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# The Image of the European Economy at the Time of the Pandemic Crisis

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**Abstract**

Aim: The aim of the paper is to create a coherent image of contemporary capitalism as influenced by the changes evoked by the pandemic crisis. The reality, or the circumstances that need to be taken into consideration, do not constitute a logical whole where its constitutive parts would complement one another, but rather seem to contradict one another, or to belong to different theoretical orders. Methodological approach: The paper presents theoretical basis of the economic and social system which was formulated by the thinkers of the European Enlightenment. Some general conclusions resulting from the empirical analysis of economy in the era of pandemic crisis are presented. Results: The author finds dynamism be a feature of capitalism at every stage of its development. That feature refers to the turn of the 20th and 21st c. when the economy on several occasions encountered the barrier of effective demand. Practical significance: The latest stage of globalisation and the role of transnationality is analysed. The rupture of the relationship networks between dependent companies and central corporations during the 2020 pandemic negatively affects the functioning of the national economies in Europe. The author scrutinises those examples of economy sectors which have been negatively influenced by the pandemic. Originality: The economics literature undertakes the critique – from the liberal theories' standpoint – of the well-established idea of social market economy in the ORDO version. Change (destruction) of economic structures requires a new discussion on their theoretical basis.

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## INTRODUCTION

Human actions and thoughts copied as social practices are the carries of social structures. The prevailing forms of activities of the participants of public life and their results become structuralised environment for subsequent activities which may either retain or change the existing situation. If it is so, then a question about the meaning of social structures for the reproduction and social change is at the same time a question about the meaning of social activities and popularised thinking practices for the system globalisation of the second decade of the 21st c. The subject of the paper are certain symptoms of changes in Europe and the world because of the pandemic crisis.

The theories of changes emerging in science and those created by social sciences adopt a theory that chaos contains a potential which creates a favourable environment for creating orderly systems (Prigogine, Stengers, 1990, Hayek, 1993). Transformations of chaotic states may head in various directions. The choice of the direction of changes is not determined, because even in case of asymmetry many changes depend on the efficiency of those who use the system rules (Akerlof, Spence, Stiglitz, Nobel Prize in Economics 2001). Some people may waste their advantage, some other may make the best use of the enfeebled alternative potential.

In circumstances of rapid social, economic and political changes caused by the pandemic crisis people try to settle the relationship with the world around. They are ready to accept such forms of social life which are not fully satisfactory (social isolation, home office) and which only remotely execute the planned projects (democratic participation in company management, sense of democracy and feeling that sense). They are ready to accept something which in the times past was odd, as a new standard. They are surprised by the fact that the novelty now designates the trends of the new world order (Sztompka, 1998).

According to the present standards until the mid-18th c. the world was extremely poor. The changes were brought by the beginning of the industrial revolution. It was possible due to the co-existence of new technologies in industry, energy acquired from coal and from the market powers. In his innovative work of 1776 Adam Smith wrote about the advantageous natural circumstance of Great Britain: "England, on account of the natural fertility of the soil, of the great extent of the sea-coast in proportion to that of the whole country, and of the many navigable rivers (...) is perhaps as well fitted by nature as any large country in Europe to be the seat of foreign commerce, of manufactures for distant sale, and of all the improvements which these can occasion." (Smith, 2007, volume 1, p. 1533-534).

Adam Smith advocated that the division of labour and specialisation accompany each other and cause economic growth. He realised that the division of labour depended on the size of the market. The extensiveness of market determines the level of specialization, and thus the labour efficiency.

The economic potential results from economic growth, yet the very concepts of economic and social progress are the creations of philosophy. It was the Enlightenment, the philosophical trend in Europe lasting throughout the 18th c., that introduced the idea do social progress. The Enlightenment thinkers were the first to notice the possibility of conscious social activities aiming at the improvement of the existence of people all over the world. What are the ideals of the Enlightenment based on?

Adam Smith believed that the economic system may be shaped in such as way as to satisfy the needs of people. That was a progressive project. In book V of his work entitled *An Inquiry into the Nature and Causes of the Wealth of Nations* Smith devoted a large part to a detailed explanation why the state had major duties in such spheres as education, infrastructures, justice and defence system. Those are the fields which require a collective action which would complement the market power rather than substitute it. Book V deals with the income of a monarch or a state where chapter I refers to the expenses of a monarch or a state, in particular the expenses related to country's defence, justice, public devices and institutions and the upkeep of the majesty of authority. While analysing Smith's work from today's perspective, too often it is because of his in-depth analysis of the manner in which the market powers may support the self-organising division of labour ("invisible hand"). In 1776, that same year that Smith's book was published, Thomas Jefferson and the Founding Fathers of the American Republic, disciples of John Locke and David Hume, advocated that political institutions were the creations of man, and that they should be shaped consciously and should satisfy society needs. In 1776 Thomas Jefferson published his political project – *the Declaration of Independence* (Jefferson 1776).

Immanuel Kant, an outstanding German philosopher of the Enlightenment promoted the ideas of creating a world management system. In 1795 he advocated that permanent peace between nations might be achieved if self-governing republics connected by international trade would be established. Kant emphasized the sense of commerce and the power of money as the factors forcing states to promote peace. He found it necessary to create the federation of free states. Such liaison would be determined by the necessity to keep and protect freedom of a given country – for itself and for other allied countries. Kant's idea of creating republics worldwide thus granting peace, was elaborated on in the report prepared by Working Group appointed by the Central Intelligence Agency of the USA.

The main assumptions of the Enlightenment: Adam Smith's project of organising economic life and Immanuel Kant's idea of peace in perpetual social progress constitute the inspiration in the 21st c. and are vital in Europe and worldwide.

One needs to note the efforts of Leon Walras related to the Nobel Peace Prize in 1905. Walras claimed that his academic output in which the idea of peace as a prerequisite for economic development of states – presented by Walras in his economic theory works – predestined him for winning the Nobel Prize. He tried for two subsequent years, yet in vain [1].

In view of the pandemic situation in Europe and worldwide in 2020 it seems that the ideals of the Enlightenment acquired significance. Adam Smith does not appear to be an advocate of liberal ideals as he is – in a simplified way – presented.

The most natural and fundamental element of each science are the ideals presented therein. The ideals regulate and bind facts and are the basis of reasoning in science – claimed William Whewell in his *Philosophy,* in the part entitled: *Review of Opinions on the Nature of Knowledge and the Methods of Seeing* (Zamecki 2012, p. 640).

## Global Economy and Pandemic Crisis

One gets to know the nature of the contemporary European economy via analysing it in motion and progress. Structural conditions of the nature of economy are overlapped by the necessity to get to know the economic processes in their dynamics. Conducting the analysis in a pure form, i.e., separately from long-term regularities of progress would impoverish the possibilities of interpreting the undergoing changes. It is caused firstly by formal difficulty in separating phenomena in their dynamics (due to economic situation) and structure; and secondly by the mutual permeation of those types of processes.

The undergoing globalisation evokes numerous negative phenomena, increased instability of growth and poor inclination to invest, structural lack of financial balance, unfavourable psychological and sociological changes.

