### **PUBLIC FINANCE**

DOI: 10.15838/esc.2022.6.84.9 UDC 338+332, LBC 65 © Leonov S.N.

## Assessing the Impact of the Coronavirus Pandemic on the Condition of Regional Budgets: The Far Eastern Aspect



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**Abstract.** The purpose of the work is to determine major features and consequences of mitigating the adverse effects of a noneconomic shock caused by the 2020–2021 coronavirus pandemic in the process of implementing the regional budget policy of RF constituent entities within a large macroregion, the Far East of Russia. We analyze the impact of the pandemic on the budget revenues of Far Eastern regions, estimate changes in the dependence of regional budgets on federal transfers. We show changes in the level of transparency in intergovernmental fiscal relations in the macroregion and the extent of autonomy of the authorities of Far Eastern constituent entities of the Russian Federation in decision-making during the crisis period in terms of the formation of regional budgets. To identify statistical patterns, we use general scientific methods based on official data from the RF Federal Treasury, the RF Ministry of Finance, and regional authorities of Russia's Far Eastern constituent entities. We show that in the Far East, the first and second waves of the epidemic had the most significant impact on regional budgets, and the pace of overcoming the coronavirus crisis was different in various regions. Regions specializing in the manufacturing industry are recovering faster; the process is slower in mining regions. The main condition for overcoming the budget crisis was a large-scale increase in federal aid, which allowed most regions to compensate for the loss of their own budget revenues. The impact of the third and fourth waves of the coronavirus crisis on the economy of the Far East and the regional budget sphere as a whole is assessed as weak. Mining industries continued to stagnate; as a result, in the analyzed period of 2020–2021, problems related to forming the tax base were noted in the majority of mining regions. Thus, we may predict that

**For citation:** Leonov S.N. Assessing the impact of the coronavirus pandemic on the condition of regional budgets: The Far Eastern aspect. *Economic and Social Changes: Facts, Trends, Forecast*, 15(6), 153–166. DOI: 10.15838/esc.2022.6.84.9

the state of regional budgets will depend more on the transfer support from the federal center. We reveal the absence of clear criteria in the provision of transfer support to the regions. Transparency of the aid provided to RF constituent entities has deteriorated during the pandemic crisis, which may lead to the emergence of adverse factors in regional development due to the desire of regional governments to lobby for special financial preferences from the federal center. The novelty of the research is due to the fact that we consider the aforementioned range of issues while comparing federal trends and the situation in the Far East under the increasing pressure of external noneconomic shocks caused by the lingering coronavirus pandemic. The materials of the article can be used in the educational sphere and in the work of state authorities at the federal and regional levels to improve budget policy.

Key words: coronavirus pandemic, regional budget policy, Far East.

#### Introduction

The coronavirus pandemic that swept the world in the 2020s has become an important factor in many structural, institutional and financial changes. At the same time, we must understand that in fact we are not talking about an economic crisis caused by internal or external economic reasons, but about the implications of an extra-economic, external shock for the economy. The coronavirus pandemic was an extra-economic shock with devastating consequences, the scale of which turned out to be different for different countries and regions (Bouckaert et al., 2020; Maggetti, Trein, 2022; Aganbegyan A.G. et al., 2021; *Ural'skii federal'nyi okrug...*, 2021; *Dal'nii Vostok Rossii...*, 2021).

In the case of the Russian Federation, the noneconomic shock of the pandemic affected almost all sectors of the Russian economy (Kuznetsova, 2020; Lola, 2020; Milchakov, 2020) and, as a result, regional budget revenues as well (Deryugin, 2020; Zubarevich, 2021a; Chernyavskii, 2020). The shock could not but affect the condition of the budgets of Russia's Far Eastern constituent entities (Gulidov, 2021; Leonov, 2020).

The relevance of this study is highlighted by the necessity to analyze the course and evaluate the options for mitigating the adverse effects that the noneconomic shock of the coronavirus pandemic inflicted on the budget system of a large macroregion, the Russian Far East.

The Far East was hit the most by the 2020–2021 crisis during the first wave of the pandemic due to a total lockdown imposed in the second quarter of 2020<sup>1</sup>. The subsequent partial economic recovery lasted until October 2020 and was interrupted by the second wave of the pandemic, which lasted the entire winter of 2020–2021 (Minakir, 2020). The second wave of the pandemic as a whole was not marked by the same large-scale closure of enterprises or severe restrictions for workers as the first one<sup>2</sup>, but it made it more

<sup>&</sup>lt;sup>1</sup> The first wave of the pandemic hit Russia in April – May 2020 and was accompanied by significant restrictions on people's mobility (quarantines, lockdowns), the suspension of work of some industrial enterprises, which led to an economic downturn and a decrease in the replenishment of regional budgets. At the same time, the rigidity and duration of the restrictions imposed in the regions were left to the regional authorities and differed from region to region (Zubarevich, 2020).

