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Empirical Paper

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Forms of COVID-19 state aid by beneficiary size in Poland in 2020

https://doi.org/10.2478/ijme-2022-0003
Received: December 10, 2021; accepted: March 31, 2022

Abstract: Lockdowns imposed by the European Union (EU) Member States produced significant consequences in the form of losses to companies, which is why the Member States decided to assist businesses from public funds. This paper aims to identify and initially assess the implementation of schemes under which coronavirus disease-2019 (COVID-19)-related state aid was granted in Poland in 2020 for different instruments and beneficiary sizes. The idea was to find out how well aforementioned schemes responded to the needs of companies affected the most by the COVID-19-inflicted crisis. To this end, statistical analysis was deployed to learn about the share of individual groups of businesses of different sizes in support instruments granted in relation with COVID-19 by type of aid. The study helped to demonstrate that Polish aid schemes approved by the European Commission in 2020 assisted mainly micro- and small-sized companies, which usually suffered from poor liquidity, by predominantly soft instruments.

Keywords: COVID-19 crisis, COVID-19 state aid, European Union, Poland, SMEs
JEL Classification: G38, H25, H32, H71, L53

1 Introduction

As a result of the coronavirus disease-2019 (COVID-19) pandemic, governments of all the European Union (EU) Member States put in place a number of instruments designed to contain the spread of the virus and to alleviate the health problems of their respective populations. In most instances, these instruments restricted or led to temporary closures of selected industries. This, in turn, produced distortions in supply chains and in production, which affected the supplies of goods and services in the EU market, combined with a rapid decrease in demand for selected goods and a significant increase in demand for certain other goods. This market imbalance led to a significant decrease in investment made by businesses, governments, and households. As a result, the EU economy suffered from the loss of liquidity felt by many companies and produced by the absence of transactions among companies, consumers, and public authorities. The above-listed effects had major consequences for European economic integration [Dimitrakopoulos and Lalis, 2021; Ferrara and Kriesi, 2021], economic governance [Ladi and Tsarouhas, 2020; Wolff and Ladi, 2020]), and the previous perception of some policies, including state aid policy [Meunier and Mickus, 2020; van Druenen and Zwaan, 2021].

In order to limit economic and social tensions, the European Commission decided to partially relax state aid regime and adopted a Temporary Framework for State aid to support the economy during the COVID-19 pandemic (hereinafter, the Temporary Framework) [European Commission, 2020l]. It was subsequently amended several times to clarify, but more importantly, to introduce new forms of admissible state aid. This

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allowed Member States, including Poland, to develop their own aid schemes not only based on the Treaty provisions but also relying on the above-mentioned Temporary Framework. It should be noted that State intervention, i.e., the distribution of financial resources in the form of state aid granted to companies, was one of the instruments intended to improve liquidity. On the one hand, the instrument is effective; however, on the other hand, it may seriously distort competition in the EU.

Due to the short time that divides us from the beginning of the COVID-19 pandemic in the EU, comprehensive analyses that require longer research periods are missing. At the microeconomic level, the available research analyses cover primarily issues related to the resilience of enterprises and the preparedness to face external crises [Giancotti and Mauro, 2020], identification of transformation drivers and readiness to apply digital technologies [Gregurec et al., 2021], and improving the interlinkages between small- and medium-sized enterprises (SMEs) and large companies (in Malaysia) [Utit Ch. et al., 2021]. Another group of studies includes the initial results of analyses focused on the effects for individual companies or sectors in EU Member States, which – in most cases – rely on fragmentary data describing the situation in the course of the pandemic and its effect on the performance of various sectors, industries, or economies, including the following: e.g., the construction industry in Czechia [Nový and Nováková, 2022], gym and fitness clubs in Poland [Piotrowski and Piotrowska, 2021], tourism in Czechia [Vaishar and Šťastná, 2020], tourism in the entire EU [Williams, 2021] and globally [Gössling et al., 2021], society and sports activities [Begović, 2020; Drewes et al,, 2021], labor market in agriculture [Cortignani et al., 2020], agriculture as an individual sector of economy [Barcaccia et al., 2020, Štreimikienė et al., 2021], the position of women in the labor market of the countries of the Global South [Rivera and Castro, 2021], fiscal policy in Slovakia [Burger, 2020], the presence of foreign investment in Poland [Umiński and Borowicz, 2021], social and economic growth in European countries [Erić et al., 2021], or the economies of, e.g., Mediterranean EU Member States [Urbanovics and Teleki, 2021].

The above analyses, however, fail to consider the antishock and anticrisis measures applied by the Member States. From the viewpoint of the assessment of available aid schemes, it is important to identify the composition of state aid rather than its total amount. As Sullivan and Wolff [2020] observe, any map of the distribution of benefits and costs during crises must include the conditions, eligibility criteria, and forms of these benefits. When it comes to the ways in which aid was granted, as observed by Dobaczewska [2021], Commission guidelines on COVID-19 State aid have identified forms of state aid that, if appropriate conditions are met, could be approved following the fast-track procedure and these categories of aid have been exploited by the Polish legislator to the fullest. Therefore, the goal of this paper is to identify and initially evaluate the implementation of schemes under which COVID-19-related state aid was granted in Poland in 2020 taking account of the type of instruments and size of beneficiaries. The point is to find out how well-fitted public intervention was to the needs of the weakest companies that could be the most affected by the crisis inflicted by COVID-19. Based on earlier studies, a conclusion is reached that, compared to large firms, SMEs have often been more affected by the COVID-19 crisis, which has exposed their greater vulnerability [Organisation for Economic Co-operation and Development (OECD), 2021]. Due to the above observations, a research hypothesis has been put forward, according to which, SMEs were the major beneficiaries of COVID-19 aid. This outcome can be attributed not so much to the sectoral nature of aid schemes but to the negative effects of lockdowns for this group of economic actors.

In order to validate the above hypotheses, statistical analyses have been carried out based on available data on both state aid notified to the European Commission and reported by the Office of Competition and Consumer Protection (OCCP). In the first case, based on the examination of all decisions issued by the Commission in the period covered by the study, we manage to capture the sizes and forms of state aid notified to the Commission by the Member States, which allows us to estimate the potential engagement of Poland in the intervention under individual aid categories. Next, relying on data collected by the OCCP, an in-depth analysis of the structure of granted aid from the point of view of the size of enterprises is conducted considering the forms of state aid. Since the time from the start of the pandemic has been too short and, consequently, appropriate data are not available, having the research goal in mind, a decision has been made not to juxtapose the results obtained for granted state aid with potential changes resulting from opening new or closing existing companies, their financial performance, or investment in fixed assets.

The paper starts with the literature review of the preliminary studies on legal and economic consequences of new COVID-19 State Aid. Then, the position of Poland compared to other Member States in the context of potential COVID-19-related state aid (hereinafter referred to as 'coronavirus state aid') and tools or forms included in national aid schemes is discussed. In the next section, the results of the statistical analysis are presented, which reveal the share of groups of entrepreneurs of different sizes in the support instruments offered in 2020 broken down by types and forms of granted state aid with their description. Unfortunately, due to the absence of similar studies that would rely on data concerning aid that was actually granted and not only notified to the European Commission, the presented results can be discussed in contrast to other publications only to a very limited extent. The available analyses [KPMG, 2020; Urbanovics and Teleki, 2021] are based on amounts earmarked in budgets and proposed instruments notified to the European Commission rather than on data on aid actually granted to enterprises. In addition, this aid cannot be compared to any other aid to companies as the time of the COVID-19 pandemic seriously differs from any earlier crisis mainly because this crisis did not emerge as a result of negligence or excessively risky behavior exercised by business actors in the financial markets, as was the case of the previous 2008–2010 crisis. The COVID-19 crisis has resulted from a pandemic that made governments across the world freeze a substantial proportion of economic activities to protect the health and lives of their citizens. After the presentation and discussion of the results, the paper finishes with a summary containing conclusions linked with our current situation and the identification of further research areas, which will be especially useful to evaluate the consequences of the granted aid on the economy and the competition in the European Single Market.

