ORIGINAL RESEARCH

How to minimize negative health effects in the European Union due to the Economic recession caused by the COVID-19 Pandemic

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Abstract

Aims: The article aims to analyze what can be learned from the last Financial Crisis from 2008 on to minimize the negative health effects in the European Union due to the Economic recession caused by the Covid-19 Pandemic.
Methods: Systematic literature reviews were conducted to analyze the interventions taken to combat the last Financial Crisis and their consequences on health. Parallel to this, a qualitative document analysis of the ongoing discussion about the measures taken or to be taken in the Covid-19 Pandemic to fight the current economic recession was conducted using institutional websites and international media.
Results: The main methods taken to combat the Financial Crisis from 2008 were, bailing out banks, austerity measures, and the European Stability Mechanism. There is evidence that the Financial crisis had negative effects on the European Health Systems in general. Austerity measures in some countries, led to an increase in psychological disorders. Overall mortality was not affected but the decrease of avoidable mortality slowed down. Various economic interventions such as bailing out essential industries e.g., the Aviation sector, cash injections, tax relief, short-work salary compensation, modified ESM, and the Pandemic Emergency Purchase Program (PEPP) were taken during the Covid-19 Pandemic to help stabilize the economy.
Conclusion: The current recession is not caused by internal failures of the financial system as it was in the financial Crisis of 2008, but by an outside event - the Covid-19 pandemic. Measures were taken by the governments and the European Union to avoid an economic crisis, and by these, the negative health effects were created during the Financial Crisis in 2008, but the lockdown phase seems to lead to similar negative health effects regarding psychological disorders and delay of planned screening and treatment.

***Keywords**: austerity, COVID-19, economic measures, financial crisis, health, pandemic.*

Conflict of interest: None declared.

