



Annex 2 –THE COVER OF THE BACHELOR PROJECT

**ROMANIAN – AMERICAN UNIVERSITY
School of International Business**

Bachelor Project

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How the Covid 19 Pandemic affected EU's Economy

1-INTRODUCTION

The earth has seen many crises and disasters. It has seen the black death kill almost half of its population, and it has seen other crises involving millions of deaths. However, in the twenty-first century, the earth encountered yet another crisis, i.e., COVID-19. The crisis started in early 2020 in Wuhan, China, and later spread all around the world. The World Health Organization recognized it as a pandemic on March 11, 2020. The European Union was badly hit by the pandemic and saw one of the largest deaths per capita around the world. The economy of the European Union was disturbed and struggled to meet the results during the pandemic due to the lockdown and the trade restrictions. The major industries that were hit by the pandemic were the textile and construction industries. Also, every industry that needed human contact was badly hit by the pandemic. However, many industries, like the digital industry, got a positive boost from the pandemic. Similarly, the food and drink industry remained neutral during the whole pandemic (Muggenthaler, 2021).

The countries initiated various measures to compete with the worst impact of COVID-19 and announced schemes like the Recovery and Resilience Facility (RRF) to compensate for the damages caused by COVID-19. Under this facility, 750 billion euros have been given to the people in the form of loans and grants. In terms of economic governance, overall liquidity and debt increased, but the economy stayed neutral overall. Most of the exports during COVID were restricted, and the EU put a ban on the export of medical equipment. Many other steps were taken to assuage the conditions during COVID. This paper overviews all the restrictions and downfalls done by COVID-19 and tries to map all the economic issues during the COVID. (Cicala, 2020)

2-SPREAD OF COVID AND EARLY EUROPE'S RESPONSE

At the start of March, the EU encountered another crisis, while many of her states, like Greece, were under strong monetary debts and a structural crunch. This could prove the end of Europe's economic dominance and make it vulnerable to economic degradation. Therefore, a stiff response was necessary to meet the crisis. Firstly, like every country in the world, every EU member state increased its public spending to the maximum. This was done to support the strained health system and compensate the labor market for the losses incurred due to the lockdown. This

public spending was done in a random fashion without proper planning and output evaluation. (European Commission, March 19, 2020)

This public spending, however, caused the enormous debt-to-GDP ratio in Europe. For example, the debt-to-GDP ratio of the EU surpassed 103 percent for many countries like Italy and Greece. This debt-to-GDP ratio is expected to remain the same for a few years. The same trend was seen with other monetary policies. The 'Pandemic Emergency Purchase Programme' (PEPP) was created at a cost of 750 billion euros to support public spending. This helped the European member states relieve themselves of the debt crisis. (Buti, 2020). The EU also created "Pandemic Crisis Support" to provide loans to help the health sector. These loans amounted to almost 250 billion euros and were available for up to 2 percent of GDP. Thus, the initial response involved huge public spending and the roll-out of debts to the member states. (Ladi & Tsarouhas, 2020b; The European Union in the COVID-19 Storm: Economic, Political, and Stability Challenges, n.d.-b)

The analysis of early response of the covid mostly led to the conclusion that it was the reactionary and panic policies which initially dictated the government and its policies. Many states like Italy and Greece were already in monetary constraint and growth rate of many state before the pandemic was not sustainable. Therefore, as the pandemic struck, the countries

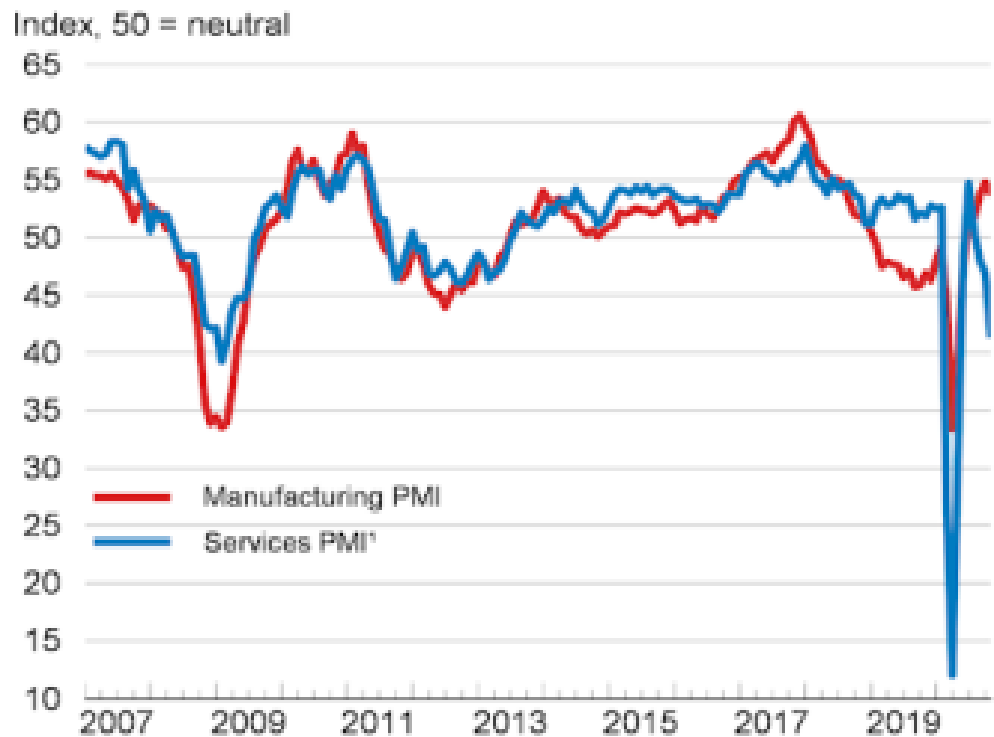
around the Europe started to increase the public spending. Even those countries which have the history of non-socialist reforms also tended toward the public spending. Most of the industries were shut down and people were forced to stay at home. This created the unemployment condition with less growth. Most of the spending was reserved for the health sector which left little budget to be spent on the public and economy. Furthermore, most of the policies of government started to benefit the worker without working. The governments spent a huge amount of money to keep the workers employed even when the industries were closed. The attitude of government toward new business was bad initially as little funds were available to support the new start-ups. The most important revenue generation entities like ports and transportation were in deficit due to lockdown. Thus, overall the initially the government was facing myriads of problems.

3-EU INDUSTRIES AND COVID 19

Industries formed the backbone of the Europe. Europe was the first region in human history to undergo the industrial revolution. Total EU economy was 13 trillion dollar in 2020 accounting for global trade of 13 percent in which industries formed the major part. The covid 19 restricted the production of industries as a whole. Firstly, the covid restriction forced the countries to close the industries and shut down all the operation in the industrial area. This disturbed the production and decreased the production to about negative 6 percent in few months. Secondly, the pandemic forced the people to stay home thus, decreasing the

demand for the goods. For example, the lockdown made the use of cars for transport redundant resulting in the less production of cars in Europe. The market shut down, unavailability of raw products and supply chain disruption were the basic problems that were faced by the industrial sectors of Europe.

COVID-19 had the worst impact on the industrial growth of Europe. Overall, industrial growth stagnated due to the complete closure of markets and fewer purchases of commodities, balancing demand and supply. There are some industries, like the digital industry and subsidiary industries related to the digital industry, that grew at a strong pace, but those industries that needed human contacts, like automotives, textiles, and other such industries, suffered at the hands of the ongoing pandemic. As there were trade restrictions, the maritime industry of Europe suffered from the lack of traffic. Overall, all the indicators regarding industrial growth, like GDP, employment, etc., were negative, showing the slow industrial growth of the economy. The production fell below the crisis of 2008 and recorded to be lowest in last half a century.



Source: OECD²¹.

Figure1-Impact on covid 19 on the manufacturing and Services sector of EU-
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3.1-AUTOMOBILE INDUSTRY

The automobile industry is one of the largest industries in the European Union. It held more than 5 percent of the total economic share and employed 2.6 million workers. This industry had a value of 675 billion euros in 2019, making it one of the most important industries in the Eurozone.

This industry was hit both on the supply and demand sides. People stopped buying cars due to lockdowns, making the production meaningless. The overall registration of cars during the first wave of the covid decreased enormously. The lockdown was intense in many countries like France and Belgium which made the use of car redundant. Furthermore, the insurance companies lifted the incentives from the industry due to lack of purchase.

The unpredictability of covid also played a major role in the low sale of car. The customers were unsure about the longevity of lockdown and thus started selling their cars in the market. This panic situation further disturbed the automobile industry. Furthermore, during the covid days, European countries did not invest in the transport sector which led to unemployment in various sectors like railway and bus. The mixture of market trends, lockdown and uncertainty effected the demand side of automobile industry. Another factor was the competition with automobile production in China. After 2018, China had increased the production and export of auto mobile to the Europe multifold which decreased the sale of various brands of cars in the European Union. During the covid, the gap widened due to the industrial pace of china.

On the other hand, the government imposed a lockdown, shutting down industries in May 2020 for more than 70 days in many European countries. By the end of 2020, there would be 4 million fewer cars manufactured, costing almost 22 percent of EU total production. This alone will cost the EU 1 million jobs in 2020. However, in the second wave, the

government came up with the subsidies and partial lockdown to further incentivize people to buy cars, which gave a boost to this industry. Therefore, in early 2021, the automobile industry saw a recovery. However, the contraction still continued, which extended to negative 23 percent by 2021 as compared to 2019, and total car production declined to 9 million units by 2021. Boxcar-Admin, 2021)

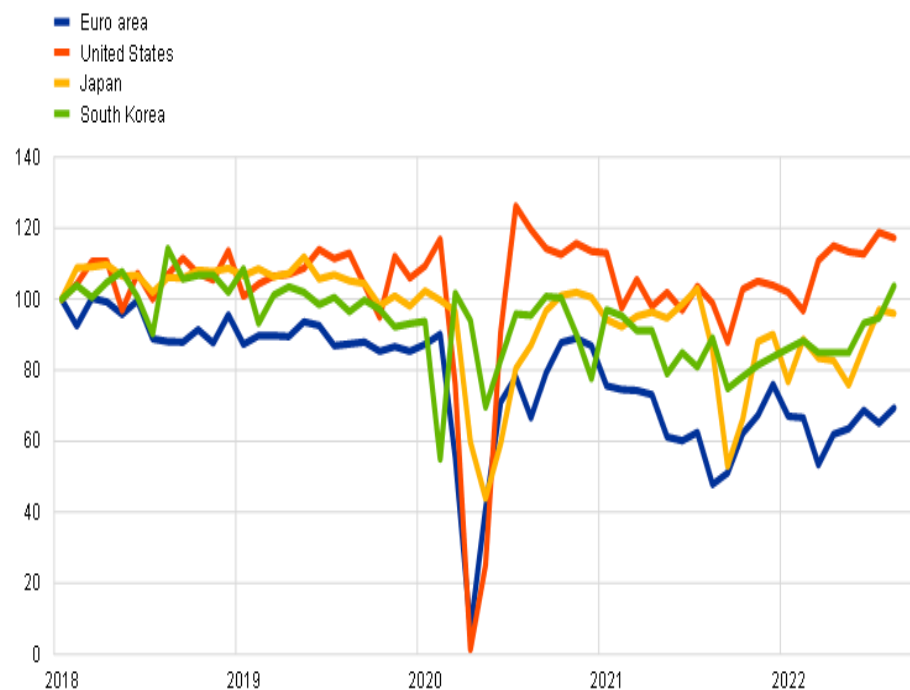


Figure:2- Impact of covid-19 on the industrial economy of different states- wpiea2022006-print-pdf.pdf

3.2-Construction industry and pandemic

The construction industry is one of the prime sectors, contributing more than 1.21 billion euros every year and accounting for more than 18 million direct jobs in the EU. The construction industry made up almost 8 percent of the total industrial growth in the EU. This industry has not been performing well since the economic downturn of 2008 and has always been sensitive to crises and the policies of the government. Thus, as the pandemic started, this industry took a nose dive toward the recession. In most of the countries, construction became limited; even the progressive countries like France and Germany saw a drop of 20 percent during the first wave of the pandemic. The main reason behind the downfall was the ban of government on the construction activities. This ban continued to the end of 2020. Also, the government spending on the infrastructure was also decreased and replaced by the social spending. The governments did not announced any new infrastructure project in the europe which further made the construction sector dipped to the recession. The commercial sector and banking sector took all the subsidies and grants for the construction making it more worse. (Pollok, 2020).

