

# **Conceptualization of Uncertainty and Trust after the COVID-19 Outbreak**

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## Conceptualization of Uncertainty and Trust after the COVID-19 Outbreak<sup>1</sup>

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### **Abstract**

This study underlines that we need concepts other than short-term events, stories, narratives, and facts for long-term analysis. In the short term, events and new data may be important. However, we need efforts to construct theory so that these data, events that take place can collectively imply something more meaningful. Theories, on the other hand, can be constructed more accurately and explained better with some concepts. In this study, two concepts were benefited to understand the long-term trends, especially in the economic field, and to put the events into a perspective. These concepts are “uncertainty” and “trust” that are very closely related to each other. In this article, the dimensions of uncertainty that emerged after COVID-19 were pointed out. These uncertainties include uncertainties regarding the spread of the COVID-19 outbreak as well as governance uncertainties on a global scale. Uncertainty in global production chains has been replaced by consumption uncertainty over time. The lack of global governance networks in building trust at a global level against all these uncertainties is emphasized. At the country level, the relationship of trust and uncertainty between the state, government, and the individual became more visible after the COVID-19 outbreak. The concepts of uncertainty and trust in this study should be used in efforts to understand and conceptualize the COVID-19 crisis.

### **Keywords**

*Uncertainty, Trust, COVID-19, Governance, Institutions*

<sup>1</sup> This study is a translation and updated version of the paper previously published in the book titled “Küresel Salgının Anatomisi: İnsan ve Toplumun Geleceği” by TÜBA in June 2020.



## **Introduction**

When the COVID-19 virus started to affect the Wuhan city of China, it was very difficult to predict that the epidemic could spread to the whole world and that economies across the globe could be affected by the process. This rare epidemic in world history has shown us how scientists can be productive in their field. Many scientists approached the COVID-19 crisis from their perspective. While prestigious magazines announced their special issues on COVID-19, many academics were already writing their articles on the epidemic. We tried to understand what the COVID-19 outbreak was and how it could spread with webinars and rapidly published opinion writings. These efforts brought along some policy recommendations on the most effective measures against the spread of the outbreak. Britain attempted to follow the herd immunity model at first. Similarly, in the countries that declared a curfew and announced tight measures to prevent the spread of the crisis, policymakers made these decisions in consultation with scientists. Although the explanations and the precautions regarding the COVID-19 crisis differed in the scientific world, it soon showed that some of these views came to the fore in time.

The COVID-19 outbreak once again confirmed the dimensions of globalization, both with the rapid spread of the virus and the ideas the epidemic produced worldwide. In retrospect, I ponder on what remains from the COVID-19 crisis to the world of science and the world of knowledge. For example, some of the quickly written articles are already expired. More enduring and more conceptual studies will be carried out when the dust regarding the COVID-19 crisis settles. In this article, I will try to show that the concepts of “uncertainty” and “trust” will come to the fore in understanding and making sense of the global economy after the COVID-19 outbreak. These concepts are of course not the concepts I produce. These are mostly concepts already well studied in social sciences. However, the concepts of uncertainty and trust in how the global economy is affected by the outbreak of COVID-19 and how it will follow

from now on can provide us a holistic view.

Before delving into these concepts, I would like to briefly explain why we need such conceptualizations. Indeed, the fastest and most wide-ranging studies on COVID-19 are the best proof of our need for a conceptualization. The state of affairs without conceptualization remains mostly as information transfers and piecemeal analyses. However, more holistic analysis, pondering over concepts in terms of the construction of other thoughts on thought, the ease of comprehensibility, and even the necessity of being able to explain increase the power of ideas. Conceptualizations are often very complex and may have difficulties in explaining special situations. However, even to appreciate that these special situations are really special, it is useful to approach the issues with some concepts in mind. We can say that this debate is a sort of methodology discussion. At this point, there may be those who prefer to follow different methods. Nevertheless, we need to get away from the special, exclusive analysis of the day and understand the concepts and the global economic orientation such that we can apprehend the long-term trend. The concepts of uncertainty and trust play a pivotal role in our understanding of the economic reactions led by the COVID-19 outbreak.

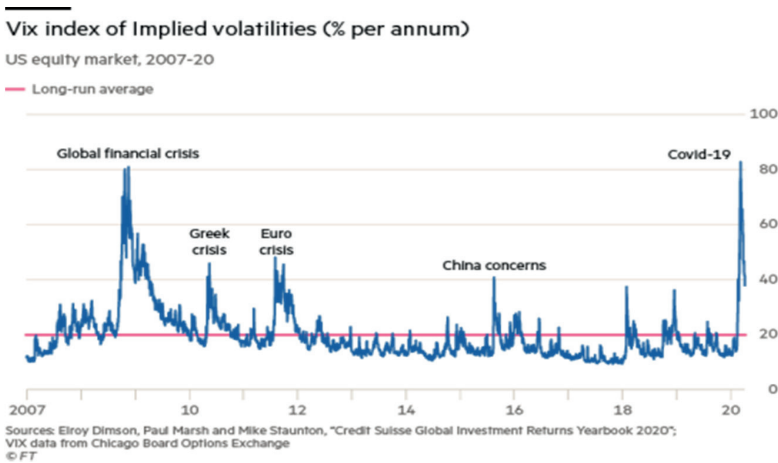
## **Uncertainty**

COVID-19 outbreak showed its impact on the global economy through uncertainty. First, there was an uncertainty about what the COVID-19 virus was. Even when a doctor diagnosed that the disease spread in China was a new type of COVID, this finding did not have the chance to be admitted immediately. Now the US claims that China hid the spread, although it knew the outbreak. The World Health Organization (WHO) also gets its share of similar criticism. The information is not clear at first, it is the first issue. Then, this information is not transferred to other countries on time, and this created a serious uncertainty about the truth in the COVID-19 outbreak. It has been realized over time that there is no alternative fact about the virus. The information noise experienced especially in the early stages of the outbreak can be attributed to the rare occurrence of such crises. However, many conspiracy theories about the outbreak and spread of the outbreak are still in demand. Some believe that this virus is a disaster spread by China, while a group in China thinks that this crisis was brought to Wuhan by American soldiers. Although these are closer to being examples of propaganda wars, this process has shown that groups do not lose any time in forming their alternative truths. Even the tendency to create alternative reality or believe in alternative facts is related to the problem of trust, another concept of this article.

