CHANCES TO MAINTAIN THE COMPETITIVENESS?**

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Abstract: *Trade is at the centre of Europe's model of economic prosperity and competitiveness. As stated in the new Trade Policy Strategy set out by the European Commission (2021), the trade policy has a key role to play in the recovery from the COVID-19 pandemic. Meanwhile, this role was emphasised even better by the effects derived from the war in Ukraine. As the pandemic hit in 2020, the growth drivers of the EU's economy relented, among which the external trade, putting million jobs at risk and leading to rise in unemployment and to depression of economic activity, while many companies had to close down. Competitiveness is a term which increased in significance in the last few decades. Trade competitiveness and, especially, export competitiveness is one of the most valuable variables a country must improve in order to increase its overall competitive position among nations and also the welfare of its citizens. The export statistics of many EU's economies changed since the COVID-19 crisis and later, the war stroke. The research questions this paper addresses are: what is the extent of these changes in which sectors? Have they come to an end or the process of recovery has already started within the EU? What effects has the war in Ukraine onto the EU exports competitiveness? Are there any chances for the EU to maintain its exports competitiveness after these crises? What is to be one and what measures to be taken to recover? After introductory theoretical remarks*

and a brief literature review followed by a survey of various techniques to measure export competitiveness, the paper shifts its focus on statistical data and analyse how much damage has the pandemic and nowadays, the war caused to the EU's export competitiveness, and which EU Member States were the most affected, based on statistical data analysis and other various indicators.

Keywords: *Export competitiveness; European Union; COVID-19 pandemic; war; crisis; challenges.*

JEL Classification: *F02; F10; F12; F13; F15; G01; H12.*

1. Introduction

Trade is at the centre of Europe's model of economic prosperity and competitiveness. As stated in the new Trade Policy Strategy set out by the European Commission (2021), the trade policy has a key role to play in the recovery from the COVID-19 pandemic as the pandemic hit the growth drivers of the EU's economy in 2020, among which the external trade, putting million jobs at risk and leading to a rise in unemployment and depression of economic activity, while many companies had to close down.

The European Union is one of the biggest economies in the world and, in order to maintain its position, it is mandatory to be competitive on the international market. This situation represents a real challenge today, when the COVID-19 pandemic' impact can be seen in most of the sectors. We intend to find out how much has the pandemic as well as the war in Ukraine changed the rules of the competitiveness "game".

The study is based on the statistical data on merchandise trade, with the accent being held on export, because trade competitiveness and, especially, export competitiveness is one of the most valuable variables a country must improve in order to increase its overall competitive place among nations and also the welfare of its citizens.

The research questions this paper addresses are: what is the extent of these changes in which sectors? Have they come to an end or the process of recovery has already started within the EU? What effects has the war in Ukraine onto the EU exports competitiveness? Are there any chances for the EU to maintain its exports competitiveness after these crises? What is to be done and what measures to be taken to recover?

After introductory theoretical remarks and a brief literature review, the paper shifts its focus on statistical data and analyze how much damage has the pandemic caused to the EU's merchandise trade in comparison with US and China, and which EU Member States were the most affected, based on market shares analysis.

2. Literature review

Competitiveness is defined as the ability of a firm or nation to offer high quality products and services to the market, while being competitive with others in terms of

price and obtaining a profit after covering the entire expenses occurred in the production process. (quotes and/or source needed) In our study, the concept refers to the products and services sold outside the borders of a particular country.

