"Ante Portas – Security Studies" 2022, No 2(19) DOI: 10.33674/320231

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RETHINKING FISCAL POLICY – INDIRECT CONSEQUENCES OF THE SARS-COV-2 PANDEMIC. OVERVIEW THROUGHOUT CHANGES IN TAX SYSTEMS IN POLAND AND CHOSEN COUNTRIES

Abstract: This article contributes to the discussion on the changes taking place in the directions of fiscal policy and the implementation of tax policy. The SARS-*CoV-2* pandemic has created economic circumstances so unique that overcoming them using traditional instruments can be very long, and according to some researchers, even impossible. The new tax system would be more strongly based on values such as resilience, equity, diversity, care and inclusive politics and ensure greater redistribution towards poorer social classes to prevent them from falling into poverty. This phenomenon is accompanied by the intensification of work on the e.g. digital tax, the addressees of which are primarily global digital giants, which is in line with the described trend. An example of new thinking can be also the New Polish Deal programme. Although it has been strongly criticized by economists for numerous errors and chaotic implementation, it seems to be based on new values and assumptions more than before. Additional circumstances, i.e. Russia's aggression in Ukraine, high inflation or recession, seem to reinforce the changes taking place in tax systems on a global scale and their impact should be the subject of further research.

Keywords: Fiscal policy, tax systems, economic effects of SARS-CoV-2, fiscal pressure, digital tax, Polish New Deal, resilience, equity

Introduction

The pandemic turned out to be a factor that shook not only the global sense of security, the global economy and supply chains. It has also had a

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profound impact on the tax systems of individual national economies, which, while initially underestimated, will only grow over time. Additional circumstances that have already emerged during the period of easing restrictions related to SARS-CoV-2, i.e. the invasion of Ukraine by Russian troops in February 2022, the energy crisis in Europe as well as high inflation on a global scale and other symptoms of recession – will probably highlight even more the imperfections of the tax systems of individual countries, becoming, apart from the pandemic itself, catalysts for the upcoming changes.

Traditionally the general tendency in fiscal policy development was that, thanks to inner stabilizers, it depends on the political authorities to an even lesser degree. A new trend seems to be shifting the emphasis from fiscal goals to selected non-fiscal goals. This was the case during the pandemic, when more important than regular tax revenues to the budget was, e.g. to maintain a high level of employment or protect those who lost their jobs or their business. In the phase of recovering from the pandemic and its economic consequences, this trend seems to continue. There is a growing discussion on the extent to which the post-pandemic reality is an opportunity for fundamental changes in tax systems, introducing new goals and values to them, not only to ensure but in fact to enable, overcoming the economic effects of the pandemic and to ensure further sustainable socioeconomic development.

Brief look at the consequences of the pandemic on the tax system in different countries

A look at the scale and depth of the impact of the SARS-CoV-2 pandemic on the functioning of the tax systems of selected countries will allow us to understand whether the changes that have occurred in them during the pandemic are temporary or will become the nucleus of a completely new fiscal policy in these countries.

One of the more interesting questions in this matter was to check what was the impact of pandemic restrictions on the tax systems of the Nordic countries: Denmark, Finland, Norway and Sweden – traditionally referred to as welfare states. These countries offer, among others free medical care or higher education, which means a significant tax burden on citizens, whose share in GDP before the pandemic oscillated around 40-45%. Figure 1. presents these relationships in comparison with the United States.

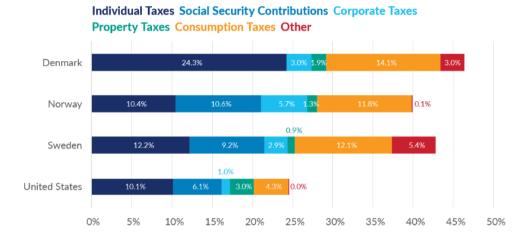


Figure 1. Tax-to-GDP Ratio by Tax Revenue Source, 2019.

Note: U.S. payroll taxes are defined as social security contributions in this chart. Source: OECD, "Revenue Statistics - OECD countries: Comparative tables."

Source: OECD, *Revenue Statistics – OECD countries: Comparative tables*, <https://stats.oecd.org/index.aspx?DataSetCode=REV> (12.12.2022).

The level of unemployment in the welfare Nordic countries in the first period of the pandemic between February and September 2020, compared to the corresponding period of the crisis in 2008-2009, is presented in Figure 2. A glance at the results shows that the impact of the pandemic almost immediately had an impact on unemployment levels as severe as it did during the 2008 crisis, and even more severe for Sweden and Norway. All of this, combined with a sharp decline in GDP growth, could not be neglected for tax revenues in these countries.

Shortly after the outbreak of the pandemic, a group of Irish researchers prepared a simulation of how tax revenues from indirect taxes would change as a result of changes in consumption induced by SARS-CoV-2. This view is interesting because the model used to estimate the indirect tax microsimulation shows the data weekly, as shown in Figure 3. This approach is important because most European countries very quickly launched various types of protection packages, shields and social transfers, especially those aimed at maintaining a high level of employment. They provided the so-called 'cushioning effect' not only for the beneficiaries themselves but also for the tax revenues they generated during this period.

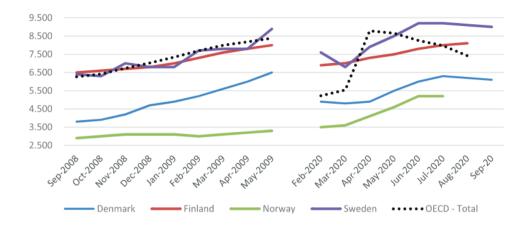
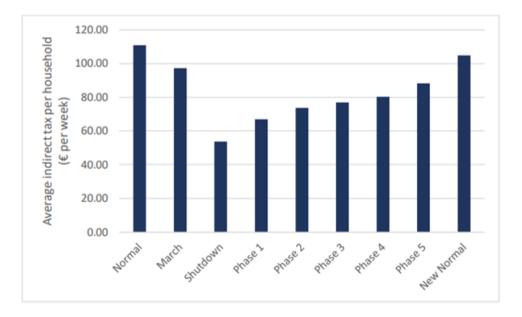


Figure 2. Rise in unemployment great recession versus SARS-COV-2.

