ЕКОНОМІКА ТА УПРАВЛІННЯ НАЦІОНАЛЬНИМ ГОСПОДАРСТВОМ

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GOVERNMENT'S POLICY IN THE HEIGHT OF COVID-19 PANDEMIC

Amalyan Nataly. Government's policy in the height of COVID-19 pandemic. The paper presents an attempt to estimate cost effectiveness of the governments' arrangements for prevention, limitation and overcoming the consequences of the spread of COVID-19 pandemic, as a result of which nearly quarter of a billion people were infected and almost 5 million died. Epidemic control measures, undertaken by almost all national governments, have ended in 6,7 percent of world GDP lost in 2020 and global fiscal deficit of 13,9% of the collective GDP for 2020. Hundreds of billions of SDR, dollars, yens and euro, additionally issued by IMF and national central banks simultaneously with rate cuts and preferential refinancing caused the growth of broad money supply in 2020 to 145,1 percent of global GDP. All of this could not but influence economics of all the countries. For the purpose of estimation of the consequences of such a policy, we endeavored to interpret governments' activities as operations of a fictitious business entity (COVID Gov Inc) and explore business model of such a company.

Key words: COVID Gov Inc, business model, big pharma, fiscal policy, monetary policy.

Амалян Н.Д. Політика держави у розпал пандемії СОVID-19. У статті зроблено спробу оцінити економічну ефективність діяльності уряду щодо запобігання, обмеження поширення та подолання наслідків пандемії COVID-19. Пандемія коронавірусу COVID-19 вплинула на все людство: понад чверть мільярда інфікованих, майже 5 млн померлих, мільйони страждають від наслідків. Заходи боротьби з епідемією, вжиті майже всіма національними урядами, призвели до втрати 6,7% світового ВВП у 2020 р. та суттєвого недоотримання доходів держав. Додаткові видатки бюджету (субсидії бізнесу, додаткові витрати на охорону здоров'я та підтримку зайнятості), втрата надходжень до бюджету через скасування деяких податків, відтермінування платежів, податків та соціальних зборів уже спричинили глобальний фіскальний дефіцит у розмірі 13,9% сукупного ВВП у 2020 р. Сотні мільярдів СПЗ і трильйони доларів, ієн і євро були додатково емітовані Міжнародним валютним фондом і національними центральними банками. Одночасне зниження ставок та пільгове рефінансування центральними банками спричинили зростання широкої грошової маси зі 125,6% світового ВВП у 2019 р. до 145,1% у 2020 р. Усе це не могло не вплинути на всі сфери економічної діяльності всіх країн. Із метою оцінки наслідків такої політики ми спробували інтерпретувати заходи уряду як діяльність фіктивного суб'єкта господарювання (COVID Gov Inc) та дослідити бізнес-модель такої компанії відповідно до політики, вибраної в кожній конкретній країні. Основними моделями політики держав у період пандемії коронавірусу на сучасному етапі є: (і) забезпечення соціального дистанціювання та/або карантину (реалізується в більшості країн); (іі) політика, спрямована на досягнення групового імунітету (реалізувалася у Швеції та Бразилії); (ііі) фіксація на розробленні вакцин (реалізується у США). Метою роботи є відстеження особливості ліяльності уряду під час пандемії COVID-19. виокремлення основних результатів впливу такої діяльності на національну економіку та розроблення критеріїв для оцінки ефективності втручання уряду в економіку в період пандемії.

Ключові слова: COVID Gov Inc, бізнес-модель, великі фармацевтичні компанії, фіскальна політика, грошово-кредитна політика.

Амалян Н.Д. Политика государства в разгар пандемии COVID-19. В статье представлена попытка оценить экономическую эффективность государственных мер по предотвращению, ограничению распространения и преодолению последствий пандемии COVID-19, в результате которой уже четверть миллиарда человек были инфицированы и более 5 млн. умерли. Меры по борьбе с эпидемией, предпринятые почти всеми государствами, привели к потере 6,7% мирового ВВП в 2020 г. и глобальному бюджетному дефициту в размере 13,9% совокупного ВВП. Сотни миллиардов СПЗ, долларов, иен и евро, дополнительно эмитированных МВФ и центральными банками одновременно со снижением ставок и льготным рефинансированием, привели к росту широкой денежной массы до 145,1% ВВП в 2020 г. Все это не могло не сказаться на экономике всех стран. Для оценки последствий такой деятельности в статье предлагается интерпретировать действия государств как операции фиктивного коммерческого предприятия (COVID Gov Inc) с последующей оценкой бизнес-модели такой компании.