In the second wave, almost 11 percent of the previous recession was recovered, but the economy still suffered from the pandemic and was unable to reach the pre-pandemic level of growth. In 2021, it started to grow at a pace of 4 percent, and recovery was in V-shape. During the second wave, the investor trust was boosted by the new banking policies and debt relife project. Also, EU launched the social spending package

which included the construction company that gave almost 100 billion dollar additionally to revive the sector. The consumer trust was also improved by the oversight and policies of government. The budget reform returned the situation to the normal which had a considerable amount to spend on the infrastructure. This pre-pandemic growth is still to be achieved in 2023 because many indicators are yet to be recovered. Thus, the construction industry is a prime example of the recession caused by the pandemic. The construction industry also suffered due to the lack of migrant workers from Asia and Africa, as these workers formed the backbone of the labor market. The flights and travelng were banned by the EU during the EU and visa issuance was stopped which created the shortage of worker in EU's Market. In addition, the tight border reforms also stopped the illegal migrant workers to enter EU. (European Commission, 2021)



Figure:3 - GDP vs Construction Output of Europe -
https://www.euroconstruct.org/ec/press/pr2020_90

3.3-Textile industry and pandemic

The textile industry in Europe is one of the oldest and most profitable industries. There are more than 190,000 registered textile companies in Europe, and this industry employed almost 1.7 million people and contributed €180 billion in 2019. (EURATEX, 2020) This industry has various challenges, like cheap imports from China and the transition to Green energy. However, the pandemic had the worst impact on the industry. Firstly, the sale of

textile products decreased by 38 percent, and production also reached a negative 40 percent for clothing products. Most of people tend to stay home and thus stopped purchasing new and fancy clothes during the pandemic. The fashion industry which is a subsidiary industry to textile were also hit because covid restriction had the forced all the exhibition and other shows to shut down. Also, all the social events like birthday parties and marriages were banned which even make the situation more worse for the fashion industry. The market was closed but people started to buy clothes online. With the ban on the import of Chinese products, the industry manufactured new products like masks and other protective gears to help the health sector ,however, the overall recovery did not occur. (Zia, 2020)

Another change in the textile industry came with the change in consumer behavior. in pandemic times. 54 percent of products were bought online, making it the biggest online industry in the history of mankind. Furthermore, the government's policies and consumer behavior supported the recovery of this industry in the second half, but the total recovery is still to be achieved. Overall, the textile industry showed a U-shaped recovery post-pandemic. During the second half of the pandemic, the social events started to happen online and office work continued digitally which boosted the demand of fashion clothes. The industries were opened and the covid SOPs were implemented which provided the growth to the economy but the textile sector was unable to achieve the same pace as to the pre-pandemic time due to various reason. (Cicala, 2020)

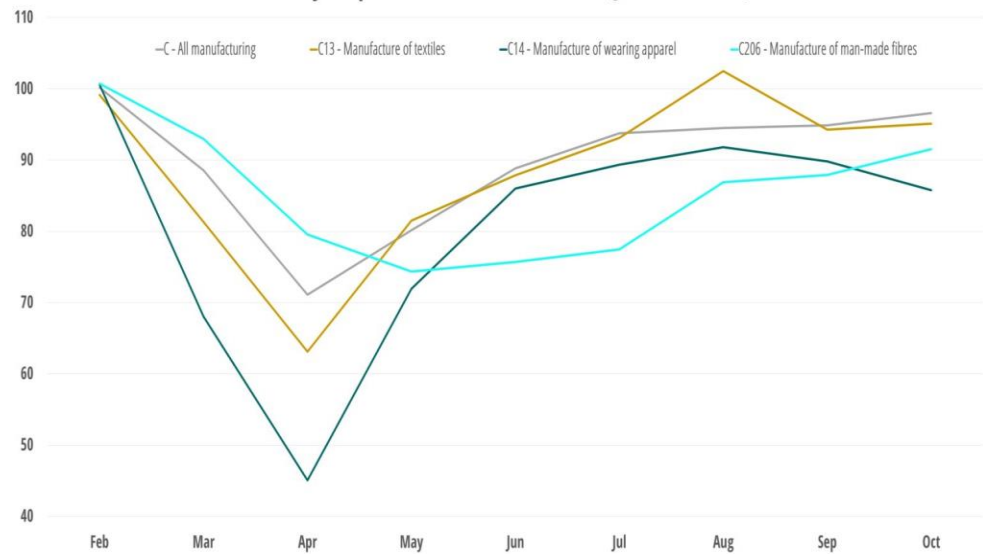


Figure:4- Monthly Output of various sector of EU during jan 2020- IPOL_STU(2021)662903_EN.pdf

Graph showing the decline in the production in Textile industry around Europe after pandemic lockdown.

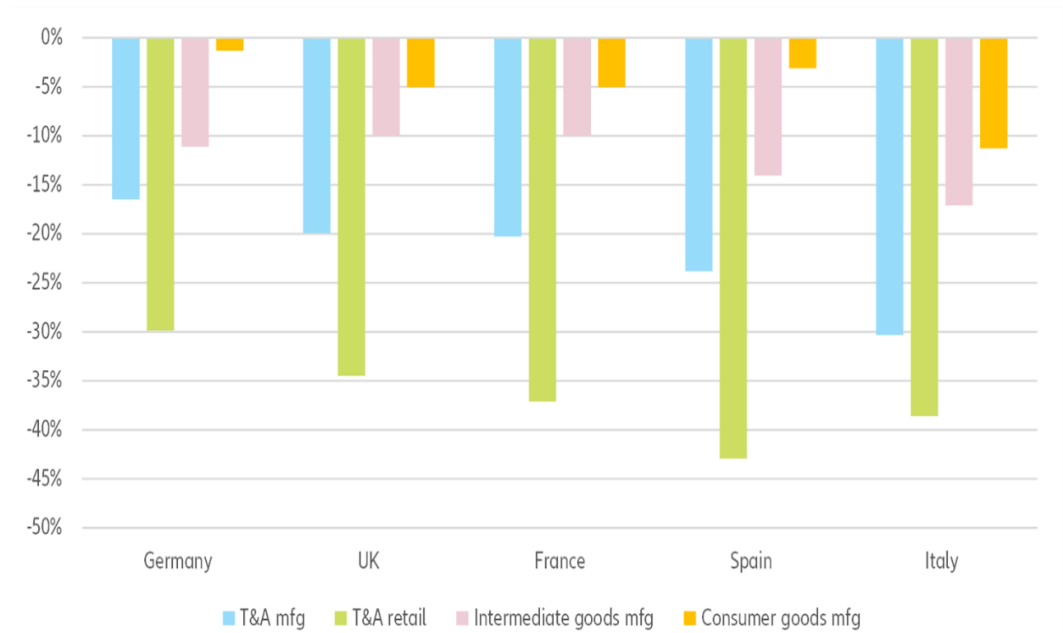


Figure:5- Growth of different sectors of EU during first wave -
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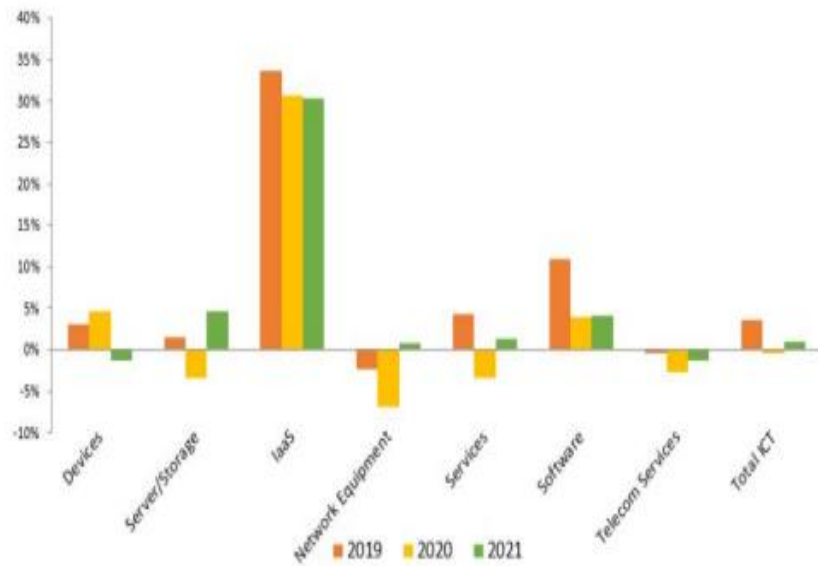
3.4-Digital Sector and Pandemic

The digital sector is one of the most innovative, research-based, and emerging sectors of the industry. By 2019, In Europe, more than 6 million people were employed in the digital sector, which comprised almost 4.77 percent of the total market. It had a total turnover of 650 billion euros in 2019, which made it a crucial industry. (Heinrichs et al., 2022) It showed negative growth in the first period because of the closure of industries in many areas, like automobiles. Also, many countries shut down the production of parts of chips necessary for the production of digital

devices. The supply chain disruption affected the production of digital gears. The shut down of industries in Taiwan, a major chip supplier of the world, caused the shortage of production of laptops, computers and mobiles. The demand for the digital sector during the first wave increased from 81 percent to 90 percent, but the overall growth remained slow due to unavailability of products. Another major issue to the digital sector was the digital illiteracy; unlike the other sectors of the economy, the digital needed the skilled and educated workers which were less at the time, thus, it faced the labor shortage during the pandemic. (Europe's Digital Migration During COVID-19: Getting Past the Broad Trends and Averages, 2020)

During the second half, the digital sector grew at the pace of 1 percent and added value increased almost 2 percent at the end of the second wave. Other subsidiary sectors benefited much from this. For example, the sale of Computers and laptops grew exponentially during the covid. Similarly, the tech-related jobs like customer care and website developer also soared in that time making it grow above 5 percent. (Eib, 2022). Similarly, the fashion industry also grew due to increased digitalization and companies started to invest more in internet based business and digital marketing. Consumer behavior also shifted in the digital industry as the pandemic forced the people to use it. It produced a sense of trust in the digital industry around Europe which helped it to grow even after the pandemic. The boom in the digital industry was abrupt and supported by the policies integrated other stakeholders. The digital industry is dependent on

the chip production from Taiwan and software from USA, thus, the global supplychain made it the most diverse industry which saw a positive boom during the covid 19 (Eib, 2022).



Source: IDC, 2020¹³⁰.

**Figure:6- ICT spending by segment in Europe -
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3.5-Food and Drinks industry and Covid

It is one of the most important industries in Europe, with about 4.82 million jobs and a contribution of more than 280 billion euros in 2019. (European Commission, 2020) This industry also supported other basic industries, like agriculture, that are dependent on the food industry of the country. Also, the services sectors like cafes, restaurants and hotels are dependent on the food and drink sector. The growth in the food and drink sector is highly diversified, so it is not possible to generalize the growth. In the first half, the phenomenon of panic buying was seen. The people got worried and bought and stored food products in bulk. The panic buying caused the increased demand and inflation in various part of Europe. This increased the sales of food retailers in general but disturbed the supply chain in general.

The storage of food at home caused panic and inflation for a few weeks. Similarly, packaged food and meat sales also increased. For example, Germany saw an increase of 28 percent in the online sale of food. Similarly, as people started to stay home, the overall packaged and stored food industry boomed initially. France saw 63 percent growth in the sale of stored food. The closure of borders and the storage of food cause disturbances in the supply chain of food, but overall, production and supply remain neutral. Similarly, during the second wave, panic buying stopped completely and people remained buying at a normal rate; thus, the market remained neutral and resilient. (Cicala, 2020)

The employment in the food industries decreased due to the closure of the cafe and hotel. There was a 2 percent decrease in employment in the drinking sector and 1

percent in the food sector. However, during the second wave the industry started to recover and the employment improved during this time causing an increase of 3 percent and improving the overall situation. The second wave boosted the online delivery of foods and drinks and the market started to deliver good through virtual order. Furthermore, consumer behavior started to shift and pick-up orders further increase the orders. The main issues regarding the food and drink was the closure of cafes which were opened after the second wave and vaccinization. This showed the V-shaped recovery and reached the pre-pandemic level before 2022.