Data used in the study come from original analyses of the decisions made by the European Commission concerning admissible coronavirus state aid, as well as data from the OCCP and Statistics Poland (GUS).

2 The literature review

In principle, state aid in the EU is seen as incompatible with the internal market if, due to its selective nature, it distorts or threatens to distort competition in so far as it affects trade between Member States. However, further paragraphs of Art. 107 of the Treaty on the Functioning of The European Union provide for mandatory and voluntary exemptions from the above prohibition. The first case covers situations when specific categories of aid are considered compatible, while, in the second case, the Commission is competent to declare them compatible with the internal market. This is the outcome of exclusive EU competence in competition policy in the Single European Market and, thus, the Commission's competence to assess and ex-ante decide about the admissibility of public intervention by the governments of EU Member States. The above *modus operandi* is critical as, after traditional barriers to trade got eliminated with the creation of the customs union, which was followed by the elimination of more advanced nontariff barriers, including physical, technical, and fiscal barriers, when the internal market was launched, the only protectionist and interventionist instrument left in the hands of the Member States is state aid. Therefore, it seems that especially during crisis periods, strong supranational institutions and their indispensability for the preservation of the single market make the EU competition policy a fundamental pillar of the EU economic policy [Dierx and Ilzkovitz, 2021].

As already mentioned, there are many exemptions from this general prohibition, which, however, permit limited state intervention in the free market economy. To ensure identical interpretation and application, as well as to reduce uncertainty with regard to the feasibility of intervention, the Commission drafted a number of guidelines that specify the goals, scope, beneficiaries, and maximum intensity of admissible state aid [Ambroziak, 2017]. In 2005, state aid rules were put in order and modernized following political suggestions made by the Member States [European Council, 2005; Nicolaides et al., 2005] and conceptual documents of the European Commission [2005]. They unambiguously state that the policy of state aid admissibility in the EU should focus on the reduction of the value of intervention and limits goals exclusively to those resulting from the market failure concept. In this latter case, aspects that were stressed included externalities, public goods, imperfect information, coordination problems, and market power. The Commission decided that, "State aid should be the appropriate policy instrument and should be designed so that it effectively solves

the market failure, by creating an incentive effect and being proportionate. In addition, state aid should not distort competition to an extent contrary to the common interest." [European Commission, 2005] Next, reforms of state aid took place in connection with the preparations to the implementation of subsequent Multiannual Financial Frameworks of the European Union and were subordinated to the idea of admissible intervention when specific market failure occurs.

Market failure can be interpreted as "the failure of a more or less idealized system of price-market institutions to sustain 'desirable' or to estop 'undesirable' activities (production and consumption)" [Bator, 1958]. More precisely, we are speaking of "a situation where a market, in the absence of intervention, fails to allocate resources efficiently" [New South Wales (NSW) Department of Industry, 2017]. It seems that the actions taken by the Government are based on the principle that companies are not purely private assets but agents for positive change [Dowling, 2021]. In order to ensure the best possible allocation of production factors, the EU allows for granting selected types of state aid specified as to the goal, scope, intensity, and potential beneficiaries. To reduce the negative impact of public intervention, the EU put an end to sectoral aid in favor of horizontal aid, which is available to a much wider group of entrepreneurs, and focused on concrete goals, such as, e.g., regional development, environmental and social initiatives linked to the limitation of climate change, better energy efficiency, and better education and employment opportunities for employees (including the disabled) [Ambroziak, 2017, 2021b].

At the outset of the pandemic in Europe, the European Commission did not reflect much will to liberalize the restrictive provisions on state aid. In the first communication, the Commission indicated that the then-binding provisions should be fully sufficient for the pandemic as they allowed for the possibility to support SMEs, i.e., those potentially hit the strongest by the crisis, making sure at the same time that "subsidy races" detrimental to competition were avoided [European Commission, 2020d]. At that time, attention was paid primarily to horizontal measures available to all economic entities as well as on support to consumers instead of selective aid to companies. Enterprises should build resilience to achieve long-term sustainability and to overcome unexpected events. Giancotti and Mauro [2020] presented an extremely wide array of conceptual frameworks that could be used to guide enterprises in improving resilience; however, the shock produced by COVID-19 could have been anticipated by companies to a rather limited extent.

Yet, it quickly turned out that the Commission had to refer to Treaty provisions that enable granting aid, which would urgently meet the demand for liquidity and assist companies threatened with bankruptcy (Art. 107 para. 3 subpara. C of the Treaty on the Functioning of the European Union [TFEU]) or compensate the damage suffered by entrepreneurs caused by exceptional occurrences, such as the COVID-19 pandemic (Art. 107 para. 2 subpara. B of the TFEU) (much less frequently invoked – Nicolaides, 2020; Ambroziak, 2021a; Kubera, 2021).

However, one needs to bear in mind that aid planned based on the above-mentioned legal premises was not to have been mobilized as a result of an identified market failure. Hardships faced by companies were, in fact, the effect of a series of decisions made by the governments of the EU Member States, which froze specific areas of the economy. This meant *de facto* that entrepreneurs, who – until that time – had pursued fully legitimate business activities, could not continue to operate due to arbitrary decisions made by their governments. Setting aside the rationale of these decisions from the viewpoint of the free market economy, the governments imposed restrictions or put on hold certain industries. Consequently, losses suffered by entrepreneurs were not inflicted by their bad business decisions or potential negligence. Thus, the reasons for granting coronavirus state aid did not meet the market failure criteria as it was not the market (i.e., entrepreneurs and consumers) that voluntarily changed the operating mode but the governments that arbitrarily decided about the fate of specific types of economic activities. As a result, voices could be heard about the need to even comprehensively rewrite the rules of the economy [Stiglitz, 2020], a suggestion within which further proposals of the Commission fit in to a certain degree.

The Temporary Framework drafted by the European Commission [European Commission, 2020l] was subsequently updated and modified on many occasions in 2020, and it provided for a broad range of categories of allowable state aid [European Commission, 2020a, 2020e]. Starting from aid that was limited only with regard to its amount (first up to EUR 800 K, up to as much as EUR 1.8 M in 2021), aid in the form of guarantees, subsidized interest rates for loans, preferential short-term export credit insurance through aid

in the form of deferrals of tax and/or of social security contributions, wage subsidies for employees to avoid layoffs during the COVID-19 outbreak, and recapitalization measures, up to research and development (R&D) aid in the area of COVID-19 tests and vaccines. The analysis of the above-listed legal solutions leads to a joint conclusion that a set of completely new, unprecedented legal solutions has been put in place, which facilitates granting of state aid to companies hit by government decisions that shut down some areas of economic activity [Buendía et al., 2020; Honoré, 2020; Motta and Peitz, 2020a, 2020b; Robins et al., 2020; Rosiak and Przybyszewska, 2020; Kopeć, 2021]. This new approach, different from the previous one, is a novelty in the EU competition policy. The policy of state aid admissibility departs from the market failure criteria and focuses on assisting entrepreneurs who face economic hardships actually not inflicted by themselves. Examples of such decisions were those connected with the collapse of demand after the World Trade Center (WTC) terrorist attacks in 2001 [European Commission, 2002a, 2002b] or certain occurrences such as the eruption of the Eyjafjallajokull volcano [European Commission, 2010]. However, all these occurrences were short term by nature, and they ended within a foreseeable period. The COVID-19 pandemic is different; its nature suggests its relatively long-term persistence in the form of alternating rounds of intensification and constraints. The outcome materialized in subsequent freezing and unfreezing of the economies of the EU Member States in 2020. As a result, Ferri [2020] indicated that state aid control has been used by the European Commission as an important "risk management tool".