Ключевые слова: COVID Gov Inc, бизнес-модель, крупные фармацевтические компании, фискальная политика, денежно-кредитная политика.

The ongoing pandemic of coronavirus disease 2019 is an event of a global scale. The disease itself and its consequences have been already researched from different viewpoints: medical, economic, financial, political, cultural, social, environmental and others. Scientists analyze symptoms, ways of transmission, prevention, treatment of disease, vaccines and variants of virus; supply and demand shocks, influence of pandemic on different sectors, unemployment and international trade, national economic recovery programs; social, financial, political and psychological consequences of the pandemic; vaccine apartheid. On a par philosophical aspect came under scrutiny in search for an answer to question: what is better - to favor utmost individualism, reflected in movements against social distancing rules and the mandatory face masks, or to manage the pandemic as a military campaign against national security threat [1]. All these and other aspects have been already discussed on different levels - personal, local, state and global.

One of the less discussed aspects is an estimation of the efficiency of activities of the national governments during the pandemic. In order to fill the gaps this paper presents a try to feature a government as a business operator, that has its distinctive business model. Thus, the paper is an outline of how this particular business entity seeks to make money with its product and customer base; more specifically, we are going to analyze economic viability of the government during pandemic, focusing on the following questions:

- What product this business entity is going to sell;
- How it intends to market that product;
- What kind of expenses it will face;
- How it expects to turn a profit.

Literature review. The role of the government at the market economy is the subject of numerous studies. The authors pay attention to the detection of the government's role, incentives and behavior in a modern market economy, as well as how government actions shape the economy's performance. In academic literature there are no objections to the statements that the government has become an active and influential participant in modern market economies, increasing in size, expanding its scope in the spheres of national defense, law and order enforcing and ensuring the proper functioning of the market: regulating financial markets, managing the monetary system, maintaining adequate market competition, protecting consumers, negotiating trade and investment agreements, establishing and enforcing technical standards for products and regulating international economic relations [2].

Much less are investigated the theoretical aspects of the the government interference in healthcare and economic activities during pandemic. The most discussed topic in scientific articles is the program of a specific government for stimulation of specific economies [3; 4; 5; 6; 7].

Focusing on the theoretical aspects of the role of the government in a time of pandemic, Joseph Stiglitz explains why pure market forces are inadequate to restore economic growth. Classifying pandemic as externality, professor Stiglitz points out the absence of the market for risk and addresses the problems of socialization of risks and the moral hazard. In conclusion he accentuates the need for new methodologies to study government and economics and importance of such research specifically in the case of the COVID recovery [8].

The need for new profound research was also stressed by another Nobel laureates Eric S. Maskin [2] as well as by Andrew Atkeson. In his paper consultant to the Federal Reserve Bank of Minneapolis argued for the necessity of an analysis of the economic consequences of the mitigation steps and of the quantitative tradeoffs between public health and the economy [9].

The aim of this empirical research is to trace the peculiarities of the government's activities during COVID-19 pandemic, to list main consequential results of such activities and suggest approaches to estimation of the government's interference efficiency. In order to do this, we are going to analyze an imaginary business model of a fictitious company 'COVID Gov Inc'

The first point to address is "Problem and solution".

The World Health Organization on January, 30, 2020 declared the coronavirus a "Public Health Emergency of International Concern" – a formal declaration that an ongoing outbreak or epidemic is a serious risk to multiple countries. On March 11, 2020 WHO's Director-General announced that COVID-19 can be characterized as a pandemic.

Declaration of pandemic has motivated majority of governments to discharge their main function – establishing and enforcing the "rules of the economic game".

Key activities and key partners are determined by each COVID Gov Inc pursuant to the policy, chosen in that particular country, main types being:

a) commitment to social distancing and/or lockdowns – in majority of states;

b) policy, aimed at attaining herd immunity (as in Sweden), and

c) fixation on vaccine development (as in the USA).

