Embracing Uncertainty During the Crisis

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Abstract

The purpose of this paper is to emphasize the impact of uncertainty over the economic environment in the current crisis installed within the COVID-19 pandemic that is unprecedented because there has never been a phenomenon of such magnitude, a global crisis, with a profound, extensive and more complex impact than any other event that decision-makers have considered so far. The current pandemic caused an uncertainty shock globally, which rose into recession. There is uncertainty about the consequences of the crisis and impact on global health, how the world will live and work, how relations between the largest states will be influenced, how the roles of states in trade relations will change, considering the responses to the crisis.

Key words: economic uncertainty, economic analysis, pandemic, recession
J.E.L. classification: D8, E3, E4, O4

1. Introduction

Assessing the economic impact of COVID-19 pandemic is fundamental and it represents a challenge for economists, especially because of the speed of propagation of the crisis, market volatility and economic uncertainty shocks. We need economic solutions and policies to meet the most difficult economic problems that have arisen in this period and will define the most comprehensive economic crisis to date and to combat the disastrous economic effects that will occur. The current crisis is considered unprecedented because there has never been a phenomenon of such magnitude, a global crisis, with a profound, extensive and more complex impact than any other event that decision-makers have considered so far. Other local disasters produced high levels of uncertainty, which had a national or regional impact, such as Fukushima, Chernobyl, the Iraqi invasion of Kuwait, the Gulf wars, the 9/11 terrorist attacks, the Global Financial Crisis or Brexit. But the Covid-19 pandemic created an overwhelming shock of uncertainty, overcoming the economic crisis of 2008-2009, being rather similar to that which succeeded the Great Depression of 1929-1933. We are dealing with a situation that brings together a decrease in aggregate demand, stricter financial conditions and a significant supply shock.

There is uncertainty about the consequences of the crisis and impact on global health, how the world will live and work, how relations between the largest states will be influenced, how the roles of states in trade relations will change, considering the responses to the crisis. What will be the impact of the crisis on the public and private sectors, how will these changes be affected by technological disruptions, what will the recovery look like, what are the opportunities that have arisen from this crisis that can benefit the luckiest or most daring?

What is certain is that no leader, company, sector or state will remain immune to the impact and consequences of COVID-19. There will be no unbeatable strategies, but organizations may become stronger and more complex as we collectively anticipate a post-COVID-19 environment.

2. Literature review

Baker et. al (2020) bring into question business uncertainty, stock market volatility and economic policy uncertainty in press articles. They have created an empirical model for measuring the impact of the effects of shocks such as natural disasters, coups, revolutions and terrorist attacks in several countries on the increase in production at the country level operating in uncertainty. In a similar concern, researchers Abdelsalam & Abdel-Latif (2020) preoccupied to find out the best early warning system that would predict the occurrence of a financial crisis, under model uncertainty.

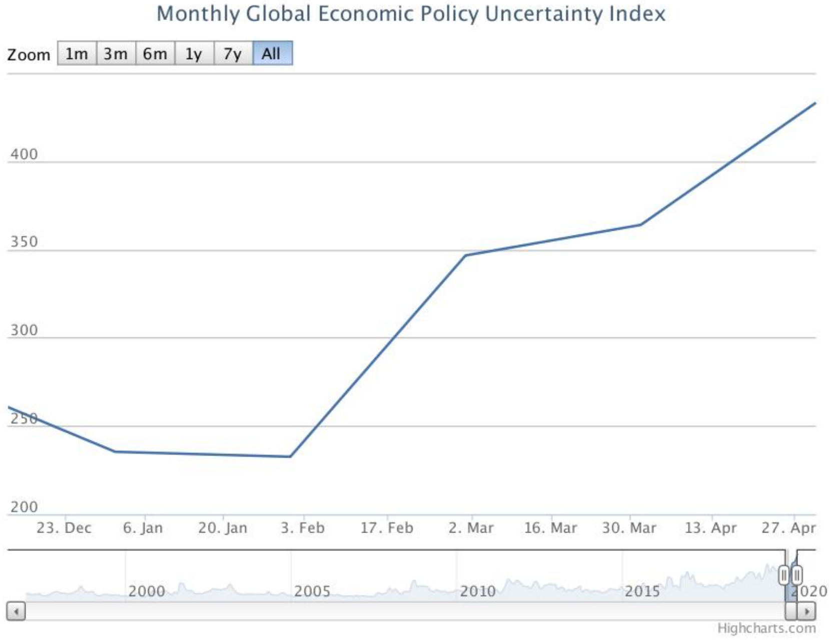
Brown & Rocha (2020) presented the evolution of financial investments in China in the period immediately following the Covid-19 crisis, comparing the first quarter of last year and the current one and observes a drastic reduction in investment by 60%.