The global character of increasing number of phenomena hinders compensating use of international relations channels for solving problems of individual national economies. Never in the history has the world relied so much on multilateral agreements and international organisations.

Although the main institutions proved to be lasting and flexible the time has weakened the resilience of some of them. Entering the globalisation era, the world economy opens the period of interrelations accompanied by the lack of institutional adaptation to new conditions. The outlined nature of contemporary economy is complemented by its pessimistic image caused by the pandemic crisis.

Therefore, one cannot fail to observe that the full costs of crisis will not be swiftly known. Enormous, yet still unknown, costs of the current pandemic crisis will encumber both the present as well as the future generation.

## A real sphere and the sphere of regulations in modern theory of economics

The range, scope and costs of the pandemic crisis which commenced at the beginning of 2020 in China and in a short period of time reached other countries worldwide clearly show that its scope is incomparable with any other crisis after WWII. One could relate it to the 1929–1933 crisis which hit the world economy.

The current pandemic crisis causes measurable and unmeasurable costs. Measurable costs, which

[1] Footnote - In April 1905, Leon Walras decided to apply for the Nobel Peace Prize, awarded in this category by the Nobel Committee from 1901. He sent his candidacy in the form of "Notification" to Norway. He was joined by the written support of his three friends at the University of Lausanne: Ernest Roguin, Maurice Milliud, Alexander Mauer. Walras wrote a short text on the occasion, entitled "Peace through social justice and free trade." In it, he justified that he deserved the award because in his scientific achievements he emphasized the importance of social justice, land purchases and free trade for the cause of world peace. He spoke about the pacifist movements that France should initiate and strive to join, in support of this initiative, by small states such as Switzerland. It was a few years before the First World War. The decision to receive the Nobel Peace Prize was not made. Walras had a good social sense of the social conditions necessary to develop economic activity in Europe and the world [See Léon Walras: Letter of July 20, 1905. (W) William Jaffé (ed.): *Corespondence of Léon Walras and Related Papers*. Vol. III (1898 – 1909). Amsterdam 1965, North – Holland. See also: Agnar Sandmo: *Retrospectives. Léon Walras and the Nobel Pease Prize*. "Journal of Economics Perspectives", vol. 21, no. 4, Fall 2007, s. 217-228.

will only be known after some time, include the following types: (Table 1 and 2, Appendix 1) [2)];
- decrease of GDP and foreign exchange,
- increase of unemployment rate,
- public finances debt,
- collapse of small and medium sized companies and mergers and acquisitions.

In view of the division of economic system into a real sphere and the sphere of regulations, the increase of the international capital movement characteristic of the turn of the 20th and 21st c. reflects the increase of the significance of the regulation sphere in the description of world economy.

Material and physical processes such as production, consumption and exchange undergo in the real sphere. In the sphere of regulation there is coordination of real processes consisting in noticing, processing and transmitting information and knowledge and on preparing and making decisions. There is a close correlation between the two spheres – production and exchange are impossible without transmitting information, making decisions and coordinating individual plans. On the other hand, economic regulation only makes sense when we know the context in which the real production and exchange processes take place. The mental division of real and regulatory processes is the expression of the choice of methodological option. The presented methodological approach was created and promoted in literature by Janos Kornai with a strong emphasis on regulatory processes. Kornai practised the science of economics via the prism of regulatory processes. He applied the method of coordinating economic decision with the help of two-level planning models. He achieved it together with a Hungarian mathematician Tomas Liptak in 1965. Kornai-Liptak two-level model is an alternative to the Dantzig-Wolfe decomposition from 1960. The latter model made it possible to perform multi-scale linear programs (Dantzig, Wolfe 1960).

The presented analysis seems to be up-to-date since the interest in the concepts of Janos and Kornai in the world literature is still great (Magnin, Nenovsky 2020).

The contemporary international finance is an academic discipline scrutinising economic processes undergoing in that sphere of economy. It will allow us to know the intensity, directions and character of financial transfers. It is said that the economy is dominated by financial problems. That process is intensified by the system of motiving managers from financial institutions (Musiał 2020). That systems induces the managers to make risky decisions to maximize the profits in a short period of time. It also often strengthens secondary turnover on financial markets which frequently harms the real sphere of economy. The services on the financial market were to facilitate financing of the real sphere of economy, optimise the means' allocation processes to minimise the risk of the economic entities. Meanwhile, such services do not manage risk, but rather create it [2].

With reference to that, Stiglitz formulated the opinion of the too far-fetched progressing autonomy of financial markets, improper functioning of rating agencies which include in their opinions too few macroeconomic factors which might influence the risk of investing. Stiglitz emphasised the loosening of the criteria of proper and correct functioning of such institutions as banks, in particular central banks (Stiglitz 2004).

**The pandemic crisis and the European economy: banking sector**

The turn of the 20th and 21st c. is characterised by two processes being present in the European economy: European integration and globalisation. Those two processes are parallel. In the contemporary economy one can distinguish the goods-and-services market and the financial market.

The pandemic crisis spans the whole world. Only a big world crisis would give basis for a new monetary system. The world heads towards global authority (global government) and the means to archive

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[2] Footnote - It is worth paying attention to the trust that the idea of ordoliberalism enjoyed among economists in Germany for a long time. This situation is starting to change. Paul Krugman, Nobel Laureate in Economics, in 2008, pointed out that the mainstream German economy is satisfied with its situation and lives in its own intellectual universe. At a conference organized by the joint American and German academic centers, the problem was raised: "Ordoliberalism - what for? Regulatory policy and the social market economy put to the test, 19 September 2018. It found that German economics had split off from the Western mainstream. This state of the economy was considered an aberration, arguing that it grew out of an intellectual tradition called ordoliberalism. According to Brigitte Young, ordoliberalism is an irritating German idea. Harold James, recognized as an expert in German economics at Princeton University, or Mario Draghi, the Italian President of the European Central Bank, together they make the economy in Germany similar to the branch of moral philosophy (Draghi) and would like to call it so [*Ordoliberaliism: A German addity?* Edited by Thorstein Beck and Hans – Helmut Kotz, 2017, w tym: Brigitte Young: Ordoliberalism as an "irritating German idea", s. 31-40. A Vox UE.Org e - Book].

that are the financial instruments. Big corporations, which achieved their positions in the global system, such as Amazon, BlackRock, Altria and others, are interested in getting to know the economic situation in national economies which function on the basis of debt. Investigating the reasons and finding the effects might be known after a longer period of time.

The changes caused by pandemic situation are presented below on the basis of information obtained from the Bank for International Settlement with the seat in Basel, Switzerland. That bank has been chosen, because of the special role it has in Europe and the world. Sixty-three central banks and monetary authorities are members of the Bank for International Settlement.

Global Economy Meeting (GEM) coordinates works of Committees, namely:

- Committee on the Global Financial System,
- Committee on Payments and Market Infrastructure,
- Markets Committee.