As the level of information certainty decreases, people tend to accept the information or narratives of whom they trust. For this reason, as well, there is a logic to build this article on two concepts. Under rising uncertainty, people tend to accept the explanations of people and groups that they trust more to get rid of the discomfort zones caused by this increasing uncertainty.

Eventually, everyone has his or her alternative truths. However, in cases where uncertainty is less, it is easier to agree on the truth. Recently, the construction of reality through narratives has become a professional line of business for some. The importance of creating alternative reality through the Facebook ads and news in the Trump's election victory continues to be discussed. In Figure 1 and Figure 2, we see that the uncertainty expressed by stocks and economic policy uncertainties peaked with the outbreak of COVID-19 in the USA. We know that these uncertainty indices are frequently used resources, especially during times of economic fluctuations.

**Figure 1.** The Course of the VIX Uncertainty Index Expressed by the Stock Market in the USA



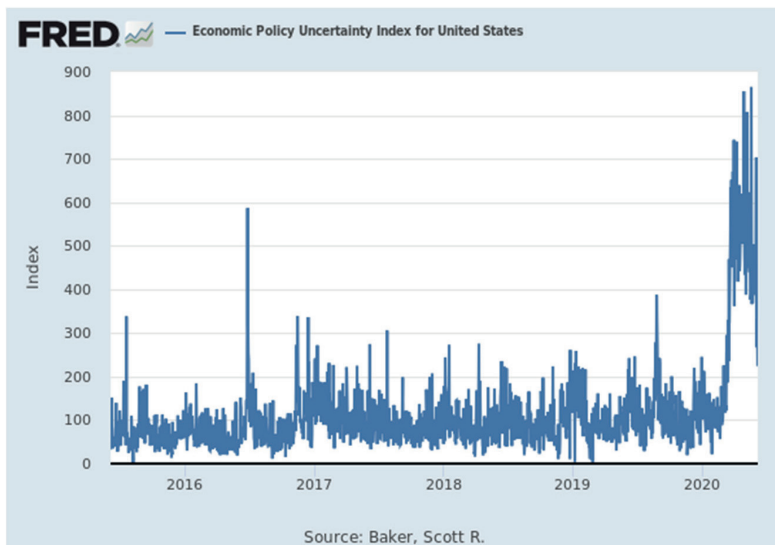
Source: Financial Times. VIX 'fear gauge' in recovery from COVID-19 shock.

In terms of the subject of our article, uncertainties about the economy come to the fore after the COVID-19 outbreak (Figure 1 and Figure 2). After the COVID-19 outbreak all over the world, uncertainty indices peaked. We observe the reflections expressed by these uncertainty indices in daily economic activities. First, economic uncertainty was realized in the supply direction. China has become the biggest factory in the world with its last 40 years of performance. About a quarter of global industrial production is carried out in China.

The city of Wuhan, the center of the epidemic, is also the logistic center in China. For this reason, disruptions in production in China immediately affected the production planning of the factories in the rest of the world. As the inputs did not come from China in the later stages of the crisis, automobile factories in Europe and Japan had to interrupt their production. Fortunately, production uncertainties originating from China have decreased with the onset and early control of the COVID-19 epidemic in China. However, this uncertainty in the supply chain has increased insecurity on the global supply chain. After the epidemic, instead of *just in time* philosophy, many factories and companies

have started more thinking about the *just in case* production approach. These country-based risks and uncertainties in the global production chain have led firms to prioritize their risk-dispersing strategies by diversifying their productions into different countries. In an environment where uncertainty about trade wars continued, uncertainties originating from COVID-19 have ascended in the business sphere. The Japanese government has announced a loan incentive package for companies that will shift their production from China to other countries. The trade war negotiations remain to be an issue. This probably intentional uncertainty itself deters the firms to invest and produce in China.

**Figure 2.** Economic Policy Uncertainty Index for the USA



**Source:** Baker, Scott R. 2020. *Economic Policy Uncertainty Index for the United States*. FRED.

In the later stages of the COVID-19 outbreak, the global economy was exposed to demand-side uncertainties this time. With the rapid spread of the outbreak, curfews have been declared in many countries, and social life has started to take place under certain restrictions. Economic demand suffered greatly due to foreclosures in restaurants, cafeterias, and many other public places. We immediately observed the decrease in economic demand in national income accounts and world trade. Except for food, health, and communication services, people staying at their homes do not need much to consume. The more important determinant of economic demand is the current income of households and forward-looking income expectations. In the meantime, many people lost their jobs because of the COVID-19 outbreak. In the USA, where the labor market is very flexible and unprotected, unemployment has reached a level of 15 percent in a very short period. Since labor rights are more prominent in Europe, even though unemployment rates do not increase as fast as the USA, it is inevitable that people in the European Union, which expects a