All COVID Gov Incs – champions of the first type of policy – had mandated a number of containment measures: mandatory isolation of patients and infectious agents, stay-at-home orders, suspension/ban of public events and gatherings, curfews, cordons sanitaria's, border closures or complete lockdowns. By April 2020, about half of the world's population was under some form of lockdown, with more than 3,9 billion people in more than 90 countries or territories having been asked or ordered to stay at home by their governments [10].

While institution and enforcement of sanitary norms and social distancing policies was simply an administrative procedure, the need to comply with the requirements of the sanitary norms has issued a challenge for all national COVID Gov Incs – in some cases they had to meddle into business activity of the private companies - due to a dramatic shortage of disposable face masks, diagnostic tests and personal protective equipment (PPE) across the world at the very beginning of pandemic. In this context numerous COVID Gov Incs either endeavored to forbid export of masks, PPE and testing kits or to stimulate import or in other forms became engaged in trade wars. Taiwanese COVID Gov Inc, for example, in January 2020 introduced one-month export ban on surgical masks [5]. According to the IMF there have been almost 120 new export restrictions in 2020 [11], giving grounds to the statements of the 'end of globalization'.

Cases of direct interference of COVID Gov Inc in the economy were very uncommon: only few countries (Spain and Italy among them) nationalized private hospitals and embarked in supervising the operations of face mask factories [12].

Other forms of business activities of 'COVID Gov Inc.' in this sphere were maintenance of smooth operation of transportation infrastructure and logistics, as well as tariff reduction (or removal) and expedition of certification procedures to allow masks produced by new companies or national test systems to be traded as soon as possible.

The second type of policy was the least burdensome for those COVID Gov Incs that were operating that policy: their main concern was effective functioning of hospitals for patients with coronavirus. Beside routine needs and requirements of the hospitals each COVID Gov Inc had to provide care facilities with oxygen and artificial respirating units and medical staff – with PPE. Both tasks turned up to be extremely complex in the context of disruption of supply chains, deficit of medical equipment and protectionism in countries – traditional vendors of such goods.

Fixation on vaccine development devolved into COVID Gov Incs paying billions of dollars (euro, pounds) to certain big pharma companies. Estimates of direct public spending on the development and manufacturing of COVID-19 vaccines vary from \$18 billion and \$39,5 billion (Frank R. et al, 2021).

Contrary to the masks and PPE production, engagement of national governments did not come into service out of nowhere: many national governments always have been investing extensively in every aspect of the basic science, preclinical development, and clinical trials for different vaccines; and in the era of COVID-19 the government's role became even more central than usual. The US government, in particular, essentially removed the bulk of traditional industry risks related to vaccine development, including:

 risk of scientific failures (spending more than \$900 million supporting non-clinical studies and research to accelerate movement of vaccines into clinical trials at companies such as Johnson and Johnson, Sanofi, Merck, and Moderna);

- risk of failures to demonstrate safety and efficacy (Johnson and Johnson, Moderna, Sanofi, and AstraZeneca together received more than \$2,7 billion from the US federal government to cover expenses related to human trials);

- manufacturing risks: overall, the government's manufacturing expenditures included contracts for more than \$100 million to develop manufacturing capacity plus nearly \$3 billion spent on contract manufacturers; Moderna, for example, has received nearly \$1 billion from the federal BARDA to fund its vaccine development; government funding for Pfizer is estimated to be \$1,95 billion. In total the US has pledged \$5 billion to pharma giants for a COVID-19 vaccine [14]. The government also reduced manufacturing risk by spending more than a billion dollars on supplies and equipment.

- market risks related to low demand – by underwriting capacity investments – through advance purchase commitments. Johnson and Johnson had a \$1 billion contract for 100 million doses of their vaccine. Moderna had contracts totaling \$4,95 billion to produce 300 million doses. Pfizer had advance purchase contracts totaling \$5,97 billion for 300 million doses [13].