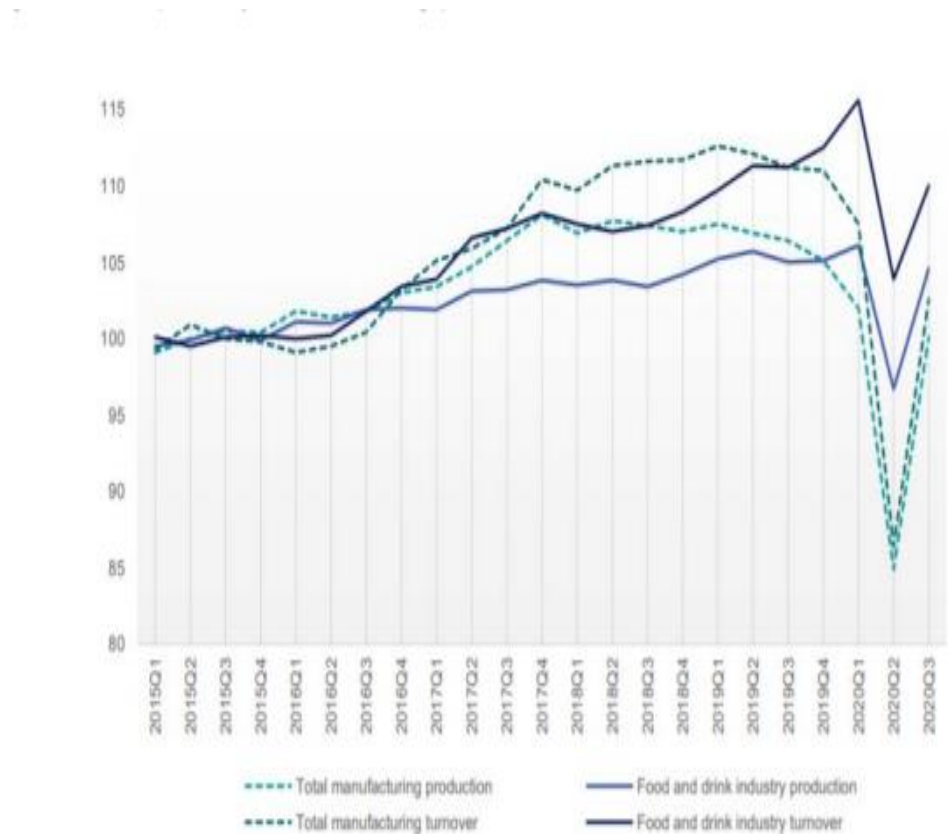


Figure:7 EU quarterly manufacturing production and turnover, 2015-17-

<https://www.mckinsey.com/~media/mckinsey/industries/retail/our%20insights/state%20of%20fashion/2021/svgz-sof-2021-ex1.svgz?cq=50&cpy=Center>

Above Graph shows the decrease in the employment in food and drinking during pandemic

3.6-Cross sectoral Analysis of economy during pandemic

Overall, all sectors of the economy suffered from the supply shortage due to the closure of factories and production and the lack of workers due to the complete lockdown. Thus, when the supply side is disturbed, the demand side also shifts due to the pandemic as people start to buy differently. People had to stay home, and thus the consumption of many goods decreased, causing deflation on the demand side too. This turmoil affects almost all sectors equally. Furthermore, the lockdown completely sealed the workers at home, slowing down production to a minimum. (Cicala, 2020)

The graph shows that every single product and sector saw the decline during the covid in which Textile is the most affected and foods and drink was the least affected sector of the industry.

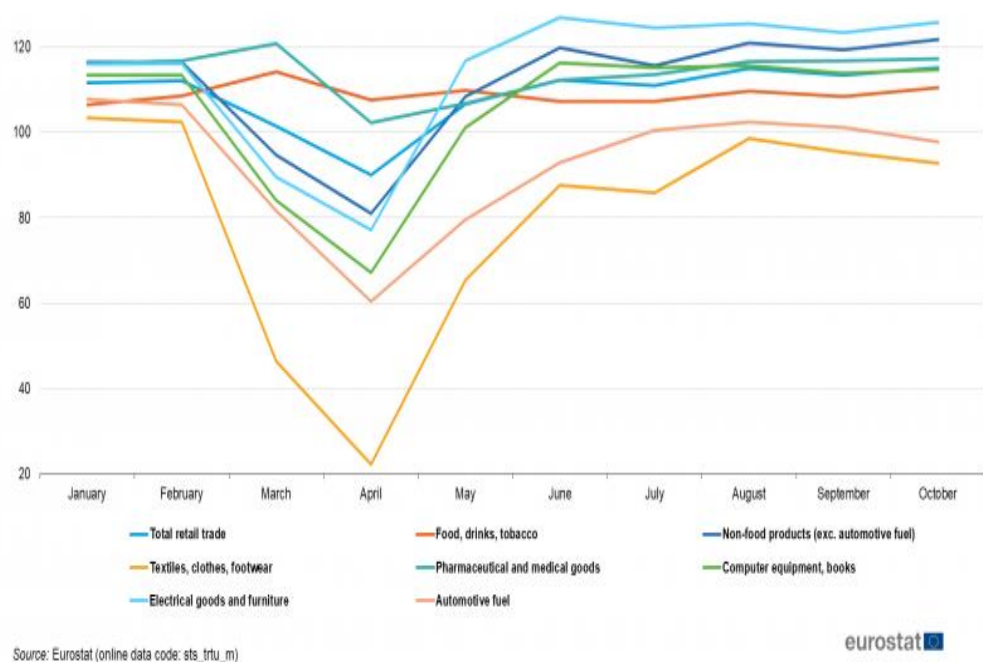
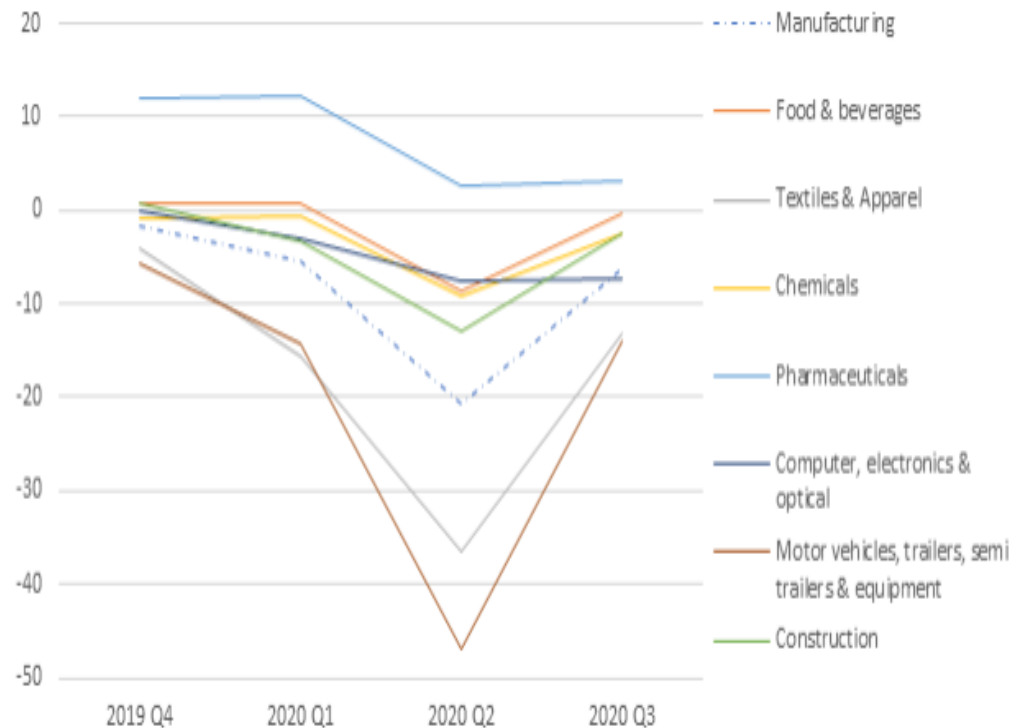


Figure :8 Development of retail volume according to product groups, january to October 2020-
https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:EU-27,_development_of_retail_trade_volume_according_to_product_groups,_January_to_October_2020.png

The second wave of pandemic was less harmful for all the sectors because the factories were allowed to open and the supply chain disruption resumed. Furthermore, the people had adapted to the pandemic which provided better and appropriate consumer behavior to the companies. The growth rate in the second wave did not meet the pre-pandemic level but overall the situation improved a lot. Furthermore, the startups were also affected by the pandemic.

Though many new startups and companies benefited from the digital market boom, overall the government had no spending left to boost the new companies due to social spending. Therefore, the startups struggled during the pandemic. (Almeida et al., 2021)

If one compared the industries, those that needed the human touch were the most affected by the pandemic. For example, the aerospace and automobile industries suffered more than all the others, while those industries that could work without human contact boomed, like the pharmaceutical and food industries, as shown by the graph, which were the least affected industries during the pandemic. The health sector and digital sector had extra boost due to the spending of government and lockdown but the digital industry needed the skill workers which was less at the time. Thus, the digital industry suffered from the mass digital illiteracy and trust of people. (Eurostats, 2021).



Source: Authors' own elaboration, based on Eurostat¹⁴⁶.

Figure:9 Manufacturing industries production (q-o-p percentage change) - https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:EU-27,_development_of_retail_trade_volume_according_to_product_groups,_January_to_October_2020.png

4-TRADE RESTRICTION

Trade is one of the major entities which adds value to the economy and literally runs the economy of any country. Trade restrictions in the modern days are a nightmare for any country as it can lead to the total destruction of the economy of

that state. Covid-19 has a strong effect on global trade. Lockdown restrictions shut down the factories and thus the countries dependent on those factories faced the shortage of product. Similarly, the EU also faced the trade shrinkage during the pandemic(*Impact of the COVID-19 Crisis on EU Trade Policy: Our Five Cents to the Debate*, n.d.)

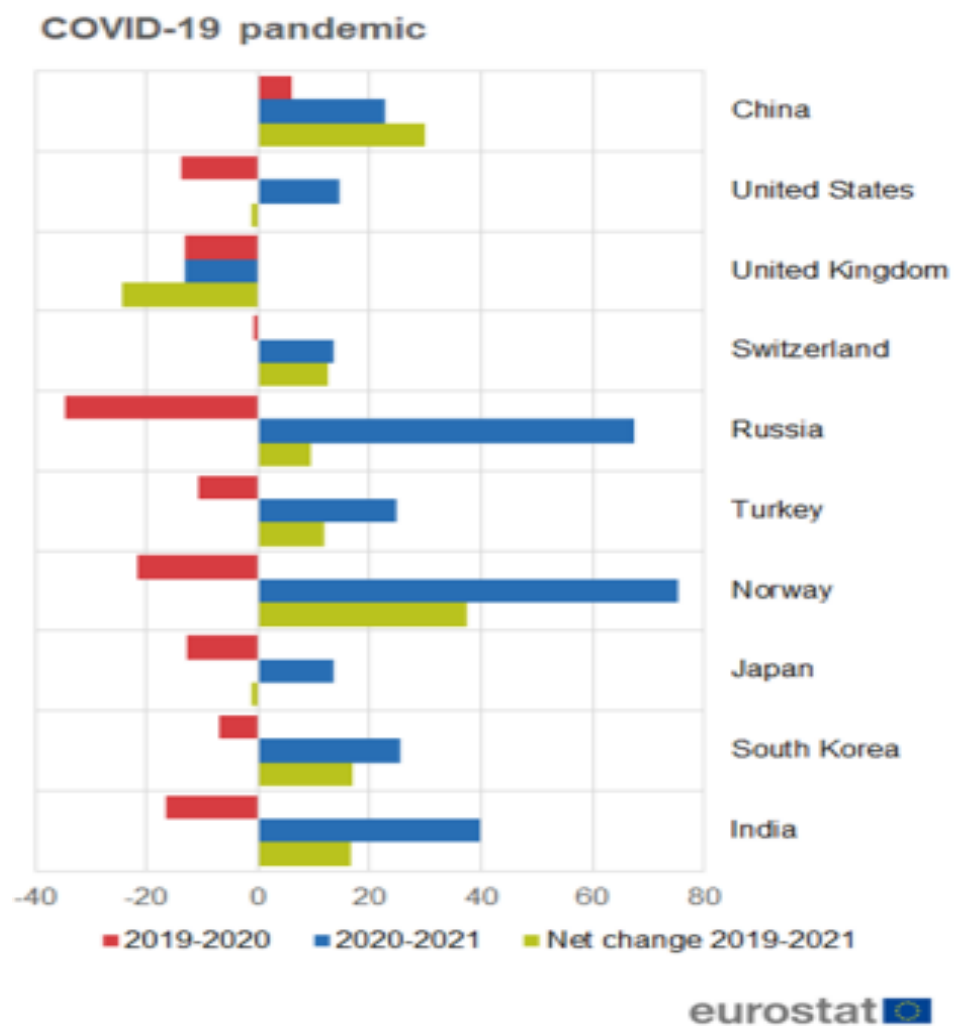


Figure:10- import during the financial crisis of 2020 and 2021 in different countries- 90439.pdf

The EU introduced various policies related to trade during the pandemic. The EU issued “guidelines for trade” during the COVID pandemic, and every member state consented to them. The president of the commission drafted policies to ensure “goods and essential services continue to flow in the EU internal market”. (Press Corner, n.d.) To decrease the shock of the pandemic, the guideline stated “principles for an integrated approach to effective border management to protect health while preserving the integrity of the Single Market”. Similarly, the EU made sure that every state had green lanes for transport at their border and issued “Communication from the Commission on the Implementation of the Green Lanes under the Guidelines for Border Management Measures to Protect Health and Ensure the Accessibility of Goods and Essential Services (Carreo et al., 2020).