“Competitiveness depends on the relationship between the value and quantity of the outputs offered and the inputs needed to obtain profitability (productivity), as well as the productivity of the other bidders that exist in the market.” (Economic Point)

2.1. Competitiveness theories – from old to new approaches in international trade

2.1.1. Mercantilism

Although Adam Smith is known as the father of the idea of competitiveness, mercantilism is an economic policy that appeared before him (sixteenth century) and dominated the Western Europe and Africa between sixteenth and nineteenth century. This ideology promotes powerful government regulations that have the aim to bring prosperity by increasing exports. According to mercantilism, a country can be competitive only if it has a surplus trade balance. Many restrictions were imposed on imports and even on domestic consumption, while local producers received subsidies and other protection measures in order to be capable of producing and, therefore, exporting more products. Nations such as Germany, France and England applied this economic dimension of nationalism. (Voinescu and Moisoiu, 2014)

2.1.2. Absolute and comparative advantages

Adam Smith did not agree with the mercantilism approach, specifying that it is impossible for all the nations to become richer at once by exporting their products. This means that some countries must import those products and the protectionist trade policies limited this kind of situations. Instead, he advocated for free trade and specialization: “If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry, employed in a way in which we have some advantage.” (Blinder, 2008)

David Ricardo improved the absolute advantage of Adam Smith, by adding a new perspective to it. The comparative advantage practically says that a country should specialize in the production of goods in which it has a relative advantage, in fact a lower opportunity cost. (Voinescu and Moisoiu, 2014)

2.1.3. Recent critique to the economic competitiveness at a macroeconomic level

Paul Krugman is vehemently against the conception of economic competitiveness at a macroeconomic level. In his opinion, it makes no sense, because countries cannot compete with each other as well as companies do. (Krugman, 1994) He affirms that a firm may go bankrupt if it does not have enough money to pay the suppliers, workers and bondholders, which is not possible when we talk about a country. Also, nations are not really competing in an economic perspective and they all benefit from selling different merchandise between each other. (Eriksson, 2008)

Table 1: Indicators of competitiveness

Multi-factor/criteria Indicators	Single-factor Indicators
Competitiveness Index (GCI)	Export volume development
World Competitiveness Index (WCI)	Export growth rate development
Doing Business Index (DBI)	Average aggregate exports (exports commodity structure)
Knowledge Economy Index (KEI)	Average aggregate imports (imports commodity structure)
	Relative Balance of Trade
	Export performance
	Net export value development
	Export per capita
	Turnover Transactions TOT
	Unit Labor Costs (ULC)
	Real Revealed Comparative Advantages (RCA)
	Effective Exchange Rate (REER)

Source: Ruzekova, V., Kittova, Z., & Steinhauser, D. (2020), p. 147.

3. Economic Competitiveness in the EU

European Union is one of the most competitive economic and political structures around the world. A large amount of its trade happens between the member states, but also with China, US and other European countries.

In 2019, some of the EU member states were placed in top 10 of the Global Competitiveness Index: Netherlands on the 4th position, Germany on the 7th position, Sweden on the 8th and Denmark on the 10th position. (World Economic Forum, 2020)

We already know that the export competitiveness of many EU's economies changed since the COVID-19 crisis stroke, compared to the previous years, but even though, we will analyze the results regarding trade, in order to make a complete image about the situation.

4. Methodology

The objective of this paper is to explain the concepts of economic competitiveness and to present the current situation of the merchandise trade competitiveness in the EU, considering the impact of the COVID-19 pandemic in the economy.

This goal is obtained by conducting a literature review on the general subject and a case study on some indicators of the merchandise trade competitiveness before the pandemic.

We used the SALSA procedure (Search, Appraisal, Synthesis, and Analysis) to split the research in several steps and gain the most valuable cognitive effects. (Liu, 2017)