Introduction

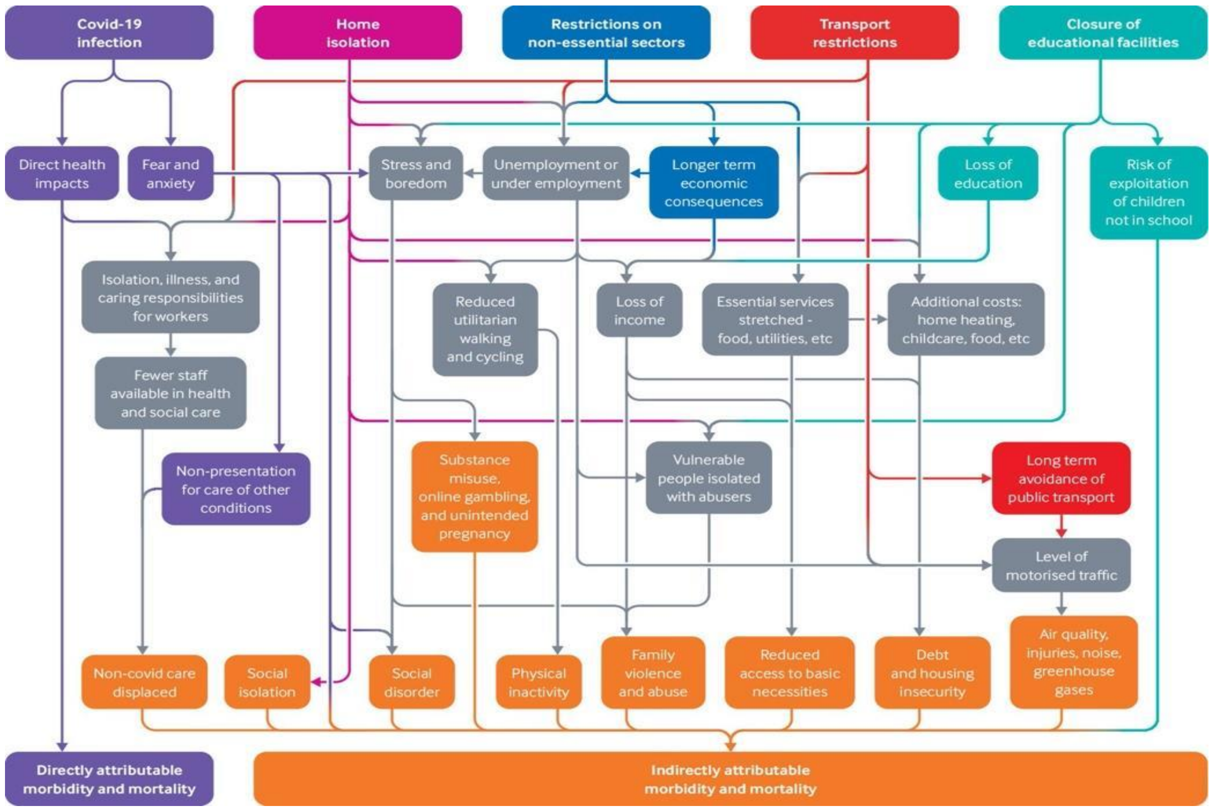
In December 2019 an outbreak of the virus, Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), occurred in Wuhan, China, which developed into the COVID-19 pandemic (1). The virus that caused COVID-19 spreads mainly when an infected person is in close contact with another person or small droplets and aerosols is in the air (1). At the beginning of 2020, 23 million people were infected worldwide, out of which, 800,961 people died (2). To combat the pandemic in the absence of a vaccine several non-pharmaceutical measures such as lockdowns were adapted by infected countries. This was to prevent the spread of the disease and not overload the health system with patients. A side-effect of these measures is that they had and still have a serious influence on the economies of infected countries that finally led to a worldwide recession (3). The Gross Domestic Product (GDP) shrank by 12.1 % in the European Union at end of July 2020 (4). By this, the Covid-19 Pandemic has the highest negative effect on the economy of all infectious disease outbreaks in the last decades (5). Next to the direct burden of ill-health due to infected people, there is the risk of an indirect burden of ill-health caused by the measures taken to combat the economic recession as we learned from studies that looked into the effect of economic decline on health (6). The European Union and its Member States had to choose interventions to minimize these negative health effects. Figure 1, originally presented by Douglas and colleagues (7), visualizes the interdependencies between the different measures taken to fight the pandemic and illustrates the pathway of economic consequences leading to indirectly attributable morbidity and mortality. The last financial crisis started in August 2007 in the United States. The excessive risk taken by banks along with the bursting of the United States housing bubble caused the financial downturn in the United States (8). Real estate was hit the most damaging various financial institutions globally. This was then followed by a Global Financial Crisis in September 2008 that later developed into the Great Recession in 2009-2010. The Financial crisis of 2008 in Europe initially affected Portugal, Ireland, Italy, Greece, and Spain. This led to a loss of confidence in European businesses and economies. Unsustainable fiscal policies and overleveraged banks led to a Sovereign Debt Crisis in the Euro area in 2010 (8). The research objective of this article is to analyze if the measures taken to combat the last Financial Crisis should be applied this time too. By comparing the current economic recession with the Financial Crisis of 2008 and the economic measures taken then, we can theorize if the measures would work during the economic crisis caused by the COVID-19 pandemic.

Methods

Ethical Consideration

This literature review was based on published reports and was therefore exempted from ethical approval. A systematic literature review was conducted on the measures taken to combat the financial crisis of 2008 and, on the health effects the crisis had, using databases PubMed, Web of Science, and EconPapers from the years 2009 to 2020 using a combination of Boolean operators (AND/OR), Medical Subject Headings (Mesh) and predefined keywords. Peer-reviewed papers in English on measures taken to combat the financial crisis of 2008 and the health effects of the crisis were retrieved and independently evaluated for eligibility based on the title and abstract. Thereafter, full texts of eligible papers were accessed according to the pre-defined inclusion and exclusion criteria. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2009 guidelines were followed (9).

Figure 1. Effects of Social Distancing Measures (7)



Search Strategy and Data Collection

For the review on the measure taken to combat the Financial Crisis in 2008 and health effects caused by the crisis, keywords were “Financial Crisis 2008”, “Economic impact”, “Eurozone crisis”, “Measures”, “Austerity”, “Health Effects”, “behavioral effects”, and “Europe”. The time span of publications was from 2009 to June 2020. The Great American Recession 2007-2009, the measures taken during the financial crisis of 2008 in the United States of America, countries outside the European Union, and published articles in other languages apart from English were excluded. Parallel to this, a qualitative document analysis regarding the content of the ongoing discussion about the measures taken or to be taken in the Coronavirus Pandemic to fight the economic recession was conducted to watch out for evidence about indirectly attributable morbidity and mortality. Sources monitored were the institutional websites, e.g., of the European Commission (EC), the European Centre for Disease Prevention and Control (ECDC), the European Central Bank (ECB), the World Bank, the European Investment Bank (EIB), the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD), and major International Consultant Companies and newspapers. For the review on how to combat the 2008 Financial Crisis and the health effects of the financial crisis of 2008, 668 articles could be identified via the databases searched, and 35 articles via additional sources.