Advisory Economic Committee of the Bank for International Settlement – which is the central bank – is composed of eighteen members, namely: President of the Federal Reserve System of the USA, Central European Bank, Bank of China, the presidents of central banks of Germany, France, Italy, Sweden, Canada, India, Brazil, Spain, and previously also of England.

The members meet every second month, on Sunday evenings at 7 p.m. in the conference room "E" located in the round building at 2 Centralbahnplatz in Basel, Switzerland. The meeting lasts about 60 to 90 minutes. After that, the members go to the dining room on the 18th floor. They dine until 11p.m. or even midnight. The group is composed almost exclusively of males.

The Advisory Economic Committee is supposed to prepare projects for Global Economy Market and supervise establishing the agenda. The session starts on Monday morning and lasts for about 3 hours. Adam Lebor describes the meeting in the following way: "Apart from the people who participated in the dinner on Sunday night, the Monday session is attended by the representatives of i.a. Indonesia, Poland, Republic of South Africa, Spain or Turkey. The presidents of fifteen smaller counties, such as Hungary, Israel or New Zealand may attend the meeting as observers only and usually do not speak. The presidents of the member banks of the third category – coming from Macedonia or Slovakia – are not allowed to enter the session room and may only hunt for pieces of information during coffee and meals breaks.

The presidents of all sixty bank-shareholders of the Bank for International Settlement then go for lunch (in the form of an open buffet). The dining room designed by Herzog & de Meuron (a Swedish company which also built the Olympic stadium in Beijing known as "the Bird's Nest") has white walls and black ceiling and provides a spectacular view of three countries: Switzerland, France and Germany. At 2 p.m. the bankers and their assistants come back to room "B" where the issues interesting for the presidents are being discussed" (Lebor, 2016, p. 5).

Such two-day meetings have been carried on for over eighty years. The bank was established in 1930. The meetings of presidents are confidential.

The seat of the Bank for International Settlement is beyond the jurisdiction of Swiss authorities. It enjoys protection like that granted to the United Nations Organisation or diplomatic posts. To enter the premises of the bank the Swiss authorities need to obtain the permit issued by the bank's management. The Bank sends and receives post which is protected in the same way as diplomatic correspondence. The Bank is exempt from Swiss taxes. Its employees do not have to pay income tax on their high remunerations. In 2011 the salary of the general director amounted to 763 930 Swiss francs. The sum is increased by numerous bonuses. By virtue of the Swiss law, all representatives of banks are granted immunity for life covering all activities conducted by them during their duties. By virtue of the Swiss law the property of the bank is not subject to civil law claims and may not subject to seizure. The Bank is a very liked employer. Six hundred of its employees come from over fifty countries.

The Bank for International Settlement has two local offices – one in Hong Kong (since 1998) and the other one in Mexico (since 2002).

Without going into details, one may observe a high centralisation level of authorities and institutions in the sphere of banking. For example, under the auspices of SNB – FRB – BIF (SNB – Swiss National Bank, FRB – The Federal Reserve Board, BIF – Bank of International Settlements) for the second time the following conference was held: *High – Level Conference on Global Risk, Uncertainty, and Volatility*. Zurich (Rüschlikon), 12 – 13 November 2019.

That conference, as it is called – of a higher level – was organised since the world faced deep uncertainty in the field of economy, finance and politics. The uncertainty and its implication for market assets and financial stability were among the key issues discussed during the conference sessions. The aim was to develop theoretical and empirical basis of operation of global markets, including the transmission of insecurity to the real economy, and financial stability.

**The character of economic processes in the era of pandemics in Polish economy**

A few examples illustrating the pandemic crisis in Poland are discussed below.

Capital Group of Powszechny Zakład Ubezpieczeń Społecznych S.A. informs of a significant deterioration of business conditions for the banking sector which was caused inter alia by the fall of interest rates, increased credit risk and additional deductions in lieu of the expected credit instalments. Moreover, the banks realised in their results the reserves related to COVID-19 which reduced the results of the Capital Group of PZU S.A. by PLN 220 million. The company announced some time ago that they wished to keep the costs under strict control. They managed to do so despite the pressure on the increase of remuneration and despite additional costs related to COVID-9 pandemic. The return on capital in Q3 of 2020 was achieved at the level of 20.4% which places PZU S.A. Capital Group among the insurers with the highest return on capital in Europe (Gieroba, 2020, p. 84-85).

Let us discuss the situation in more detail. It is a good example which reflects the nature of the undergoing globalisation process. It is a capitalist globalisation with two tendencies: one related to salaries, and the other to profitability. As far as salaries are concerned the tendency is to level them down, and as far as return rate and profitability go the tendency is to increase them up to the worldwide standard norms. That erasure of high remunerations and not so profitable capitals – that double levelling movement – is made at the stage of circulating capital. Capital itself goes in such spheres where high profitability is obtained and leaves the places where labour costs are high.

Capitalist globalization includes a mechanism which constantly selects industries and sectors worth functioning on a world market. That mechanism is explained by the law of political economy: the law of uneven development of capital. It has never been so much visible as nowadays. It results from the subordination to the profitability criterion which is binding on the world market.

The results of operation of PZU S.A., the structure of Capital Group of the conglomerate nature, might be understood as far as its essence is concerned, if one considers the market context in which the Group operates. The structure is typical for oligopoly. The president discusses the employees' pay in the context of pressure on the increase of salaries, and he informs of the return on capital when he mentions the fact that PZU is among the insurance companies with the highest return on capital in Europe.

One needs to observe that the development of capital is not of a linear character. The contradictions of capital economy are evident on the world scale. It is inadequate to call the process of economic development as sustainable. In fact, it is the opposite, one should rather talk about new inequalities in world economy and rethink the definition.

4.1. Mergers and acquisitions on the Polish market

The report published by Navigator Capital Group Fordata shows that there were 52 mergers and acquisitions on the Polish market in Q2 2020, which was 3 cases fewer than in Q1 2020 and as many as 11 cases fewer than in Q2 2019. The biggest transaction between March 2020 and June 2020 was the acquisition of Energa group by PKN Orlen for PLN 2.8 milliard (HOME@MARKET 2020, no. 11, p. 32).

4.2. Prolonging the government support for big companies called "Financial Shield" means the willingness of the state to co-participate in the fight against the consequences of pandemic. The program consists of the following points:

- subsidising fixed costs of small and medium-sized companies,
- remitting subvention from the financial shield coming from Polski Fundusz Rozwoju (Polish Development Fund),
- long-term loans (for 6 years) for sectors affected by restrictions,
- subsidising employment,
- exemption from ZUS (Social Insurance Company) premiums,
- mayors of towns lower the rents for restaurateurs (e.g., the mayor of Gdańsk lowered the rent to PLN 1 (Bobroszek 2020 p. 101).

The report by Cezary Szczepański entitled *Jak odetkać kurek z pieniędzmi* shows that in 2019 as many as 90% of Polish entrepreneurs did not receive payment in the required time. Companies directly affected by pandemic restrictions and their contractors are in a particularly difficult situation. They do not pay and they do not receive due payments. (Szczepański 2020, p. 102).