Source: OECD, *Harmonised Unemployment rates*, <https://data.oecd.org/unemp/ harmonised-unemployment-rate-hur.htm> (30.11.2022).

Figure 3. Average weekly indirect tax paid per household in each phase of the pandemic (ϵ *per week)*



Source: C. Coffey et al., *The effect of the SARS-COV-2 pandemic on consumption and indirect tax in Ireland*, "Budget Perspective" No. 3/2021.

The presented data show that the average amount of indirect taxes per household in the pre-pandemic period was $\notin 111$ /week. During the lockdown period, according to estimates, it should drop to $\notin 54$, gradually increasing after reopening to the 'new normal', which would be $\notin 105$.²

However, when you compare the total tax revenues of European countries in 2019 and 2020 – these curves are relatively flat, which means that the difference in total tax revenues of individual countries, after the outbreak of the pandemic, does not seem so significant. There has been a decline in most countries, but not very much. The exceptions are countries such as Germany, France or the United Kingdom, where the decline was more noticeable. Meanwhile, countries such as Denmark, Lithuania, the Netherlands, Poland and Sweden, improved their result compared to 2019. The more that almost the entire first quarter of 2020 was a normal period, before the outbreak of the pandemic, which also affected and flattened the annual results. Details are presented in Table 1.

Looking at the data in Table 1., it is also worth noting that the vast majority of countries recorded a dynamic increase in tax revenues in 2016-2018. For many of them, 2019 turned out to be a kind of correction, and the pandemic year 2020, that followed, continued this trend. It can therefore be concluded that the pandemic did not so much reduce tax revenues as prevented their further growth, sometimes very dynamic.

When analyzing the impact of the SARS-CoV-2 pandemic on tax systems in different countries, it is worth looking at the table that presents a forecast of an important component – the financial condition of taxpayers, i.e. the level of savings of households in the European countries, as a percentage of their disposable income. The advantage of this forecast over the actual state in this case is that it does not take into account the influence of other important factors, like the new outbreak of the Russian-Ukrainian conflict, which took place only after the pandemic started. Their presumably significant influence on the matter analyzed in this article should be the subject of separate, more detailed studies.

² C. Coffey et al., *op. cit.*, p. 14.

* 2016	* 2017	* 2018	* 2019	* 2020
165.12	174.34	192.16	189.42	181.15
206.02	219.99	238.35	227.68	221.43
66.79	75.26	87.09	87.83	84.35
142.47	151.06	157.66	161.98	165.72
8.06	8.74	10.07	10.41	10.55
105.18	109.33	116.79	113.55	113.42
1 121.01	1 192.96	1 279.60	1 224.76	1 192.11
1 308.62	1 389.68	1 527.48	1 501.42	1 471.10
74.97	78.46	84.84	81.06	73.28
50.21	54.11	59.07	59.63	55.31
70.33	75.59	86.02	87.41	85.85
792.15	820.47	872.38	850.32	807.63
8.64	9.48	10.71	10.64	10.67
12.75	14.13	16.23	16.54	17.42
22.04	23.98	27.97	27.69	27.97
300.83	322.02	354.41	357.35	361.74
143.39	154.51	171.99	161.85	140.00
157.67	179.63	206.45	209.68	214.43
70.22	75.35	83.92	82.63	80.17
29.72	32.42	36.06	36.34	36.26
16.72	17.98	20.17	20.14	19.70
413.83	443.61	492.23	483.10	468.14
227.51	238.60	243.21	228.74	230.49
873.02	875.68	939.47	925.99	887.77
	165.12 206.02 66.79 142.47 8.06 105.18 105.18 1121.01 1308.62 74.97 50.21 70.33 792.15 8.64 12.75 300.83 143.39 157.67 70.22 29.72 16.72 413.83 227.51	165.12 174.34 206.02 219.99 66.79 75.26 142.47 151.06 8.06 8.74 105.18 109.33 1121.01 1192.96 1308.62 1389.68 74.97 78.46 50.21 54.11 70.33 75.59 702.15 820.47 8.64 9.48 12.75 14.13 22.04 23.98 300.83 322.02 143.39 154.51 157.67 179.63 70.22 75.35 29.72 32.42 16.72 17.98 413.83 443.61 227.51 238.60	165.12 174.34 192.16 206.02 219.99 238.35 66.79 75.26 87.09 142.47 151.06 157.66 8.06 8.74 10.07 105.18 109.33 116.79 1121.01 1192.96 1279.60 1308.62 1389.68 1527.48 74.97 78.46 84.84 50.21 54.11 59.07 70.33 75.59 86.02 792.15 820.47 872.38 792.15 820.47 872.38 792.15 820.47 872.38 792.15 820.47 872.38 792.15 820.47 872.38 792.15 820.47 872.38 792.15 820.47 872.38 792.15 820.47 872.38 792.15 820.47 872.38 792.15 83.92 300.83 300.83 322.02 354.41 143.39 154.51 <td>165.12 174.34 192.16 189.42 206.02 219.99 238.35 227.68 66.79 75.26 87.09 87.83 142.47 151.06 157.66 161.98 8.06 8.74 10.07 10.41 105.18 109.33 116.79 113.55 1121.01 1192.96 1279.60 1224.76 1308.62 1389.68 1527.48 1501.42 74.97 78.46 84.84 81.06 50.21 54.11 59.07 59.63 70.33 75.59 86.02 87.41 792.15 820.47 872.38 850.32 8.64 9.48 10.71 10.64 12.75 14.13 16.23 16.54 22.04 23.98 27.97 27.69 300.83 322.02 354.41 357.35 143.39 154.51 171.99 161.85 157.67 179.63 206.45 209.68</td>	165.12 174.34 192.16 189.42 206.02 219.99 238.35 227.68 66.79 75.26 87.09 87.83 142.47 151.06 157.66 161.98 8.06 8.74 10.07 10.41 105.18 109.33 116.79 113.55 1121.01 1192.96 1279.60 1224.76 1308.62 1389.68 1527.48 1501.42 74.97 78.46 84.84 81.06 50.21 54.11 59.07 59.63 70.33 75.59 86.02 87.41 792.15 820.47 872.38 850.32 8.64 9.48 10.71 10.64 12.75 14.13 16.23 16.54 22.04 23.98 27.97 27.69 300.83 322.02 354.41 357.35 143.39 154.51 171.99 161.85 157.67 179.63 206.45 209.68

Table 1. Tax revenue Total, Million US dollars, 2016-2020.