In 2020, the European Commission issued almost 500 decisions on COVID-19 state aid of the total available budget of EUR 3.3 trillion, representing 20.6% of the total EU gross domestic product (GDP). As in the previous years, state aid intensity in the EU accounted for 1%–1.5% of EU GDP, according to the conclusion drawn by Agnolucci [2021], who confirmed that "classical policy objectives of state aid measures such as environmental protection, regional aid, and R&D and innovation, have been set aside in order to aid undertakings in difficulty". It seems that flexible state aid rules and significant differences in COVID-19 state aid budgets approved by the Commission may, in the future, distort the competition in the EU market [Van Hove, 2020; Ambroziak, 2021a].

In terms of relevance of support, available preliminary analyses covering only the first quarters of COVID-19 indicate that COVID-19 state aid tended to go to firms that are most in need of it [Luja, 2020; Groenewegen et al., 2021], which are overwhelmingly SMEs [Antonescu, 2020; Cowling et al., 2020]. According to OECD studies, this was mainly the case for SMEs. This was mainly due to five reasons: (a) the overrepresentation of SMEs among the industries most affected by lockdowns (wholesale and retail trade, air transport, accommodation and food services, real estate, professional services, and other personal services); (b) the limited financial resources available for SMEs as a buffer in case of crises; (c) SMEs being less adaptable to value chains than big companies; (d) SMEs using new digital technologies to a limited extent; and (e) SMEs being less adaptable to new circumstances that call for significant changes in management [OECD, 2021]. It confirms earlier findings according to which, SMEs are particularly dependent on external financing, which is why they are not resistant to external shocks [Narula, 2004; European Commission, 2019]. Studies conducted so far suggest the need to adjust certain elements of the SME business model in relation with the COVID-19 pandemic [Fitriasari, 2020; Lai et al., 2020] and introduce different risk management methods [Cepel et al., 2020; Grondys et al., 2021]. In addition, attention has been drawn to the allocation effects of employment and capital in connection with COVID-19-related restrictions [Kemmeren, 2021].

At the same time, the results of recent studies point to a major problem for SMEs during the COVID-19 pandemic: maintaining liquidity [Albonico et al., 2020; Cowling et al., 2020; Martinez-Cillero et al., 2020; McGeever et al., 2020]. In such a situation, some companies reduce costs to avoid excessive debt [Thorgren and Williams, 2020]. Moreover, some authors highlight that seed finance is the main type of entrepreneurial finance most acutely affected by the crisis, which typically goes to the most nascent entrepreneurial startups facing the greatest obstacles in obtaining finance [Brown et al., 2020]. This confirms earlier findings of pre-COVID-19 research on the impact of crises on the position of SMEs [Laufs and Schwens, 2014; European Commission, 2019]

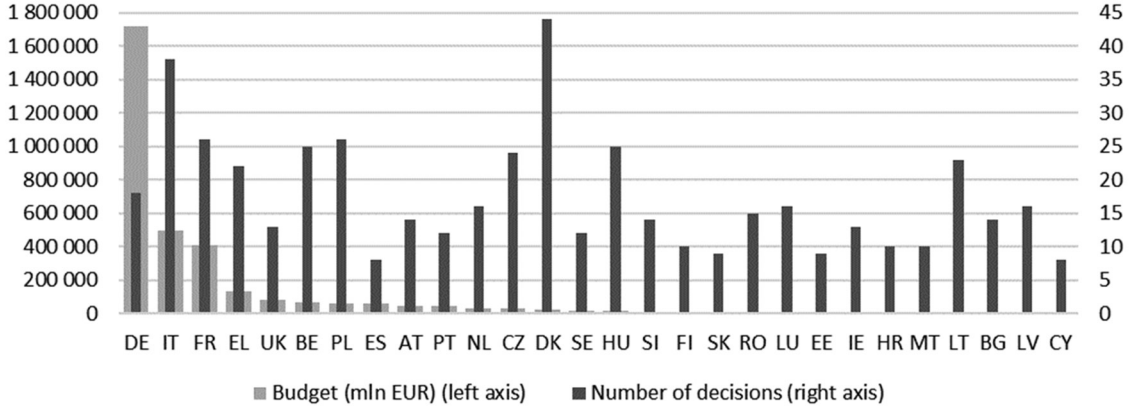
Previous research on the situation of SMEs during the COVID-19 pandemic suggests that without government support, the failure rate of SMEs would have increased significantly [Belghitar et al., 2021; Gourinchas et al., 2021] and that government support limited only to threatened firms should have relatively

low fiscal costs [Barrero et al., 2020]. It can therefore be assumed that the COVID-19 shock required to rebalance entrepreneurial actions looking inside (frugality) and outside (support) [Giones et al., 2020]. In the case of external financing for SMEs, many forms of assistance are mentioned worldwide, including, among others, government guarantees, as instruments that provide liquidity but also put the least strain on public finances [Corredera-Catalán et al., 2021], credit guarantees [Brault and Signore, 2020], reverse factoring as an option for small-sized businesses looking for quick access to cash without going into debt [Elizundia et al., 2021], as well as direct liquidity subsidies [Dörr et al., 2021], subsidized workers' remuneration designed to preserve employment [Antonescu, 2020; Dörr et al., 2021], and payment breaks [Duignan and McGeever, 2020]. Despite individual evaluations of aid programs available in Poland in relation to COVID-19 [Ambroziak, 2021a; Łopatka and Fedorowicz, 2021; OECD, 2021], a comprehensive study of the effectiveness of targeting aid schemes to the most needy enterprises is still lacking. Indeed, the literature indicates that policy interventions need to be sensitive to the different types of SMEs, rather than adopting a one-size-fits-all approach [Juergensen et al., 2020; Belghitar et al., 2021; Dörr et al., 2021], as well as targeting promising firms to reduce deadweight loss [Santarelli and Vivarelli, 2002].

3 Coronavirus state aid mechanisms available to entrepreneurs in Poland

At the end of March 2020, i.e., only 2 weeks after the announcement of the COVID-19 pandemic in Europe, Poland notified the first aid scheme under the entire series of so-called Crisis Shields. Finally, in 2020, the Commission approved 26 Polish state aid schemes against COVID-19, which provided for 45 financial instruments offered to entrepreneurs, while 44 Danish , 38 Italian and 26 French schemes (Figure 1). Many of them were amended and adapted to the needs of entrepreneurs and economic conditions, in addition to being extended over the following months of 2021.

The total budget of Polish COVID-19 state aid schemes covered by the positive decisions of the Commission amounted to EUR 61.4 billion, including aid to agriculture and to Polish Airlines LOT (LOT) and airports in Poland (around EUR 1.3 billion). It is worth noting that the aforementioned budget was not correlated with the size or economic potential of Poland. The largest coronavirus state aid budget approved by the Commission was proposed by Germany (52.8% of the total state aid for anti-COVID measures in the



Note: DE – Germany, IT – Italy, FR – France, EL – Greece, UK – United Kingdom, BE – Belgium, PL – Poland, ES – Spain, AT – Austria, PT – Portugal, NL – Netherlands, CZ – Czechia, DK – Dankmark, SE – Sweden, HU – Hungary, SI – Slovenia, FI – Finland, SK – Slovakia, RO – Romania, LU – Luxembourg, EE – Estonia, IE – Ireland, HR – Croatia, MT – Malta, LT – Lithuania, BG – Bulgaria, LV Latvia, CY – Cyprus.

Figure 1. Number of decisions and the budget of coronavirus state aid approved by the European Commission in 2020.
Source: author's calculations based on the European Commission decision (https://ec.europa.eu/competition-policy/state-aid/coronavirus_en).