4.3. Polish brewing market on the verge of collapse due to pandemic

Poland in the second (right behind Germany) biggest producer of beer in the European Union with the production on the level of 40 million hectolitres of beer annually. According to the Deloitte analysis the whole beer production and sale chain in Poland is of the total added value of PLN 19.4 milliard annually, which provides in total almost 158 thousand workplaces.

In view of the binding Act on education in sobriety and counteracting alcoholism it is impossible to sell beer online, i.e. with delivery. You can only sell beer in retail shops which obtained the licence. At present, Poland is the only European Union country in which selling beer via the Internet is prohibited. (Szczepański 2020, p. 32).

4.4. Miscellanea:

In business the digit of the month is 5.6 million dollars. That is how much was earned by Albert Bourla, the president of Pfizer for selling 62% of his company's shares. He sold them on the day it was announced that his company had invented an effective coronavirus vaccine (My Company. Polska, 2020 no. 12 (63) December 2020, p. 8).

In politics – well said. "As it was the case with the Spanish flu, we now also have to expect that the second wave of COVID-19 will be more severe for economy than the first one. It seems that it will keep the economists busy for the whole winter – said Angela Merkel, the German Chancellor. (My Company. Polska, 2020 no. 12 (63) December 2020, p. 8)

5. Independence of the Central Bank

In the 20th c. the independence of the central bank became an international norm. At the end of the 20th c. there were around 200 central banks all over the world, almost one per one country. The percentage of banks, which have operational independence while establishing the policy is about 80-90 percent which is illustrated by Figure no. 1.

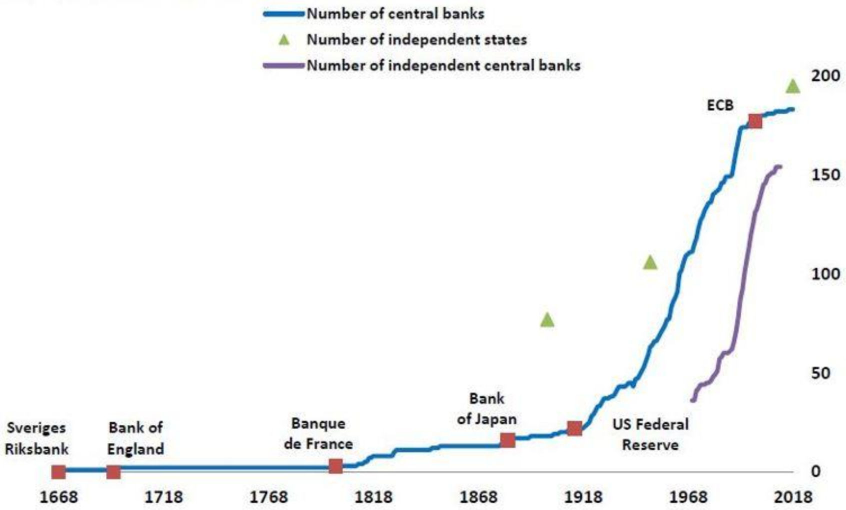



**Figure 1**. Number of central banks
Source: Banking Directory

The status of independence of central bank is constituted by quasi-constitutional, institutional, personal, financial and economic independence. Swedish bank Sveriges Rilkbank was founded in 1668. It is the bank that has been granting prizes in the field of economy since 1969. Models of independence of central banks are created – there is a whole spectrum of such models and in every case the independence of a central bank is only partial. The legal index of independence constructed for some countries by OECD is presented in table no. 3.

**Table 3**. *De jure* measures of Central Bank Independence

| Country | CBI Measure | Country | CBI Measure |
|---|---|---|---|
| Australia | 0.25 | Japan | 0.44 |
| Austria | 0.86 | The Netherlandes | 0.86 |
| Belgium | 0.86 | New Zealand | 0.35 |
| Canada | 0.47 | Norway | 0.45 |
| Denmark | 0.50 | Spain | 0.86 |
| Finland | 0.86 | Sweden | 0.30 |
| France | 0.86 | Switzerland | 0.77 |
| Germany | 0.86 | UK | 0.70 |
| Italy | 0.86 | US | 0.48 |

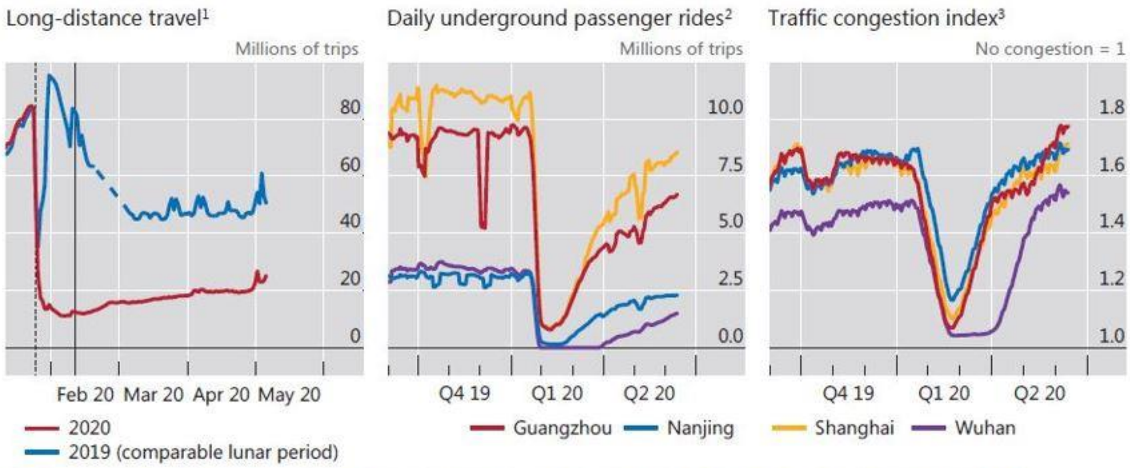
Source: *Bank of England Speech What Has Central Bank Independence Ever Done for Us?* Speech given by Andy Haldane Chief Economist and Member of the Monetary Policy Committee UCL Economists' Society Economics Conference 28 November 2020

Table 3 presents the results of long–term research. Ana Carolina Garriga conducted research in 182 countries in the period from 1970 to 2012. She presented the results in academic forums e.g. Monetary Policy and Central Banking: Historical Analysis and Contemporary Approaches, Princeton University, 6–7 February 2015.

5.1. Bank for International Settlement and its current information and its character

Bank for International Settlement in Basel, Switzerland publishes a weekly magazine "BIS Bulletin." The authors of the articles are the employees of the bank, and sometimes other economists. The articles cover the topics which enjoy the greatest interest and are of a technical nature. The opinions expressed in articles are the opinions of the authors, and not necessarily of the bank.

In issue 19 of 22nd May 2020 there is an article by three authors: Frederic Beissay, Daniel Bees and Phurichai Rungcharoenkitkul entitled: *Dealing with Covid–19: understanding the policy choices*. The article presents GDP situation in January and April 2020. The year 2020 is compared to the same period in 2019. The data refers to the world, AEs and EMEs. The text is about the charges related to saving life in the era of increased social distancing. The problem is presented in Figure 2.