Source: OECD, *Revenue Statistics: Comparative tables*, <https://data.oecd.org/tax/tax-revenue.htm> (30.11.2022).

Location •	v 2019	* 2020	* 2021	× 2022	• 2023
Austria	8.51	14.45	11.36	7.34	7.27
Belgium	6.13	15.49	11.18	5.63	4.29
Bulgaria	2.03	7.11	2.90	1.05	0.95
Czech Republic	8.54	16.88	11.39	4.15	2.91
Denmark	3.56	5.76	5.68	3.83	3.71
Estonia	8.74	11.87	10.20	7.22	5.77
Finland	0.55	4.76	3.17	1.68	1.23
Germany	11.06	16.29	14.97	10.00	9.25
Hungary	9.21	10.53	10.09	8.88	9.61
Ireland	5.33	21.59	15.35	6.46	5.09
Italy	2.49	10.32	4.73	0.97	-0.12
Latvia	0.07	9.08	12.85	8.20	4.95
Lithuania	-0.16	9.00	6.18	4.50	2.94
Luxembourg	7.88	18.11	19.92	17.28	14.04
Netherlands	11.36	17.79	15.35	12.57	12.47
Norway	7.61	14.53	13.40	8.17	7.68
Poland	0.70	6.85	4.29	-0.90	-0.65
Slovak Republic	4.13	5.14	5.17	3.18	3.17
Slovenia	6.48	16.25	12.35	7.31	6.17
Spain	4.21	10.81	6.90	4.84	4.50
Sweden	15.56	17.13	14.92	13.80	13.42

Table 2. Household savings forecast Net, % of household disposable income, 2019-2023.

Source: *OECD Economic Outlook No. 106 (Edition 2019/2)*, <a href="https://data.oecd.org/https://data.oecd.org

The main conclusion from the analysis of Table 2. is that the outbreak of the pandemic mobilized the inhabitants of most countries to significantly increase their savings in 2020 so that the surplus would then decrease in the next three years to levels much lower than in 2019. The table shows that citizens of many countries tried to cope with the economic challenges of the pandemic on their own, without expecting excessive help from the state.

At least one more country and changes in its fiscal policy in connection with the SARS-CoV-2 pandemic aroused the curiosity of researchers. The country where the pandemic began in 2019 – China. Figure 4. shows the level of tax revenues in China as a percentage of GDP over the last decade. A visible decrease in inflows can be seen, as well as a greater amplitude of fluctuations in inflows starting from 2019. In Q1 2020 alone, China's GDP fell by 6.8% YoY, imports fell by 16.1% YoY and exports by 6.4% YoY³.

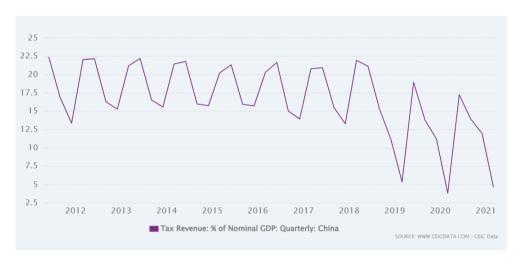


Figure 4. China's Tax Revenue: % of GDP, 2012-2021.

Source: CEIC Data, https://www.ceicdata.com/en/indicator/china/tax-revenue--of-gdp>, (21.11.2022).

To sum up, the pandemic has hit the tax systems of countries on a global scale, forcing them to take active action and non-standard steps, as well as providing new arguments for discussion on changes in the approach to fiscal policy in general.

Responses to a pandemic – evidence from some countries

As already mentioned, many countries relatively quickly proposed a number of tax solutions to mitigate the effects of the pandemic, especially for

³ National Bureau of Statistics of China, GDP, Export & Import's annual growth rate. 58

entrepreneurs. The priority was usually their survival and maintaining a high level of employment.

Let's go back to the welfare states. The activities of Sweden and Finland focused on facilitating VAT, i.e. the possibility of later payment or loan and facilitating the payment of this tax. Finland additionally waived the charging of penalties and interest for late VAT payments. In contrast, no visible tax changes have been observed in Norway. In turn, a number of interesting solutions, some for the first time, were introduced by Denmark. In addition to the delay in VAT payments, there was targeted support for large enterprises and selected industries; increasing liquidity in the banking sector, the state taking over the sick leave fee for the first 30 days (instead of the employer) or taking over fixed costs (including rent or interest payments) for selected companies that have been particularly affected by pandemic restrictions.⁴ Taking over the sickness payment obligation was particularly important at the beginning of the pandemic, because of the numerous SARS-CoV-2 cases of employees and their family members, which required frequent self-isolation of all household members.

The Irish authorities have decided to mitigate the income shock by supporting households whose members have lost their jobs due to the pandemic restrictions and by providing subsidies to employers for each eligible worker. Two instruments have been developed for this purpose:

- Pandemic Unemployment Payment (PUP) a social security benefit for both employees and self-employed who lost their employment due to SARS-CoV-2⁵;
- 2. Temporary Wage Subsidy Scheme (TWSS) a temporary subsidy scheme that allows employers to get a maximum of \notin 410 per employee. However, this subsidy was based on the employee's net salary, not gross⁶.

The United Kingdom has taken extensive measures in the face of the pandemic shock in the field of fiscal policy. Their scale has reached dimensions not recorded since World War II. It is worth mentioning that the UK's financial policy was not particularly stable before the pandemic. The net debt of the public sector in this country increased from below 40% of GDP on the day before the crisis in 2008 to 80% of GDP in 2019, on the day before the outbreak of the pandemic. As a result of the response to SARS-CoV-2, this debt

⁴ B. Greve et al., *Nordic welfare states – still standing or changed by the SARS-COV-2 crisis?*, "Social Policy & Administration", 2021, Vol. 55, No. 2, pp. 295-311.