Discussing relations with key partners one could suppose that COVID Gov Inc is protecting all the population and providing assistance to the most vulnerable industries. But analyzing particular programs it is obvious that support was rendered exceedingly selectively. Alongside with allocation of billions of dollars to several pharma companies, majority of national COVID Gov Incs have left off financial support of clinicians, hospitals and pharmaceutical companies dealing with non-Covid patients (affected by HIV/AIDS, malaria, tuberculosis etc.). As a result, such patients many a time were deprived of safe and timely access to their screening and medications, being unable to timely detect a disease and/or avoid disease progression or worsening of symptoms due to potential delays or interruptions in treatment.

In France, in particular, during the lockdown the National Cancer Institute suspended all cancer screenings in an effort to fight against the pandemic. The effects of delayed screening or lack of follow-up care will manifest themselves in 4 or 5 years, being transformed into 2 to 5% increase in mortality over the next 5 years, according to the estimation of Aurélie Bardet, lead researcher of the Europe's leading cancer centre [15].

Similar situation could be watched in many sectors of health care. All over the world the decrease in sales of medicines for chronic diseases, limited funding for innovation, termination or postponement of the clinical trials for various diseases and/or drugs, approval delays (for non-COVID-related products) were registered. Treatment of many chronic diseases was put on hold. In Ukraine, for example, during the lockdown only urgent measures of hospitalization were allowed; scheduled operations could be performed only if in a result of their rescheduling there was a significant risk to life [16].

Numerous data attest to the fact that all over the world key activities of COVID Gov Incs have caused serious redistribution of the market of medical services, some 'big farma' companies becoming 'more equal' than others. The same we can observe in all the countries and in all the industries, where different legal entities from the same industry can receive (or not receive) exclusive treatment. In the United Kingdom, in particular, only 434 test providers were authorized by the government to perform tests for foreigners coming to the UK from a red list country with price for their services varying from £10 (covid@testingservices.online) to £399 (THE MAYFAIR GP). For these foreigners to stay isolated a limited number of hotels were designated, charging the stable price £2,285 for every adult [17]. Penalties for breaking quarantine rules (up to $\pounds 10,000$) did not encourage choice of other dwelling places.

For employees of the industries hit by pandemic, every national COVID Gov Inc has proposed special relief programs. For a 3-month period, the Danish government covered 75% of the salaries of employees paid on a monthly basis who would otherwise have been fired, with companies paying the remaining amount. For the same period, the UK government provided grants covering up to 80% of the salary of workers if companies kept them on their payroll. The Irish Government introduced a Pandemic Unemployment Payment of €350 per week, available to workers/self-employed who had lost their job / income as a result of the pandemic. In Hong Kong every citizen above 18 every citizen above 18 years of age received more than US\$1,000. US COVID Gov Inc pumps \$1 200 direct stimulus checks to taxpayers.

All the programs, meant to keep both businesses and workers afloat, at least in the short term were financed by national COVID Gov Incs.

US COVID Gov Inc for example, allocated funds for 4 programs [3]:

- Coronavirus Aid, Relief, and Economic Security Act (CARES Act) - \$2.2 trillion;

– US Paycheck Protection Program & Health Care Enhancement Act – \$483 billion;

Consolidated Appropriations Act of 2021 – \$2,3 trillion;
American Rescue Plan – \$1,844 trillion.

Total cost of US Covid relief packages is around \$6 trillion, amounting to about 26,6% of GDP. Value of comparable packages as a share of GDP as of May 2021 was in the EU 11,14%, in Japan – 56,09%, in Germany – 39,3%, in France – 23,28% [18]. As of July 2021, fiscal measures to fight the pandemic are estimated at \$16,5 trillion [19]. In average advanced economies spent about 20% of their GDP in response to COVID-19, while fiscal and monetary policy response in emerging market was estimated as 6% of their GDP, and in low-income countries – 2%.

Key resources in all countries beside tax relief is money (dollars, euro, pound, yen, hryvna), issued by central banks. US FRS, in particular, introduced several SPV (*Commercial Paper Funding Facility, Primary Dealer Credit Facility, Money Market Mutual Fund Liquidity Facility, Primary Market Corporate Credit Facility* etc.) to support the flow of credit to business entities. As a result monetary aggregate M2 grew up from \$15 512 billion (March, 2020) to \$20 956 billion (September, 2021), meaning that over the course of a year and a half money supply was increased by 35% [20].