After checking for relevance 36 articles were included. The qualitative document analysis of the institutional websites was included till the end of June 2020 and 13 results were used.

Figure 2. Systematic literature review on economic measures taken during the financial crisis 2008 (9)

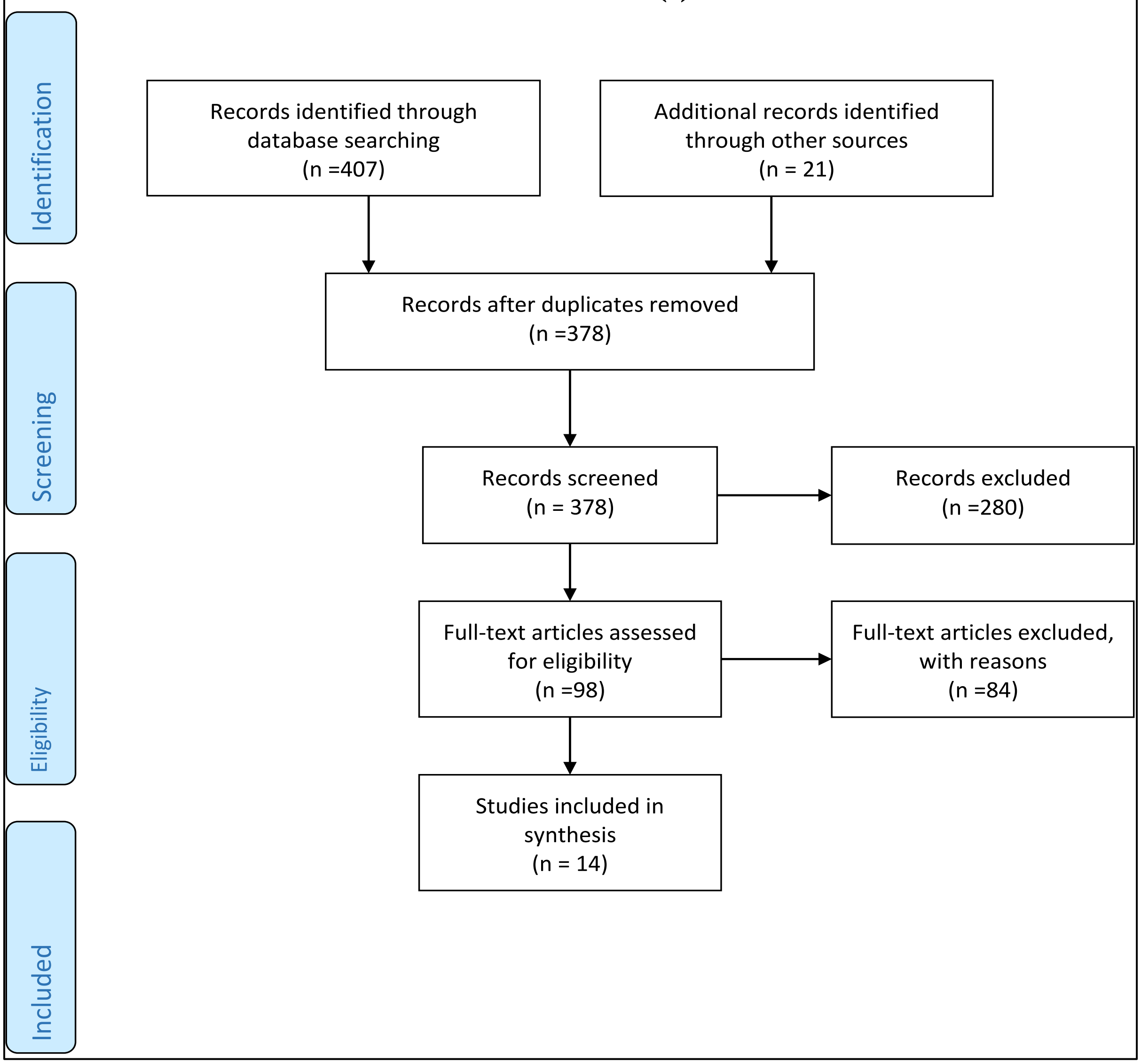
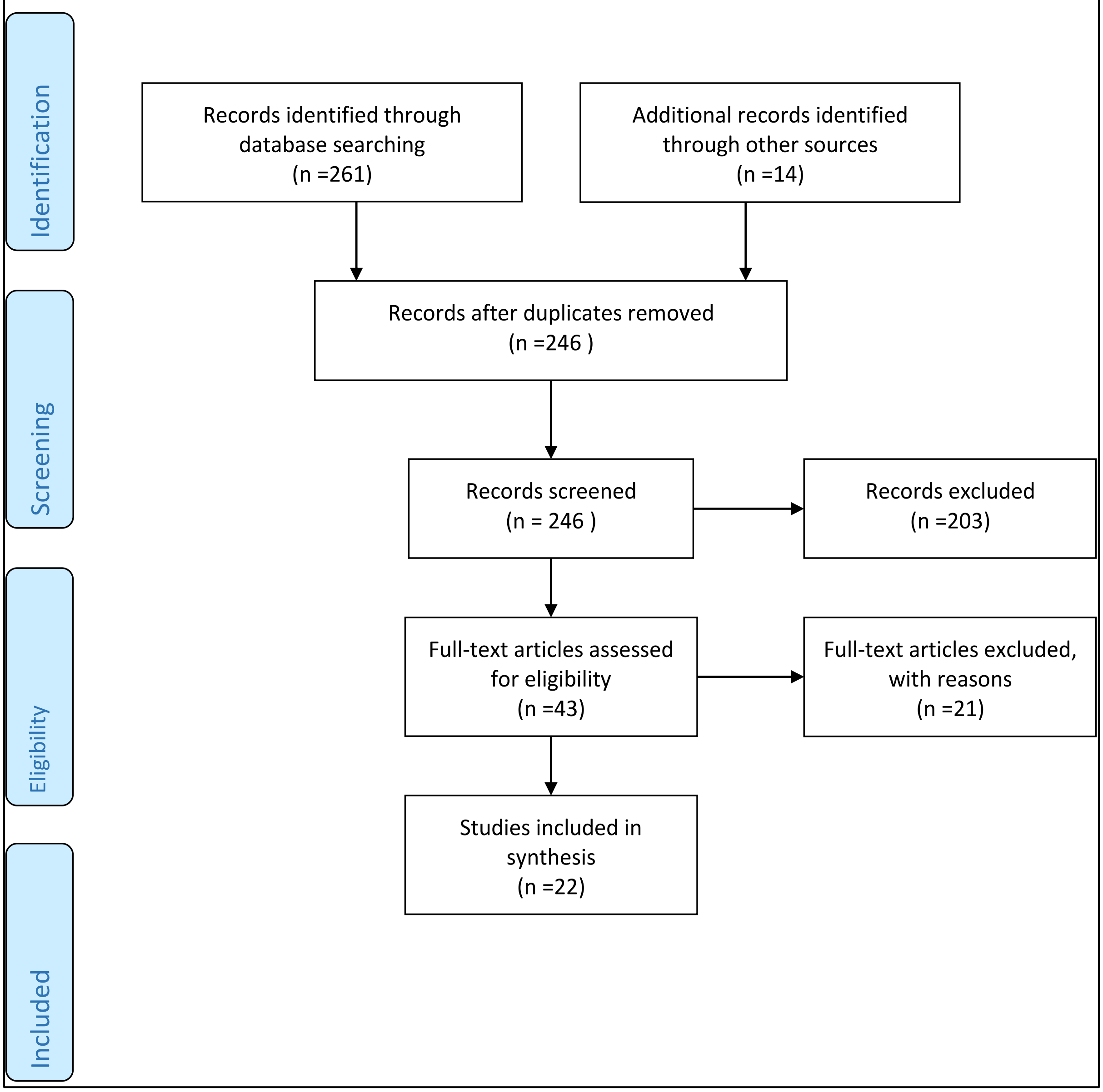


Figure 3. Systematic literature review on health effects of financial crisis of 2008 (9)