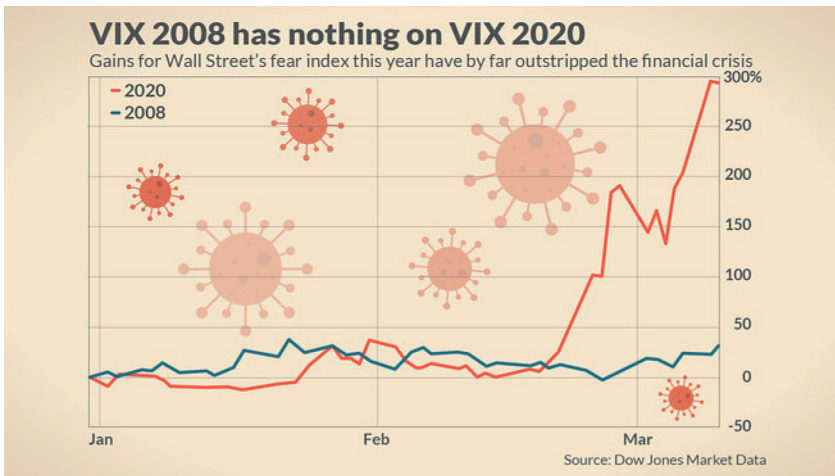
9 percent contraction in 2020, sense uncertainty about their income. However, more importantly, considering the unknowns about when the COVID-19 outbreak will end, whether vaccines can be found and whether they will be effective even if the vaccine is found, it is common for individuals to have uncertainty about the income they expect in the future. Individuals who are more concerned about future income are expected to cut back on their current consumption (Friedeman, 1962). Even in countries where the measures taken against the COVID-19 epidemic began to normalize, consumption has not yet reached its previous levels.

States in fact acted swiftly to reduce demand-side uncertainties. The great depression has taught us how difficult it is to resurrect the demand once it has stopped. Politicians taking lessons from historical experiences will not allow economic demand to halt. For this reason, each country immediately started announcing direct income transfers within its means. Britain distributed £2,500 to all employees and returned the tax paid by to entrepreneurs in the previous year. Direct income support plans were introduced to employees to prevent layoffs across the EU. Similar policies were implemented in Japan. Similar policies were also put into practice in almost all countries. However, even these plans do not guarantee the future income of people. In an environment where the economic effects of the COVID-19 outbreak are not known, consumption will continue to be interrupted in terms of income expectations.

The COVID-19 outbreak may cause some structural changes in the economy as well. The economic turmoil that erupted with the COVID-19 outbreak could accelerate the structural transformation observed in economic life. Before the COVID-19 outbreak, the whole world was discussing the increase in efficiency that came with digitalization. With Industry 4.0, developed countries were investing more in technologies where only robots work, and human labor is not needed much. Developing countries that want to control their supply chains and production more after the COVID-19 outbreak will invest more in Industry 4.0 project. In an environment where social distance is a problem, robots are expected to be used more in the industry and even in the services sector. At the same time, the COVID-19 crisis has shown that even large and well-established companies may not be able to withstand such shocks. We all observe together that companies that distribute profits constantly due to equity pricing reasons do not have substantial reserves for rainy days. Companies with less capital, more leverage are struggling in the COVID-19 outbreak. It is revealed that well-established airline companies are not able to offer lifelong guaranteed jobs to their employees. All these developments have shown how uncertain future income is for employees. For the wealthy with high assets, the low return problem of assets will continue for a longer period. After the 2008 global crisis, interest rates were already at historically low levels. Following the COVID-19 outbreak, central banks lowered interest rates further to support the economy. Nevertheless, assets were repriced after the COVID-19 outbreak. The prices of assets in stock exchanges and the other wealth assets dropped in the first place. This causes the owners to decrease their consumption with this

negative asset pricing effect, considering that their wealth is decreasing and they will be less rich in the future. The way to overcome all these income and asset uncertainties is related to trust, another concept of this article. As long as governments can give their citizens confidence in their future income and wealth, they can prevent their economies from demand-driven shocks. But of course, establishing trust is not easy. Although the confidence in economic policymakers is high especially in developed countries, the opportunities of all local policymakers are limited against the global economic developments as a result of structural changes caused by rapid creative destruction in technology. There is no easy solution other than taking the necessary steps to reduce uncertainties against economic uncertainties and to establish correct communication and trust on time.

**Figure 3.** VIX Uncertainty Index in Covid 19 and 2008 Global Crises



*Source: Ortiz-Ospina, E. (2016). Trust and GDP. Our World in Data.*

The 2008 global crisis, which we have experienced in the relatively recent past, gives us crucial hints on how to reduce uncertainty in the economy and establish trust. This type of crisis affects countries through three channels: i. international trade channel, ii. international finance channel and iii. expectations channel. As long as countries can reduce uncertainties about these channels, they can give their citizens and global markets more confidence. It is not under the country's control to reduce all uncertainties in the international trade channel. After the COVID-19 outbreak, some customs have been closed all over the world and international transportation has been difficult. Although such logistical problems start to be overcome in time, the expected economic contraction in the global economy, around 3 percent, necessarily indicates a higher contraction in the global trade. Besides, countries have started to emphasize more domestic production and employment to compensate for this decrease in revenues. This approach also confronts us as a long-term problem in international trade. These uncertainties that suddenly appear in

international trade also test the trust of companies in each other. Firms that shake the mutual trust by pretexting force majeure should be aware of the fact that they are committing self-harming in the long-term.

There was a net capital outflow at the beginning of the COVID-19 crisis, in the developing countries that could not borrow in terms of their own currencies in international markets. Developing countries experienced this process, which we call a *flight to quality*, right after the 2008 global crisis as well. The first reaction of international investors in such unexpected global crises is to withdraw their investments into safe harbors. Although the 2008 global crisis came out of the USA, international investors preferred initially to park their funds primarily on US bonds. We saw a similar reaction in the global financial markets after the COVID-19 outbreak. While the US dollar swiftly appreciated, interest rates decreased rapidly in developed countries. Developed countries with negative interest rates were preferred instead of developing countries. As in the 2008 global crisis, when the dust settles, it is essential to expect a reversal of the flow of funds towards the developing countries, which are perceived riskier once the uncertainty increases. As a matter of fact, as in the 2008 crisis, the central banks of the developed countries quickly took steps in this crisis. They quickly reduced already low policy rates. They try to keep financial conditions as loose as possible by resorting to channel the funds to risky bonds, bills, and stock purchases apart from the interest rate cuts. Developing countries will also get their share from these funds when uncertainty decreases and risk appetite increases.