14 March 2020 was the day when the EU officially adopted the mechanism to stop “personal protective equipment”. This ban included most of the medical equipment and protective medical gear, like masks and other things. This ban helped the EU maintain goods at their borders to compete with pandemics and health crises. Similarly, in April, the EU removed the tariff and other taxes from many other objects, which was necessary to battle COVID 19. It issued a “Commission Decision on Relief from Import Duties and VAT Exemption on Importation

Granted for Goods Needed to Combat the Effects of the COVID-19 Eradication During 2020” . This included all the things necessary to fight COVID. These measures had a positive impact on the economy of the EU. The EU started to manufacture and boost the production of essential things like ventilators and masks needed to fight the pandemic. Similarly, trade restrictions on other countries provided the EU with specific breathing room for the dwindling economic condition. (Carreo et al., 2020)

The biggest trade partners of the EU are America and China. In 2021, the export to China and the USA showed a net increase of 21 billion dollar and 46 billion dollar and similarly the import bill to both states also increased two fold. Similarly, export to india also increased about 30 percent in 2021.(Van Brempt, 2021)

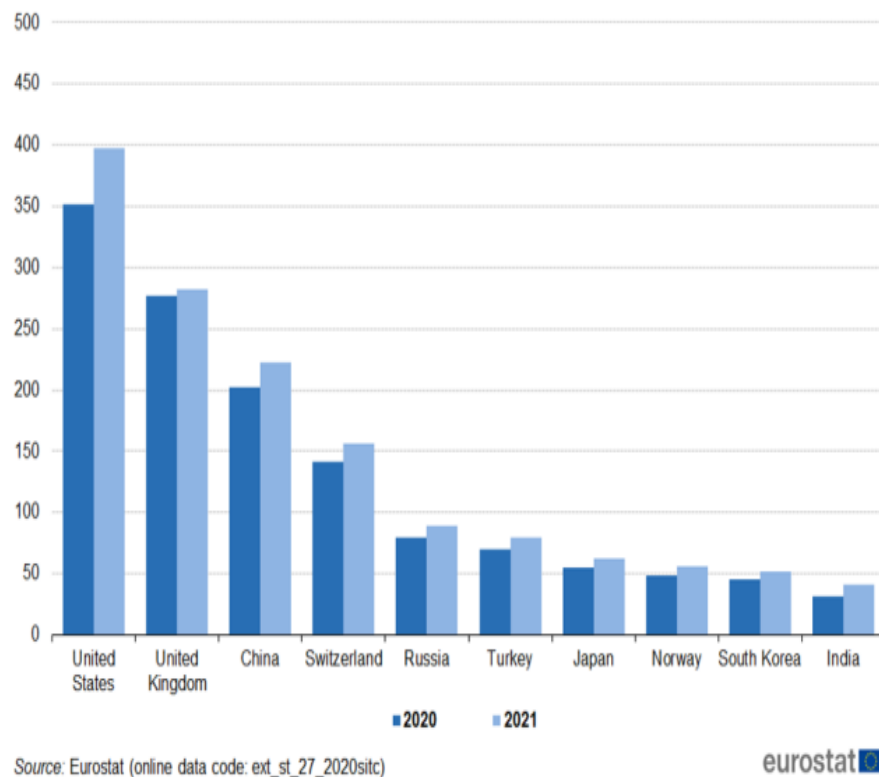


Figure 11:EU export to mainpartner,2020 and 2021-90439.pdf

Furthermore, the positive side of the pandemic was the export surplus. The EU made a surplus of 217 billion euro. The EU market saw a trade surplus of 250 billion and more in the last decade but in the last few years, the trade surplus was dwindling. However, covid provide an opportunity to test new policies and with trade restrictions provided with new opportunities to the capitalist market of EU.(Van Brempt, 2021)

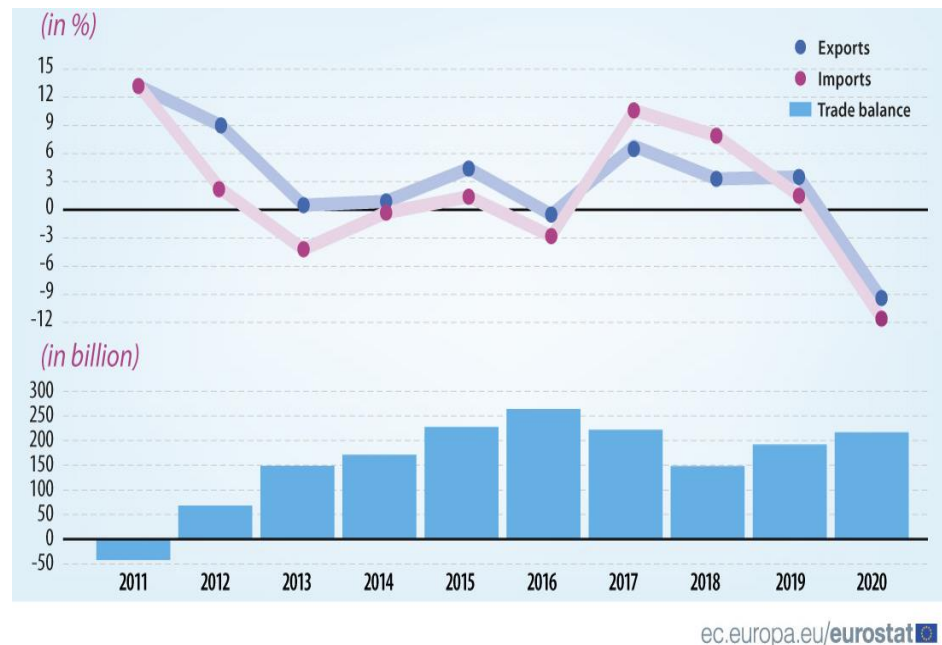


Figure 11.1- EU international goods (year growth rate) -
<https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20210325-1>

5-EU ECONOMIC GOVERNANCE OF COVID-19

The pandemic also caused the government to reform the economic and political nature of the market. The pandemic left most of the workers unemployed, which led to the economic crunch. Furthermore, many workers were available for the work, but due to lockdown, it was not allowed. Thus, to compete with this crisis, every state started social spending and the

liquidation of currency in the hands of workers. The EU started the Recovery and Resilience Facility (RRF), which was extended to almost all citizens. This facility included the money raised from the market by issuing bonds, and the money was made available to all the states. The state then used this facility to give loans and grants to the people in order to recover from the pandemic. The grants and loans under this facility will have increased by 750 billion euros by 2021. (Papadopoulos, 2022)

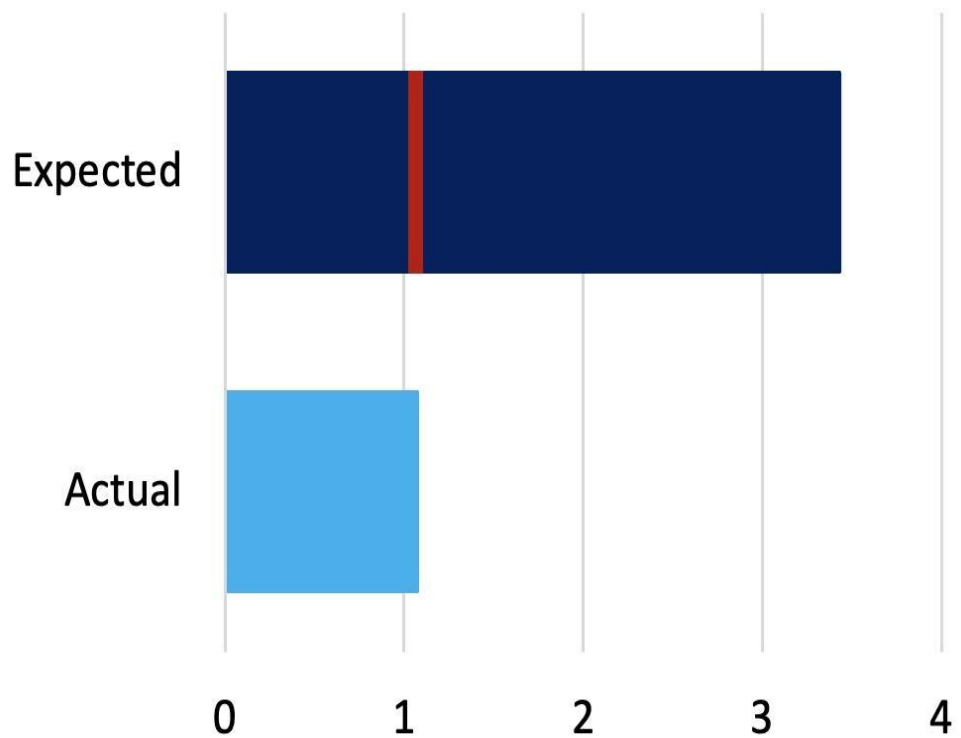


Figure 12- Increase in unemployment rate in SURE beneficiary Member States, 2020 (percentage points) - <https://cepr.org/voxeu/columns/eu-economy-after-covid-19-implications-economic-governance>

This graph shows the number of employment that are being created as the result of net expenditure. The key areas to invest in this facility are green energy, new business, transport and food and drink industry. This facility substituted the employer-employee relationship to assuage the unemployment and damage to the economy caused by the pandemic.

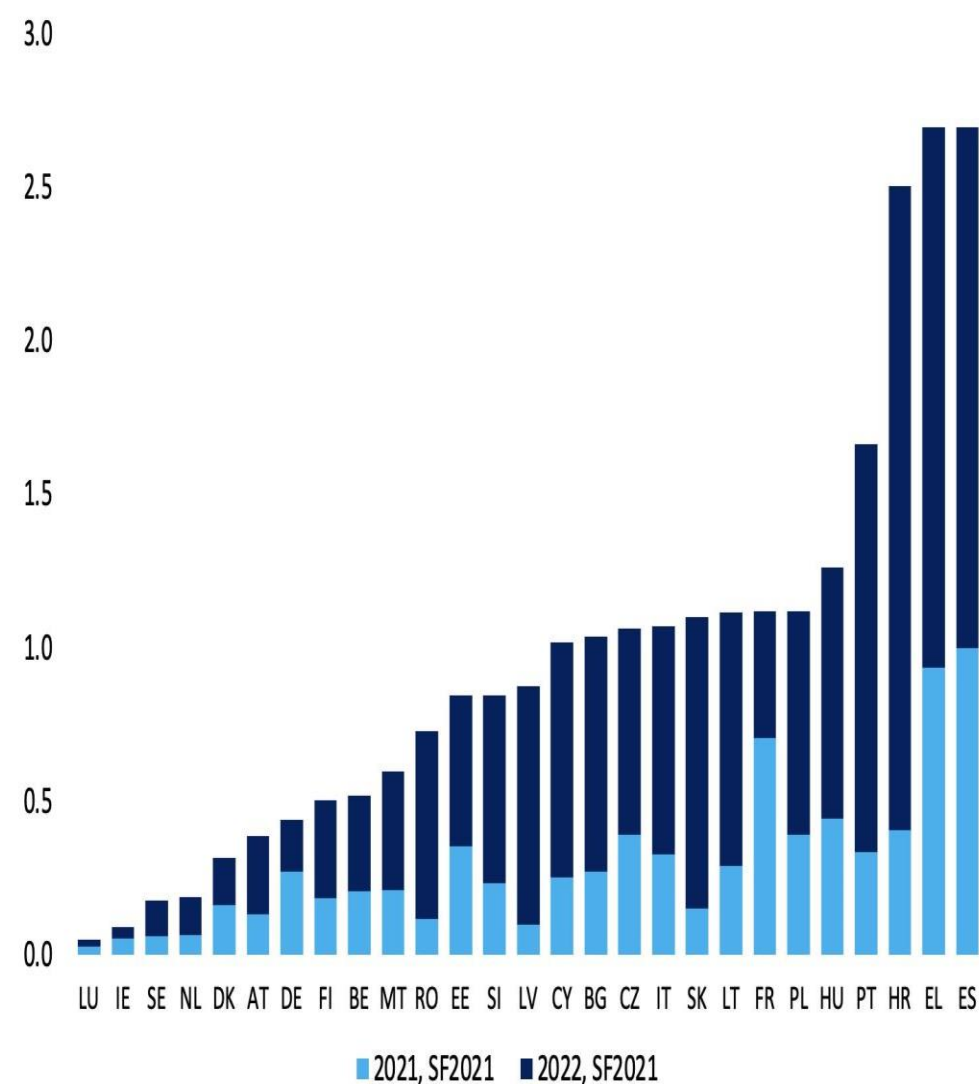


Figure:13-the Expenditure financed by RRF grants, 2021 and 2022 (% of GDP)-<https://cepr.org/voxeu/columns/eu-economy-after-covid-19-implications-economic-governance>