Table 2: Methodological process of this study following the SALSA approach

SALSA approach & steps	Steps & details in this article
<p>1. Search</p> <ul style="list-style-type: none"> - finalise research topic, - identify key words, - preliminary literature searches, - full literature searches and reference management, - selection of articles, - obtain articles, - gather the statistical data for the case study. 	<ul style="list-style-type: none"> - topic: Competitiveness and Export Competitiveness, - key words “competitiveness”, “comparative advantage”, “competitive advantage”, “productivity”, “export competitiveness”, and “EU economy”, - preliminary and full literature searches conducted through Web of Science, Google Scholar, SSRN, - download and obtain all articles, - select the statistical data from UNCTADSTAT.
<p>2. Appraisal</p> <ul style="list-style-type: none"> - quality assessment. 	<ul style="list-style-type: none"> - conduct citation analysis on all obtained articles, - review literature and further screen articles, - review full text, - compile a finalised pool of studies for this project.
<p>3. Synthesis</p> <ul style="list-style-type: none"> - integrating previous studies, - using the data for the case study. 	<ul style="list-style-type: none"> - categorize articles into definitions and theories of competitiveness, - identify connections, contradictions, and gaps in the competitiveness literature, - analyze the statistical data to obtain the GVC, RVC and CMS.
<p>4. Analysis</p> <ul style="list-style-type: none"> - analysis & conclusion. 	<ul style="list-style-type: none"> - discuss the export competitiveness based on the reviewed literature and data gathered, - formulate an ecosystematic model, discuss its applications and implications, and suggest future work.

Source: Liu, Chen (2017), p. 113.

Focusing on the overall understanding of the competitiveness and, more concrete, export competitiveness, this article begins with finding the most relevant studies regarding the subject in the first step of the SALSA approach. The authors started it with a literature review of other journal articles, books and chapters of some studies found via Web of Science, Google Scholar and SSRN. (Liu, 2017) The principal key words used were “competitiveness”, “comparative advantage”, “productivity”, “competitive advantage”, “export competitiveness”, and “EU economy”. It is important to mention that in this process was also used the *Global Competitiveness Report*, a ranking of the most competitive countries in the world,

made by the World Economic Forum, and some statistical data from UNCTADSTAT.

We analyzed the citations of the articles from step 1 and read the abstracts, which convinced us about what articles are better to use for this study.

The third step involved a literature review on the term “economic competitiveness”, where can be found a definition, some of the most important theories regarding the subject and information about the results of the EU's member states in the *Global Competitiveness Report* of 2019, before the pandemic appeared. The following section of this paper, results and discussions, is comprised of a case study in which are presented the merchandise trade competitiveness, particularly the merchandise export competitiveness, of the EU in comparison with the other two biggest economies in the world: China and US.

In the end, step 4 – Analysis refers in the article to the conclusion part, in which we identify the framework of the EU's export competitiveness nowadays and even suggest a possible new area of research.

5. Results and discussions

In order to answer the paper's questions, we must provide a general background of the situation. So, we choose to exemplify how EU is doing in trade and export competitiveness by using data over a decade, since before the pandemic stroke until 2020 and comparing the results with China and US. The statistical analysis contains data from a decade, which allows us to interpret the changes that appeared in time and the evolution of merchandise trade and the merchandise export competitiveness.

5.1. Merchandise trade in EU, China and US

Merchandise trade has a crucial importance in the economic growth of a country, because it lowers prices for the consumers, helps creating jobs and challenges the producers to give their best and always offer high quality products in the market. If the companies do not concentrate their efforts in staying competitive, they go pretty soon out of business.

EU, China and US are the biggest economies in the world at the moment and also the most influential players in international merchandise trade. Despite the fact that they are “adversaries” in the competitiveness' game, each one of them depends on the others in terms of trade, making the largest exchanges of goods and services between them.

China is the only economy from our list that managed to have a steady surplus in the merchandise trade balance during 2010 and 2020. (Figure 1) The reason is that China is a highly industrialized country, which used trade as an instrument to modernize and grow its economy in the last few decades.

Also, it mostly imports raw materials or machineries for the production process, such as iron ore, integrated circuits or crude oil. (Ma, 2021) Chinese people, which represent the biggest labour force in the world, process the input into final goods that are exported cheaper than imported. This is possible because the government has massive dollar reserves in order to maintain the national currency undervalued.