The dashed vertical line in the left-hand panel indicates lunar new year's eve. The solid line indicates the date of return to work.

[1] Chinese new year holiday: 4–10 February in 2019 and 24–30 January in 2020. Includes all air, rail, road and water transport modes. [2] Seven-day moving average. [3] Defined as the ratio of average actual travel time in the city to quickest possible journey time on a given day; 30-day moving average.

**Figure 2**. Passenger transport has yet to reach pre–virus levels.

Sources: Chinese Ministry of Transport Wind. I quote for: Frederic Beissay, Daniel Bees and Phurichai Rungcharoenkitkul entitled: *Dealing with Covid–19: understanding the policy choices*. "BIS Bulletin no. 19, 22 May 2020, p. 3

Figure no. 2 – the right side shows the number of visits in shops and recreational centres in 2020 in February and April in UK and in New York before introducing economy shut–down (17th February 2020, 2nd March 2020) and after shutting down economy (16th March 2020, 30th March 2020 and 13th April 2020).

The authors base the article on two economists from the University of Chicago, namely: Michael Greenston and Wisham Nigram, both employed by the University, in Becker Friedman Institute for Economics. Their study is entitled *Does Social Distance Matter.* "Working Paper" 2020, Chicago University Press, Chicago (20 pages).

6. The needs in the time of pandemics: COVID–19 needs economy which is epidemic-oriented.

COVID–19 pandemic is a global catastrophe of the humanist system in the world scale that has not been experienced since the Spanish flu of 1918.

Epidemiology as the science has begun to develop in the 19th c. yet we know the examples of statistical analysis of public health before that period, suffice it to mention the works of John Graunt of 1662 (Graunt 1662). The first epidemiology society was founded in London – *London Epidemiological Society* – in 1850, and the first epidemiology study entitled *On the Mode of Communication of Cholera* was published by John Snow 1849 (first edition, and 1855 second edition). John Snow as epidemiologist and anaesthesiologist. He was called the Victorian cartographer. London suffered from cholera epidemic three times during his life (he died at the age of 45): in 1832, 1848/1849 and 1853/1854.

At present, the epidemiologist asks for expert opinions. They are important in view of the needs related to foreseeing and counteracting future pandemic. One needs to understand the impact of the pandemic on people, material goods and economic activities of people all around the world. Identification of costs which are particularly important from the economic point of view will be helpful in analysing COVID–19, because so far epidemiologists act based on their intuition. The fact that the virus is infectious in now a new problem. In view of the catastrophe caused by COVID–19 one cannot allow for isolated works – epidemiologists separately and economists separately. There is a growing need to join the efforts and use the know–how to analyse the present situation. Epidemiology is a sister discipline of economy as both sciences require the application of observation and experiments; moreover, economy and epidemiology both use isolation (separation) and develop their own respective language. One should not choose between the public health and healthy economy. One has to take the matter in one's own hands. That is the message of Eleanor J. Murray, a professor of medicine and an epidemiologist, formulated in the article: *Epidemiology's Time of Need: COVID–19 Calls for Epidemic–Related Economics* [Murray 2020].

There were 750 000 thousand cases of coronavirus worldwide from December 2019 to 30th March 2020. The research conducted in Centre for Disease Control and Prevention "*Aerosol and Surface Distribution of Severe Acute Respiratory Syndrome Coronavirus 2 in Hospital Wards*" (Guo, Wang, Zhang et al., 2020).

The research was conducted at Huoshenshan Hospital in Wuhan, China, in a general medical and intensive care unit. There were 9 patients with severe disease in intensive care units, and 24 patients with less severe disease in the general unit. The research was carried out by a team led by scientists from the Military Academy of Medical Sciences in cooperation with the Academy of Military Sciences in Beijing, China.

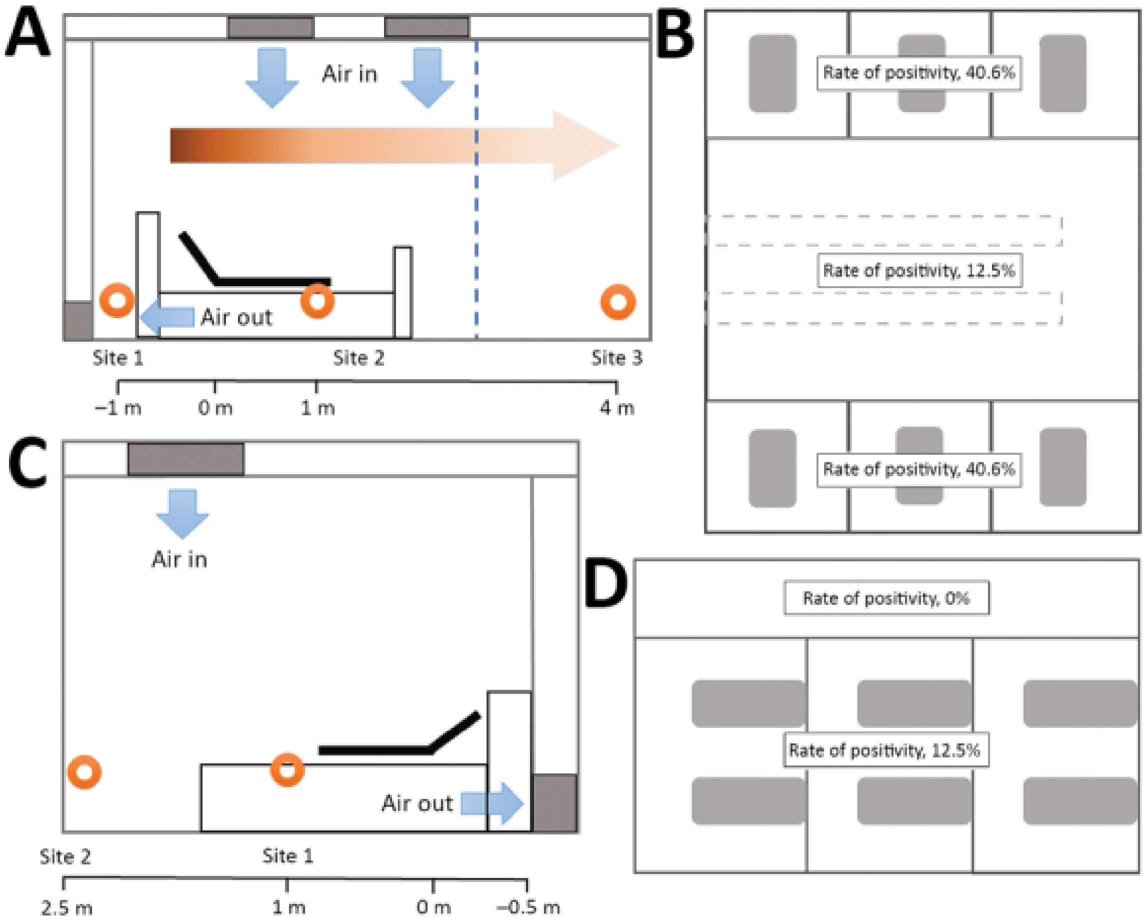



**Figure 3**. Spatial distribution of coronavirus 2 aerosols for severe acute respiratory syndrome in isolated intensive care units (ICU) and general wards (GM) of Huoshenshan Hospital in Wuhan, China. Picture below illustrates the research conducted at Huoshenshan Hospital in Wuhan.