During the second wave of the coronavirus, the Republic of Buryatia became the first Russian region whose authorities resumed lockdown. The work of cafes, restaurants and other places of public catering was suspended (they could only supply food and drink for consumption off the premises). Shopping malls, saunas, beauty salons, cinemas, fitness clubs were closed. The restrictions did not apply to grocery stores, pharmacies, communication shops, as well as organizations engaged in the delivery of goods. Many regions extended holidays for schoolchildren (in particular, the Nizhny Novgorod, Kurgan and Sakhalin oblasts, Khabarovsk Krai). At the end of October 2020 Rospotrebnadzor issued a decree on restrictions throughout Russia: citizens were required to wear masks in places where more than 50 people were present; catering was not supposed to work from 23:00 to 6:00. See: Min'ko D., Antipova A. What are the six main restrictions imposed in Russian regions. The main takeaways. Available at: https://www.rbc.ru/society/30/11/2020 /5f8ec2d39a79471d9e2b26ce

difficult for the economy to recover (*Dal'nii Vostok Rossii...*, 2021) and, as a result, regional budgets were affected as well. The dynamics of the pandemic in the Far East were characterized by the third (July 2021) and fourth (December 2021) waves of COVID incidence, when the peak number of cases per month was 48.8 thousand and 67.7 thousand people, respectively<sup>3</sup>.

As is known, all-Russian trends do not always reflect territorial development features and the response of regional systems to shock effects (Milchakov, 2021; Pukhov, 2020). This allows us to make an assumption about possible differences from the nationwide trends in the influence of the four coronavirus waves of 2020–2021 on the change in the condition of the budgets of Russia's Far Eastern constituent entities.

This study examines the impact of the pandemic on the budget revenues of the Far Eastern regions and assesses the degree of change in the dependence of regional budgets on federal transfers, shows whether intergovernmental fiscal relations have become more transparent during the crisis and whether Russia's Far Eastern constituent entities have gained greater independence in making decisions regarding regional financial policy.

We should note that the condition of Russian regional budgets in 2020 was considered in analytical bulletins of the National Research University "Higher School of Economics"<sup>4</sup>, as well as in monitoring studies (Deryugin, 2020; Zubarevich, Safronov, 2020; Chernyavskii, 2021). All the works note that major trends include a dramatic decline in budget revenues during the lockdown and a remarkable increase in transfers from federal to regional budgets at the same time. However, the publications we have considered do not compare the results of the first and subsequent

waves of coronavirus for regional budgets based on the quarterly dynamics of regional budget indicators for 2020–2021.

#### Data sources and research methods

In this study we use data of the RF Federal Treasury on the execution of consolidated budgets of RF constituent entities on a quarterly cumulative basis for 2020–2021 and previous years so as to calculate the dynamics and assess the pace of recovery from the crisis. All budget revenues of Far Eastern constituent entities were considered – their own (tax and nontax) revenues, as well as the volume and dynamics of transfers, both in general and in the context of their individual types (grantsin-aid, subsidies, subventions and other transfers)<sup>5</sup>.

Since budget analysis in Russia does not adjust the reported dynamics of budget revenues and expenditures for inflation, the calculations of budget dynamics are made in nominal rubles.

In this section we use simple statistical methods for analyzing the dynamics and structure of budget indicators; thus, we obtain representative answers to the research questions raised regarding the budget policy of Far Eastern constituent entities in the context of the coronavirus pandemic.

#### Research results

1. In contrast to the average Russian data, the actual annual data on the formation of budget revenues of the Far Eastern constituent entities do not indicate a fall, but only a slowdown in the growth rate of the main sources of own revenues of the consolidated regional budget of the Far Eastern constituent entities in 2019–2021.

A comparative analysis of the condition of the Far Eastern constituent entities with the average Russian data in terms of the volume and structure

<sup>&</sup>lt;sup>3</sup> The spread of coronavirus in the regions of Russia. Available at: https://ncov.blog/countries/ru

<sup>&</sup>lt;sup>4</sup> Economic and social impact of coronavirus in Russia and in the world. Available at: https://www.hse.ru/pubs/share/direct/435321798.pdf

<sup>&</sup>lt;sup>5</sup> Subsidies are allocated to regions for specific purposes and provide for co-financing from the region; subventions are directed to the fulfillment of federal powers delegated to the RF constituent entity (for example, payment of unemployment benefits, etc.); other intergovernmental transfers also have a targeted nature and only grants-in-aid can be freely used by regions without directions from the federal level of government.

of consolidated budget revenues does not prove that the situation in the macroregion was critical at that time. Thus, by the end of 2020, the absolute value and structure of tax revenues of regional budgets in the Russian Federation as a whole seriously changed, while in the Far East only the tax on total income and non-tax revenues showed a drop alongside an increase in the value of federal transfers, which was significant (125%), but smaller than the national average (159%) (*Tab. 1*).