At the central level, the EU economy shrank by 6 percent during the COVID, which called for special measures to compete with the crisis. Thus, the ECB initiated a broader and more comprehensive set of fiscal responses to this pandemic by implementing “monetary policy measures”. Overall, the harshness of the pandemic was less severe, as can be seen on the first graph of this heading. However, even after that, the high ratio of public debt was seen around Europe, and the deficit increased to its maximum during that time. By the end of COVID, the EU was in need of about 650 billion euros in investment to attain sustainable growth. (The EU Economy After COVID-19: Implications for Economic Governance, 2021)

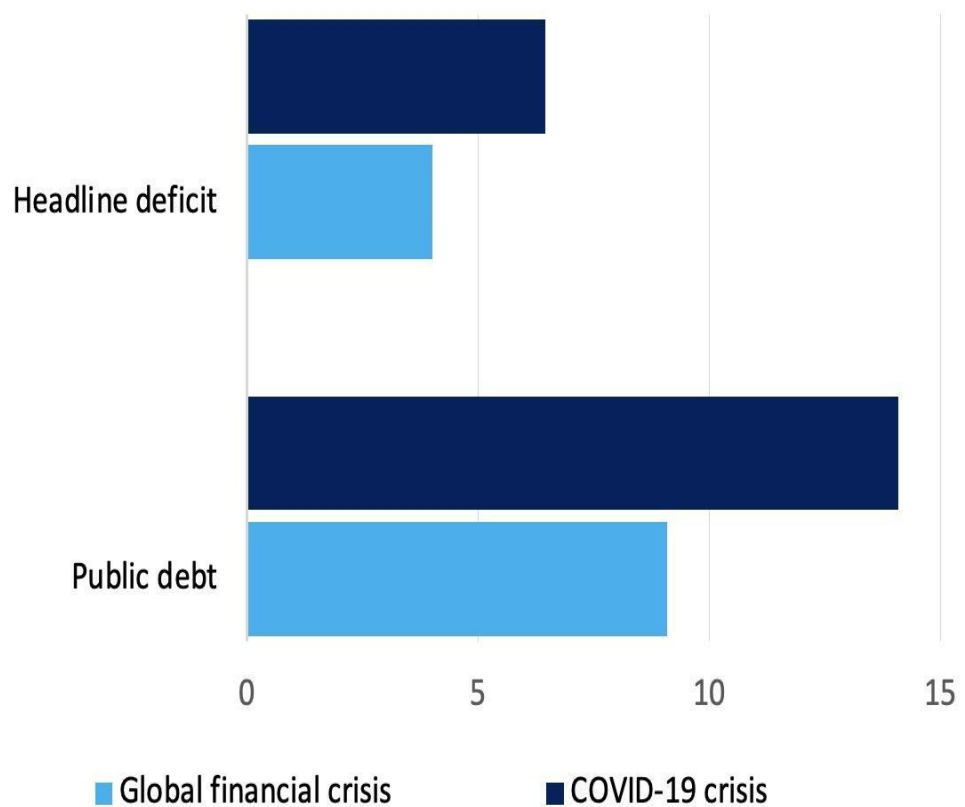


Figure:14- the increase in public debt during the covid. (*The EU Economy After COVID-19: Implications for Economic Governance*, 2021)-<https://cepr.org/voxeu/columns/eu-economy-after-covid-19-implications-economic-governance>

6-Debt and spending

The IMF predicted that the Eurozone public deficit would reach a new high of 10.1% of GDP in 2020. The European Recovery Plan

accord is a significant step forward. EU-wide borrowing funds the proposal, which mixes £360 billion in loans to member states with £390 billion in grants, something that was inconceivable. The Eurozone's battle against the crisis is now no longer the duty of the ECB only; the union-wide fiscal policy is tackling it.

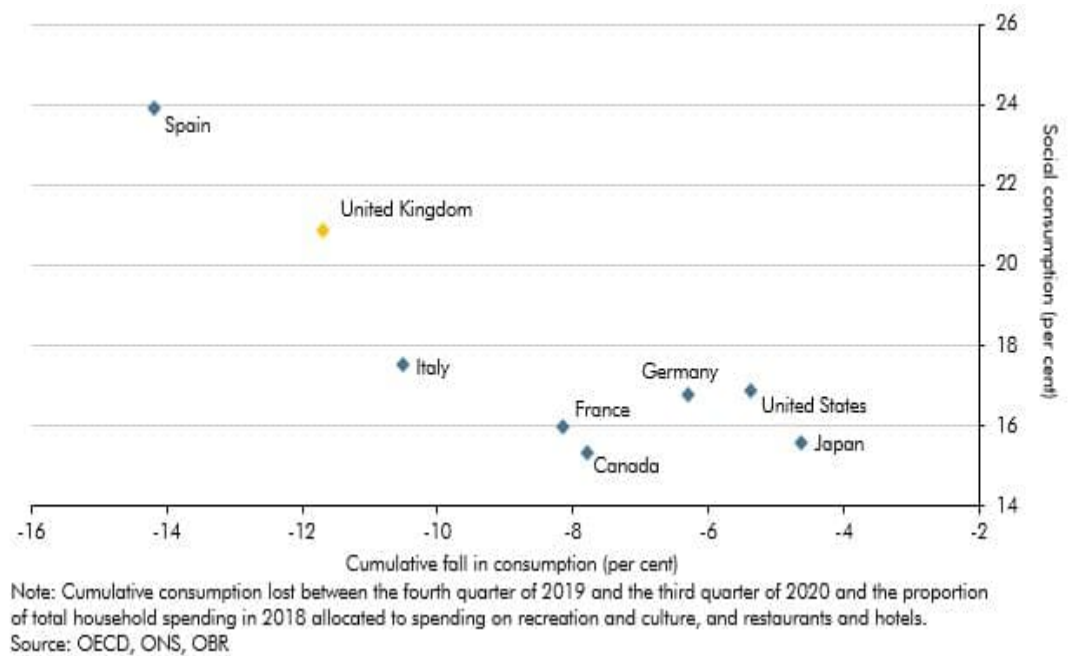


Figure:15-Social consumption vs cumulative fall in consumption in different states of EU -

<https://obr.uk/efo/economic-and-fiscal-outlook-october-2021/>

7-EU growth

The most important indicator regarding economic growth is considered to be the Gross Domestic Product (GDP). It is widely used to analyze the growth of countries and as a tool to

evaluate the strength and weakness of any economy. COVID-19 had a strong impact on the GDP of the Eurozone. Due to the lockdown, the factories were ordered to be closed, and thus production decreased. Due to the lack of government planning, growth further plunged. For Europe, the cost to the GDP was about 1 billion euros, or about 6 percent of total GDP. Thus, overall, the whole GDP of the EU fell below 6 percent on average, which was more than the economic fallout of 2008. Also, there are some countries that were severely struck, and some made amazing recoveries. (Petrakeviius et al., 2022)

Source	2020	2021	2022
EC (EU27)	-6.3	3.7	3.9
EC (euro area)	-6.8	3.8	3.8
ECB (euro area)	-7.3	3.9	4.2
OECD (euro area)	-7.5	3.6	3.3
IMF (euro area)	-7.2	4.2	3.6
World Bank (euro area)	-7.4	3.6	4.0

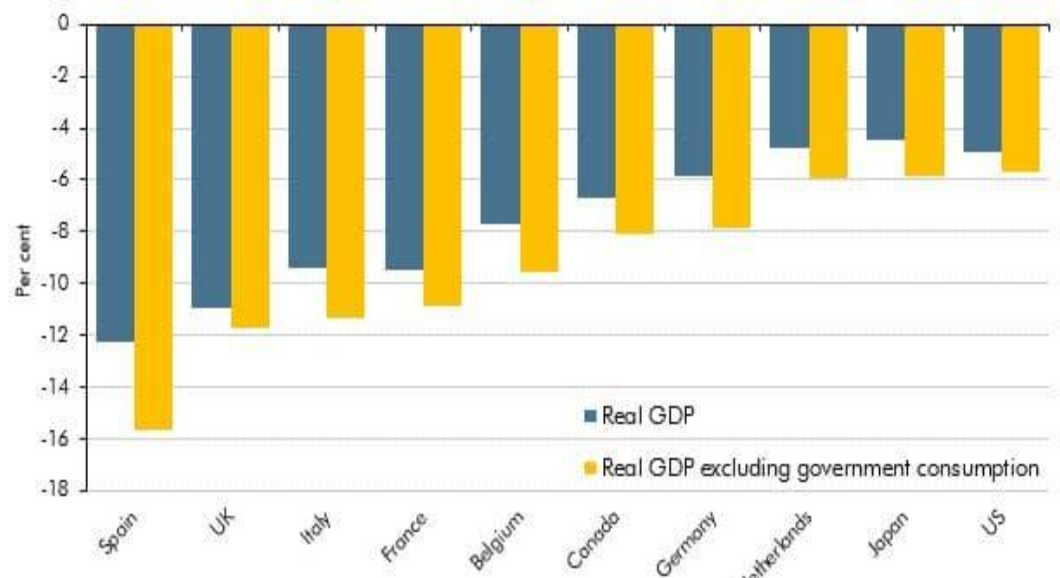
Source: EC⁹; ECB¹⁰, OECD¹¹, IMF¹², World Bank¹³, 2021.

Figure:16- EU REAL GDP estimate (for 2020) and forecast for 2021-2022 (y-o-y)percentage change)-

https://www.epc.eu/content/PDF/2020/Economic_impact_of_COVID19_on_EU.pdf

The table shows the GDP estimated by various sources. For example, the IMF estimated the EU economy to be shrunk by negative 7.2 percent and later the economy grew by 4.2 and 3.6 percent respectively in the upcoming year. This graph also shows the slow recovery of the EU regarding the pre-pandemic economic growth.

In the top ten developed states, the growth decline was less than 3 percent and others faced a decline of 10 percent. For example, Germany's economy was the prime case study in this regard. It shrunk at the pace of 1.5 percent in the first three months of the 2021 but later in the same year recovered with the same pace. However, the people's spending decreased 5.4 percent due to the economic uncertainty and low growth. The French economy faced the worst economic fall out during the pandemic with the economy falling as low as negative 6 percent. Overall the production in France also decreased below 8.5 percent making it worse than any other crisis of the twenty -first century. (Office for Budget Responsibility, 2021)



Note: Chart shows the average shortfall in output over the first three quarters of 2020 relative to the fourth quarter of 2019.
Source: OECD, ONS, OBR

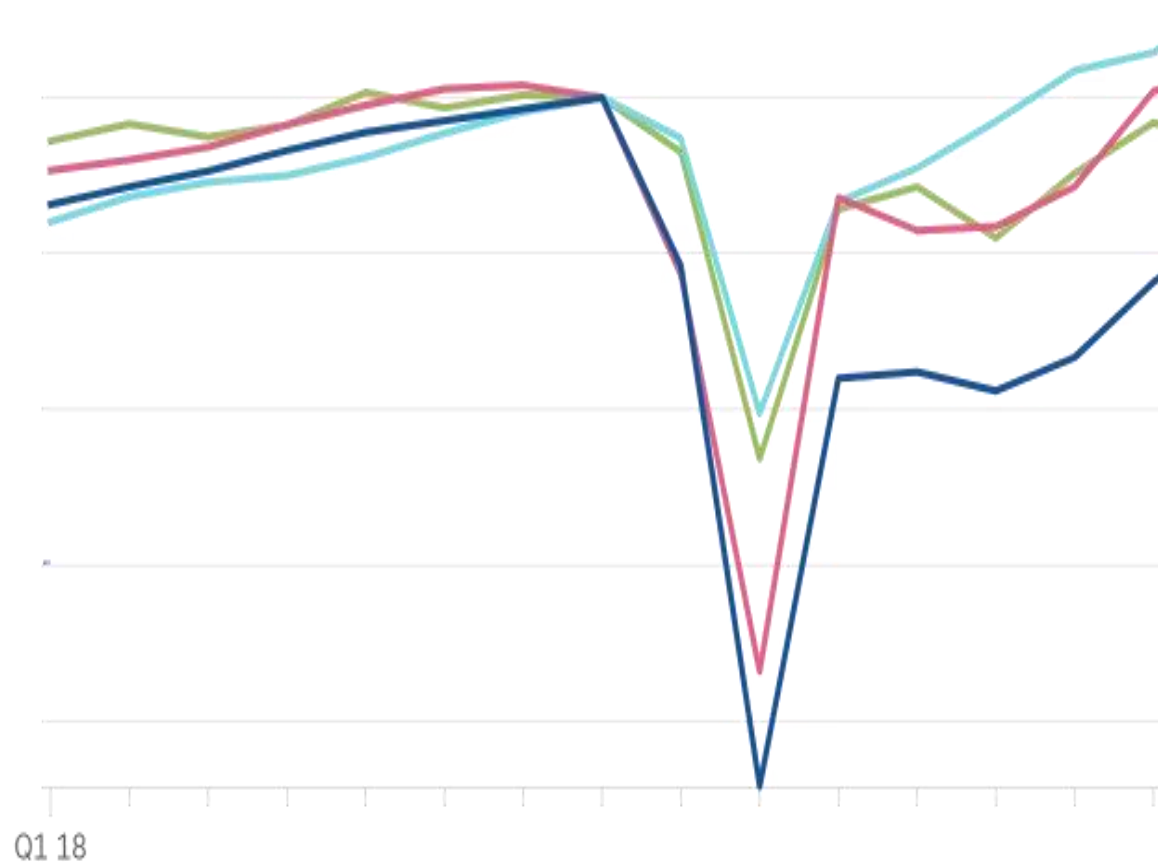
Figure 17: Real GDP vs Real GDP excluding government consumption in EU-

https://www.epc.eu/content/PDF/2020/Economic_impact_of_COVID19_on_EU.pdf

The chart shows the impact of covid on the Real GDP of various states including France, Belgium and Germany.