Other numerous scholars researched on the manner of taking decisions under uncertainty conditions and we can find a variety of books and articles over the time (Raiffa, 1968; Smithson, 1988; Hirshleifer and Riley, 1992; Etner et al., 2009).

3. Uncertainty measurement and means of response

Extraordinary circumstances, such as COVID-19, require a mix of courage, clarity and humility, as the biggest enemies in decision-making are neither ambiguity nor uncertainty, but overconfidence, procrastination and subjective or incomplete information (Deloitte 2020). An instrument for measuring the uncertainty reflected by the volatility of financial markets is the so-called "VIX" (Volatility Index). Another tool often used is the lack of consensus among economic forecasting experts. Ways of measuring uncertainty have been proposed starting from the analysis of the texts of the indexed articles in the important databases. Also, another indicator of uncertainty measurement comes from the analysis of press articles. Specifically, those analyzes count and interpret the number of references to 'uncertainty', 'Covid-19', 'coronavirus', 'pandemic', 'regulation', or other terms related to the infectious disease. It is assumed that the more references there are to the things designated by these terms, the greater the degree of uncertainty.

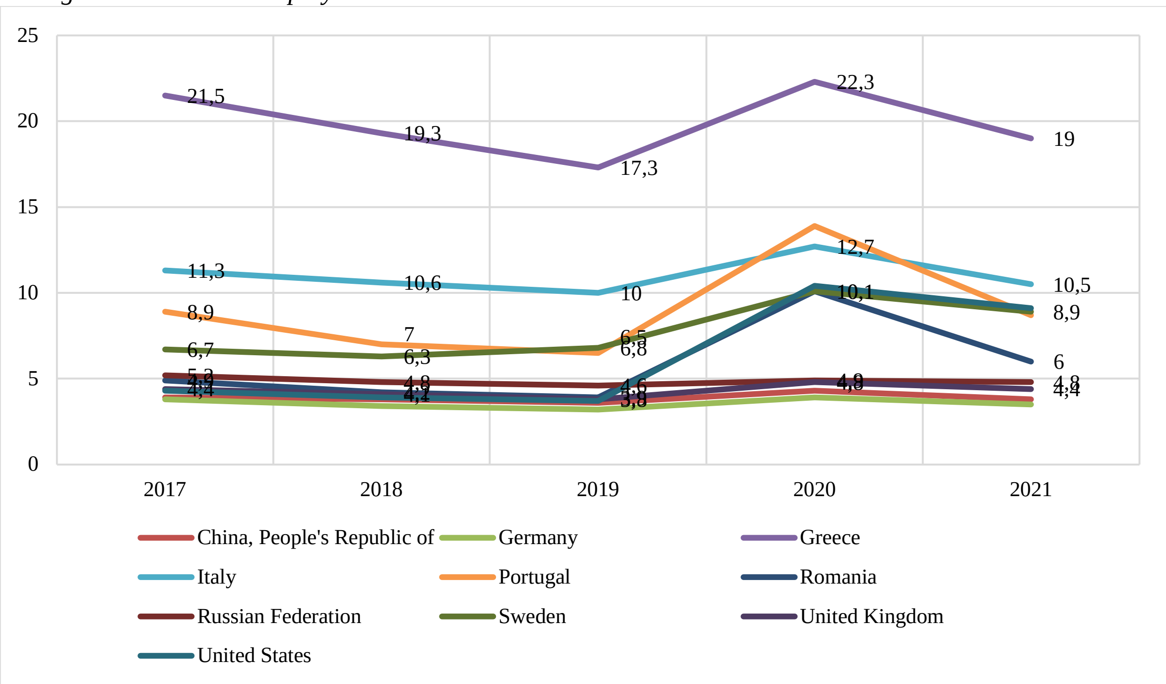
Figure no. 1 The economic uncertainty index of the global market from the last months (December 2019 – April 2020)



Source: authors' selection from http://policyuncertainty.com/

We have selected below data from the International Monetary Fund for several countries and pointed out an overview of the recent years and a forecast for 2021 of the unemployment rate, inflation and economic growth, indicators that are related with uncertainty. There are two different types of evolution, a smoother one and a more abrupt one in terms of unemployment rates. Germany, the United Kingdom, Germany and Russia seems to be less affected than the other selected countries.