According to Statista, “in 2015, Chinese imports went down by 13.2 percent due to the global uncertainty following several geopolitical conflicts, disease outbreaks, and terrorism.” (Ma, 2021)

The merchandise trade balance in China started with a surplus of 159.434 million of US dollars in 2010, went down to 119.378 million of US dollars in the next year (the lowest value in the entire decade) and began ascending until 584.478 in 2015, when it decreased again for three years. Despite the fact that the COVID-19 pandemic started from China, it did not negatively affect the merchandise trade. Its merchandise trade surplus got to 560.916 million of US dollars in 2020.

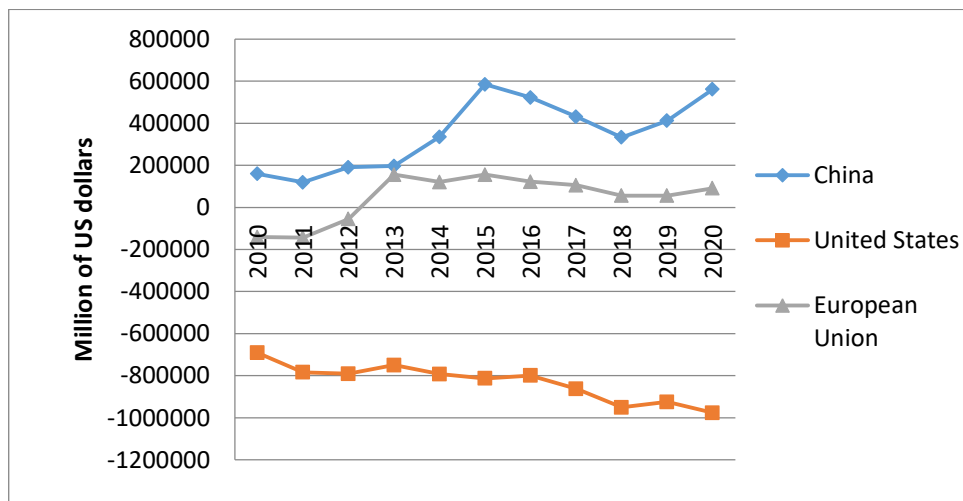


Figure 1: EU, China and US's merchandise trade balance in current US million dollars

Source: UNCTADSTAT.

On the other hand, the data collected from UNCTADSTAT (Figure 1) suggests that European Union experienced some troubles along the way, starting in our study with a significant trade deficit. The effects of the Great Recession of 2008 were still visible and the recovery process took several years. This means that the trade deficit gradually decreased, until in 2013, year in which Croatia joined the EU, reaching a merchandise trade surplus of 155.242,4 million of US dollars. It maintained more or less stable until 2018, with values varying from 120.902 million of US dollars in 2014 to 105.589 in 2017.

In 2018, EU's merchandise trade balance suffered a new loss because imports rose at a way faster rate than exports that year – 6.479.843 trillion of US dollars exports compared to 5.907.717 in 2017, while the value of the imports increased from 5.802.127 to 6.423.891 trillion of US dollars.

Even though UK left the EU at the beginning of 2020, the country remained part of the trade union until the end of the year and EU increased its surplus in merchandise trade in 2020 to 90.937 million of US dollars from 56.148 in the previous year. One of the causes may be that “EU market presented a trade surplus in plastic (+1 million tonnes) and paper (+4.2 million tonnes) materials, indicating a drain of secondary raw materials.” (European Commission, 2021)

US is the only analyzed economy that remained constantly below the line, being during the whole period in a trade deficit. In 2010, the value of its imports was higher than the exports with no less than 690.689 million of US dollars. (Figure 1) However, after that moment, the results went down even more, getting to a merchandise trade deficit of 790.821 million of US dollars in 2012.

The merchandise trade deficit seemed to decrease in 2013, but the difference is small from the previous period and it returned back to it in 2014. In the following years, we can see a stable position in the trade deficit of the US, a little change occurring only in 2018, when the merchandise trade deficit got almost to 1 trillion of US dollars (950.239 million of US dollars) and was even higher in 2020 – 975.916 million of US dollars.