In the United Kingdom monetary aggregate M4 increased from £2 404 billion in February 2020 to £2 889 in June 2021, that is to say almost twice. The ECB's pandemic emergency purchase programme included increase of asset purchase of private and public sector securities from the initial ϵ 750 billion for a new total of ϵ 1 850 billion – that is by more than 2,4 times [21]. In Ukraine the volume of cash in circulation increased by UAH 133.4 billion or by a third.

Value proposition: the USA has focused heavily on developing and deploying COVID-19 vaccines instead of applying preventive measures such as facemask and social distance mandates in the earlier days of pandemic. In 2020 US COVID Gov Inc launched Operation Warp Speed – a program to accelerate and deploy COVID-19 vaccines for free. It was initially funded with about \$10 billion from the CARES Act with additional funds allocated through BARDA; by October 2020 funding was increased to about \$18 billion.

Mainstream thinking lies in the affirmation that only vaccination will put an end to pandemic. To endorse this idea scientists have proposed their models of vaccine cost-effectiveness evaluation. To compare costs and benefits they use specific for each country data on 'value of a statistical life' (in the USA – $129\,000$ per year of quality life or more than \$9 million) and cost of a lost workday – calculated from the US GDP of \$21 trillion distributed among 330 million citizens, each averaging 261 workdays to represent an average of \$243,81 per person per day.

In the USA the average cost of hospital care for COVID-19 patients without insurance varies by age – from \$51 389 for patients between 21- and 40-years-old to \$78 569 for patients between 41 and 60 years old. In total inpatient COVID-19 hospitalizations could cost the U.S. healthcare system between \$9,6 billion and \$16,9 billion in 2020 [22].

Group of American scientists asserts that vaccines have a high probability of reducing healthcare costs compared to the baseline approach – doing nothing. They associate the latter with about \$34 billion in financial impact to the healthcare sectors based on direct medical costs in the first year alone (on the assumption of nearly 6,3 million hospital days and over 283 000 deaths plus additional \$32 billion in loss to the labor sector due to productivity losses). In their opinion vaccines reduces societal costs to only \$13 billion – more than a 60% reduction in spending. The presence of the vaccines offers several improved outcomes, such as 3,4 million fewer hospital days and nearly 154,000 fewer deaths. Moreover, there would be only a \$15 billion financial impact on the labor sector due to productivity losses among the non-immunized [23].

The United States successfully administered the first dose of the vaccine on December 14, 2020. Vaccination rates peaked in early April and sharply declined since, averaging 3 million shots per day in early April to less than 1 million shots in June.

Channels and Customer relationship. Analysis of the mechanism for how COVID Gov Inc communicates with and delivers value propositions to customer segments affords Dongho Kim and Myoung-Kil Youn grounds to make a conclusion that the United States' vaccine distribution push strategy was short of meeting the concept and scope of distribution [24], This conclusion is endorsed by statistics: the goal of the US COVID-19 vaccination campaign (to achieve herd immunity, e.g., vaccinate 70% adults in the USA by July 4, 2021) was not achieved: as of October 2021, only 56.8% American people were fully vaccinated with 56.7% being vaccinated at least one dose And 45% of unvaccinated Americans stated in July 2021 that they will definitely not get the vaccine, while another 35% said that they will probably not get the vaccines [25].

In Ukraine the national vaccination campaign began on 24 February 2021. However, although the pace of vaccination has started to pick-up since the beginning of June, Ukraine remains the country with the lowest vaccination coverage in Europe. As of the October, 2021, Ukraine has administered 13 683 903 doses of COVID vaccines so far. Assuming every person needs 2 doses, that's enough to vaccinate about 15.4% of the country's population [26].

Marketing. In order to ensure utilization of vaccines some national COVID Gov. Inc have launched publicity campaigns. In the USA on March 15, 2021 the Biden administration decided to spend \$1,5 billion on vaccine confidence/PR campaign. Ukrainian COVID Gov. Inc. had allocated UAH25 million for campaign.