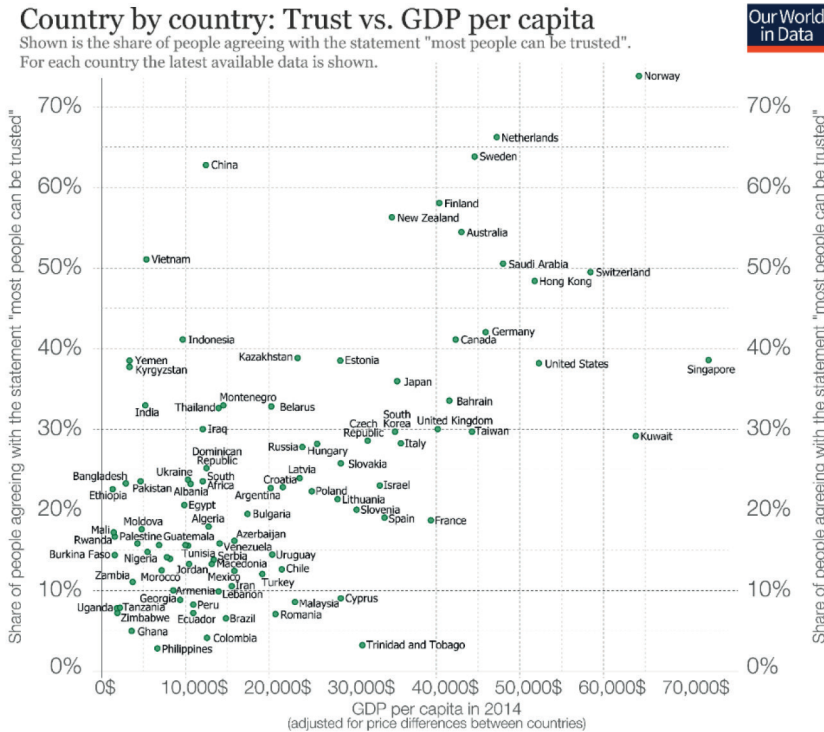
Let me complete this part by linking it to the trust concept. The countries that investors in the global financial markets will turn to will be the countries that give their investors more confidence. Especially for countries with savings deficits, providing long-term financing from global financial markets is essential for high and sustainable growth (Sachs, 2003). To this end, countries should try to attract long-term financing by establishing confidence in the global markets rather than being attractive only in the short term by offering high-interest rates.

## **Trust**

We frequently use the concept of trust in economics like trust in international finance, trust in domestic currency and trust in financial stability. Sometimes you might think that this concept is a keyword to explain everything in economics or a tautological term. Indeed, the concept of trust has an important place, especially in classical liberal economics. For this reason, the discussion of the concept in the literature is very old. Adam Smith became the father of modern economics by building trust in people's selfishness, believing that people will pursue their self-interest, not sympathy for each other. Relying on people to follow their interests has made economics. It was not the norms of the society that Adam Smith trusted, the morality of people or sympathy for others.

Adam Smith’s main contribution is the belief that individuals would act in their self-interest. He stated that individuals could establish a social order by reckoning that others would act according to their self-interests too. In the early 1980s, trust studies gained momentum in the literature with the increase in trust in the market with neoliberal globalization (Rodrik, Öniş & Aysan 2000). Francis Fukuyama, who declared the end of the bipolar world in 1989 and claimed the end of history, wrote his book titled Trust (Fukuyama, 1995), which supported the Post-Washington consensus. In the free market system, the main task of the state is to establish confidence in the market by setting the rules of the market (Hayek, 1960) instead of directly intervening in the market. Relying on an invisible hand, believing in the market is perceived to make the system more flexible and functional. Figure 4 can give an idea of confidence and economic growth. As confidence increases, it is observed that the national income growth rates per capita increase.

**Figure 4.** Trust and Economic Growth



Data source: World Value Survey for data on trust and Penn World Table for data on GDP per capita  
 This visualization is available at [OurWorldInData.org](https://ourworldindata.org). There you find the raw data and more visualizations on this topic. Licensed under CC-BY-SA by the author Max Roser.

Source: Our World in Data <https://ourworldindata.org/>

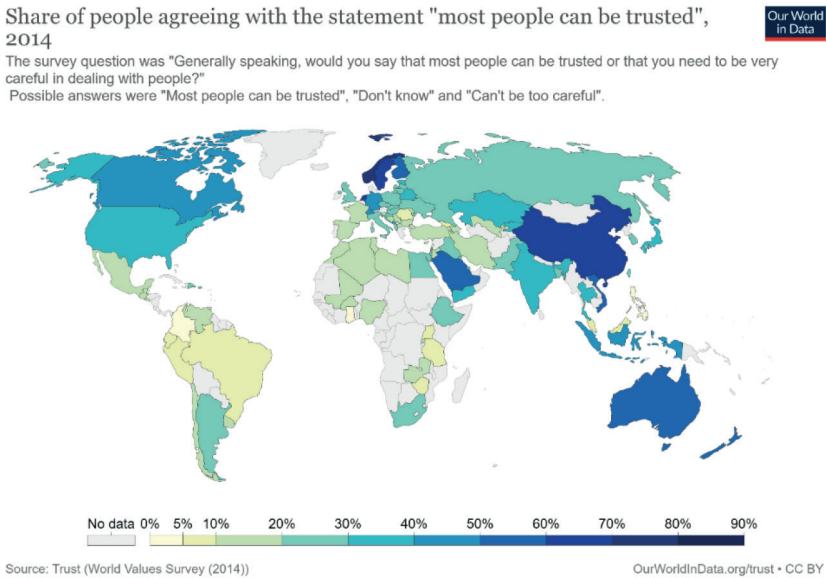
The concept of trust is not just a concept of economics. The importance of trust in psychology, management, organizational thinking, sociology, accounting, and finance has also been pointed out. Trust comes to the fore as a concept that leads to multidisciplinary studies. Avner Greif pointed out the importance of trust in trade with historical examples (Greif, 1992). In this study, we do not intend to deal with the literature on trust from the beginning. I would like to bring the concept for the analysis of the COVID-19 epidemic and its consequences and the economic developments that may occur in the future. As a result of the COVID-19 crisis, we can see that countries, companies, and individuals have a serious loss of trust between each other and among themselves. Perhaps this loss of confidence already existed, but such a crisis exposed the degree of confidence to a real test. Countries became skeptical of each other's data during the first phase of the COVID-19 outbreak. The problem of trust, already damaged in recent years, between the USA and China, peaked with COVID-19. Comments were made that China hid the epidemic and there will be no confidence in the shared Chinese data. In the later stages of the crisis, countries closed their borders to countries where the epidemic spread rapidly, and then to the whole world. During the epidemic, as a result of the increase in the demand for medical materials, countries banned the export of medical supplies. Exports of intensive care respirators could not be done, although there was a need in other countries. Very basic products such as masks have been scarce all over the world and countries have to prioritize their citizens. Similar restrictions were experienced in food products. Grain exporting countries such as Russia and Ukraine went to export restrictions. All these developments made the globalization to be questioned. More countries have emphasized the importance of being a self-sufficient country at least in the fields of food and health.