GDP index rebased, Q4 2019=100

Spain France US Germany



Source: Refinitiv

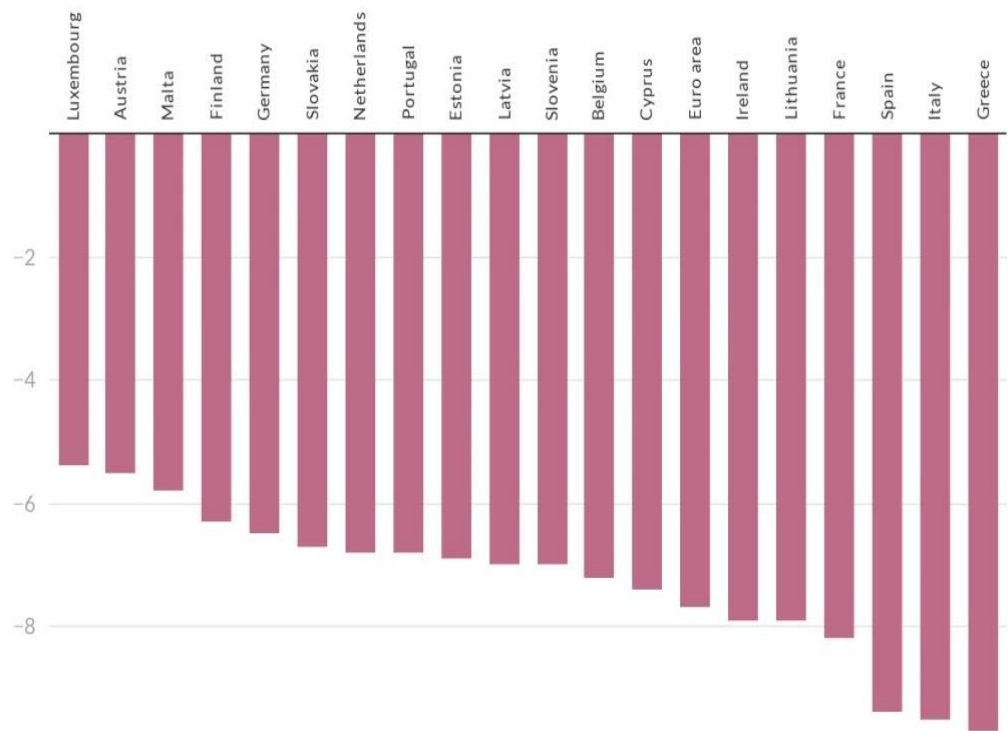
© FT

Figure 18-Comparison of France GDP with other European countries - https://unctad.org/system/files/official-document/osg2022d1_en.pdf

The above chart shows the fact that Germany, France and Spain went into recession during the covid 19 but later the economic recovery was shown in 2021-22. France recovered with an amazing 7 percent alongside other countries mitigating the factor of downfall during covid.

Italy was the prime case study for the covid 19 effect on the GDP and overall growth. In 2020 alone, the economy of Italy shrank with 5.4 percent in the first quarter and 12.4 percent in the second quarter making it the worst hit country by pandemic.

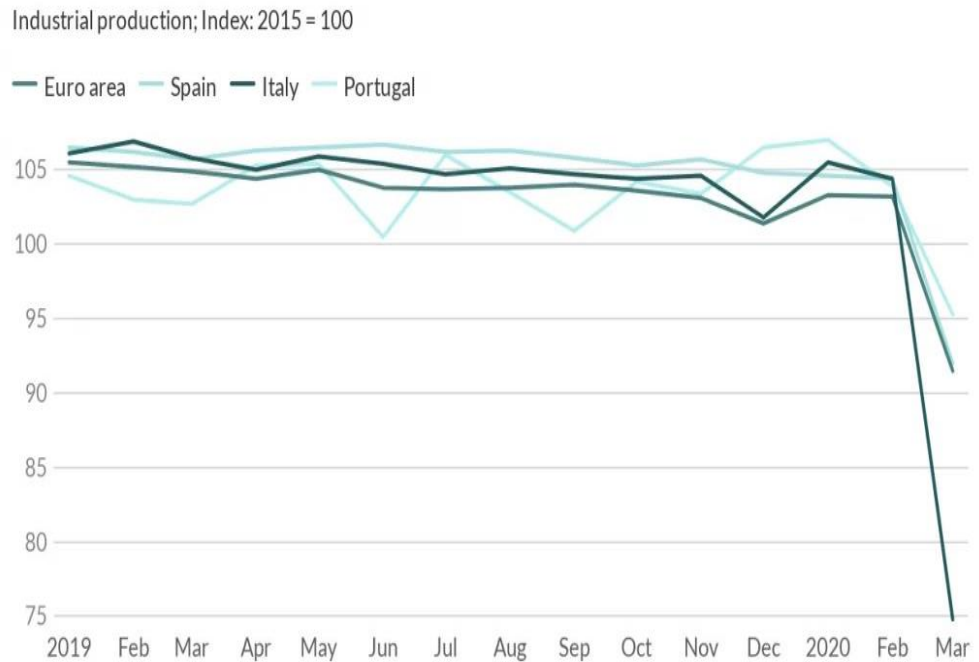
2019 to 2020 real GDP change



Source: European Commission, European Economic Forecast, Spring 2020, page 1

| BertelsmannStiftung

Figure 19- Real GDP change of different European countries in 2019-2020- 90439.pdf



Source: Eurostat (extracted on 15.05.2020)

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Figure 20-Massive production slump in different countries of Europe

Labor market

Covid 19 affected the EU labor market in the worst possible way. The lockdown was started in February and eased in mid May but this lockdown restricted the movement and growth of the economy, affecting the laborers. The labor market was disturbed primarily due to the closure or partial closure of firms and factories due to lock down. The average per hour a day work rate declined and unemployment also soared with

the lengthy retention of job trends. In the first half of 2020 alone, the number of labor shrank by about 5 million. It means that 44 percent of people have lost or shifted their jobs during the pandemic in Europe. There were recoveries in the last quarter of 2020 but the overall number of people unemployed remained less than the 2019. Other than this the working hours also declined in all the sectors. For example, in the recreation sector, there was a decline of 40 percent in the first half of 2020. Furthermore, the average per hour pay declined in Europe. About 9.1 percent per hour wage decreased around the Eurozone due to less growth and earning. Similarly, the job retention ratio increased due to unpredictability of lockdown. Another important thing to note here is that most of the Europe was facing the labor shortage thus it faces the less brunt of covid lockdown. However, during this time, the flights were banned and new visas were not offered which made it difficult for the migrant worker to travel to Europe. Thus the migration was halted and the job market sustained from the further losses. (Hurley et al., 2022)