In Russia as a whole, the consolidated budgets of its constituent entities for 2020 showed an increase in revenues by 1,328 billion rubles, while the sources of this growth were mainly federal transfers that increased dramatically in 2020 – by 1,523.4 billion rubles or 1.6 times compared to 2019. Federal transfers were able to smooth the decline in tax and nontax revenues of the budgets of Russian regions. According to the results of 2020, RF constituent entities witnessed quite a considerable decline in the volume of income tax (by 12.8% by 2019) and nontax revenues (by 11.7%). Despite the declared measures of large-scale support for small and medium-sized businesses, by the end of 2020, the tax on total income paid by Russian small businesses also

decreased by 0.7%. Against this background, a 7.5% increase in individual income tax receipts in the aggregate budgets of Russian regions is explained by the large share of those employed in the public sector and at state-owned enterprises, where wages were raised in accordance with growing consumer prices. In general, own (tax and nontax) revenues of Russia's regional budgets for 2020 decreased from 10,992.9 billion rubles to 10,798.4 billion rubles (by 1.77%).

The formation of the revenue part of the aggregate (consolidated) regional budget in the Far East in 2020 was characterized by more positive dynamics compared to the national average. The growth of own revenues of the total budget in the first year of the pandemic slowed down dramatically and was only 0.2% in 2020; however, along with a 1.25-fold increase in the volumes of federal transfers to the region, this allowed for an increase in budget revenues of the Far Eastern constituent entities by 8.5%. The Far Eastern small business, which operates under difficult socio-economic conditions, reacted to the pandemic most harshly and more noticeably than at the national level (Leonov, 2018). In 2020, despite direct financial support for business, the Far East experienced a 7% decrease in

Table 1. Volume and structure of revenues of the consolidated budgets of the Far Eastern constituent entities and the Russian Federation as a whole (2019–2021)

	Revenues (in nominal terms), billion rubles/ %							
	2019		2020		2021			
	RF	FE	RF	FE	RF	FE		
Revenues - total	13572.3/100	1211.1/100	14901.2/100	1314.6/100	17546.3/100	1499.9/100		
Including:								
Tax and nontax revenues	10992.9/81.0	806.8/66.6	10798.4/72.5	808.6/61.5	13651.8/77.8	967.8/64.5		
Tax revenues	10152.3/74.8	706.6/58.3	10055.9/67.3	741.2/56.4	12675.8/72.3	822.5/54.8		
Profit tax	3358.2/24.7	220.0/18.2	2927.0/19.6	228.9/17.4	4529.3/25.8	249.4/16.6		
Individual income tax	3956.4/29.2	271.4/22.4	4253.1/28.5	287.0/21.8	4793.2/27.3	311.6/20.8		
Excise taxes	755.3/5.6	41.9/3.5	797.9/5.4	43.9/3.3	950.1/5.4	54.0/3.6		
Taxes on total income	596.4/4.4	39.8/3.3	592.1/4.0	37.0/2.8	808.9/4.6	46.0/3.1		
Property taxes	1350.9/10.0	91.5/7.6	1358.0/9.1	105.1/8.0	1444.5/8.2	109.1/7.3		
Nontax revenues	840.6/6.2	100.2/8.3	742.5/5.0	67.4/5.1	976.0/5.6	145.3/9.7		
Transfers from other budgets	2579.4/19.0	404.3/33.4	4102.8/27.5	506.0/38.5	3894.5/22.2	532.2/35.5		

the receipts from the tax on total income provided mainly by small and medium-sized enterprises (Ryazantseva et al., 2020; Leonov, 2021), and even by the end of 2021, although tax revenues on total income increased, they still turned out to be lower than the volume indicators for the pre-COVID year 2019.

Nevertheless, the results of the formation of consolidated budget revenues show that in 2021, both in the Far East and in the Russian Federation as a whole, there was a formal damping of the signs of the crisis in the revenue base of regional budgets.

In the Russian Federation by the end of 2021, against the background of an increase in own (tax and nontax) revenues of Russia's regional budgets by 26.4% and a decrease by 5.1% in the amount of transfers (from 4102.8 to 3894.5 billion rubles in 2021), the increase in revenues of the budgets of RF constituent entities amounted to 17.8% by 2020.

In the Far East, in 2021, the own revenues of regional budgets increased by 19.7% and were provided by an increase in the entire regional tax base, and an increase in federal transfers by 3.1%

ensured an increase in budget revenues by 14.1% compared to the level of 2020.

However, according to the quarterly analysis of the formation of budget revenues in the Far Eastern regions (*Tab. 2*) and taking into account the growth of their income base, we see a more pessimistic picture concerning the way out of the budget crisis caused by the coronavirus pandemic of 2020–2021; we can also note some clarifying points.