Results

Measures taken to combat the Financial Crisis of 2008

The primary cause of the 2008 financial crisis in Europe was the bursting of a property bubble in the United States of America in 2007 (10). The crisis resulted from a structural problem of the Eurozone, and a combination of factors, which included the globalization of finance, easy credit system that encourage high-risk borrowing, lending practices, international trade imbalances, a real estate bubble, unsustainable fiscal policy approaches related to government revenues, and expenses and approaches used by certain nations to bail out troubled banks and private bondholders (11). The first interventions were to prevent the collapse of the banking sector and the second interventions tried to avoid a massive drop in demand (12). Member States made efforts to prevent mass unemployment and made sure workers would retain their relationship with the labor market, e.g., by implementing short-time work schemes. This was one of the main reason's governments had to raise taxes and cut back social expenditure (13). Investments in jobs and government infrastructure, tax measures, and tax reliefs were implemented (12). Other measures such as lowering interest rates and buying government bonds were part of the monetary policies of the EU that would help to cope with the financial crisis (14). Between October 2008 and May 2009, The European Central Bank (ECB) lowered its interest rate to maintain price stability in the Euro area. The enhanced credit system focused on commercial banks, as they were the main source of funding for businesses and households in the Euro area interbank market (15). Public debt increased, national credit ratings fell and the cost of borrowing increased. This led governments in Europe to impose harsh austerity measures which would reduce public spending (13). During the crisis, unemployment increased rapidly in Europe. The European Central Bank (ECB), the European Investment Bank (EIB), and the International Monetary Fund (IMF) along with leaders of European member states placed a priority to reduce the deficit (16). The majority of the deficit reduction policies by European governments involved further budget cuts rather than tax increases (16).

Health Effects of the financial Crisis of 2008 in Europe

The 2008 Financial crisis in Europe not only had an economic impact but has also a short, medium, and long-term impact on the health systems and the health of individuals (16,17). Economic growth, democratization, and improved living conditions have contributed to better population health in most European countries, but health inequalities are still prevalent (18). These inequalities are mainly caused by daily living conditions, inequalities in available money, and resources which affect individuals during a financial crisis due to loss of employment. This leads to a change in lifestyle which may include smoking, alcohol consumption, and nutrition intake (19,20). In times of an economic crisis, households will also limit their spending on health (21). The Financial crisis of 2008 caused, in some countries, severe psychological disorders which included depression, anxiety, and suicidal behavior (22). Over time suicides and psychological disorders increased by 7% because of unemployment, loss of income, and housing instability e.g. (in some southern European countries) (23).

Countries such as Greece started to reduce their health care budget during the financial crisis in 2008. The tight restrictions of budgets on the health care system worsened the health system performance and also led to a slowdown in the reduction of avoidable mortality (24).

Impact of the Covid-19 Pandemic on the Economy in Europe

The Impact of Covid-19 Pandemic on the economy is severe (25). The manufacturing sector was affected due to lockdown measures as e.g., it depends on the physical presence of the workers. The travel and tourism sector experienced great difficulties as the movement of people was restricted. The closing of public places led to a supply chain disruption. Educational institutions had to shift to online education. The entertainment industry experienced a total standstill as gatherings were forbidden. All of this resulted in the loss of jobs and income and also reduced demand and supply (25-27). This influenced the consumers' confidence as they hesitate to buy products in the face of possible job loss or reduced income. In summary both, supply and demand were reduced in the Pandemic (3,28). Some of the currently discussed economic measures to solve the crises are already implemented (25,29,30). They focus either on individuals by offering temporary cash for vulnerable households, expand short-time work schemes, and increasing resources for health care (27,31). For the industry, the reduction or delay of paying taxes for affected sectors is discussed (32). At the State level, Fiscal Consolidation is needed to expand liquidity and availability of credit to firms (32,33). Regulations on reporting bankruptcy have been delayed. Regarding macroeconomic policies, the expansion of liquidity to banks is discussed (30). Further, it should be ensured that monetary policy can respond to extreme market conditions (32). The European Union (EU) agreed upon a recovery fund and a long-term budget that supports its citizens and business from the economic crisis caused by COVID -19. The European Union's long-term budget called the multiannual financial framework (MFF), of 1,100 Billion Euros for the year 2021 to 2027 can be considered vital in the recovery of the economy (27). The EU has also sanctioned temporary funding of 750 Billion Euros called the Pandemic Emergency Purchase Program (PEPP) (30,33). The PEPP program would help the Member States in supporting their citizens and businesses. This included compensation on employees' wages, supporting small and medium-sized enterprises (SME), and supporting businesses with tax reliefs or delayed taxes (25,27,31). The effect of the measures is still unknown due to the recent implementation. Some European Member State Governments have started to bail out national airlines (34) as the aviation and the travel sector were one of the most affected sectors during the lockdown. But not all sectors were affected equally. The IT sector for example is expected to double its revenue in the second quarter compared to the first quarter in March 2020. Companies such as Apple and Google even saw an increase in their share price from the beginning of February to the first week of August by 8.26% and e-commerce companies such as Amazon and eBay saw an increase in their share price by 29.64% from the first week of March to the first week of August (35). The increase in growth of online sales has helped the e-commerce industry because consumer confidence has increased in online sales. This in return helped increase business and industry confidence. The Supply chain for certain products from China had come to a standstill. As China today is seen as the workbench for Europe this had major implications for the availability of most goods. This was very eminent in the discussion about missing PPE due to the import from China. Therefore, many countries are encouraging companies to relocate production in their own country and have committed to support this with dedicated investments into manufacturing through programs such as the ESCALAR (35).