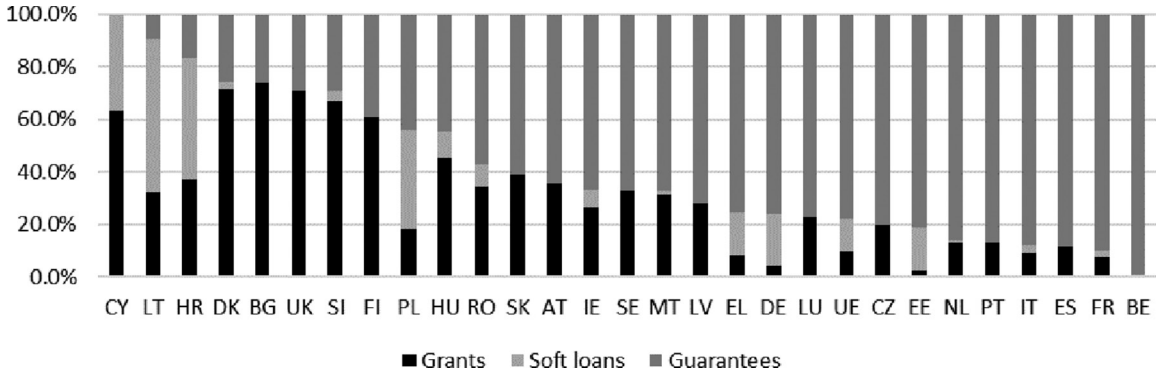


Figure 2. Forms of COVID-19 State aid approved by the European Commission in 2020.
Source: see Figure 1.
COVID-19, coronavirus disease-2019.

EU, while the share of Germany in the EU GDP in 2020 amounted to 21%) as a result of a substantial change in the country's approach to fiscal policy [Crespy and Schramm, 2021], followed by Italy (15.1% and 10.4%, respectively) and France (12.5% and 14.5%, respectively), while Poland ranked seventh (with the share of total state aid of 1.9% and 3.3% share in the EU GDP).

From the point of view of the impact on both the economy and competition in the EU market, not only the amount but also the form of support offered is important – it is crucial whether the entrepreneur could have or had applied for support in the form of grants, loans (including nonrefundable ones), or guarantees. A significant number of the Member States offered mainly guarantees at the beginning of the COVID-19 pandemic. These helped companies to secure liquidity, constituted state aid in the meaning of Article 107 of the Treaty, but, at the same time, had no immediate impact on public debt should the beneficiaries repay the guaranteed loans. This was particularly the case for Belgium, France, Spain, Italy, Portugal, and also Germany, i.e., countries that struggled with public debt problems after the 2008–2010 crisis (Figure 2). The EU Member States that decided to offer more public aid in the form of direct subsidies or soft loans (often nonrefundable) constituted a separate group. This group of countries included the United Kingdom, Poland, Denmark, Slovakia, Finland, Hungary, Croatia, Lithuania, and Bulgaria. Poland (as was Slovakia; see Burger, 2020) was therefore among those countries that offered a relatively significant proportion of nonrepayable aid instruments in the form of (a) grants and subsidies and (b) soft loans, which depleted public resources on an ongoing basis and may significantly reduce interventions in the event of further business freezes.

The main objective of the coronavirus aid instruments was to reduce the expected problems of both maintaining financial liquidity faced by companies affected by the implemented restrictions and the freezing of parts of economic activity. The mentioned tools can be divided into either three groups from the point of view of the forms of state aid or into two groups, considering their relation to the budget. In the first case, these tools are grants and subsidies, soft loans, and collaterals and guarantees. In the second case, a distinction can be made between instruments transferring money from public budgets (central and local) to entrepreneurs and tools reducing or completely eliminating public financial obligations of companies toward these budgets (Table 1; Ambroziak, 2021a).

4 Structure of the coronavirus state aid in Poland

According to OCCP data available at the end of June 2021, from this pool, Polish entrepreneurs received a total amount of about EUR 19.6 billion as coronavirus state aid in 2020. It can, therefore, be noted that Poland has not transferred all the funding approved by the Commission to companies and has extended some schemes to 2021. Of the aforementioned total amount of state aid granted in 2020, 74.8% were soft loans, 23.7% grants and subsidies, and only 1.5% guarantees and collaterals (Figure 3). This indicates a different final use of available aid funds in relation to those budgeted in the aid schemes approved by the

Table 1. COVID-19 state aid measures offered to entrepreneurs in Poland in 2020

Measures	Donors
Support instruments created on the basis of resources from European funds offered, both those from the previous financial perspective and the then current one, namely, for 2014–2020: Guarantees "Liquidity loans" that were written off at later stages.	*Bank Gospodarstwa Krajowego* (Bank of National Economy), Polish Agency for Enterprise Development, and other institutions implementing the EU funds
Exemption from the duty to pay social security contributions "Work suspension" benefits	ZUS
Grants to cover the current running costs of a business to microenterprises and small-sized companies Grants to protect existing jobs	Regional and county labor offices
Subsidizing salaries and wages of disabled employees and workers Refunds of costs of the adjustment of workplaces to the needs of disabled workers Hiring employees who assist disabled workers Training disabled workers	State Fund for Rehabilitation of Disabled People (PFRON)
Subsidies to entertainment industry	Ministry of Culture and National Heritage
Subsidizing the running costs of a business to sole proprietorships that do not have employees Subsidizing employees' remuneration and social security contributions to SMEs Subsidizing employees' remuneration and social security contributions to NGOs and organizations of public benefit	Regional and local authorities (governors, strarosts, mayors, and heads of villages and municipal councils)
Exemption from property tax Exemption from rent and long-lease payments, as well as from rent for use	Local authorities
Suspension of charges (property tax, rent for spaces that were leased from local authorities, or other civil law liabilities)	Local authorities

Source: Decisions of the European Commission on Polish State Aid measures.

COVID-19, coronavirus disease-2019; NGO, nongovernmental organization; SME, small- and medium-sized enterprises; ZUS, Social Insurance Institution.

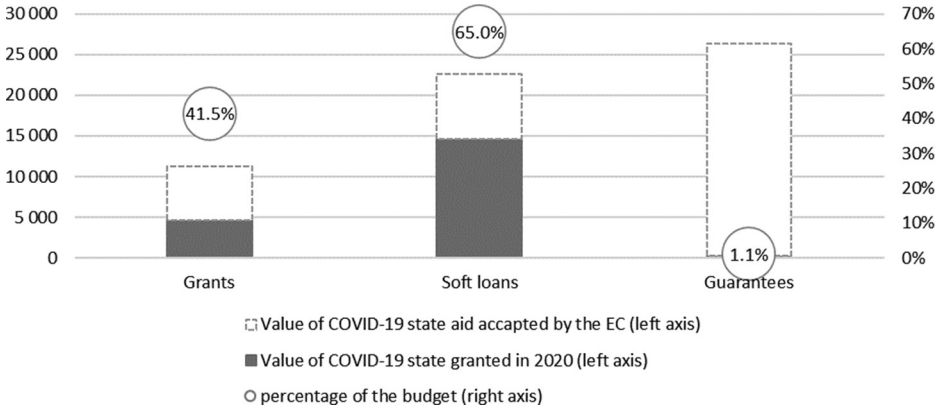


Figure 3. Structure of coronavirus state aid budgeted and used in Poland in 2020 (billions of EUR).
Source: Own calculations based on the data of the European Commission and the OCCP.
Decisions of the European Commission on Polish State Aid measures.
COVID-19, coronavirus disease-2019; OCCP, Office of Competition and Consumer Protection.