Figure no. 2. The unemployment rate in selected countries



Source: authors' selection data from the IMF

As we can notice from the above figure, there are dramatic variations but the peak point for all countries are this year, of course, due to Covid-19 pandemic. The interesting part is that not all countries have such abrupt disparities.

For example, Europe's largest economy, Germany, and the world's greatest economy, the United States, have different trajectories even though both reached their lowest unemployment rates at the beginning of 2020. The US touched its lowest 4.4 rates in March, but in April the rate rose to 14.7, the largest record since the Great Depression. On the opposite, Germany's unemployment rate rose with 0.2pp only, from 3.3% in January to 3.5% in April 2020. This happened due to very different measures the two states took.

The US counted on augmented unemployment benefits to such extent that ended up in encouraging people to stay unemployed rather than work on reduced salaries, their jobless benefits surpassing their previous incomes. Germany, on the other hand, offered loans up to 1billion € for large companies, SMEs, authorized individuals, up to a maximum of 25% of 2019 revenues or double staff costs and for employees, it provides financing of up to 67% of the net salary, except for employees with high salaries. They also introduced short-time work, allowing the financially perturbed companies to greatly reduce their employee working hours and the government take charge of their lost salaries.

Table no. 1 Inflation rate, average consumer prices

Inflation rate, average consumer prices (Annual percent change)	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
China, People's Republic of	2.6	2.6	2	1.4	2	1.6	2.1	2.9	3	2.6
Germany	2.1	1.6	0.8	0.7	0.4	1.7	2	1.3	0.3	1.2
Greece	1	-0.9	-1.4	-1.1	0	1.1	0.8	0.5	-0.5	1
Italy	3.3	1.2	0.2	0.1	-0.1	1.3	1.2	0.6	0.2	0.7
Portugal	2.8	0.4	-0.2	0.5	0.6	1.6	1.2	0.3	-0.2	1.4
Romania	3.3	4	1.1	-0.6	-1.6	1.3	4.6	3.8	2.2	1.5
Russian Federation	5.1	6.8	7.8	15.5	7	3.7	2.9	4.5	3.1	3
Sweden	0.9	0.4	0.2	0.7	1.1	1.9	2	1.7	0.5	1.5
United Kingdom	2.8	2.6	1.5	0	0.7	2.7	2.5	1.8	1.2	1.5
United States	2.1	1.5	1.6	0.1	1.3	2.1	2.4	1.8	0.6	2.2
Emerging market and developing economies	5.8	5.5	4.7	4.7	4.3	4.3	4.8	5	4.6	4.5

Source: authors' selection data from the IMF

Inflation tends to be positive during stable times on short and medium-term, while in times of crisis gets negative. The Covid-19 pandemic aftermath led to decreased inflation rates due to the consumer demand, commodity prices and oil prices downfall, which caused the lowering of prices and deflation. Deflation translates into falling prices and wages that will cause a reduction in demand and extra deflation. Cukierman and Meltzer (1986) claim the higher gets the uncertainty the more the inflation will increase, reducing welfare, of course, that depends on the country and counting on the central bank's behaviour in such uncertain context.