Health effects of Economic Recession 2020 in Europe

The mortality impact of COVID-19 has been of major concern in Europe and the rest of the world. As of the beginning of August 2020, there were a total of 216,478 deaths (32). The impact of lockdowns adopted by the Member States can have unintended health effects (36). Lack of social contact can result in mental health issues, limiting physical activity can result in obesity and a rise in domestic violence. The current financial situation can cause uncertainty and stress that would result in a negative health effect in the short term (37). Due to lockdown, people are not traveling and by this, the number of traffic accidents is supposed to go down (38,39).

There have been concerns that the measures taken to mitigate the COVID-19 Pandemic could increase the number of deaths from other diseases. One of the major issues is that people hesitate to go for treatment as they fear they would be infected by the COVID-19 virus. Or, that they do not like to burden the healthcare system when it is already under pressure due to the pandemic (37,40). Hospitals are delaying the treatment of non-COVID-19 patients as they are trying to prioritize the cases related to the pandemic (40). Therefore, apart from the official COVID-19 deaths, there are additional deaths that may be directly or indirectly related to it. Due to the lockdown and social distancing measures about 2.1 million people missed out on cancer screening. There have also been up to 290,000 people with suspected symptoms that have not been referred to any hospital or any treatments (37). This is because during the lockdown health systems focused on patients with COVID-19 and other services like cancer screening were postponed. Due to this, there might be around 230,000 cases of cancer gone undetected. Cancer requires prompt diagnosis and treatment; hospitals can't do so because they are over capacitated by COVID-19 patients. This would increase the number of cancer cases over the long term (41).

Discussion

The rapid spread of COVID-19 prompted many governments to impose serious and strict lockdown measures. These measures have made many businesses shut down temporarily, led to restrictions on free movement and travel, financial market going turmoil, and decreased consumer confidence (42). The measures taken in Europe to help and boost the economy are relatively large compared to those measures taken during the Financial Crisis in 2008. The magnitude of the impact of these measures on the growth of GDP is still unknown due to their recent implantation.

Data on the economic effect of the pandemic are not yet available or accessible since some statistics are produced on a quarterly or yearly basis. As there are different reasons for the origin of the crisis, some macro-economic effects might be different so the actions to be taken might not be the same.

Table 1 compares the reasons for the two crises, the effects on the economy, the measures taken, and their effects.

Table 1. Comparison of the Financial Crisis of 2008 with the Economic Recession 2020

	Financial Crisis 2008	**Economic Recession 2020**
Reason for crises	From inside the Financial System (Bursting of a Property Bubble)	From Outside of the Financial System (SARS-CoV-2)
Effects on the Economy	Global Recession, Credit Crunch.	Global Recession, No demand and no supply.
Measures taken	Bailing out Banks, Austerity Measures, European Stability Mechanism (ESM) introduced.	Bailing out essential industries e.g. the Aviation Sector, Cash injections, Tax relief, Short-work salary compensation, Modified ESM, Pandemic Emergency Purchase Program (PEPP).
Effect of measures taken	The economy recovered over time.	Short-term Economic recovery, Long-term Economic Recovery is unclear.

The reasons for the shock and impact on the world economy are different in 2020 when compared to the Financial Crisis in 2008. In 2008, the problem was a banking crisis which was the result of too much "bad debt". Now it is the supply chain shock having a knockout effect on the market (43). Various leading economists have urged governments to bring out measures to fight the economic downfall. They suggest reducing personal and corporate bankruptcies, ensure people keep spending even though they are not working, increase public investment, increase healthcare spending, and using an unconventional policy called the helicopter money where the governments print new money and distribute it among the public during a recession (44).