The national reactions to the COVID-19 outbreak, which is a global crisis, actually showed that international governance mechanisms did not work very well in these periods. It is evident that institutions such as the World Health Organization (WHO) that need to provide global governance in health do not have much authority and effectiveness. However, in the 2008 crisis, which is a global crisis, global governance mechanisms were put into effect rapidly and global financial governance mechanisms were strengthened in the 2008 crisis. For example, we see that the G20 became very active after the 2008 global crisis and the global coordination problem is tried to be solved with this channel. G20 countries, which gathered at the level of finance ministers until the 2008 crisis, started to gather at the level of leaders (presidents) immediately after the crisis. G20 started to replace G7 and G8 in global governance. Important decisions have always been made at G20 meetings, at least in the first years after the crisis. The Financial Stability Board (FSB) was established to make structural decisions in global financial governance. IMF quota reform has given developing countries more voice in the IMF. The IMF and the World Bank changed their traditional approach after the global crisis, contributing to global financial governance with much more flexible supports. After the COVID-19 outbreak, although the epidemic and the economic

effects of the epidemic were global, we could not see serious collaborations in global governance. Aside from global collaborations that could be attempted against a global problem, countries have uncovered the old conflicts by taking advantage of this crisis. The Trump government's inward-looking attitudes also depicted the lack of a leading country that set an agenda on a global scale.

Another problem of trust was between individuals and the state<sup>2</sup>. Governments that shut everyone down to their homes and the governments that tried not to disrupt the normal daily order to develop herd immune systems, were also criticized. Prolonged precautionary measures caused serious economic concerns. In this trade-off between health and economic life, policymakers continue to decide on behalf of individuals. While governments reached more information about individuals to control the COVID-19 outbreak, this caused "big brother is watching us" discussions. These discussions were experienced most vividly in the USA. With the incentive of Trump, protests were held against the provincial governors, who continued their COVID-19 restrictions. While Democrats favored restrictions and accused Trump of failing to take adequate and timely measures, Trump supporters claimed that these restrictions restrained individual freedoms and were against the US constitution. It seems fair to say that whoever trusts a source ex-ante, also trusts the measures and policies taken by this source.

Figure 5. Global Trust Data Map



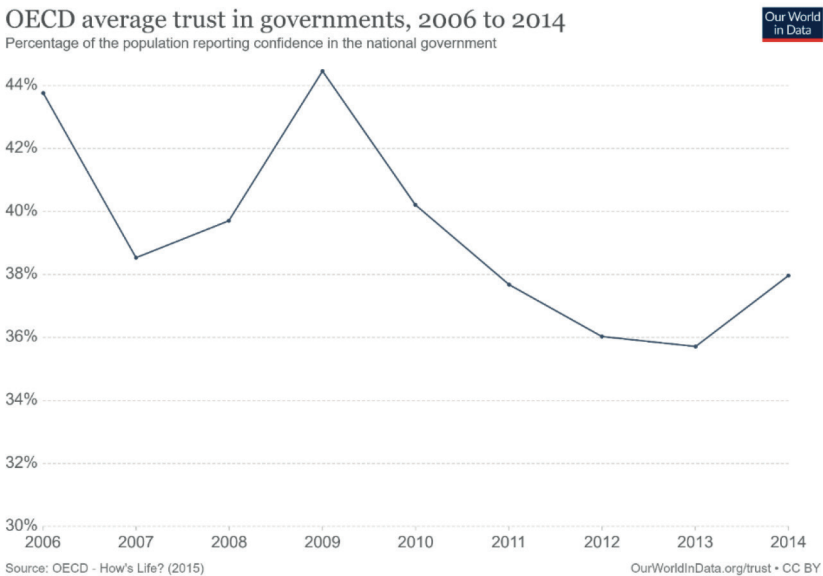
Source: Our World in Data <https://ourworldindata.org/>

<sup>2</sup> The confidence data map in Figure 5 can give an idea for the overall level of trust of people in different countries.



In the developed countries with a high elderly population, who were seriously wounded by the COVID-19 outbreak, the crisis also shook trust in the institutions of the state. Serious loss of confidence has occurred in healthcare institutions believed to be strong in Italy, Spain, the UK, and even in the USA. The institutions of the developed western countries have been suspected of not as strong as once thought, against such rare shocks. It turned out that state competence and state capacity are more important than whether a country is democratically governed<sup>3</sup> or not in the crisis. The case of Brazil for example revealed that in the COVID-19 epidemic populism only worked in the short term.