An interesting aspect is that the merchandise trade deficit of the US from the last decade brings some good news. Primarily, the trade deficit reflects growing demands in the United States and around the world. The structure of imports suggests that investment is driving development, which should be reflected in production and employment. The increase in consumer goods consumption is beneficial to the US economy since it reflects rising consumer trust, that should encourage firms to invest and generate new jobs. (Meltzer, 2011) The US affords to adapt this strategy because is practically borrowing from its trading partners.

5.2. Merchandise exports in EU, China and US

Trade is an important factor in the economy of a country, but when we are talking about international competitiveness, we must point out its exports. A nation tends to be competitive when it exports more than it imports, which in our case demonstrates that because of its merchandise trade deficit, US does not have export competitiveness.

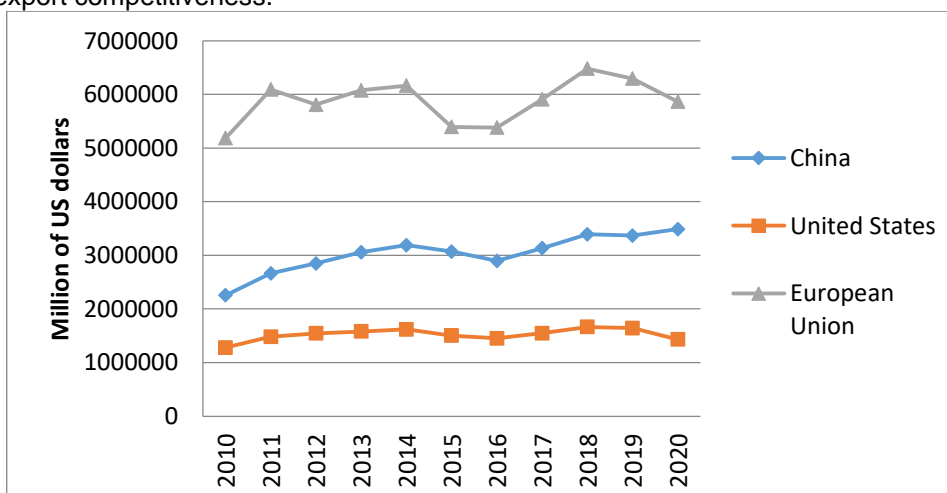


Figure 2: EU, China and US's merchandise exports in current US million dollars
 Source: UNCTADSTAT.

For a better understanding of the export competitiveness of EU, China and US, we explained below the share of exports each one of these three economies has in the world. (Figure 2)

Figure 2 illustrates that despite the trade balance values presented in Figure 1 – where China is situated in the first place; European Union is in fact the leader of exports and, therefore, is the most competitive economy in terms of this indicator. This happens because China usually exports cheap products and raw materials, while EU adds more value to the final goods during the production process.

According to UNCTADSTAT, even in 2010, EU had exports of 5.183.906 trillion of US dollars and they increased to 6.092.183 in the next year. The following years EU's exports experienced little changes, but a huge loss occurred in 2015, when they got to 5.394.903 trillion of US dollars, a difference of 768.918 million of US dollars from 2014.

However, the value of exports got back on track after that moment and reached 6.479.842 trillion of US dollars in 2018 (an increase of 20.11 percent). There was a fall of 185.196 million of US dollars in 2019, but the critical point was hit in 2020, when the EU exports got from 6.294.646 (in 2019) to 5.865.686 trillion of US dollars. It must be underlined that the value was still higher than at the beginning of the analyzed period – 2010, having an overall increase of 13.15 percent in exports. Food, drinks, and tobacco recorded more than one tenth (10.7 percent) of all intra-EU exports in 2020, while their segment of extra-EU exports was much smaller, at 8.6 percent. But from another perspective, the limited supply or complete absence of adequate resources may explain, at least to some extent, why some goods are imported from outside the EU; for example, mineral fuels and related materials accounted for 12.9 percent of all extra-EU imports, particularly in comparison to 4.3 percent of intra-EU imports. (Statistics Explained, 2021)