Table no. 2 Real GDP growth

Real GDP growth (Annual percent change)	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2015**	**2016**	**2019**	**2020**	**2021**
China, People's Republic of	14.3	9.7	9.4	10.6	9.5	7.9	7.8	6.9	6.8	6.1	1.2	9.2
Greece	3.3	-0.3	-4.3	-5.5	-9.1	-7.3	-3.2	-0.4	-0.2	1.9	-10	5.1
Italy	1.5	-1	-5.3	1.7	0.7	-3	-1.8	0.8	1.3	0.3	-9.1	4.8
Portugal	2.5	0.3	-3.1	1.7	-1.7	-4.1	-0.9	1.8	2	2.2	-8	5
Romania	7.2	9.3	-5.5	-3.9	2	2.1	3.5	3.9	4.8	4.1	-5	3.9
Russian Federation	8.5	5.2	-7.8	4.5	5.1	3.7	1.8	-2	0.3	1.3	-5.5	3.5
Sweden	3.4	-0.2	-4.2	6.2	3.1	-0.6	1.1	4.4	2.4	1.2	-6.8	5.2
United Kingdom	2.4	-0.3	-4.2	1.9	1.5	1.5	2.1	2.4	1.9	1.4	-6.5	4
United States	1.9	-0.1	-2.5	2.6	1.6	2.2	1.8	2.9	1.6	2.3	-5.9	4.7
Emerging market and developing economies	8.4	5.7	2.8	7.4	6.4	5.3	5.1	4.3	4.6	3.7	-1	6.6

Source: authors' data extraction from the IMF

Even with immense financial policies support, we can notice steep droppings in all countries GDP. China was hardly hit by the pandemic, its exports dramatically dropped with factories closure and the prolonged restriction period. Its growth has an immense drop, the biggest in the last 40 years, from 6.1 last year to 1.2 in 2020, a 4.9 pp drop.

Higher uncertainty translates on short term into GDP volatility, through passive behaviour of companies, decrease their activity, stop hiring, get lower labour productivity, give up on investments and stop growing. In longer-term we get lower economic growth, downgrades and the recession occurs. On the longer term, uncertainty may encourage research and development spending to find out future incomes and this might be an aspect to consider over the impact on longer-term growth.

4. Conclusions

The Covid-19 produced a huge economic disturbance and uncertainty and led many countries to the recession. Recession raised more uncertainty, that magnifies and expands quickly and the economic setbacks might induce more uncertainty. World Bank (2020) asserts that the most affected countries are especially the more developed ones that were strongly hit by the outbreak and confront themselves with a restricted health care capacity, depending on the global value chains and external financing, exports, international trade and tourism.

We need urgent policy measures that would help the healthcare systems on short term to override the failures in business activity and unemployment. On longer-term investments in public health and education systems ought to be taken, as well as paying more attention to governance and business environment and, as we surpass the health crisis, launching growth reforms aiming firm and sustainable growth.

Generally, there are two types of reactions in situations of uncertainty generated by the crisis or decision-makers is absorbed the shock and becomes inert, unable to make decisions or accepts and meets the situation taking decisions taken following the creation of multiple plausible scenarios on the possible consequences, seeking various perspectives and opinions from the younger generations, or people outside the company, the field of activity, outside the geographical area.

Uncertainty may influence companies to reduce the investments and hiring and cause them to become less sensitive to productivity, prices and demand. According to Deloitte, some actions can be taken in conditions of uncertainty, although there is no perfect formula for actions that a company could apply. An intelligent, well-thought and executed scenario can reduce the risk of falling into the trap of overconfidence when anticipating future possibilities. It can reduce or remove hesitations by providing a logical structure that challenges and validates basic assumptions. It can also mitigate the risk of incomplete and biased data by combining intuition with qualitatively measured data in an objective manner. (Deloitte 2020)

Table no. 3 Suggested actions in conditions of uncertainty

Actions	Description
Necessary	Actions or choices that are urgently needed in the short term for business continuity
No regret actions	Actions or choices that would have been made in any type of scenario any way
Big bets	Essential choices or investments made in the present period with a clear hope that one or more scenarios will materialize
Unforeseen actions	Actions related to the occurrence of one or more scenarios
Satellite movements	Small actions or investments made according to one or more scenarios made together with large bets

Source: Authors adaptation of Deloitte, 2020

This pandemic will have a tremendous economic impact that might weaken long-term growth, leaving deep marks over investments, trade, supply disruptions, due to high uncertainty, a large unemployment rate and will also leave socio-economic scars. Hence, we face serious health threats, social consequences and policymakers should struggle to protect public services, healthcare, social security, supporting the private sector and ensuring liquidity direct to people to permit a smoother way on business development after the pandemic.

Countries will have to concentrate on supporting households and main public and private sectors to overcome the financial perturbations and afterwards, in the rehabilitation period, to disengage the public support and concentrate on more comprehensive development opportunities.

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