⁵ R. Hick, M. P. Murphy, Common shock, different paths? Comparing social policy responses to SARS-COV-2 in the UK and Ireland, "Social Policy & Administration", 2021, Vol. 55, No. 2, pp. 312-325.

⁶ S. Byrne et al., *The Initial Labour Market Impact of SARS-COV-2*, "Economic Letter", Vol. 2020, No. 4, pp. 4-9.

exceeded the 90% barrier in 2020^7 . Back to fiscal policy, however. The purpose of the support was not to transfer directly to households, as in the case e.g. of the United States, but to keep employees' relations with their organizations. By July 2020 alone, income protection obligations for employed and self-employed people, business grants and loans and large-scale government guarantees totalled £ 290 billion. The breakdown of this amount and the level of support for individual activities are presented in Figure 5.

As can be seen, the largest share of this amount, as much as 21% and £ 58.9 billion, was accounted for by public service spending. In second place were programs aimed at maintaining employment or at least postponing reductions – 20% and 57.7 billion pounds. Launched in March 2020, the package offered government funding for 80% of an employee's monthly salary, up to a maximum of £ 2,500. Employers were also encouraged to supplement the remaining 20%, but this was not a requirement. The program turned out to be very effective, although its burden on public spending was considerable. It covered 9.6 million employees and 2.7 million self-employed. Nevertheless, still 1.4 million people applied for unemployment benefits during this period⁸.

The third largest component was VAT and income tax deferrals (£ 50 billion, 17%) and business loans (£ 45.8 billion, 16%), which covered over a million businesses. At the same time, support was offered to the Bank of England in the purchase of short-term, unsecured debt of large companies, amounting to over 18 billion pounds⁹.

Other activities and forms of support did not exceed 10%, including direct support for households amounting to \pounds 9.5 billion, i.e. 3% of the total amount of support.

Tax preferences have also been introduced in Poland. The duration of the reliefs varied. The first category of reliefs expired at the end of May 2020, the next one will expire at the end of 2022, and the last one will only apply until the end of 2023. In the first category, it is worth mentioning: the exemption from tax on income from buildings by owners of commercial real estate value of at least PLN 10 million; the possibility of making a one-time depreciation write-off on fixed assets used for the production of goods related to counteracting SARS-CoV-2, or the possibility of deducting donations for SARS-CoV-2-related purposes to selected institutions or NGOs in the amount of 150 per cent or even 200 per cent donation amount. The second category included relief for bad debts, increased limits of PIT exemptions for benefits,

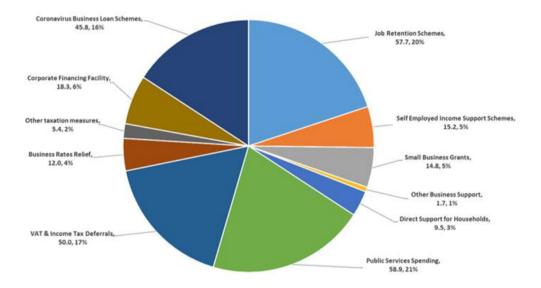
⁷ D. Heald, R. Hodges, *The accounting, budgeting and fiscal impact of SARS-COV-2 on the United Kingdom*, "Journal of Public Budgeting, Accounting & Financial Management", Vol. 32 No. 5, 2020, pp. 785-795.

⁸ Ibidem

⁹ Office for Budget Responsibility (OBR), *Coronavirus analysis*, https://obr.uk/coronavirus-analysis/, (30.11.2022).

and the third – increased limits of exemptions for selected benefits in connection with the financing of social activities¹⁰. It can be said that the main axis of support, in this case, was focused on counteracting and fighting SARS-CoV-2, which is why this type of activity could be settled on preferential terms in the first period of the relief.

Figure 5. UK fiscal response to SARS-CoV-2, 2019-2020 as £ billion and % of total, at 14 July 2020.



Source: D. Heald, R. Hodges, op. cit., p. 789.

When analyzing various approaches, it is worth paying attention to Italy's anti-shock fiscal policy, implemented in the first phase of the pandemic. Three shocks required addressing: two supply shocks (decreases in labour and productivity) and one demand shock, which was a discounting factor. A detailed summary of the fiscal steps taken and their financial dimension is presented in Table 3. The largest share in the package had transferred to households and small businesses, considered critical for the Italian economy (\notin 38.5 billion). The vast majority of this amount supported actually households, not businesses. It is worth noting that this pool also allocated \notin 5 billion to support local governments, whose fiscal revenues also collapsed during the pandemic. The second step was to support lending to small and medium-sized enterprises (SMEs) to reduce the

¹⁰ T. Rolewicz, *Zniesienie stanu epidemii a zmiany w podatkach*, https://www.ey.com/pl_pl/tax/zniesienie-stanu-epidemii-zmiany-w-podatkach, (30.11.2022).

cost or increase the quantity of bank loans. This sector was in a worse shape even before the pandemic, which significantly exacerbated the situation. Another action was the steps aimed at reducing the fixed production costs of companies (\notin 2.4 billion), including i.a. 60% tax relief for companies whose income does not exceed \notin 5 billion a year, and whose income fell by more than 50% in the period March-May 2020 compared to the same period in 2019. In turn, reductions in direct and indirect taxes amounted to \notin 8.2 billion, including a reduction of VAT on medical equipment to prevent the spread of the virus from 22% to 0% and a travel voucher of \notin 500 for each Italian family (to be used in Italy). And finally, the last step – an increase of \notin 12 billion in government spending, with more than \notin 8 billion in the health sector¹¹.