**Figure 6.** Trust on Governments in OECD Countries



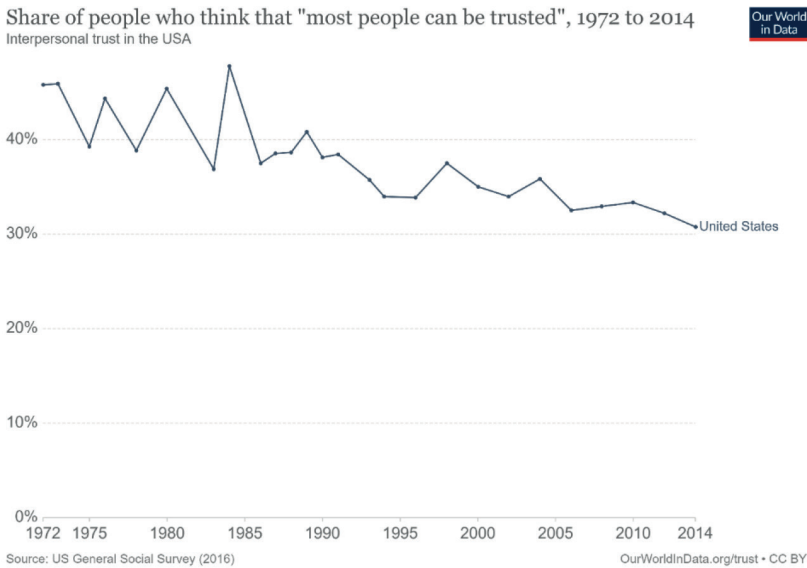
*Source: Our World in Data <https://ourworldindata.org/>*

The COVID-19 outbreak seems to be an important breaking point in history. For this reason, there is no doubt that as academics, thinkers, policymakers have so far produced many works on the COVID-19 epidemic and its consequences. Hence it is indisputable that many ideas will be developed and different analyses will be made henceforward. We are already expecting that very meritorious works will be produced in relatively more macro areas such as on state formation, globalization and technological creative destruction. However, the COVID-19 outbreak and its outcomes will also be further investigated at the individual and social levels. The personalities, psychologies, philosophical and social aspects of individuals who cannot leave their homes for a long time should be studied. For example, as a result of the COVID-19 outbreak, how will individuals' need to establish social distance affect the trust

<sup>3</sup> In order to give an idea, the average trust in governments can be seen in OECD countries over time in Figure 6.

between individuals? Even though individuals trust their states and institutions, will individuals' perceptions of risk change in this global order? How will individuals trust each other after these developments over time?<sup>4</sup> Even if we realize the importance of building a more sustainable, environmentally friendly world, can we be too late to prevent such global disasters?

**Figure 7.** Trust Decreases in the USA



Source: Our World in Data <https://ourworldindata.org/>

All these questions shake the individual's trust in the routine of the world. In the internet age, an individual, who is rapidly aware of the risks, feels a passive and existential threat to these risks. Hence, the coaching and mentoring books that reflect these perspectives are expected to be among the best sellers after COVID-19. I envision that questions such as how to trust people more and how to build trust to be successful in life at an individual level will be scrutinized more.

Such serious shocks are also testing the trust between companies. While everything is going well, we may not find mechanisms to test trust on a company scale. However strong reliable companies that act ethically in difficult times will separate from others. However, this separation may not be very easy due to the asymmetric information. Although the epidemic affected the whole world and all firms, each firm, each sector was not affected by the crisis at the same level. For this reason, the issue of information asymmetry, also mentioned in the previous section, is important. If the information is asymmetrical, the

<sup>4</sup> Over time, individuals' trust in each other is measured in countries. As can be seen in Figure 7, with the neoliberal globalization in the USA, the individuals' trust in each other decreases.



question of whether the firm is acting differently due to the COVID-19 binding necessities or using it as an excuse is a question of trust. In practice, we observe plenty of examples of this problem. For example, a textile company states that a British company they have been working with for years did not withdraw items from customs by using COVID-19 as an excuse. Companies that can give trust to other companies and international trade stakeholders with their honest behaviors will be more advantageous in terms of reliability they have created in the long term.

In essence, the continuity of the system depends on trust, especially in our world where trade and financial globalization has been experienced in the last 40 years. The free market emphasis on neoliberal globalization assigns a central role to the concept of trust. Therefore, how global economic relations will turn after COVID-19 will be related to the establishment and consolidation of trust. So far, you may be thinking that my thoughts on the concept of trust remain abstract. For this reason, I will next talk about a very good example experienced in Turkey<sup>5</sup> regarding the importance of trust in the COVID-19 process.

When the COVID-19 outbreak news broke out, the primary focus was on health measures. The general acceptance was the 'health first' approach, as we did not know exactly to which dimensions the outbreak could reach. What kind of reaction should be given against this epidemic crisis, which we do not know or have not experienced before? If you pay attention to the essence of the issue, there is an uncertainty issue that I mentioned in the first part. We routinely know who should behave in certain situations and who is responsible. But when the uncertainty about the extent of the epidemic combined with the uncertainty about the precautions to be taken, the question of who should we trust against these uncertainties emerged. Ministry of Health launched the Scientific Advisory Board to build trust under these uncertainties. Every day, Minister of Health met with the Coronavirus Scientific Advisory Board before explaining the precautions against the epidemic and communicated that these precautions announced were discussed in this board and that the measures taken were the decision of the Coronavirus Scientific Advisory Board. I do not know how the Coronavirus Scientific Advisory Board decides, who assembles this board, what are the rules of internal governance. I do not think many people know that either. But under such obscurity and uncertainty, people paid attention to the views of scientists who specialize in their subjects, and they trusted their advice more. They believed that scientists would make more accurate decisions in uncertainties where information was noisy. The fact that the COVID-19 epidemic problem that has not been encountered before also strengthened the trust in science and scientists. Trust in experts of the subject played a key role in ensuring that the community largely complied with the measures taken against the COVID-19 epidemic and followed the recommendations given by the Coronavirus Scientific Advisory Board

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<sup>5</sup> About Turkish economy works, you can see Aysan, A.F et al., regarding Turkish social politics works, you can look at Aysan, M.F et al.