Sources: Guo Zhen-Dong, Zhong Yi-Wang, Shou-Feng Zhang, Xiao Li, Lin Li, Chao Li, Yan Cui, Rui-Bin Fu, Yun-Zhu Dong, Xiang-Yang Chi, Meng-Yao Zhang, Kun Liu, Cheng Cao, Bin Liu, Ke Zhang, Yu-Wei Gao, Bing Lu and Wei Chen: *Aerosol and Surface Distribution of Severe Acute* Respiratory *Syndrome Coronavirus 2 in Hospital Wards*, Wuhan, China, 2020, p. 1590

Figure 3 illustrates the spatial distribution of coronavirus 2 aerosols. The figure consists of four parts and A, B, C, D. Coronavirus 2 on the surface and in the air in departments was investigated. The indicators resulting from air tests differed depending on the place of sampling for testing. In intensive care units, there were 12 air vents and 16 air vents per hour. There were 8 air vents and 12 air vents per hour in general departments. Virus-laden aerosols were placed near the air outlets in patient rooms and doctor's offices. In parts A and C, the places referred to in the figure are marked with colored circles (orange).

Based on the research, it was found that virus contamination was greater in the air and on the surface of facilities in intensive care units than in general units.

By March 30, 2020, none of the hospital staff had been infected with SARS2-COV-2, indicating that appropriate precautions were effective in preventing infection in the hospital where the research was conducted. Family members are usually not professionally trained, which easily leads to familial contamination. The construction of mobile cabin hospitals has been found to be an effective means of preventing infection transmission.

A limitation to the conclusions made is that the test results do not indicate the amount of viable virus. In other words: for a measured minimal infective dose, the aerosol transmission distance cannot be accurately determined.

The research brought us to the following conclusion:

- In order to determine the distribution of coronavirus with the acute respiratory distress in the hospital wards in Wuhan, China, samples of air and surface were tested.
- Pollution was bigger at the intensive care wards than in general care wards. The virus was widely spread on floors, computer mouse devices, litter bins and handrails and was present in the air ca. 4 meters away from patients.

  The transmission distance SARS–COV–2 might amount to 4 meters.

In the initial period of the pandemic crisis, the medical journal "The Lancet" published an article entitled: *Phisical distancing, face masks and eye protection to prevent person-to-person transmission of SARS-COV-2 and COVID-19: a systematic review and metaanalysing* (Chu, Akl, Duda, Solo, Yaacoub, Schünemann et al., 2020) The studies concerned patients aged 30 to 60 years who had symptoms of SARS (severe acute respiratory syndrome) and MERS (Middle East Respiratory Syndrome). 172 case studies were carried out in 12 countries, on 6 continents, 44 relevant comparative studies were performed. It is reported that between March and 28 March 2020, there were 5.85 million human infections worldwide, 359,000 people died.

The studies were performed using the Cochrane method (quantitative econometric studies) and the GRADE approach (qualitative gradual studies) was used. It concerns the criterion of the intensity of the features: high, moderate, low, very low. 87 English-language literature items were used. The research was funded by the World Health Organization. Two health care workers from Poland, from Krakow, participated in the study.

The conclusions resulting from the conducted research included recommendations about keeping social distance and the need to wear face masks. You should also protect your eyes.

The Robert Koch Institute in Berlin informed about new variants of the SARS-COV-2 virus in Great Britain and South Africa. The results of epidemiological studies are not yet available. The attached figure illustrates the situation that it is extremely important to strictly follow known rules in order to collectively prevent the transmission of SARS-COV-2.

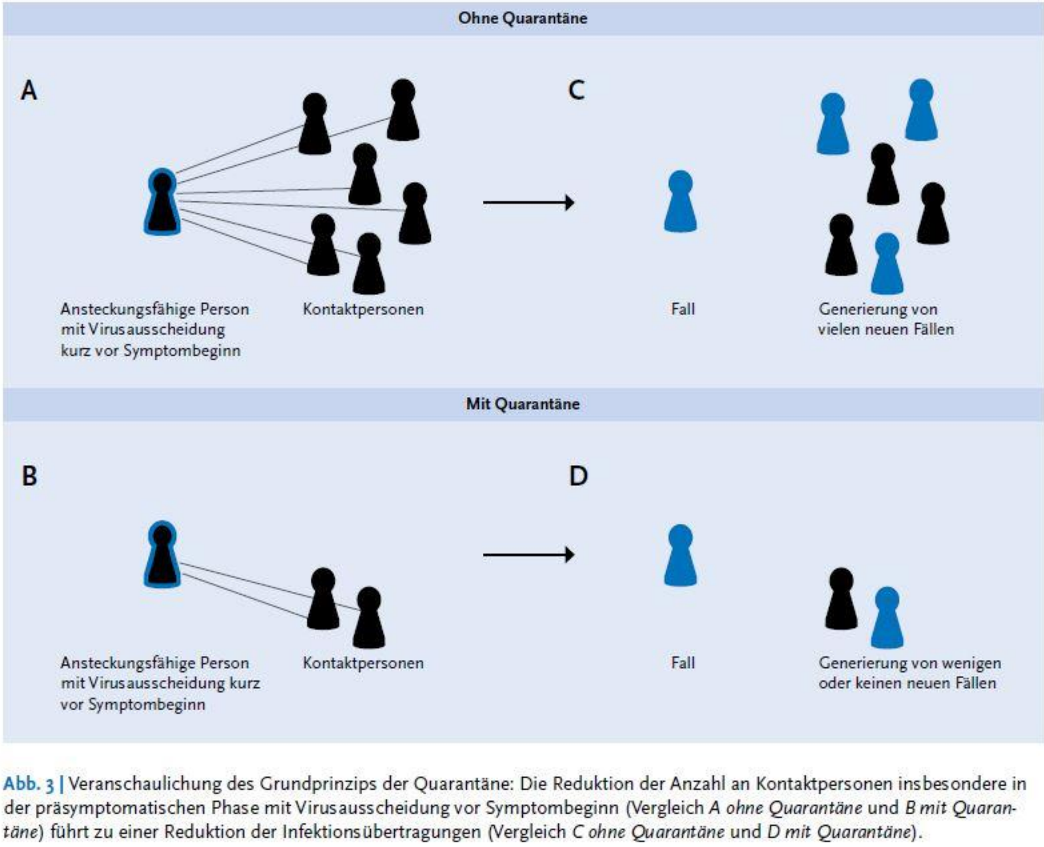



**Figure 4**. Abwägung der Dauer von Quarantäne und Isolierung bei COVID–19
Sources: *Abwägung der Dauer von Quarantäne und Isolierung bei COVID–19*. “Epidemiologisches Bulletin”. Berlin: Robert Koch Institut, no. 39, 24 September 2020, p. 7.