Summary of Fiscal Policies (Relaunch Decree)				
Fiscal Measure	Amount (in Billion Euros)			
Transfers to firms and households	38.5			
Fiscal transfer to businesses	6.2			
Employment subsidies	26			
Grants to local governments	5.3			
Firms' cost of capital reduction (guarantees)	9.5			
Firms' production cost reduction	2.4			
Direct and indirect tax reductions	8.2			
IRAP tax reduction	4			
Tax credit for the tourism sector	1.6			
Tax reliefs for selected sectors	0.45			
Further indirect tax cuts	2.15			
Increase in government spending	12			
Health spending	8.2			
Other expenditures	3.8			
Other minor tax and spending interventions	4.65			
Total	75.25			

Table 3. Summary of fiscal policies in Italy in billion euros.

Source: M. D. Pietro, L. Marattin, R. Minetti, op. cit.

¹¹ M. D. Pietro, L. Marattin, R. Minetti, *Fiscal policies amid a pandemic: the response of Italy to the SARS-CoV-2 crisis*, "National Tax Journal", September 2020. **62**

We can ask the question of whether the actions of the Italian government were: adequate, optimal in relation to the situation and, above all, effective. In this case, economics researchers attempted a simulation based on 4 scenarios. It is worth quoting the results of these studies, because they illustrate the limitations of fiscal policy and that in practice it very often does not achieve 100% effectiveness.

So, 4 scenarios were created and analyzed for the impact of SARS-CoV-2:

- 1. Lack of any fiscal stimulus in the situation of a pandemic outbreak;
- 2. Fiscal stimulus implemented by the Italian government;
- 3. Alternative fiscal plan change in the proportions of the package in scenario 2 in favour of increasing public spending to reducing taxes;
- 4. Alternative fiscal plan assuming the transfer of funds from households to companies with the remaining parameters of the package unchanged in scenario no. 2.

The following issues were checked: To what extent did scenario 2 ease the recession compared to scenario 1? Scenarios 3 and 4, on the other hand, examine to what extent alternative fiscal plans could have better mitigated the fall in GDP compared to scenario 2^{12} .

The results of the scenario study indicate that scenario 2 (actually taken by the government) allowed minimizing the fall in GDP by 25%, in the period of Q2/2020-Q2/2021. At the same time, better results could have been achieved by focusing the package more on public spending than tax cuts (scenario 3), but in this case, it would be resisted by businesses as the Italian economy had a high share of government spending and a high level of taxes even before the pandemic. The analysis also confirmed that a greater strengthening of tax reductions in enterprises at the expense of household support would also have brought better results than those achieved in the implementation of scenario 2. However, the implementation of scenario 4 would have had a negative impact on the income redistribution policy in Italian society, where the level of inequality has been increasing for the last two decades¹³. The example of this study clearly shows that the effectiveness of fiscal policy has never been and will not be the only determinant of its implementation. There are social costs. income redistribution policies, business expectations and much more that governments struggling with recession must also take into account. It is worth bearing this in mind when analyzing or evaluating the selected fiscal policies.

The summary of the fiscal response of individual countries to the pandemic will be completed by the analysis of China, which, as it was emphasized earlier, is of particular interest due to its global impact.

¹² Ibidem.

¹³ Ibidem.

China launched VAT reform even before the pandemic. The simulations showed that lowering the VAT tax is a necessary step to reduce the operating costs of enterprises, which will thus be better able to face challenges and develop. An additional effect was the stimulation of demand. Simulations showed that total GDP increased by 0.21% and indicators such as consumption, exports, total investment volume and production value increased significantly. At the same time, however, due to reduced VAT revenues, the local fiscal pressure increased by nearly 11% from 0.34 to 0.38. In fact, the outbreak of the pandemic has significantly revised these figures. Especially in the case of GDP, which not only did not increase but fell by nearly 7%. Other indicators fared much worse as well. And the local fiscal pressure instead of 0.38 amounted to 0.43, which meant its further increase by over 14%. The gap between revenues and expenditures of local governments in this country is already close to half of local government revenues, which poses a serious threat to their stability¹⁴.

Analyzes indicate that the deep VAT reform in China will continue, leading to dynamic reductions, in order to stimulate supply. However, this should take into account various types of challenges and cyclical contradictions in the Chinese economy. It is also extremely important to reform the financial and tax management system in such a way as to balance the disproportions between the central and local government finances. Establishing a fair and transparent relationship between central and local governments will help reduce local fiscal pressures and stabilize finances.

Case Study #1 Digital Tax in Poland

The SARS-CoV-2 pandemic has triggered steps to reduce taxes in many countries. However, protective measures for entrepreneurs and employees affected by its effects were a significant burden for the state budget. Therefore, even during the pandemic, there were examples of reverse actions aimed at increasing the tax burden, e.g. by introducing new forms of taxation. An example here may be the introduction of a digital tax in Poland.

The need to set a digital tax was discussed in Poland even before the pandemic. Meanwhile, at the end of April 2020, a government bill on this matter was submitted to the Polish Parliament. It can be assumed that SARS-CoV-2 turned out to be its catalyst. The tax focused on VOD services and was to amount to 1.5% of the annual revenue obtained from fees for publicly available on-demand audiovisual media services or revenue obtained from broadcasting commercial communications, if this revenue in a given settlement

¹⁴ Y. M. Guo, Y. R. Shi, Impact of the VAT reduction policy on local fiscal pressure in China in light of the SARS-COV-2 pandemic: A measurement based on a computable general equilibrium model, "Economic Analysis and Policy", Vol. 69, March 2021, pp. 253-264.

period is higher. Pursuant to the Act, entities having their registered office in another EU Member State were also obliged to pay the tax. It is worth mentioning that the income from the tax was to be transferred in full to the Polish Film Institute¹⁵.

This tax in question was introduced on July 1, 2020. And although it was part of one of the anti-crisis packages, it has remained as a permanent tribute until now. However it is only a part of the comprehensive digital tax discussed at the level of the entire European Union, and in a broader context at the OECD forum (136 countries).

However, the challenge associated with this more complex digital tax, covering all the aspects of digital products and services – is, on the one hand, a change in thinking – the tax will be paid not only in the country of production of the product or service, but also in the country of recipients, and on the other hand, the fact that it is contrary to the currently applicable in many countries, including in Poland¹⁶, DST tax (Digital Services Tax). Therefore, the G20 countries, which in October 2021 announced the introduction of a digital tax at the turn of 2023/2024, also presented a plan to phase out DST. Poland was also among the signatories of the agreement¹⁷.