European Commission. This is because soft loans (65% of the total value of coronavirus state aid) and grants and subsidies (23.7%) were significantly used, while guarantees granted in 2020 under this assistance mechanism used only 1.1% of the amount allocated for this form of assistance accepted by the Commission.

Aid in the form of soft loans was, therefore, the most important value-wise form of coronavirus state aid in 2020, reaching the level of EUR 14.7 billion (which accounted for 71.3% of the total coronavirus

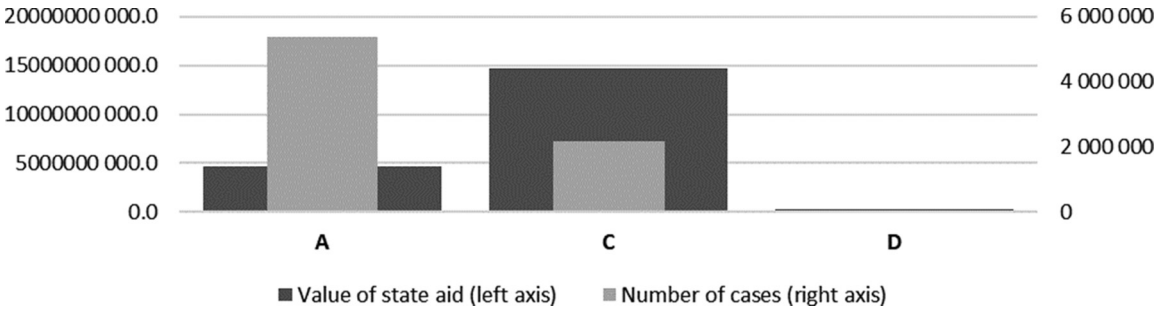


Figure 4. Coronavirus state aid value and number of cases in Poland in 2020.
Note: A – grants and subsidies; C – soft loans; and D – guarantees and collaterals.
Source: Author's calculations based on the data of the OCCP.

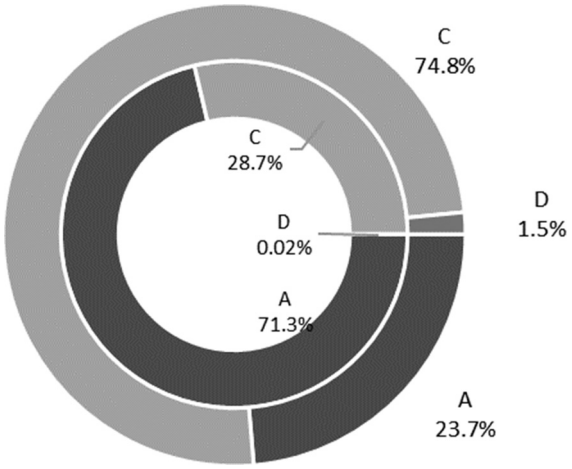


Figure 5. Structure of state aid granted in relation with COVID-19 in Poland in 2020 by type and beneficiary size.
Note: A – grants; C – soft loans; and D – guarantees. Internal circle: cases of state aid; external circle: value of granted state aid.
Source: Author's calculations based on the data of the OCCP.
COVID-19, coronavirus disease-2019; OCCP, Office of Competition and Consumer Protection.

state aid). Such support was granted in almost 2.2 million cases, which accounted for 23.7% of all aid cases (one entrepreneur could receive aid several times). This was more than half the number of cases of grants and subsidies (almost EUR 5.4 million). At the same time, the value of support granted in the latter form reached a level exceeding EUR 4.6 billion, which meant 23.7% of all aid cases (see Figures 4 and 5). As far as guarantees and collaterals are concerned, 1,600 cases generated a total aid of more than EUR 300 million.

When analyzing the relevance of coronavirus state aid in the Polish economy, the special role played by the size of enterprises is worth noting (Table 2). On the one hand, the number of micro- and small-sized enterprises in Poland exceeds 99% of the total business population; however, when we look at the share of these in total employment, the rate drops to <50%, and in the generation of GDP, their share slightly exceeds 32%. Such a distribution of accents in the role of SMEs, and in particular the position of micro businesses, results from the fact that many people run sole proprietorships offering (a) specialized engineering, professional, and management services and (b) basic transport or security and cleaning activities. This means, as expected, that although SMEs lie at the foundations of employment, it is the large enterprises that offer the highest value addition to the economy measured by their share in GDP generation.

Given the above, it is worth noting that, in 2020, coronavirus state aid was granted mostly to micro-sized companies (93.7%), followed by small (5.9%), medium (0.3%), and large enterprises (0.1%), which correspond to their share in the total population of economic entities in Poland. However, taking into account the value of granted coronavirus state aid, one would expect that the respective percentages should, to some extent, reflect the role in the economy measured by the share either in total employment or

Table 2. Share of economic entities by size in key economic indicators in Poland in 2020

Enterprises	Share in the total business population	Share in employment	Share in GDP generation
Total	**100%**	**100%**	**100%**
Micro	96.1%	38.4%	19.60%
Small	2.9%	11.7%	13.00%
Medium	0.8%	16.9%	20.30%
Large	0.2%	32.9%	47.10%

Source: Author's calculations based on data of Statistics Poland (https://bdl.stat.gov.pl/BDL/dane/podgrup/temat/25/377).

GDP, gross domestic product.

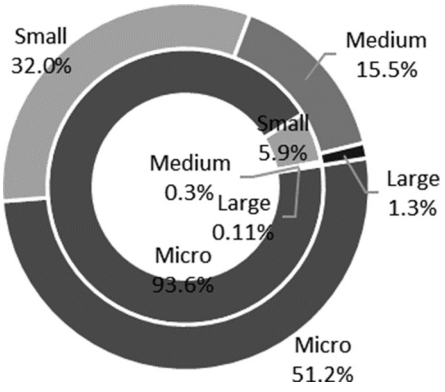


Figure 6. Structure of state aid granted in connection with COVID-19 in Poland in 2020 by beneficiary size.
Note: Internal circle: cases of granted state aid; external circle: value of granted state aid.
Source: Author's calculations based on the data of the OCCP.
COVID-19, coronavirus disease-2019; OCCP, Office of Competition and Consumer Protection.

in the generated GDP. However, this was not the case – more than half (51.2%) of the total value of state aid went to the microenterprises, 32% to small, 15.5% to medium, and only 0.2% to large companies (Figure 6).

5 Coronavirus state aid in the form of soft loans

As already mentioned, value wise, the largest share in state aid granted in Poland was reported for the so-called soft loans (71.3% of the total coronavirus state aid). Two forms dominated in this group of instruments, i.e., repayable advances (C1.5) and conditionally waived loans (C1.4). The total value and number of cases of public aid offered under this form of support amounted to >99% of all soft loans. As far as repayable advances are concerned, they were offered as a financial shield for micro-, small-, and medium-sized enterprises by the Polish Development Fund (PFR) [European Commission, 2020h], while the second instrument was loans written off to cover the current costs of business activity mainly for microenterprises [European Commission, 2020i]. Therefore, it is not surprising to see a 100% share of microenterprises in the latter instrument, although the share of this measure in the total amount of assistance provided under soft lending was 13.6% (and 83.7% of all cases of this form of assistance support) (Table 3). The situation was slightly different in the case of the PFR offer. In fact, the share of small-sized companies in the aid granted under this measure reached 41.7%, but from the point of view of the number of cases, it was far below the share in the total number of enterprises (83.6%). A better position in both rankings (value and number of cases) of coronavirus state aid was scored by small- and medium-sized enterprises, taking into account the number of cases.