## CONCLUSION

The societies of European and other countries entered the second decade of the 21st century with quite an unusual baggage. The first is the pandemic crisis. The second is the economic crisis. The main thesis of the analysis results from the observation confirming the observation about the growing gap between the real economy and the regulatory sphere. We are dealing with a sequence of processes of a systematic increase in social inequalities, the concentration of income and wealth within corporations that are, for example in Poland, branches of transnational corporations. A decrease in the GDP growth rate, an increase in unemployment, mergers and collapses of small and medium-sized enterprises in Poland are a sign that the economy with a lower level of development fulfills the role of a dependent economy in relation to the economic / political centers of Europe and the world. The study shows that the banking system plays a special role in the regulatory sphere. It would be premature at the present stage of presenting the state of the European economy during a pandemic and the role of banks' actions towards economic entities, to track and evaluate the effectiveness of the preventive role of this system against the pandemic threat in Poland, Europe and the world.

Nevertheless, it can be said that the complexity of the profit maximization mechanism in transnational corporations such as BlackRock is increasing. This company has its share in banking assets, for example in Poland in Alior Bank. Modifications to modern capitalism introduce measures to protect and strengthen capitalism, for example in the banking system by Bank Of International Settelments, based in Basel, Switzerland, but at the same time exacerbate its deep contradictions. Large transnational corporations are interested in stimulating demand for their products and services, and large transnational capital groups see their interest in the continuous increase in turnover on financial markets.

A review of specialist medical literature, including "The Lancet", indicated that knowledge was accumulated about the symptoms and effects of the spread of pathology. Further work is needed on the causes of the epidemic crisis.

## REFERENCES

Dantzig George B., PhilipWolfe: *Decomposition Principle for Linear Programs*. "Operations Research", 1960, vol. 8, issue 1, s. 101-111

Akerlof Gregore A. 2001: *Behavioral Macroeconomics and Macroeconomic Behavior*. Nobel Lecture

Boissay Frederic, Daniel Rees and Pchurichai Rungcharoenkitkul: *Dealing with Covid-19: understanding the policy choices*, "BIS Bulletin" No 19. 22 May 2020

Chu, Derek A., Elie A. Akl, Stephanie Duda, Karla Solo, Sally Yaacoub , Holger J Schünemann: *Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-COV-2 and COVID-19: a systematic review and meta-analysis*. "The Lancet", Vol 395, issue 10242, pages 1973 – 1987, June 27, 2020.

Dobroszek Kuba: Co zawiera nowa tarcza? „My Company. Polska" nr. 12 (63) grudzień 2020, s. 101

*Fuzje i przejęcia na polskim rynku*. "HOME&MARKET", nr 11, listopad 2020, s. 32.

Garriga Ana Carolina: *Central Bank Independence in the World: A New Dataset*. "International Interzetions" 42 (5): 849-858

Gieroba Kamil: *Grupa PZU odporna na wirusa*. "Sieci" 2020, no 49 (418), s. 84-85.

Grenston Michael i Wisham Nigram: *Does Social Distance Matter?* Working Paper 2020, - 6 Chicago University, Becker Friedman Institute

Grount John: *Natural and Political Observations Made upon the Bills of Mortality*. 1662

Guo Zhen-Dong, Zhong Yi-Wang, Shou-Feng Zhang, Xiao Li, Lin Li, Chao Li, Yan Cui, Rui-Bin Fu, Yun-Zhu Dong, Xiang-Yang Chi, Meng-Yao Zhang, Kun Liu, Cheng Cao, Bin Liu, Ke Zhang, Yu-Wei Gao, Bing Lu and Wei Chen: *Aerosol and Surface Distribution of Severe Acute Respiratory Syndrome Coronavirus 2 in Hospital Wards*, Wuhan, China, 2020 "Emerging Infections Diseases", Vol. 26, No. 7, July 2020, s. 1586-1591.

Hayek Fridrich August Von: *Law, legislation and liberty*. Vol 1-3 1979. Routledge,

Jaffé William (ed.): *Corespondence of Léon Walras and Related Papers*. Vol. III (1898 – 1909). Amsterdam 1965, North – Holland.

Jefferson Thomas: *Deklaracja Reprezentantów Stanów- Zjednoczonych Ameryki Zgromadzonych na Kongresie Generalnym.* 4 lipca 1776

Kant Imanuel: *Zum ewigen Frieden*. [w:] Kants Werke, Tom VIII, s. 363-364, Akademie Textausgabe, Berlin 1968.

Lebor Adam: *Wieża Bazylei. Historia i tajemnice Banku Rozrachunków Międzynarodowych*. Przełożyła: Kardina Gawlik. Wrocław: Wydawnictwo Wektory, 2016

Leśniak Dagmara: *Polski rynek piwowarski w zapaści z powodu pandemii*. „Franczyza@Biznes. własna firma na licencji. Nr. 6 (46) 2020, 30-33

Magnin Eric, Nenovsky Nikolay: Password: "D". *Dependend Capitalism and Monetary Regimes: The Case of the Balkan Countries*. [In:] A. Farazmand (ed), *Global Encyclopedia of Public Administration, Public Policy, and Governance*. Springer Nature Switzerland AG, 2020, page 1 – 9

Murray Eleanor J.: *Epidemiology's Time of Need: COVID-19 Calls for Epidemic-Related Economics*. „Journal of Economics Perspectives" vol. 34, no. 4, Fall 2020

Musiał Grażyna: *Modern World and Economic Interactions in The Light of The Science of Economics As Well As Finances and Accounting*. "Finance, Accounting and Business Analysis" 2020, Volume 2, Issue 1, p. 17-24. DOI: https://doi.org/10.16408/faba.v2i1

Phillips Peter: *Giants. The Global Power Elite*. Wydawnictwo: Seven Stories Press. New York, NY: 2018

Prigogine Ilya, Isabelle Stengers 1990: *Porządek z chaosu: nowy dialog człowieka z naturą*. 1984.

Sandmo Agnar: *Retrospectives. Léon Walras and the Nobel Pease Prize*. "Journal of Economics Perspectives", vol. 21, no. 4, Fall 2007, s. 217-228

Smith Adam: *Badania nad naturą i przyczynami bogactwa narodu*. Tom 1. Wydawnictwo Naukowe PWN Warszawa 2007.

Spence Andrew Michael 2001: *Signaling in Retrospect and informational Structure of Markets*. Nobel Lecture

Stiglitz Joseph Eugene 2004: *Globalizacja*. Przeład: Hanna Simbierowicz. Wydawnictwo Naukowe PWN, Warszawa 2004.

Szczepański Cezary: *Jak odetkać kurek z pieniędzmi*, „My Company. Polska" nr. 12 (63) grudzień 2020, s. 102

Sztompka Piotr (ed.): *Building Open Society and Perspectives of Sociology in East-Central Europe*. Montreal, University of Quebec Press, 1998.