The proposal to introduce a complex digital tax at the international level has two pillars. The first is an international agreement on the nexus index (rules for taxation by suppliers of digital products and services and individual countries). It addresses, among others tax challenges related to the allocation of profits between different countries of operation. The subject of the second pillar is a global minimum tax with a rate not lower than 15% and a set of international regulations to ensure its functioning¹⁸.

Summarizing the topic of digital tax. It has been announced many times by the Polish authorities, such as in the Official Financial Plan of Poland for 2019-2022. According to estimates, additional revenues to the state budget on this account were to amount to PLN 217.5 million already in the first year of the tax's functioning¹⁹. Nevertheless, formal steps to implement it have not been carried out. This may be influenced by Poland's close allied relations with the

¹⁵ I. Krzemińska, *Pandemia COVID a podatek cyfrowy w Polsce*, <https://home.kpmg/pl/pl/blogs/home/posts/2020/04/digital-economy-pandemia-SARS-CoV-2-impulsem-do-wprowadzenia-podatku-cyfrowego-w-polsce.html>, (30.11.2022).

¹⁶ The tax related to VOD in Poland is also treated by many researchers as DST.

 ¹⁷ M. Olejniak, *Podatek cyfrowy – nowa opłata dotycząca gospodarki cyfrowej*, "Magazyn Przedsiębiorcy", 09.03.2022, https://magazynprzedsiebiorcy.pl/podatek-cyfrowy, (30.11.2022).
¹⁸ M. Żurek, M. Saciuk, *Opodatkowanie gospodarki cyfrowej w Polsce*,

<https://www2.deloitte.com/pl/pl/pages/tax/articles/podatek-cyfrowy-opodatkowanie-gospodarki-cyfrowej-w-Polsce.html>, (30.11.2022).

¹⁹ B. Sikora, *Digital Services Tax in Poland*, ">https://www.twobirds.com/en/insights/2019/poland/digital-services-tax-in-poland>, (30.11.2022).

United States, where GAFA²⁰ companies and many other enterprises, which could be subject to the new tax, come from. The analysis of available materials and publications indicates that Poland will probably wait for a standardized complex digital tax project, introduced as part of a larger international forum, i.e. G20 or the EU, so as not to be perceived by a key partner and ally as a country 'going ahead'. Nevertheless, the topic itself will return to the public debate from time to time, especially in increasingly difficult times for the Polish economy.

Case study #2 Polish New Deal

The digital tax mentioned in the previous paragraph, in addition to seeking additional revenues for the state budget after the SARS-CoV-2 hit, can also be treated as an attempt to distribute income more equitably between the richest and the poorest. The pandemic has exposed the weakness of clichés and structures, also in the field of fiscal policy. One example of the search for a 'new deal' based on greater social solidarity may be the example of the New Polish Deal.

The New Polish Deal is the flagship project of the Polish government, the aim of which was to reduce social inequalities and improve the living conditions of all citizens. It appeared as an idea to get out of the economic effects of the pandemic. The five pillars of the program were: favourable tax changes for 18 million Poles (nearly half of the population), improvement of health care, proposals for obtaining own housing, abolition of PIT for pensioners receiving the lowest benefits and the creation of 0.5 million new jobs. According to the assumptions, the project is to cost over PLN 650 billion by 2030 (over PLN 72 billion annually)²¹.

The project itself, introduced under enormous time pressure, turned out to be underdeveloped and chaotic. Through numerous faults, it caused a significant complication in the Polish tax system, previously considered one of the most difficult and less transparent for taxpayers. The program itself was corrected 3 times within 6 months (in Poland, changes in the income tax are usually introduced once a year)²² and has been updated to versions 1.0, 2.0 and 3.0. An in-depth analysis of this topic should rather be the subject of a separate publication. At this point, it is worth focusing on the ideas and values that guided the creators of the 'new deal'.

²⁰ Digital giant companies, formed from the first letters of Google, Amazon, Facebook and Apple.

²¹ Polski Ład, *O programie*, <https://www.gov.pl/web/polski-lad/o-programie>, (30.11.2022).

²² Ł. Zalewski, *Wszystko o Polskim Ładzie 2.0. Co już wyjaśniono, a co wciąż budzi wątpliwości [PORADNIK]*, https://podatki.gazetaprawna.pl/artykuly/8500587, polski-lad-2-0-zmiany-wynagrodzenia-poradnik.html>, (30.11.2022).

Looking at the 10 key areas of the New Polish Deal program, you can find not only issues such as a decade of development or fair work with decent pay, but also specific ideals that guided the authors of the project. These values, as can be assumed, had an overwhelming impact on the shape of the entire project. These include family and home in the centre of life, Poland-our land, friendly school and culture for the new century or the golden autumn of life²³.

According to experts' calculations, most taxpayers should experience favourable changes in earnings. The analysis of 6 different earnings scenarios shows that the first 4 scenarios in which earnings did not exceed PLN 10,000 gross per month increased or remained at a neutral level after the changes were introduced. However, exceeding the ceiling and earning more than 10,000. gross per month (scenarios 5 and 6) were subject to slight decreases in the New Polish Deal. This was mainly due to the reduction of the PIT tax rate from 17% to 12%, leaving an increased tax-free amount (PLN 30,000/year) and an increased first tax threshold (PLN 120,000/year)²⁴. It is worth noting that at the same time, a number of reliefs and deductions, i.e. relief for the middle class, and the possibility of deducting health insurance contributions, were eliminated – nevertheless, looking at the specific calculations, the overall balance seems favourable. It is also the result of the polarization of Polish society in terms of earnings, and the fact that the vast majority of taxpayers fall into the basic income ceiling not exceeding PLN 10,000 gross per month.

On the other hand, there is no shortage of research that proves that the 'New Polish Deal' project is unable to achieve the noble goals it proclaims. The results of the analysis suggest that tax transfers take place quite randomly to groups that either do not need them or, on the contrary, require much more attention and systemic changes. An example may be Polish pensioners. Forecasts indicate that in the future as many as 70% of retirees will receive only the minimum pension. This is due to the contribution system and the inefficiency of Polish institutions, i.e. the Social Insurance Institution (ZUS). Therefore, discussions on whether to exempt this social group from one or another contribution seem pointless, because they will not significantly affect the financial condition of this social group. This is one of the examples that there are social groups that, without a systemic change, will not be able to overcome the effects of e.g. the SARS-CoV-2 pandemic.