While communicating with own population national COVID Gov. Incs used all channels: raising awareness by way of daily publishing data on the number of hospitalized patients and deaths; helping people perceive benefits of being vaccinated and launching promotion campaign for booster shots.

But the most interesting are the phases of delivering a Value proposition to people, which was subjected to a radical transformation. More and more COVID Gov. Incs have moved from handling the sense of alarm and fear of those striving to get vaccine shot to unwillingness of a large part of population to be vaccinated. With the time going on the changes in the modes of marketing became evident: if at first when demand greatly outnumbered supply, and COVID Gov Incs had to prioritize most vulnerable groups to be the first in line to receive a deficit shot, relatively soon 'COVID Gov Inc.' started to introduce enforcement measures and/or administrative threats or simply pay money to persons to be vaccinated: President Joe Biden called on state, territorial and local governments to provide a \$100 cash incentive to people who get vaccinated in July 2021; Harris County, Texas, already offers \$100 to each person who gets their first vaccine dose [27]. New Yorkers can get \$100 pre-paid debit card or free tickets or club memberships, or gifts cards for getting vaccinated against COVID-19. Local governments released incentives for vaccination in the form of different lottery and/or money prizes.

Collaterally with carrot policy COVID Gov. Inc pursues the stick policy:

- Germany ended for all free rapid Covid-19 tests, which have been taxpayer-funded since March 2021. Now tests (with price $\notin 12 - \notin 50$ for a rapid test and $\notin 44 - \notin 100$ for a PCR test) have to be paid for by unvaccinated people out of their own pocket. The same is taking place in France, where starting from October, 15, 2021, COVID tests are no longer free of charge.

- In the USA many insurance companies are waiving in 2021 all types of member cost-sharing (copays, deductibles, and coinsurance) for COVID-19 testing and treatment, thus raising the cost of remaining unvaccinated.

– Ukraine has introduced compulsory coronavirus vaccinations for some jobs including teachers and employees of state institutions and local governments. Unvaccinated persons have to be suspended from work without any payment.

Customer segments. Each COVID Gov Inc has prioritized vaccination of its own population – some of them even at the expense of the default of obligations and immediate hazard of corresponding litigation costs and damage payments. In April 2021, for instance, the European Commission launched legal action against AstraZeneca for delaying the delivery of Vaxzevria while giving preferences to deliveries to UK over the EU order.

As of October, 2021 AstraZeneca, BioNTech, Johnson & Johnson, Moderna, Novavax and Pfizer are still refusing to participate in initiatives to boost global vaccine supply with the result that less than 1% of people in low-income countries are fully vaccinated, compared to 55% in rich countries [28].

In their own countries all COVID Gov Incs prioritize most vulnerable segments pf people: elderly and healthcare personnel are first to be vaccinated.

Revenue streams. Main source of income of any COVID Gov Inc is taxes. At present their administration is greatly influenced by social distancing policies (enforcing widespread restrictions on labor mobility) and shutdown of the production lines resulting in sharp cutbacks and sizeable output contraction with imminent repercussions on economic activity, and, ergo, on tax collection.

Formation of an economically unacceptable environment characterized by business bankruptcies, foreclosures/ evictions, and forbearance on debt afford grounds for scientists to enunciate a concept of stagpression: situation, when recession overlaps depression causing structural economic deconstruction [29]. In witness of this framing some data can be provided:

According to UN labour experts, COVID pandemic is expected to contribute to global unemployment of more than 200 million people in 2022. Compared to 2019, an additional 108 million workers worldwide are now categorized as "poor" or "extremely poor" – meaning that their earnings are less than \$3,20 per person, per day [30]. The hardest-hit sectors amid the pandemic are small businesses, the share of which in the USA is 99,9% of all businesses, collectively employing 47,3% of the nation's private workforce. In 2021 34% of small businesses were closed. Disaggregation of the economy by industry shows that particularly hard-hit by pandemic were travel and transportation, manufacturing food and clothing, leisure and hospitality.