Other categories of soft loan instruments included various types of payment deferrals and installments of civil and property tax dues offered by local government units. However, they accounted for a much smaller percentage in the coronavirus state aid (Figure 7). As a rule, relatively, most support of this kind

Table 3. Structure of state aid granted in the form of soft loans in connection with COVID-19 in Poland in 2020

Aid	Enterprises								Share in a given form	
	Micro		Small		Medium		Large			
	Share in the value of aid, %	Share in the number of state aid cases, %	Share in the value of aid, %	Share in the number of state aid cases, %	Share in the value of aid, %	Share in the number of state aid cases, %	Share in the value of aid, %	Share in the number of state aid cases, %	Share in the value of aid, %	Share in the number of state aid cases, %
Repayable advance C1.5	41.7	83.6	38.5	14.3	19.8	2.1	0.0	0.0	86.01	16.15
Conditionally waived loans C1.4	99.3	99.3	0.3	0.3	0.0	0.0	0.3	0.3	13.64	83.69
Preferential loan C1.1	17.9	68.2	12.0	24.7	4.7	4.3	65.4	2.8	0.34	0.07
Deferred tax payment C2.1	6.6	59.2	4.8	18.6	8.1	9.5	80.4	12.8	0.00222	0.05
Distribution of tax payments in installments C2.2	42.0	45.5	0.2	18.2	2.1	18.2	55.7	18.2	0.00098	0.0005
Postponement of the payment date C2.4	63.5	84.7	32.1	10.9	3.9	3.6	0.5	0.7	0.00080	0.0127
Payment in installments C2.5	67.2	83.5	9.6	12.1	17.0	2.2	6.2	2.2	0.00073	0.0042
Postponement of payment of tax arrears with interest C2.1.2	50.8	84.2	14.0	6.0	8.4	3.8	26.8	6.0	0.00033	0.0231
Postponement of the payment of the overdue fee C2.4.1	1.9	93.3	0.0	0.0	98.1	6.7	0.0	0.0	0.00020	0.0007
Spreading the payment of tax arrears with interest in installments C2.3.1	55.2	75.6	2.5	17.1	40.8	2.4	1.5	4.9	0.00011	0.0019
Payment in installments of the overdue fee C2.5.1	33.7	66.7	66.3	33.3	0.0	0.0	0.0	0.0	0.00003	0.0001
Total	49.5	96.7	33.2	2.6	17.0	0.4	0.3	0.2	100.0	100.00

Notes: Cells marked in gray indicate bigger share of a given group of enterprises in received state aid in terms of value or number of cases compared, respectively, to the share in generation of GDP or the total population of businesses.

Source: Author's calculations based in the data of the OCCP.

COVID-19, coronavirus disease-2019; GDP, gross domestic product; OCCP, Office of competition and consumer protection.

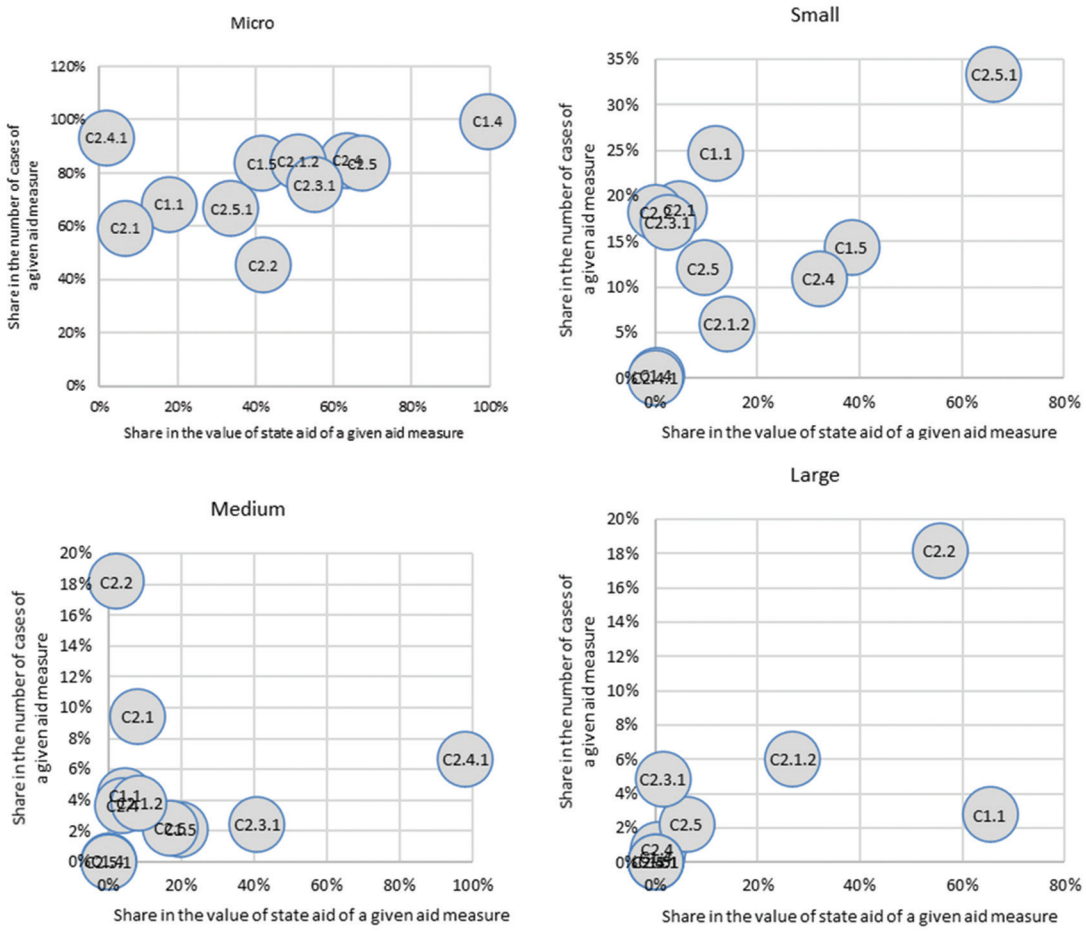


Figure 7. Share of beneficiaries of coronavirus state aid in different forms of soft loans in 2020.
Source: Author's calculations based on the OCCP data.
OCCP, Office of Competition and Consumer Protection.

(in relation to the share of these entities in GDP generation) in the form of almost all forms of available aid was granted to microenterprises. On the other hand, SMEs applied for this kind of support relatively most often (in relation to the share in the total business population), yet its value was relatively lower. Therefore, it means that for the group of micro-sized companies, allowances offered by local governments were significant value wise, while they were much smaller for SMEs.

Support for large companies was definitely different as relatively most aid was provided in the form of liquidity loans and preferential (redeemable) loans under the so-called "shield" for this type of enterprises. It is worth noting, however, that in the case of this category of companies also, deferrals and installment payments of property tax granted under the tax ordinance by local government units were attractive considering the number of cases and were significant in terms of value.

6 Coronavirus state aid in the form of grants and subsidies

Value wise, grants and subsidies ranked second (28.7%) among the types of instruments offered as coronavirus state aid, while they ranked first (74.8%) when we consider the number of all cases of such aid granted by Poland in 2020. This means that entrepreneurs would have reached for them much more willingly if the budgets of the relevant aid schemes were larger. Moreover, in this group, fee calnceleations (A2.10) and grants (A1.1) were the two dominant forms. Both the value of aid made available and the number of aid cases under the two aid schemes exceeded 99% of the total support within this group of state aid forms (Table 4).