Summing up this thread, the created program 'New Polish Deal' seems to be an expression of the belief that in such unusual economic circumstances as the outbreak of a global pandemic, the acute phase of which lasted almost two years, it will not be possible to quickly and effectively rebuild the economy,

²³ Polski Ład, 10 obszarów, <https://www.gov.pl/web/polski-lad/10-obszarow>, (30.11.2022),

²⁴ D. Leonik, *Polski Ład – zmiany w podatkach i przepisach, zmiany w wysokości wynagrodzeń*, https://www.ey.com/pl_pl/tax/polski-lad-zmiany-w-przepisach, (30.11.2022).

especially for people less earning using existing tools. The second conclusion is that it was considered right that a small percentage of the highest earners would experience unfavourable tax changes (even in the face of the post-pandemic recovery of the economy) so that a wide group of low and medium earners could experience a positive change in their standard of living. Although the implementation of the program clearly did not keep up with its assumptions in practice, the very fact of creating this type of project may be one of the signs of the upcoming changes in the approach to taxation rules on a global scale.

Some forecasts and predictions regarding tax systems

An analysis of publications on the response of fiscal policy to the medical and economic crisis caused by SARS-CoV-2 shows that in many countries an increase in tax burdens was predicted after the pandemic. These countries included: Australia²⁵, South Africa²⁶, Egypt²⁷, the US²⁸ and Estonia²⁹. Thus, just as the common reaction to the outbreak of the pandemic was to loosen fiscal policy and protect the groups that were most affected by its economic effects, recovery from the crisis will be characterized by an increase in fiscal burdens. It is worth continuing research in this area to answer the question of whether the groups of citizens most at risk of poverty will be additionally protected in this process.

Regardless of the assessment of the degree of restrictiveness of fiscal policy, in many analyzes there is a conviction about the need to develop new approaches, methods and tools to support fiscal policy in the post-pandemic period. And these are clearly missing. It is necessary to intensify scientific research in order to develop these foundations as soon as possible so that the theory can effectively support the implemented practice³⁰.

²⁵ J. Andrew et al., *Australia's SARS-COV-2 public budgeting response: the straitjacket of neoliberalism*, "Journal of Public Budgeting, Accounting and Financial Management", 2020, No. 32 (5), pp. 759-770.

²⁶ P. Burger, E. Calitz, *SARS-COV-2, Economic Growth and South African Fiscal Policy*, "South African Journal of Economics", 2021, No. 89 (1), pp. 3-24.

²⁷ E. M. Elkhashen, A. Sarhan, A. Ejiogu, *Egyptian budgetary responses to SARS-COV-2* and their social and economic consequences, "Journal of Public Budgeting, Accounting and Financial Management", 2020, No. 33 (1), pp. 78-86.

²⁸ P. G. Joyce, A. Suryo Prabowo, *Government responses to the coronavirus in the United States: immediate remedial actions, rising debt levels and budgetary hangovers*, "Journal of Public Budgeting, Accounting and Financial Management", 2020, No. 32 (5), pp. 745-758.

²⁹ R. Raudla, J. W. Douglas, *This time was different: the budgetary responses to the pandemic induced crisis in Estonia*, "Journal of Public Budgeting, Accounting and Financial Management", 2020, No. 32 (5), pp. 847-854.

³⁰ E. S. Vylkova, *Tax policy in a pandemic SARS-COV-2: review of publications in leading economic journals*, "Management Consulting", No. 12, 2021, pp. 81-94.

Predictions regarding fiscal policy are not limited only to its nature but also penetrate into its deepest foundations and the values that it should be guided by. There are voices that the effective implementation of fiscal policy in the future requires the inclusion of values such as resilience, equity, diversity, care and inclusive politics. The factor accelerating such conclusions is the observation that the fight against the SARS-CoV-2 virus has exhausted the layers of public trust in the actions of the authorities, which now need to be rebuilt. A glaring example is China, where a zero-tolerance policy for SARS-CoV-2 is used as a restrictive tool of social control. And a lack of trust coupled with high levels of social inequality hamper cooperation and economic development³¹. It can be said that such an approach will also force rethinking the idea of economic growth and development. This discussion is already underway, and the related issues of climate change are conducive to focusing new economic theories not so much on 'more' as 'better', 'healthier', 'more economical'. The development of fiscal policy seems to be joining this trend.

Conclusions

Collecting all the threads and problems presented in this article, three main conclusions can be formulated related to the ongoing changes in the role and function of fiscal policy on a global scale.

- 1. The impact of the SARS-CoV-2 pandemic on the economy was as negative as during the 2008 crisis, and even more so. What's more, it caused widespread shock and insecurity among many societies. Therefore, it is legitimate to say that the socio-economic circumstances that occurred after March 2020 are unprecedented and a change of approach is needed, including the method of implementing fiscal policy.
- 2. Implementing a new approach in the taxation systems without deeper systemic changes and new methodology is pointless. The poorest social groups, privileged under the newly proposed fiscal systems, in the long run, have no chance for a real change in their standard of living. There is a clear cognitive gap in this matter and scientific theories definitely do not keep up with the needs of practice. It is necessary to intensify research and scientific discussion on this subject in order to be able to propose adequate instruments for the implementation of new fiscal policy principles.

³¹ M. Leach et al., Post-*pandemic transformations: How and why SARS-COV-2 requires us to rethink development*, "World Development", Vol. 138, February 2021.