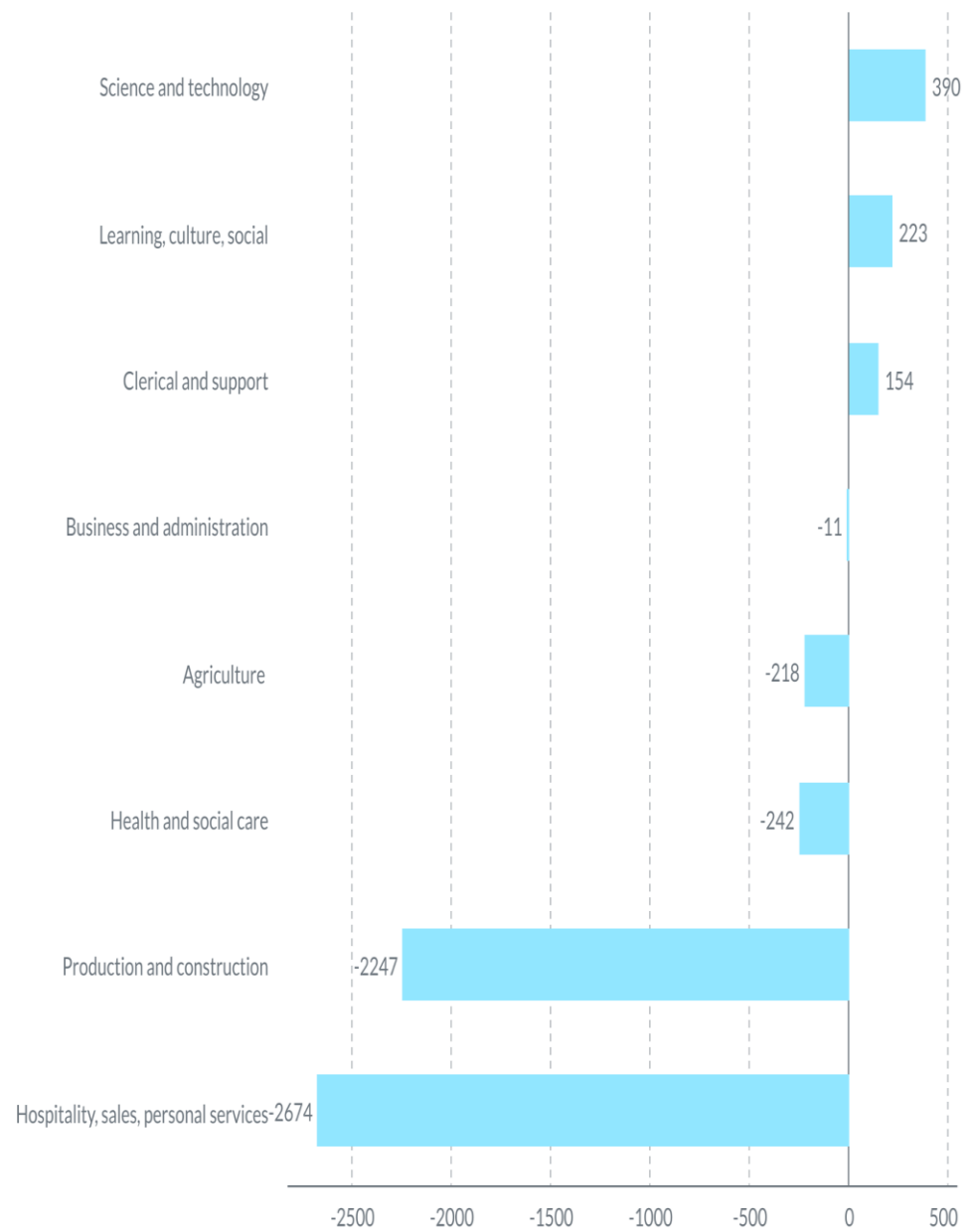


Figure 21-employment ration during pandemic-

<https://www.ecb.europa.eu/pub/economic->

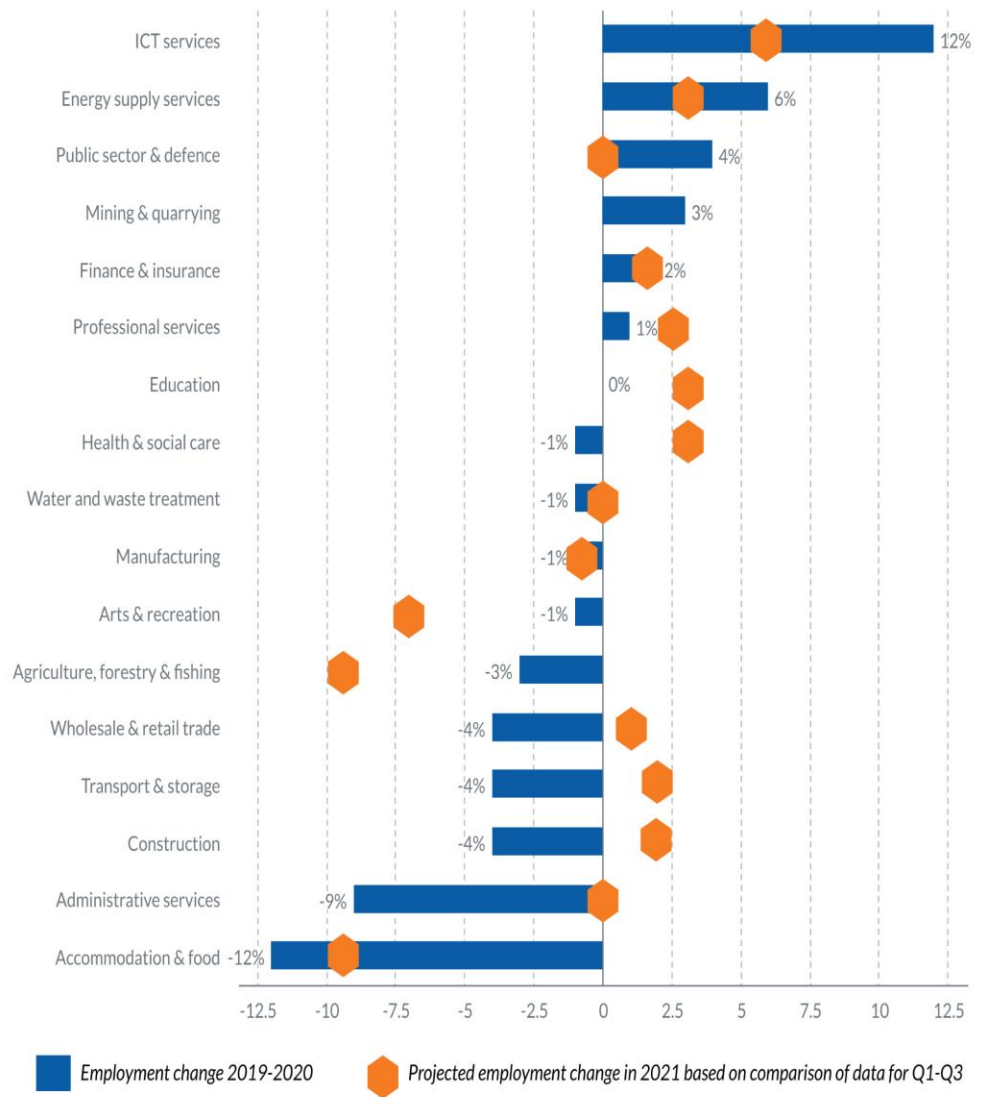


Figure 22- the shift in the employment due to Covid 19 in Eurozoe- IPOL_STU(2021)662903_EN.pdf

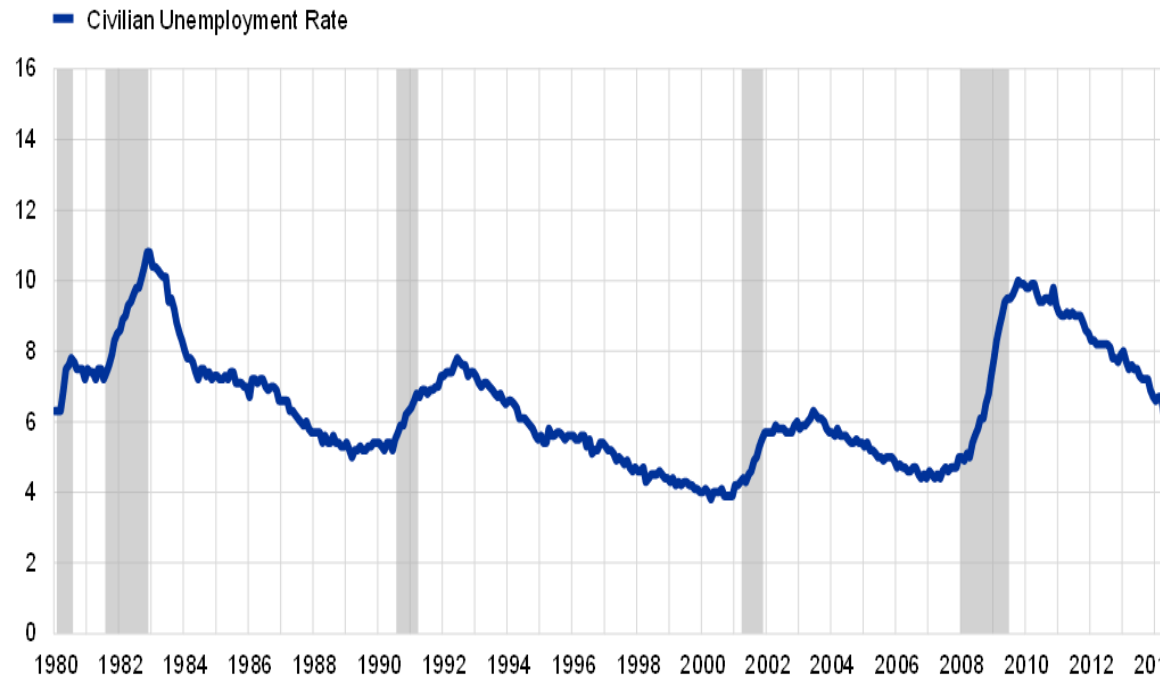
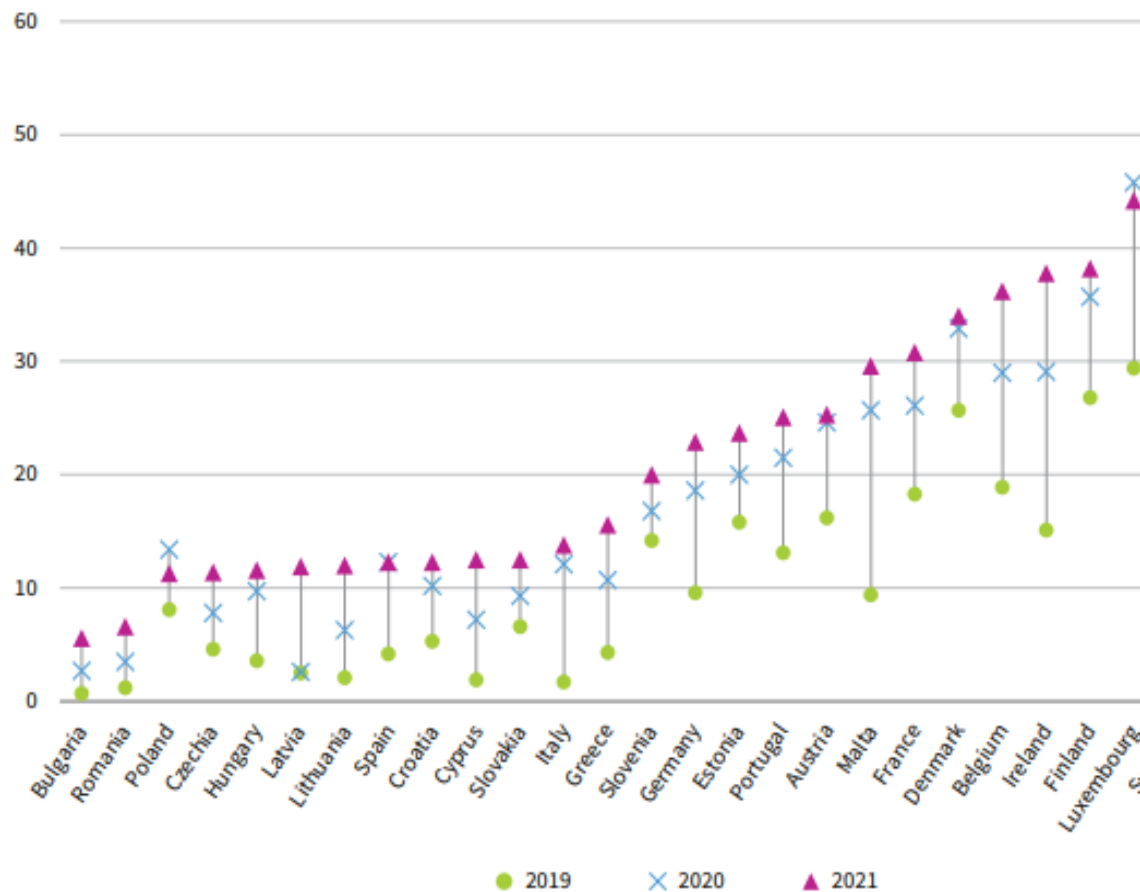


Figure 23- civilian unemployment rate in Europe (1980-2020)-
https://unctad.org/system/files/official-document/osg2022d1_en.pdf

Another prominent feature and phenomenon during the covid 19 pandemic was the growth of telecom and internet related jobs and market. The number of people working from home started to increase and by 2020 33 percent of workers were teleworkers. Similarly, about 46 percent of earning was done digitally. Most of the digital work also includes physical labor like delivery, order attendant, etc but overall most of the people involved had some knowledge of tech. The telecom industries

grew, creating a new job market for the labor. More than one third of the EU job market became global in 2020. However, the downfall of this digitalization was that it supported only the educated community of the EU like professor , Tech-specialist. Meanwhile, the simple menial working class suffered from this abrupt transformation. On the other hand, this abrupt transition helped the EU to regularize and digitalize the economy. (Wauters, 2022)



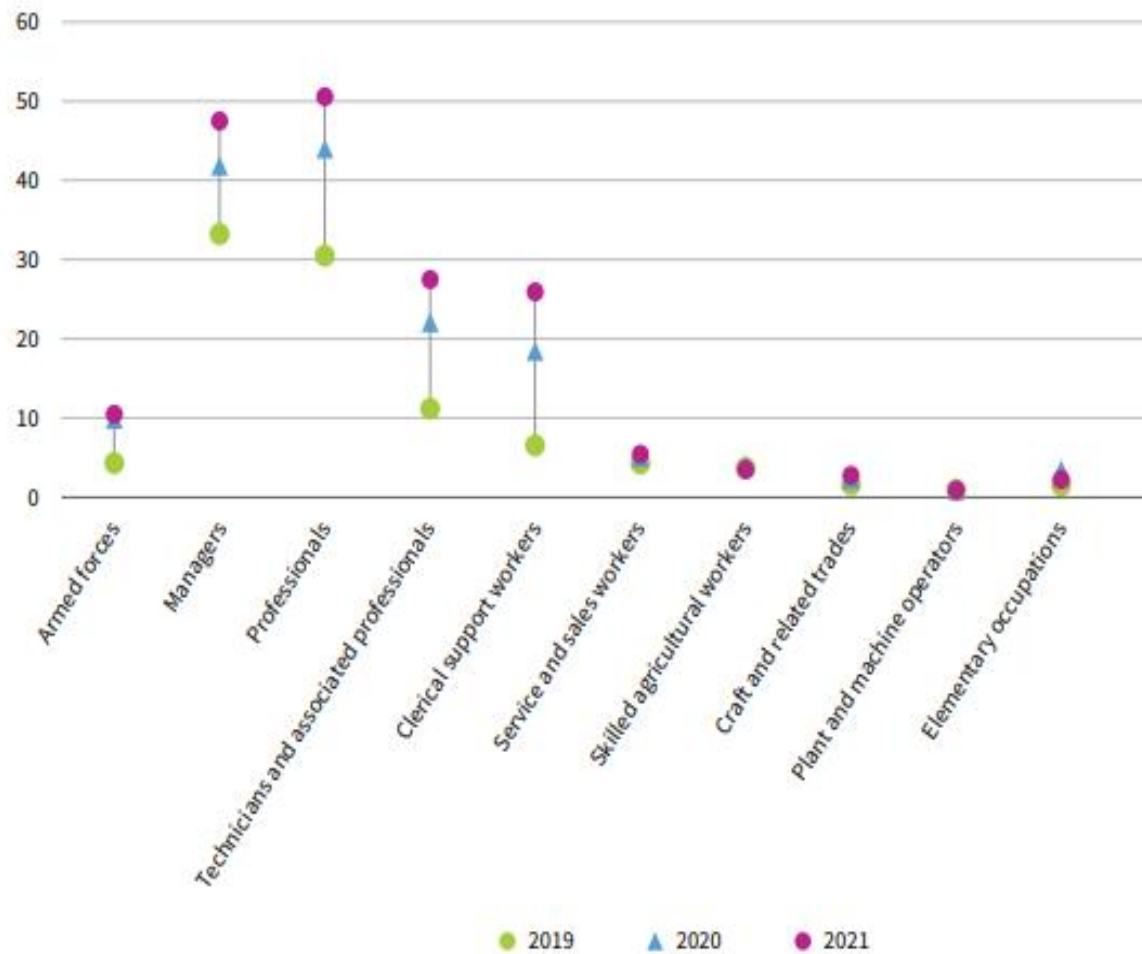
Note: Sweden did not provide data on working from home in 2020.