Committee members. In fact, this example showed how important institutions and trust are in our daily lives. In the most difficult times, the Ministry of Health which has a Scientific Committee showed how trustworthy institutions reduce uncertainty and facilitate the work of policymakers during times when uncertainty peaked. While the economists who adopt institutional economics (North, 1990) approach emphasize the importance of institutions, they highlight the trust that institutions provide to the economy<sup>6</sup>. Confidence in the economy reduces transaction costs by reducing uncertainties in economic relations (Rodrik et al., 2002).

### **Concluding Remarks**

The COVID-19 outbreak seems to be remembered as an important junction in world history. Amid this epidemic, writing these lines makes it difficult to make long-term inferences. Estimating the course of the future from a point in history should be especially difficult for economists like me. We will be able to make better predictions over time.

In time, many questions that seemed very important today will lose their significance. We will be discussing more the social, cultural, economic, political and individual relationships that changed after COVID-19 instead of questions such as how many people suffered from COVID-19 disease and how many people survived the disease. In this study, I aimed to contribute to the social sciences research in the longer term. This study emphasizes that we need concepts other than short-term events, stories, narratives and realities for the long-term analysis. In the short term, events and new data sets may be important. However, we need some theorizing efforts for the events that take place to explain them with consistency. Theories, on the other hand, can be constructed more accurately and explained with the help of some concepts.

In this study, two concepts were used to understand the long-term trends especially in the economic field, and to put the events described in a short term into perspective. These concepts are the terms of uncertainty and trust that are very closely related to each other. The COVID-19 epidemic brought along many uncertainties both with its emergence, with the search for solutions, and with its social and economic consequences in the short term. The problem of how people, policymakers, and companies decide in uncertainties is one of the most important issues in economics. The world, governments, companies, and individuals living in the crisis experienced the uncertainty that emerged after the COVID-19 outbreak. Although uncertainty is in every area of life, it is not a likable situation in terms of economics. It is accepted that uncertainty creates some costs and causes inefficiency. Possible negative results caused by uncertainties especially in market economies are tried to be compensated by our second concept, trust. The more the institutions, the state, the firms, and the individuals trust each other, the more they reduce the uncertainty through repeated games and relationships.

<sup>6</sup> On these issues of institutional economics, you may check at Acemoglu et al. papers in the bibliography.

This article first draws attention to the uncertainty issues that occur after COVID-19. These uncertainties include uncertainties regarding the spread of the COVID-19 outbreak as well as global governance uncertainties (Rodrik, 2000). Uncertainty in global production chains has been replaced by consumption uncertainty over time (Stiglitz, 2003). The deficiencies of a global governance mechanism that establishes global trust against all these uncertainties are emphasized. At the country level, the relationship of trust and insecurity between the state, government, and the individual became more visible after the COVID-19 outbreak. Firms' trust in each other in business passes a serious test through the COVID-19 crisis. In all this certainty and trust-seeking environment, the steps taken by policymakers to establish and strengthen trust both in their own countries and on a global scale will shape the future. Countries, companies, and even individuals that consolidate trust and confidence to reduce uncertainty are candidates for more sustainable success in the period after the COVID-19 outbreak. The concepts of uncertainty and trust in this study provide important clues to our efforts to understand and conceptualize the COVID-19 crisis. It is healthier to understand how the global world will be shaped in the future through these concepts. I hope this work will be beneficial in this direction.

## References

- Acemoğlu, D., Johnson, S., & Robinson, J. (2005). The Rise of Europe: Atlantic Trade, Institutional Change and Economic Growth. *American Economic Review*, 95, 3, 546–579.
- Acemoğlu, D., & Johnson, S. (2003). Unbundling Institutions. *Journal of Political Economy*, 113 (5), 949–994.
- Acemoğlu, D., Johnson, S., Robinson, J. A., & Taicharoen, Y. (2003). Institutional Causes, Macroeconomic Symptoms, Volatility, Crises and Growth. *Journal of Monetary Economics*, 89, 49–123.
- Acemoğlu, D., Johnson, S., & Robinson, J. A. (2002). Reversal of Fortune: Geography & Institutions in The Making of the Modern World Income Distribution. *Quarterly Journal of Economics*, 117 (4), 1231–1294.
- Acemoğlu, D., Johnson, S., & Robinson, J. A. (2001). The Colonial Origins of Comparative Development: An Empirical Investigation. *American Economic Review*, 91 (5), 1369–401.
- Acemoğlu, D., & Robinson, J. A. (2000). Why Did the West Extend the Franchise? Democracy, Inequality and Growth in Historical Perspective. *Quarterly Journal of Economics*, 115(4), 1167–1200.
- Aysan, A. F., Babacan, M., Gur, N., Karahan, H. (2018). On the Path to High-Income Status or to Middle-Income Trap: The Turkish Economy in Search of Its Future. Aysan A., Babacan M., Gur N., Karahan H. (eds). *Turkish Economy* (p. 1-11). Palgrave Macmillan, Cham.
- Aysan, A. F., Disli, M., & Ozturk, H. (2017). Bank Lending Channel in a Dual Banking System: Why Are Islamic Banks So Responsive?. *The World Economy*, Volume. 41, 3, 674-698.
- Aysan, A. F., Disli, M. Duygun, M., & Ozturk, H. (2017). Religiosity vs. Rationality: Depositor Behavior in Islamic and Conventional Banks?. *Journal of Comparative Economics*, Volume 46, Issue 1, 1-19.
- Aysan, A. F., Danis, H., & Ozturk, H. (2017). The Era Of New Central Banking: Challenges And Policy Experiences, Special Issue Of The Singapore Economic Review. *The Singapore Economic Review*, Vol. 62, No. 1, 1-5.