Table 4. Structure of state aid granted in the form of grants or subsidies in connection with COVID-19 in Poland in 2020

Aid	Enterprises								Share in a given form	
	Micro		Small		Medium		Large			
	Share in the value of aid, %	Share in the number of state aid cases, %	Share in the value of aid, %	Share in the number of state aid cases, %	Share in the value of aid, %	Share in the number of state aid cases, %	Share in the value of aid, %	Share in the number of state aid cases, %	Share in the value of aid, %	Share in the number of state aid cases, %
Fee cancellation A2.10	63.9	92.4	34.7	7.5	1.4	0.1	0.0	0.0	61.85	90.32
Grants A1.1	53.1	92.9	22.1	5.1	22.5	1.6	2.3	0.3	37.77	9.51
Tax exemption A2.1	26.4	76.0	22.2	16.7	19.7	5.0	31.6	2.3	0.27	0.12
Bank loan interest subsidies A1.2	5.5	33.5	32.6	35.4	40.4	23.8	21.6	7.3	0.05	0.01
Reduction in the amount of the fee A2.4	32.3	80.0	23.4	10.4	12.2	6.3	32.1	3.4	0.04	0.02
Fee waiver A2.5	55.8	81.5	25.9	11.5	11.3	4.1	7.0	2.9	0.02	0.01
Failure to collect a toll A2.7	39.8	78.6	15.3	14.3	37.8	2.4	7.1	4.8	0.0016	0.00
Refund A1.4	76.1	88.9	23.9	11.1	0.0	0.0	0.0	0.0	0.0008	0.00
Tax deduction A2.2	25.3	62.5	35.8	25.0	27.5	4.2	11.4	8.3	0.0004	0.00
Reduction or reduction reducing the tax base or the amount of tax A2.3	66.3	75.0	28.3	15.6	5.4	9.4	0.0	0.0	0.0003	0.00
Cancellation of late payment interest A2.11	50.9	80.1	24.5	8.4	17.5	5.3	7.2	6.2	0.0002	0.00
Failure to collect tax A2.6	64.2	80.0	35.8	20.0	0.0	0.0	0.0	0.0	0.0001	0.00
Total	59.7	92.4	29.9	7.3	9.4	0.3	1.0	0.0	100.00	100.00

Notes: Cells marked in gray indicate a bigger share of a given group of enterprises in the received state aid in terms of value or number of cases compared, respectively, to the share in generation of GDP or the total population of businesses.

Source: Author's calculations based on data from the OCCP.

COVID-19, coronavirus disease-2019; GDP, gross domestic product; OCCP, Office of Competition and Consumer Protection.

In the first case, it is mainly exemption from the obligation to pay social insurance contributions, as well as allowances and write-offs in payments for rent, lease, or use to local government units [European Commission, 2020i]. In the latter case, the largest proportion of support consisted of additional "work suspension" benefits offered by the Social Insurance Institution (ZUS) and subsidies to cover the running costs of business to SMEs paid from the Labour Fund by voivodeship and county labor offices [European Commission, 2020c, 2020k, 2020i] and also for R&D-related activities in connection with COVID-19 [European Commission, 2020j]. A separate category of aid included in this group was grants offered by the Ministry of Culture and National Heritage to institutions of culture [European Commission, 2020b], as well as grants and repayable aid available from financial intermediaries using EU funds.

Among the remaining types of aid in the discussed aid category (grants and subsidies), one may distinguish those that were both common and different for enterprises of particular sizes (Figure 8). First of all, both micro- and small-sized enterprises received aid that was relatively the highest in terms of value (in relation to their share in GDP generation) in almost all categories. In addition, the same result was achieved by small-sized companies, i.e., their share in the number of cases of aid was relatively the highest in relation to their share in the total business population in Poland. At this point, the support granted by State Fund

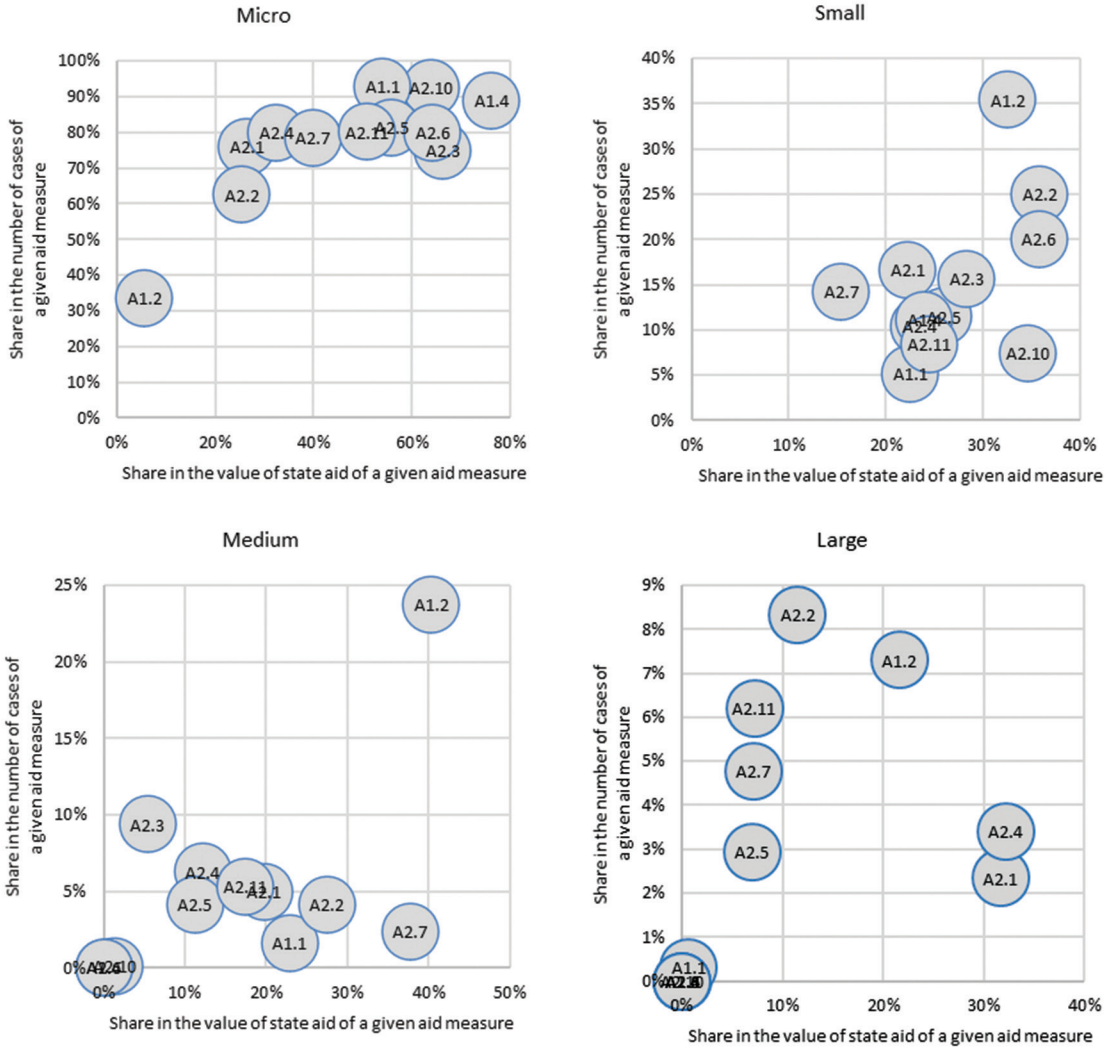


Figure 8. Share of coronavirus state aid beneficiaries in different types of grants and subsidies in 2020.
Source: Author's calculations based on OCCP data.
OCCP, Office of competition and consumer protection.

for Rehabilitation of Disabled People (PFRON) in the form of refunding the costs of adapting workplaces to the needs of disabled employees and general operating costs of businesses that employ the disabled is worth noting. A relatively significant share in the aid granted to both micro- and small-sized enterprises originated from local self-government units and took the form of real estate tax waivers, allowances in civil law liabilities, and those related to lease, rent, and use of property. Not without significance for both groups of enterprises was also the support from the ZUS in the form of exemption from the obligation to pay the mandatory social security contributions.