Source: Eurostat [lfsa_ehomp]

Figure 24- Employee working from home, by country, 2019-2020, EU 27(%)

The chart shows the increase in the working of people from home during the pandemic. Netherland was at the top where workers from home increased from 30 percent and reached to almost 45 percent. Similarly, Bulgaria and Romania was at the bottom of the list of countries with the worker working from home. This list also indicates the previous trend of working from home. The countries like Luxembourg, Finland and Denmark etc had the good amount of people working from home, thus when the pandemic started, they were the least affected markets . On the other hand, eastern european countries like hugary, Romania and Bulgarias had insignificant amount of people before the pandemic working at home, thus it suffered greatly from the pendamic. (Carreo et al., 2020).

Figure 15: Employees working from home, by occupation, 2019–2021, EU27 (%)



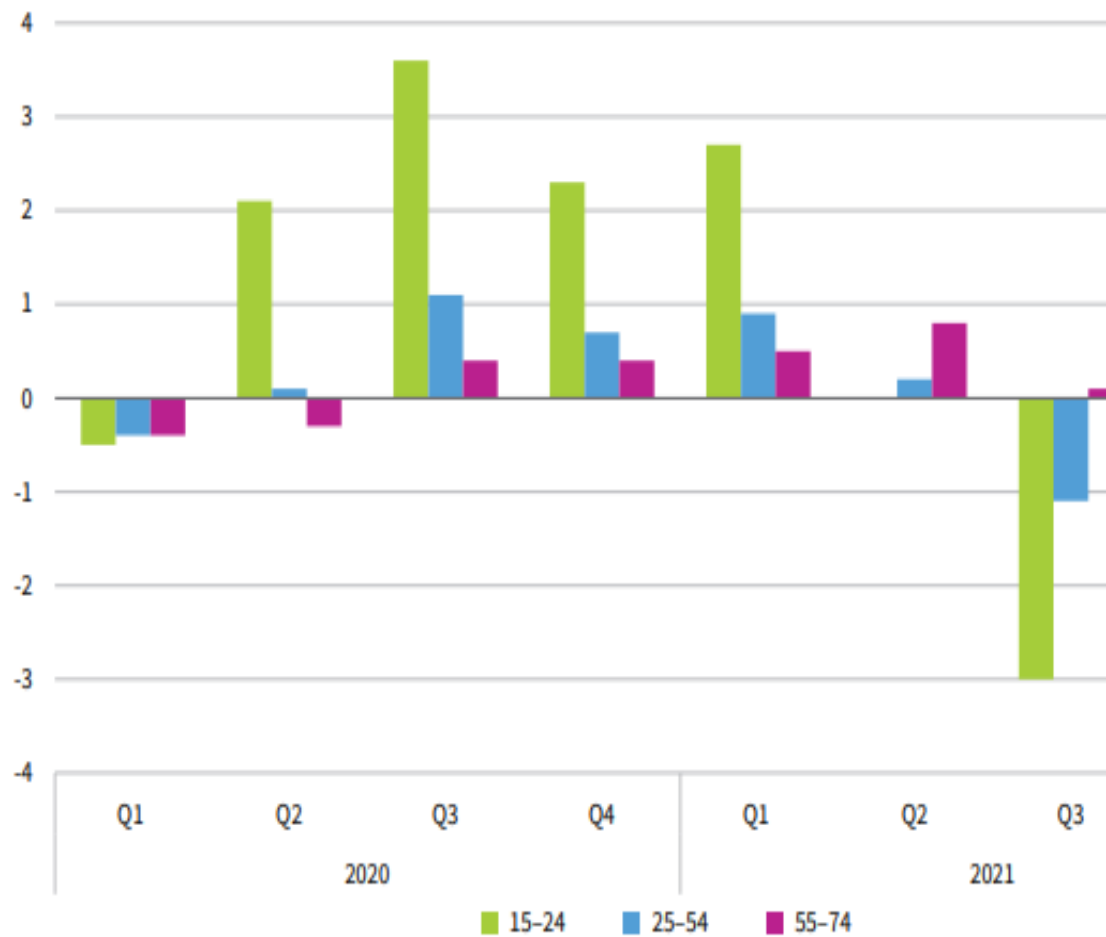
Note: Figures refer to combined responses of 'usually' and 'sometimes' to the question asking how often respondents work from home.
Source: EU-LFS (authors' elaboration)

Figure 28- Employee working from home by occupation 2019-2021, Eu 27(%) - https://www.ecb.europa.eu/pub/economic-bulletin/articles/2021/html/ecb.ebart202008_02~bc749d90e7.en.html#toc11

The major policies during the pandemic are regarding the “subsidized short-time working or temporary lay-off schemes”. These schemes mostly include the subsidies that directly benefit the worker, and not coming from the employee. In this way, the basic purpose of these schemes is to benefit the self-employed workers too. During the first half of 2020, more than 20 percent of EU laborers were connected to these schemes. Thus, 40 million European workers benefited directly from these subsidies. These policies are adopted by almost all the EU countries even if they have been anti-socialist in history. The generous grant of subsidies helped the workers to retain the job and living lifestyle.(Ando et al., 2022)

Also, the direct nature of these subsidies made them more effective. The Support to mitigate Unemployment Risks in an Emergency (SURE) was launched by the EU to support and mitigate the working class. The relationship between the employer and worker was ignored but this was done because the unemployment soared at around 6.7 percent in 2020 making any such scheme redundant. This scheme was used mainly during the first wave of pandemic. In the second half, employment conditions were improved by better planning and other fiscal policies. Therefore, the use of furlough schemes declined during the second and third wave. (Hurley et al., 2022)

Most of the time, the unemployment remains less due to short-term employment schemes and governments plans of keeping the people employed but not working. Thus, most of the time, the people were working zero hours but were working zero hours. These schemes are mostly aimed at the aged worker of more than 25 years old but the unemployment struck the young worker aging from 14 to 25. The unemployment rate of young workers rose to more than 3 percent in 2019. However, as compared to other countries of the world, Europe remained the least affected zone for employment because Europe has been facing the labor shortage since the dawn of the twenty first century. The labor shortage increased to the highest level from 1.1 percent to 2.3 percent in various areas during 2019. The main factors behind this were the aging population and strong growth rate. Therefore, it is necessary to distinguish the person who is available for work but is not seeking it during the pandemic from the person who was seeking the job but could not find it.(Ando et al., 2022)



Note: There were no changes in employment levels for 15 – 24 year olds in Q2 2021.

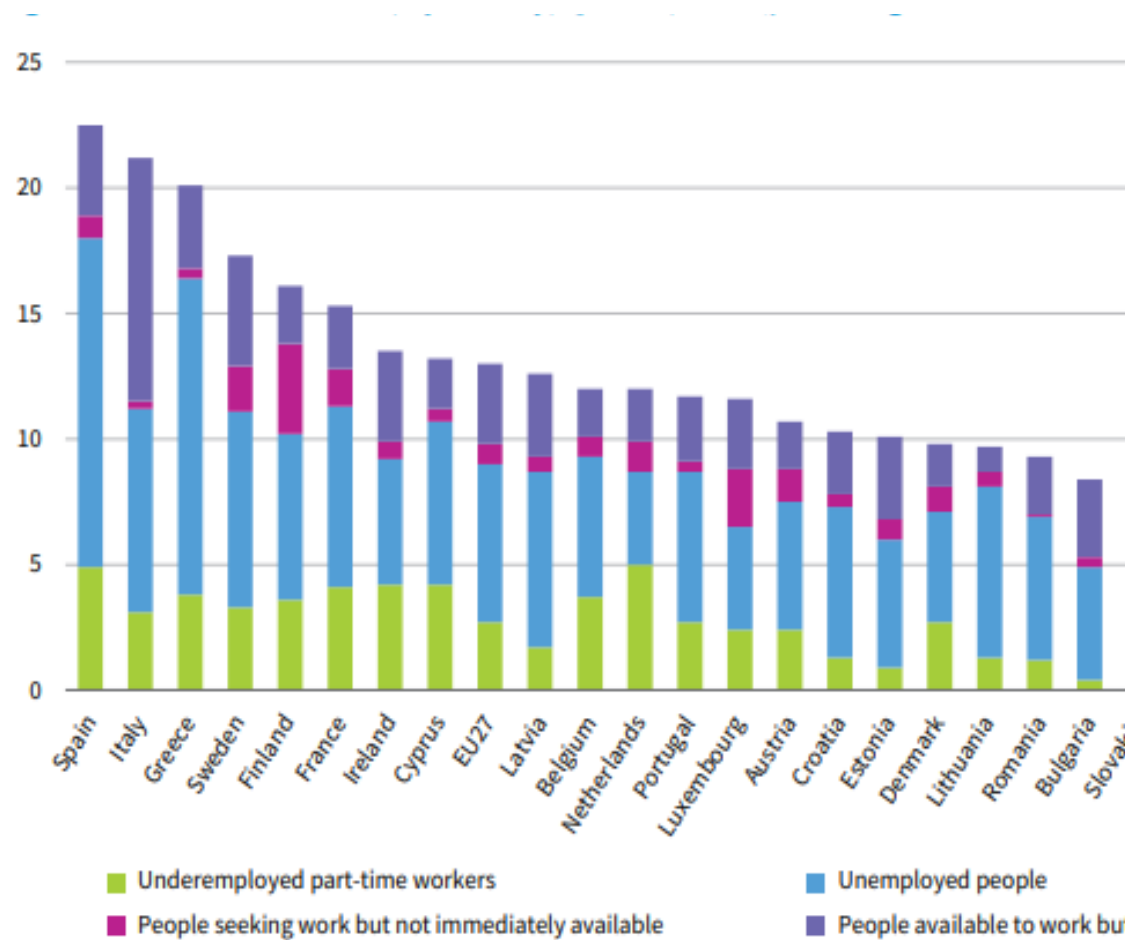
Source: Eurostat [une_rt_q]

The chart showing the rate of unemployment amongst different age group-https://www.ecb.europa.eu/pub/economic-bulletin/articles/2021/html/ecb.ebart202008_02~bc749d90e7.en.html#toc11



Source: Eurostat [lfsi_sla_q]

Figure 29- labour market slack, 2019-2020, EU (%)
https://www.ecb.europa.eu/pub/economic-bulletin/articles/2021/html/ecb.ebart202008_02~bc749d90e7.en.html#toc11



Note: Data for Malta present reliability issues and therefore are not displayed.
Source: Eurostat [lfsi_sla_q]

Figure 30-Labor market slack by country 2019-2020, EU

A chart showing the employment ratio across European Countries. The chart clearly shows that Spain, Italy and Greece were the countries that have one out of four people unemployed due to covid 19, Meanwhile Poland, Czech and Hungary were the least affected countries during the pandemic.

8-Conclusion

Summing up the arguments, the economy of the EU was badly hurt by the pandemic initially. The closure of markets and factories had a bad impact on the GDP of Europe. The overall GDP of EU was shrunk 6 percent in 2020 with many states experiencing almost 10 percent negative growth. The unemployment rate also peaked causing the both social and economic crisis in the European Union. Furthermore, the import and export of goods also declined to almost negative 5 percent. The textile and automobile industry was the most affected sector during the pandemic. To assuage the condition, the EU started to increase public spending and other policies that will boost the loans and grants. This increased the public debt to as high as 100 percent of the GDP.

However, after the first wave, the EU came with new policies and trade restrictions to boost the economy. The people and consumer behavior also adjusted to the covid restriction that boosted the economy. Furthermore, the economic revival plans and grants started to make the economy recover from the crisis. Also, the new economic plans of recovery for every country worked in the favor of the state. Almost, all the sectors saw positive growth in 2021 and trade with other countries also boosted. For example, the net export has reached almost 220 billion euro by

2021 and overall Europe saw economic recovery, ending the remnant of covid.

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