Germany was the largest exporter of the EU during the entire period of time, with exports of more than 1 trillion US dollars each year, followed by Netherlands with values oscillating from 574.251 million US dollars in 2010 to 674.870 in 2020. An interesting change occurred between France and Italy, considering that France was situated on the 3rd place until 2020, when Italy overthrown it. The difference between the exports of Italy and France in 2020 was of only 7.748 million of US dollars (496.120 million of US dollars compared to 488.372). (The World Bank, 2021)

In 2020, Germany's main export sector was motor cars and components, accounting for 15.5 percent of total exports. Machinery (14.6 percent) and chemical products (9.3 percent) were the second and third major export commodities, respectively. (Destatis, 2021) 8.52 percent of the Netherlands' total annual exports are refined petroleum. With a 6.23 percent share of a worldwide annual export sector, the country is the fourth major exporter. The Netherlands is also the world's seventh-largest exporter of raw aluminum, with a 4.81 percent share. Germany is the preferred destination for raw aluminum exports from the Netherlands, accounting for 40.1 percent of it. (Commodity, 2021)

China has a relatively stable position in the exports sector, gradually increasing its results from 2010 (2.253.916 trillion of US dollars) to 2014 (3.187.756 trillion). The country experienced a little loss in 2016, but recovered immediately from it. "In the wake of U.S. president-elect Donald Trump's win, the yuan fell to nearly eight year lows against the dollar, touching its weakest level since January 2009, amid renewed strength in the dollar. A weaker currency makes Chinese products more

attractive in overseas markets, and the recent plunge helped explain November's strong export performance." (CNBC, 2017)

China's exports value increased overall with 11.35 percent from 2017 to 2020, reaching the point of 3.487.541 trillion of US dollars in the last year (Figure 2), meaning that the pandemic did not really affect it. In addition, countries from all around the world depended on its products, especially the ones for the health industry.

Computer systems, communication technology, and telephones, as well as transportation equipment, account for the majority of Chinese exports. In 2019, the export value of this category was estimated to be at 1.2 trillion US dollars. Food and live animals used for food are also the leading export products when it comes to essential goods. (Ma, 2021)

As of the US, according to Figure 2, there are not many discrepancies in the exports between 2010 and 2020. The maximum value was achieved in 2018 (1.663.982 trillion of US dollars), when the protectionist measures taken by President Donald Trump started to appear. However, we can observe that the exports decreased slowly in the following year, suffering a huge loss only in 2020, the critical moment in which the COVID-19 pandemic stroke.

The drop in the US exports in 2015 reflects the global economy's precarious status. Weaker demand for American vehicles, laptops, and smartphones has resulted from poor worldwide growth. The growth of the US currency was a major factor impeding exports. Because of the dollar's rapid climb, international purchasers were paying more for American goods. When those international sales were transferred back to dollars, they become less value. This drop in exports obscured improvements in other areas of the economy. Consumer spending increased by more than 3 percent in the previous year, because of the strengthening job environment. Also, residential building increased by approximately 9 percent. (Egan, 2016)

6. Conclusions

In conclusion, this paper provides an overview of the export competitiveness of the EU compared to two of the most competitive nations in the world: China and US. When we look at the merchandise trade balance, we can see that China has the biggest surplus, but the EU is leading the exports' value. The reason is that EU produces and sells more expensive goods than China.

The pandemic affected the entire economic sector and EU was not forgotten. However, it managed to keep a merchandise trade surplus in 2020, because its member states limited the imports, reducing the ones made from countries outside of the EU. The exports were lower considering that cars and other vehicle and machinery parts (industries in which the EU is an export leader) did not represent essential goods and were neglected during the crisis.

Nevertheless, the situation recovered significantly in 2021, when governments have taken serious measures to control the damages and help their national companies to get back on business. It is difficult to predict what will happen in the years to come, because, at the moment, we are still in the middle of the pandemic.

There are several factors that influence the outcome, not all of them economic, but mostly sociologically.

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