Stock markets fell about 33% from March compared with 55% during the 2008 Financial Crisis. But this comparison is for the short period of the economic crisis in 2020 with a much longer period of the Financial Crisis of 2008. The shock on the economy in 2020 is different since the lockdown has severely hampered every sector from the beginning when compared to the Financial Crisis of 2008 where mostly the banks were affected first. This shows that the economic outcome of the COVID-19 Pandemic seems worse when compared to the Financial Crisis in 2008 in a short term. One can compare the fall of the stock markets to the post-collapse of Lehman Brothers which stands at 33% and 19% respectively. If income is held up for even four months, it will drive firms into insolvency which will result in unemployment, loss of income, reduced consumer confidence. Consumer confidence slumped to a level that has not been seen since the Financial Crisis in 2008. This shows that the pandemic has a serious toll financially and economically (45). The consumer confidence indicator fell to minus -15.6 points during the COVID-19 economic crisis compared to -11.2 points during the Financial Crisis in 2008 (46,47). Unemployment, loss of income, lack of supply or production which lead to increased prices have all severely decreased consumer confidence. This also shows that most of the people are unsure and pessimistic that the COVID-19 Pandemic will have a lasting impact on the economy, and this would be a lengthy recession (43).

Financial markets and the Economy already bounced back, but the question is if this will be in the form of a sharp "V", a prolonged "U" or even an up and down in the form of a "W" (48). In general, it is hard to attribute adverse health effects to a single cause in a situation of economic downturn.

The available literature on the health consequences of the Financial Crisis 2008 is (surprisingly) still scarce and prone to bias from an epidemiological viewpoint.

The results for the Health Effects of the Financial Crisis in 2008 and assumed Health Effects of the Economic Recession in 2020 are summarized in Table 2. The hypothetic health effects of the current Pandemic are marked by "(?)"

Table 2. Health Effects of the Financial Crisis in 2008 compared to observed and hypothetic health effects of the Economic Recession in 2020. Hypothetic effects marked by "(?)"

	Financial Crisis 2008	Economic Recession 2020
short	Health Systems experienced financial stress, Increase of HIV infections (due to the decrease of preventive measures), Less Road traffic accidents.	COVID related mortality increased, Increase of alcohol consumption and violence in families, Increase in depression and anxiety disorders, Reduced physical activity during the lockdown, Less traffic and work-related (?) accidents, Less Cardio-vascular diseases due to better air quality (?).
medium	Access to and Coverage of care decreased in some countries, Unmet need in health increased in countries with high co-payment, Increase of Depression, Suicide, and other psychological disorders, Increase in Homicide and alcohol-related death.	Increase of Non-COVID related mortality, Increase of Cardio-vascular mortality (Stroke, Myocardial infarction) due to delay in treatment because of Corona fear and unemployment (?), Psychological stress for younger people because of delay in schooling, graduation, and first-time employment (?).
long	Increase of Health Inequalities, Lower self-rated health in unemployed, No effect on overall mortality, Decrease of household spending on health, Decrease of avoidable mortality slowed down, No change in Birth Weight, Fetal Death, or Infant Mortality, Small but significant increase in overall Morbidity.	More Cancer cases due to low uptake of screening and delayed treatment (?), No increase in overall mortality (?).

This take-away summary shows, in general, no surprises in the expected events. Mental disorders occur when societies are under stress. The consequences of this are higher rates of alcoholism and violence in families. These "predictable" consequences give the possibility to prepare for them before they run out of control. This is especially important if further lockdowns would be necessary. Indirect consequences of a lockdown as fewer road and work accidents are positive side effects but not in the focus of discussion. Delayed treatment of acute diseases might lead to a higher disease burden later. At the moment there are no clear answers to this question. New is the situation of missed education for children. Here indirect health consequences might occur in form of psychosocial stress with long-term effects (49). As we do not know if these health-related problems are temporary or permanent, there is the need to monitor them to be aware of their prevalence. Only by this, one can shift necessary resources to the area of need. There are already clear signs that the austerity measures which followed the Financial Crisis of 2008 will not be applied by governments and the EU this time. In opposition, it is the first time that the EU is willing to go into debt itself. By this, further concerted actions regarding health issues become more, probably which will help to avoid the negative health effects of the recession.

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