- 3. One of the reasons for the difficulties faced by the authors of new concepts of fiscal policy is the change in the role of fiscal policy. In the traditional approach, issues such as stimulating growth and ensuring regular budget revenues were more strongly emphasized. Meanwhile, the new proposals focus on the function of redistribution and fair distribution, at the expense of the others, which in the long run may lead to the destabilization of public finances and, as a result, deepen income inequalities in society and increase the number of people living below the poverty line.
- 4. New concepts of fiscal policy principles try to incorporate an immeasurable, defined system of values into a very logical, quantifiable tax scheme. This is undoubtedly a difficult task and may require broader changes, e.g. in social thinking or approach to certain issues. Therefore, not only a new methodology is needed to effectively introduce changes, but also the readiness and maturity of society to carry them out and then apply them regularly, without incurring additional costs from the state.

BIBLIOGRAPHY:

- 1. Andrew J., et al., *Australia's SARS-COV-2 public budgeting response: the straitjacket of neoliberalism*, "Journal of Public Budgeting, Accounting and Financial Management", 2020, No. 32 (5)
- 2. Burger P., Calitz E., SARS-COV-2, Economic Growth and South African Fiscal Policy, "South African Journal of Economics", 2021, No. 89 (1)
- 3. Byrne S., et al., *The Initial Labour Market Impact of SARS-COV-2*, "Economic Letter", Vol. 2020, No. 4
- 4. *CEIC Data*, <https://www.ceicdata.com/en/indicator/china/tax-revenue-of-gdp>
- Coffey C. et al., The effect of the SARS-COV-2 pandemic on consumption and indirect tax in Ireland, "Budget Perspective" No. 3/2021
- 6. Elkhashen E. M., Sarhan A., Ejiogu A., *Egyptian budgetary responses* to SARS-COV-2 and their social and economic consequences, "Journal of Public Budgeting, Accounting and Financial Management", 2020, No. 33 (1)
- Greve B., et al., Nordic welfare states still standing or changed by the SARS-COV-2 crisis?, "Social Policy & Administration", 2021, Vol. 55, No. 2

- 8. Guo Y. M., Shi Y. R., Impact of the VAT reduction policy on local fiscal pressure in China in light of the SARS-COV-2 pandemic: A measurement based on a computable general equilibrium model, "Economic Analysis and Policy", Volume 69, March 2021
- 9. Heald D., Hodges R., *The accounting, budgeting and fiscal impact of SARS-COV-2 on the United Kingdom*, "Journal of Public Budgeting, Accounting & Financial Management", Vol. 32 No. 5, 2020
- Hick R., Murphy M. P., Common shock, different paths? Comparing social policy responses to SARS-COV-2 in the UK and Ireland, "Social Policy & Administration", 2021, Vol. 55, No. 2
- 11. Joyce P. G., Suryo Prabowo A., Government responses to the coronavirus in the United States: immediate remedial actions, rising debt levels and budgetary hangovers, "Journal of Public Budgeting, Accounting and Financial Management", 2020, No. 32 (5)
- 12. Krzemińska I., *Pandemia COVID a podatek cyfrowy w Polsce*, <https://home.kpmg/pl/pl/blogs/home/posts/2020/04/digital-economy-pandemia-SARS-CoV-2-impulsem-do-wprowadzenia-podatku-cyfrowego-w-polsce.html>
- Leach M., et al., Post-pandemic transformations: How and why SARS-COV-2 requires us to rethink development, "World Development", Vol. 138, February 2021
- 14. Leonik D., *Polski Ład zmiany w podatkach i przepisach, zmiany w wysokości wynagrodzeń*, https://www.ey.com/pl_pl/tax/polski-lad-zmiany-w-przepisach>
- 15. National Bureau of Statistics of China, *GDP*, *Export & Import's annual* growth rate
- 16. Office for Budget Responsibility (OBR), *Coronavirus analysis*, https://obr.uk/coronavirus-analysis/
- 17. OECD Economic Outlook No. 106 (Edition 2019/2), https://data.oecd.org/hha/household-savings-forecast.htm#indicator-chart
- 18. OECD, *Harmonised Unemployment rates*, <https://data.oecd.org/ unemp/harmonised-unemployment-rate-hur.htm>
- 19. OECD, *Revenue Statistics OECD countries: Comparative tables*, https://stats.oecd.org/index.aspx?DataSetCode=REV>
- 20. OECD, *Revenue Statistics: Comparative tables*, <https://data.oecd.org/ tax/tax-revenue.htm>
- 21. Olejniak M., *Podatek cyfrowy nowa opłata dotycząca gospodarki cyfrowej*, "Magazyn Przedsiębiorcy", 09.03.2022, https://magazynprzedsiebiorcy.pl/podatek-cyfrowy
- 22. Pietro M. D., Marattin L., Minetti R., *Fiscal policies amid a pandemic: the response of Italy to the SARS-CoV-2 crisis*, "National Tax Journal", September 2020

- 23. Polski Ład, 10 obszarów, https://www.gov.pl/web/polski-lad/10-obszarow
- 24. Polski Ład, *O programie*, <https://www.gov.pl/web/polski-lad/oprogramie>
- 25. Raudla R., Douglas J. W., *This time was different: the budgetary responses to the pandemic induced crisis in Estonia*, "Journal of Public Budgeting, Accounting and Financial Management", 2020, No. 32 (5)
- 26. Rolewicz T., *Zniesienie stanu epidemii a zmiany w podatkach*, https://www.ey.com/pl_pl/tax/zniesienie-stanu-epidemii-zmiany-w-podatkach>
- 27. Sikora B., *Digital Services Tax in Poland*, https://www.twobirds.com/en/insights/2019/poland/digital-services-tax-in-poland>
- 28. Vylkova E. S., *Tax policy in a pandemic SARS-COV-2: review of publications in leading economic journals*, "Management Consulting", No. 12, 2021
- 29. Zalewski Ł., *Wszystko o Polskim Ładzie 2.0. Co już wyjaśniono, a co wciąż budzi wątpliwości [PORADNIK]*, <https://podatki.gazetaprawna.pl/artykuly/8500587,polski-lad-2-0-zmiany-wynagrodzenia-poradnik.html>
- 30. Żurek M., Saciuk M., *Opodatkowanie gospodarki cyfrowej w Polsce*, https://www2.deloitte.com/pl/pl/pages/tax/articles/podatk-cyfrowy-opodatkowanie-gospodarki-cyfrowej-w-Polsce.html