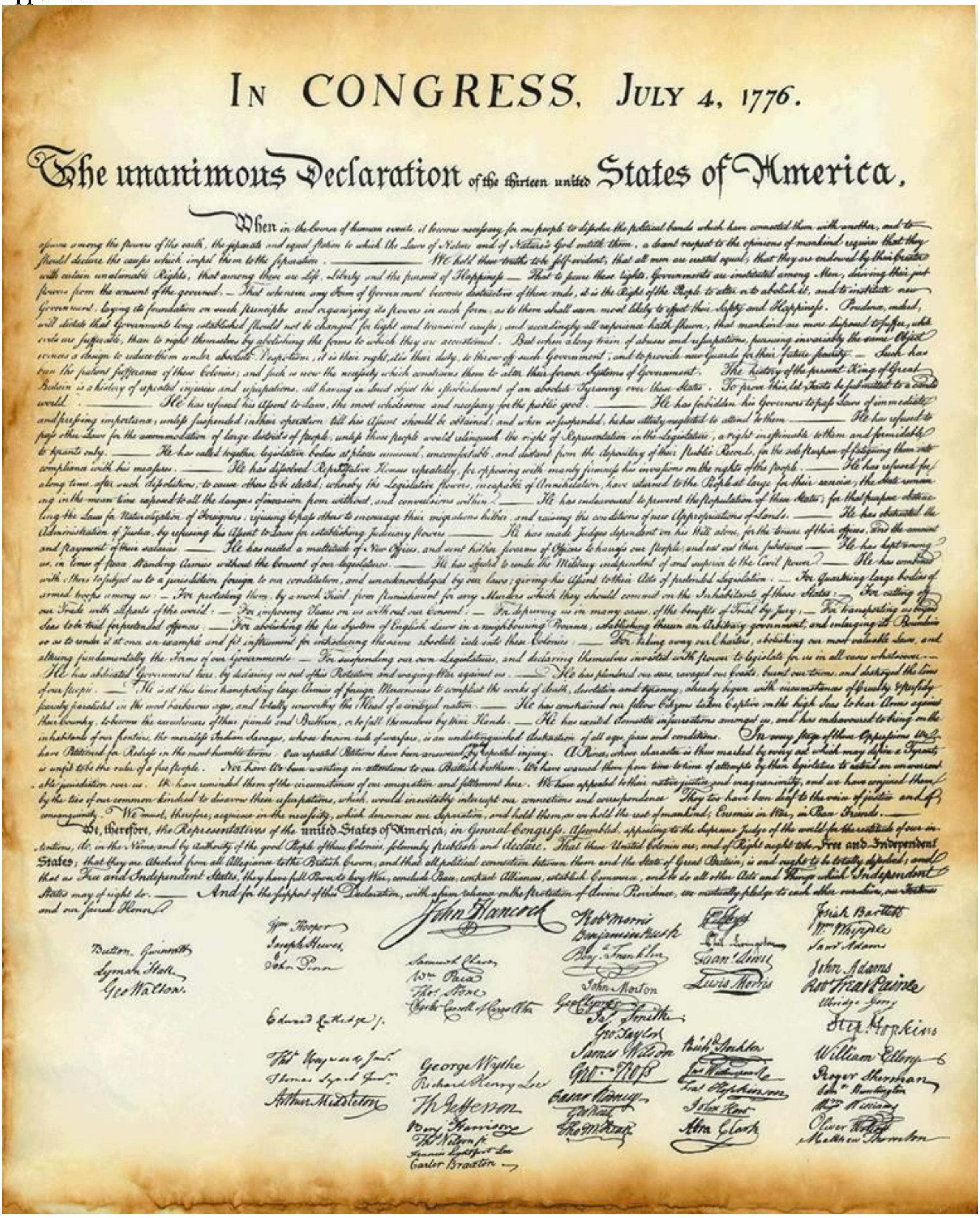
*W biznesie to liczba miesiąca: 5,6 miliona dolarów*. „My Company. Polska", nr. 12 (63) grudzień 2020, s. 8

*W polityce: Dobrze powiedziane*. „My Company. Polska" s. 8

Young Brigitte: *Ordoliberalism as an "irritating German idea"*. [W:] *Ordoliberalism: German Oddity?* Edited by Thorsten Beck and Hans-Helmut Kotz. 2017. A Vox A Vox UE.Org e – Book, p. 31-40

Zamecki Stefan: *Komentarze do naukoznawczych poglądów Williama Whevella (1794 – 1866). Studium historyczno – metodologiczne*. PAN Warszawa 2012

**Appendix 1**


IN CONGRESS, JULY 4, 1776.

The unanimous Declaration of the thirteen united States of America,

Source: https://gailwritinglife.files.wordpress.com/2014/07/declaration.jpg, [30.11.2020]

**Appendix 2**

**Table 1**. Registered unemployment rate in Poland in 2015-2020 in percent

| | January | February | March | April | May | June | July | August | September | October | November | December |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2020 | 5,5 | 5,5 | 5,4 | 5,8 | 6,0 | 6,1 | 6,1 | 6,1 | 6,1 | 6,1 | 6,1 | - |
| 2019 | 6,1 | 6,1 | 5,9 | 5,6 | 5,4 | 5,3 | 5,2 | 5,2 | 5,1 | 5,0 | 5,1 | 5,2 |
| 2018 | 6,8 | 6,8 | 6,6 | 6,3 | 6,1 | 5,8 | 5,8 | 5,8 | 5,7 | 5,7 | 5,7 | 5,7 |
| 2017 | 8,5 | 8,4 | 8,0 | 7,6 | 7,3 | 7,0 | 7,0 | 7,0 | 6,8 | 6,6 | 6,5 | 6,6 |
| 2016 | 10,2 | 10,2 | 9,9 | 9,4 | 9,1 | 8,7 | 8,5 | 8,4 | 8,3 | 8,2 | 8,2 | 8,2 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2015 | 11,9 | 11,9 | 11,5 | 11,1 | 10,7 | 10,2 | 10,0 | 9,9 | 9,7 | 9,6 | 9,6 | 9,7 |

Source: https://stat.gov.pl/obszary-tematyczne/rynek-pracy/bezrobocie-rejestrowane/stopa-bezrobocia-rejestrowanego-w-latach-1990-2020, 4,1.html, [01.12.2020]

**Table 2**. Gross Domestic Product in Poland in 2015-2020 in billions of zlotys

| | I-III quarter | IV-VI quarter | VII-IX quarter | X-XII quarter |
|---|---|---|---|---|
| 2020 | 552227,9 | 524864,8 | - | - |
| 2019 | 521714,5 | 548099,4 | 565833,4 | 637908,7 |
| 2018 | 486735,2 | 506843,8 | 525998,8 | 597794,6 |
| 2017 | 458470,4 | 478896,0 | 491407,2 | 560577,7 |
| 2016 | 430175,3 | 450125,2 | 454818,7 | 526029,3 |
| 2015 | 415705,2 | 434231,1 | 439971,7 | 510334,9 |

Source: https://stat.gov.pl/obszary-tematyczne/inne-opracowania/informacje-o-sytuacji- spoleczno-gospodarczej/biuletyn-statystyczny-nr-92020,4,104.html, (01.12.20)