Among the beneficiary branches were gig economy, pharma and IT sector. An analysis published by Oxfam America, found that 17 of the top 25 most profitable U.S. corporations, including Microsoft, Intel, Johnson & Johnson, Facebook, Pfizer and Visa, were expected to make almost \$85 billion more in 2020 in what it called "superprofits" than in previous years (Who, 2020). In fact, in 2020 Microsoft revenue increased by more than 17 billion, while Google revenue increased by \$21 billion; Amazon revenue for the 12 months ending June 30, 2021 was \$443,298B, a 37.76% increase YoY while the winner Zoom generated \$2.6 billion revenue in 2020, a 317 % increase YoY, according to the Annual reports of the companies.

When estimating macroeconomic effects of IT sector, it should be noted that: a) success of 'big tech' companies is based heavily on revolutionary technologies in days past funded by the U.S. government (such as Internet, GPS, search engine algorithms, touchscreen display etc.); b) the report presented by the Fair Tax Foundation points that Amazon, Facebook, Alphabet, Netflix, Apple and Microsoft, paid \$96bn less in tax between 2011 and 2020 than the notional taxation figures they cite in their annual financial reports. The 6 firms handed over \$149bn less to global tax authorities than would be expected if they had paid headline rates where they operated. Overall, they paid \$219bn in income tax over the decade, that is 3,6% of their total revenue of more than \$6tn [31].

Another aspect of 'corporate social responsibility' can be demonstrated from viewpoint of pricing policy, presented by the People's Vaccine Alliance. According to the research, analysis of production techniques for the leading mRNA type vaccines produced by Pfizer/BioNTech and Moderna which were developed only thanks to public funding to the tune of \$8,3 billion - suggest these vaccines could be made for as little as \$1,20 a dose. Yet COVAX, the scheme set up to help countries get access to COVID-19 vaccines, has been paying, on average, nearly 5 times more. Thus, the firms Pfizer/BioNTech and Moderna are charging governments \$41 billion above the estimated cost of production [32]. Owing to the unique contract that Pfizer negotiated with the US government, its revenues in the second quarter of 2021 has almost doubled compared to the same period of 2020: from \$9,86 billion to \$18,97 billion [32].

Activities of COVID Gov Inc can't be analyzed in full without mentioning problem of corruption: even before the pandemic, the UN Office of Drugs and Crime reported that between 10 and 25 % of the value of public contracts was lost to corruption. In time of pandemic the surge in urgent public needs has led governments to relax procurement processes and reduce oversight to facilitate expedited purchases. Thus, in many Latin American countries, speed and efficiency have been prioritized over transparency, thereby creating opportunities for bribery and corruption, cases of which have been detected in Argentina, Mexico Ecuador, Bolivia and other countries by researchers of Corporate Compliance Insights (Almonte, 2020). In Ukraine investigation is instituted against former health minister Maksym Stepanov amidst allegation of corruption while vaccine purchase.

All the abovementioned make chances of pumping up national budgets quite dreamy. As for autumn of 2021 the U.S. budget deficit hit \$,8 trillion (in pre-pandemic 2019 being \$985 billion). Eurozone governments estimate combined budget deficit in 2020 of nearly \in 1 trillion, or equivalent to about 9% of their annual GDP, while globally government debt reached an unprecedented level of close to 100 % of global GDP in 2020 and is projected to remain around that level in 2021 and 2022 [19].

Global economic growth fell to an annualized rate of around -3.2% in 2020, according to the July 2021 World Economic Outlook prepared by IMF. The US yearly GDP fell in 2020 by 3.5%. Major advanced economies, comprising 60% of global economic activity, are projected by US Congressional Service to operate below their potential output level through at least 2024 [34]. **Conclusion.** From the economic viewpoint activities of COVID Gov Inc can't be assessed as efficient or successful. Unprecedented interference in the economy (with governments setting themselves up, by definition, to pick winners and losers in what should be a free economy) has factored into biggest-ever devastation of all public purses. Chances of their restocking are minimized by pricing and fiscal shrewdness of 'big farm' and 'big tech' companies. Quantitative easing, causing overflow of monies, has already caused accelerating inflation, duly resulting in food and energy crises: since the start of COVID Gov Incs operations Food price index has gone up by more than 33% (from 90 to 120), while natural gas prices have doubled or even tripled.

Apparently the ongoing discussion of the viability of 'European response' to the soaring prices should be held with consideration of the track record of the governments' management of COVID-19 pandemic response.

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