- Aysan, A. F., Pang, G., & Veganzones-Varoudakis, M-A. (2009). Uncertainty, Economic Reforms and Private Investment in the Middle East and North Africa. *The Applied Economics*, Vol.41, 1379-1395.
- Aysan, A. F., & Veganzones-Varoudakis, M-A. (2009). Do Political and Governance Institutions Matter for Private Investment Decisions?: The Case of the Middle East and North Africa. Economic Performance in the Middle East and North Africa: Institutions, Corruption and Reform, in S. Sayan. (eds.). London: Routledge-Curzon, 94-109.
- Aysan, A. F., & Budak, M. S. B. (2009). Administrative Quality, Structural Reforms and Capital Accumulation in Developing Countries. *Economics of Developing Countries in Tiago N. Caldeira. (ed.). New York: Nova, 79-104.*
- Aysan, A.F, Nabli M.K., & Veganzones-Varoudakis, M-A. (2007). Governance Institutions and Private Investment: An Application to the Middle East and North Africa. *Developing Economies.*
- Aysan, A.F, Nabli M.K., & Silva-Jauregui, C. (2007). Political Authoritarianism, Credibility of Reforms and Private Sector Development in the Middle East and North Africa. *Revue d'économie du développement*, Vol.22, No.5, 5-36.
- Aysan, A. F. (2008). Distributional Effects of Temporary Exchange Rate Based Stabilization Programs under Financial Frictions. *Indian Development Review*, Vol.6, No.2, 153-169.
- Aysan, A. F. Ersoy, Z., & Veganzones-Varoudakis, M-A. (2007). What Types of Perceived Governance Indicators Matter the Most for Private Investment in Middle East and North Africa. *Economics Bulletin*, Vol. 5, No. 8, 1-16.
- Aysan, A. F. (2007). Yönetişim ve Kurumlar Kavramlarının İktisat Literatüründeki Yükselişi Üzerine Bir Değerlendirme. *Uluslararası Ekonomi ve Dış Ticaret Politikaları*, Vol. 1, No. 2, 27-52.
- Aysan, A. F., & Al, H. (2006). Assessing the Preconditions in Establishing an Independent Regulatory and Supervisory Agency in Globalized Financial Markets: The Case of Turkey. *International Journal of Applied Business and Economic Research*, 4, 2, 125-146.
- Aysan, A. F. (2006). The Shadowing Role of Redistributive Institutions in the Relationship Between Income Inequality and Redistribution. *Araştırma Raporu*, ISS/EC 2006-13, İstanbul: Boğaziçi Üniversitesi.
- Aysan, M. F. (2018). Between Risks and Opportunities: Social Policies in Contemporary Turkey. *Turkish Economy: Between Middle Income Trap and High Income Status* (ss. 101-120). Palgrave Macmillan, Cham.
- Aysan, M. F. (2012a). Pension Regimes, Gender and Generational Inequalities: The Persistence of Institutional Differences in Aging Postindustrial Democracies. *Aging Populations in Post-Industrial Democracies*, (p. 106-126). London: Routledge.
- Aysan, M. F. (2012b). Küreselleşme, Kriz ve Refah Devleti. *Küresel Dönüşümler: Küreselleşme, Zihniyet, Siyaset*, (ss. 107-128). İstanbul: Küre Yayınları.
- DeCambre, M. (2020). Chart of Wall Street's 'fear' index in 2020 illustrates how unhinged stock markets have been over coronavirus compared to the 2008 crisis. MarketWatch. <https://www.marketwatch.com/story/this-chart-of-the-stock-markets-fear-index-in-2020-illustrates-how-unhinged-markets-have-been-over-coronavirus-compared-to-the-2008-crisis-2020-03-10>
- Financial Times. Vix 'fear gauge' in recovery from COVID-19 shock. <https://www.ft.com/content/648d39fb-e9c9-4a31-b25b-1fd703be623e>
- FRED Economic Data. (2020). Economic Policy Uncertainty Index for the United States. <https://fred.stlouisfed.org/series/USEPUINDXD>
- Fukuyama, F. (1995). *Trust: The social virtues & the creation of prosperity*. New York: Free Press.
- Friedman, M. (1962). *Capitalism and Freedom*. Chicago: University of Chicago Press.
- Greif, A. (1992). Institutions & International Trade: Lessons from the Commercial Revolution. *American Economic Review*, 82(2): 128-33.
- Hayek, F. A. (1960). *The Constitution of Liberty*. London: Routledge and Kegan Paul.

- North, D. C. (1990). *Institutions, Institutional Change, and Economic Performance*. Cambridge: Cambridge University Press.
- Ortiz-Ospina, E. (2016). Trust and GDP. Our World in Data. <https://ourworldindata.org/trust-and-gdp>
- Our World in Data. Share of People Agreeing with the Statement “most people can be trusted”, 2014. <https://ourworldindata.org/grapher/self-reported-trust-attitudes?tab=map>
- Our World in Data. OECD Average Trust in Governments, 2006 to 2014. <https://ourworldindata.org/grapher/occd-average-trust-in-governments>
- Our World in Data. Share of People who think that “most people can be trusted”, 1972 to 2014. <https://ourworldindata.org/grapher/trust-attitudes-in-the-us>
- Önis, Z., & A. F. Aysan, (2000). Neoliberal Globalization, the Nation State and Financial Crises in the Semi-Periphery: A Comparative Analysis. *Third World Quarterly*, 21: 119-139.
- Rodrik, D. (2000). Institutions for High-Quality Growth: What They Are and How to Acquire Them. *Studies in Comparative International Development*, 35(3), 3-31.
- Rodrik, D., Subramanian, A., ve Trebbi, F. (2002). *Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development*. Working Paper, No. 9305, Cambridge, Massachusetts: NBER.
- Sachs, J. (2003). *Institutions Don't Rule: A Refutation of Institutional Fundamentalism*. Working Paper No. 9490, Cambridge, Massachusetts: NBER.
- Stiglitz, J. E. (2003). *Globalization and Its Discontents*, New York: W. W. Norton & Company.