As far as small-sized companies are concerned, in addition to the above-mentioned instruments offered by the ZUS and local government units, they also used interest subsidies on loans, which significantly reduced their financing costs. This instrument was also often chosen by medium-sized companies, which resulted in a relatively high share of these companies in the value of this aid. Medium-sized companies also enjoyed a significant share in the value of aid for selected instruments made available by local government units in the form of allowances or waiver of fees for rent, lease, and use of local property.

The distribution of both preferences (number of cases) and real effects (share in particular forms) of coronavirus state aid for large enterprises was slightly different. National, central government aid schemes did not provide for grants or subsidies for large companies; hence, these enterprises benefited mainly from subsidy instruments offered by local governments, but the aid provided to them definitely did not reflect their relevance in the creation of GDP. It is, therefore, worth noting that large companies, similar to medium-sized ones, were oriented toward repayable instruments offered by financial institutions in the form of subsidized loans available from commercial banks.

7 Coronavirus state aid in the form of guarantees and collaterals

In 2020, aid granted to Polish entrepreneurs in the form of guarantees from two aid schemes accounted for a total amount of EUR 300.8 million. The most important instrument was the loan guarantee offered by *Bank Gospodarstwa Krajowego* (BGK) [European Commission, 2020g], although a small amount was also distributed under the factoring guarantee [European Commission, 2020f]. In the former case, the aim was to secure loans granted by banks to maintain liquidity in business entities. The instrument concerned working capital loans intended for the current financing of business activities or the financing of investment expenditures that contribute to improving financial liquidity. The maximum amount of a guaranteed loan depended on the amount of salaries paid, total turnover, or a justified statement of the entrepreneurs' liquidity needs, up to PLN 250 million [BGK, 2020a].

In principle, large and medium-sized enterprises were almost the only beneficiaries of this support (respectively, 68.9% and 30.8% of the total value of this form of aid and 719 cases among medium-sized and 900 among large companies' see Figure 9). Such a relatively low interest in this form of support offered under coronavirus state aid had two reasons. Firstly, the government introduced many other instruments providing faster and cheaper access to finance in the form of grants or soft loan tools. Secondly, the

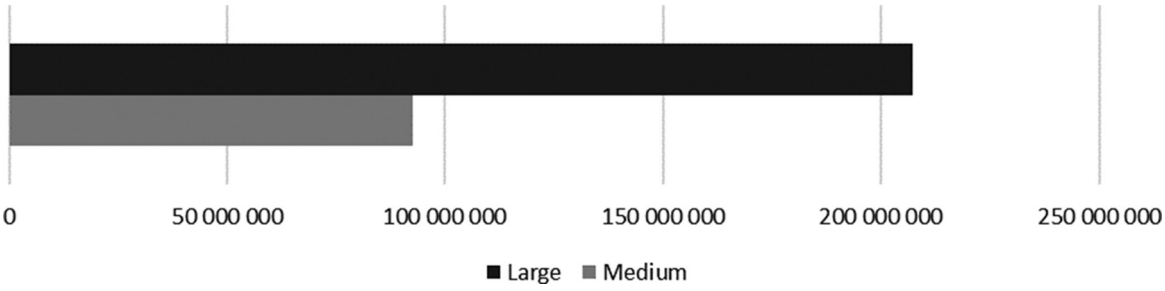


Figure 9. Value of state aid granted in the form of guarantees to large and medium-sized enterprises (in millions of EUR).
Source: Author's calculations based on OCCP data.
OCCP, Office of Competition and Consumer Protection.

BGK offered in parallel the already well-known *de minimis* guarantee instrument to SMEs [BGK, 2020b]. Operating in the same way as the new tool, it provided, however, that the support granted would be treated as *de minimis* aid, i.e., limited only by the EUR 200,000 ceiling over the past 3 years and with no tax implications for beneficiaries.

Conclusion

In 2020, coronavirus-related state aid budget in Poland amounted to 11.7% of the national GDP, which was huge compared to the previous years but not necessarily the highest if compared to other EU Member States. The share of the Polish national GDP in the EU GDP was 3.3%, while the value of this aid represented only 1.9% of total national state aid. This suggests a relatively smaller value of intervention measures in the Polish economy planned in relation with COVID-19 compared to other EU Member States and, above all, compared to Germany, France, and Italy. These countries, however, offered mainly guarantees and collaterals, while Poland was one of the Member States that offered a relatively high proportion of nonrepayable aid measures, such as subsidies, grants, and soft loans. Such an approach caused the current depletion of the reserves of public resources and may bear meaningful consequences on public finance and the ability to further support companies during subsequent waves of COVID-19 after 2020.

Considering the support mechanisms available in Poland, one may conclude that all potential state aid donors have been engaged in the distribution of resources: central-level institutions, government agencies, and local authorities. All of them offered diverse aid instruments depending on their area of competence and available resources. Institutions at the central level, including government financial agencies (BGK), collected resources from own budgets and reallocated to COVID-19-related activities, founded them on bonds issued by the PFR, and used EU resources from the current and previous financial perspective (PARP - Polish Agency for Enterprise Development, BGK). ZUS decided to waive employer obligation on social security contributions and to pay additional benefits for economic work stoppage. Furthermore, voivodeship and county labor offices (WUPs and PUPs, respectively) transferred subsidies from the Labour Fund to micro- and small-sized companies to cover both the current cost of business and the benefits intended to retain jobs. At the same time, territorial self-government units rather broadly offered all sorts of allowances, write-offs, and deferrals in the payment of fee and tax liabilities and payments due to them. Given the absence of compensation from the central budget, this move should be evaluated especially positively. In most instances, local entrepreneurs could pay taxes, charges, and other dues in installments or on deferred deadlines; less frequently, these liabilities were reduced. This was the reflection of responsibility and farsightedness that helped companies survive the most difficult period of the pandemic.

Polish aid schemes approved by the European Commission in 2020 supported mainly micro- and small-sized companies, which – in most cases – suffered from poor liquidity. This finding is in line with observations made in other Member States. By ensuring the survival of SMEs and, through some schemes and instruments, also the preservation of jobs, the upward pressure on unemployment was reduced to some extent. At the same time, it was assumed that medium-sized enterprises and, above all, large companies should have enough savings to stay on the market for several months with no or relatively little support from public coffers (although, in the case of the national carrier LOT and regional airports, this proved impossible).

Entrepreneurs in Poland used mainly soft loan instruments, mainly liquidity loans offered by the PFR with the possibility of their write-off if, e.g., employment is maintained. Consequently, once this condition was met, the instrument became more of a grant than a repayable instrument. Further, exemptions from contributions to the ZUS turned out to be a wide stream of financial support. However, it seems that grants and subsidies would be the main tool that Polish entrepreneurs would like to use. In terms of the value of granted coronavirus state aid, it was the second group of tools, while, in terms of the number of cases, it was the first and most important. This may mean that entrepreneurs would have reached for these tools much more willingly if the budgets of the relevant aid schemes were bigger.

At the same time, guarantees and collaterals, dedicated primarily to medium-sized and large enterprises, did not gain in popularity. This trend stands in contrast to the situation in more-developed countries, which decided to make greater use of repayable instruments, including the aforementioned guarantees and collaterals. As a result, national budgets were protected to a greater extent, credit action was launched in commercial banks, and entrepreneurs could count on relatively cheaper financing on the market. This gives more room for possible interventions during the next announced waves of COVID-19 and support for domestic entrepreneurs in the following years. It would also be interesting to determine the effects of this support over a somewhat longer period. No doubt such analyses will be feasible as soon as data on the operations of enterprises for the first years of the pandemic are available. They will be expected with interest as initial surveys conducted with the participation of aid beneficiaries suggested that insufficient amounts were mobilized to assist businesses affected by the closure of economy [Piotrowski and Piotrowska, 2021].

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