2. The analysis of quarterly data on the formation of revenues of the Far Eastern budgets has shown that the depth of the recession and the rate of recovery of budget revenues after the epidemic differed across RF constituent entities. Mining regions suffered most; the Sakhalin Oblast and Chukotka Autonomous Okrug (ChAO) even by the end of 2021 still have not been able to restore the pre-COVID structure of regional budget revenues.

In the second quarter of 2020, the own (tax and nontax) revenues of consolidated budgets of the Far Eastern constituent entities decreased by 18.5%; income taxes fell by 29%, individual income tax – by 3.5%, and taxes on total income indirectly characterizing the state of small and medium-sized

2nd quarter 3rd quarter 4th quarter 1st quarter 2nd quarter 3rd quarter 4th quarter of 2020 to of 2020 to 2020 to 2020 to of 2021 to of 2021 to of 2021 to of 2021 to 2021 to 2020 2nd quarter 3rd quarter 4th quarter 2019 1st quarter 2nd quarter 3rd quarter 4th quarter Revenue of 2019 2019 2019 of 2020 of 2020 of 2020 of 2020 RF FE All revenues of -5 -0.1 11 8 21 5 10 9 11 -5 25 13 21 29 14 18 18 14 consolidated budgets Including: -20 -19 7 -2 0.2 31 43 own (tax and -1 -6 3 8 -13 40 27 27 28 27 20 nontax) -27 -29 -17 -17 -7 15 -13 4 15 -33 53 25 85 71 77 28 55 9 profit tax 9 individual -10 -4 11 7 16 11 8 6 4 1 33 19 9 4 10 13 9 income tax -28 -29 5 -7 -6 21 37 25 tax on total -11 16 1 -0.718 80 60 29 18 27 income Total amount of 73 47 58 34 65 8 60 25 17 -7 -2 9 -13 -5 5 26 -11 6 transfers from other budgets

Table 2. Dynamics of growth in the revenues of consolidated budgets of regions in 2020 and 2021, in% compared to the same period of the previous year

businesses in the region - by 28.7% compared to the same period in 2019 (see Tab. 2).

The mining regions suffered most: a drop in production at large companies led to a sharp reduction in the volume of profits received and, as a result, a reduction in income tax receipts to the budgets of the territories.

The Sakhalin Oblast had the maximum shortfall in revenues for April – June 2020: the oblast budget did not receive 27.3 billion rubles, mainly, as can be assumed, due to strict quarantine<sup>6</sup>. Income tax deductions were lower than the average for the Far East (-29%) in Kamchatka Krai (-65%), the Republic of Buryatia (-50%), the Sakhalin Oblast (-46%), Zabaikalsky Krai (-42%).

Such a critical situation with the own revenues of regional budgets led to a sharp increase in the volume of federal transfers to the regions, which increased in the second quarter of 2020 to the second quarter of 2019 by 73% nationwide and in the Far East, in particular, by almost half (47%). Transfer infusions continued in the third quarter of 2020 (in Russia as a whole, the growth was 58%, and in the Far East -34% by the third quarter of 2019), which helped to mitigate the negative impact of the decrease in revenues for the main tax items on the replenishment of regional budgets. Individual income tax receipts at this time increased at the expense of a large proportion of those employed in the public sector, where wages were raised in accordance with growing consumer prices.

The dynamics of budget parameters by the end of 2020 in the Far East as a whole turned out to be even better than the average Russian situation. In the Russian Federation on the whole, own revenues, despite the spring failure, decreased by only 2%,

while in the Far East, regional budgets showed an increase in this indicator by 0.2% to the level of 2019. The situation in the Far East looked worse than the Russian average concerning the tax on total income paid by small businesses: its receipts in the Far East for 2020 decreased by 7%, with a drop of 0.7% in Russia as a whole.

As a result, we can say that the impact of the second wave of the coronavirus pandemic on the regional budget sphere has been leveled off by the beginning of 2021; in particular, this was due to very large amounts of transfers received by regional budgets; moreover, these transfers increased by almost 60% in 2020. Such a dramatic growth of federal aid provided to regional budgets did not occur even in the crisis of 2009, when the volume of transfer support increased by a third and amounted to 34% of regional budget revenues.

In contrast to the average Russian situation, in the Far East, the second wave of coronavirus provoked a 5.1% drop in revenues of consolidated regional budgets in the first quarter of 2021 compared to the first quarter of 2020, which was due to a 33.4% reduction in income tax receipts, mainly in the mining regions, as well as a decrease in transfers provided to the Far Eastern territories. Thus, in the Republic of Sakha (Yakutia), there was a decrease in income tax receipts to the republic's budget by 31% (-4.8 billion rubles); in the Sakhalin Oblast, the reduction in the receipt of this tax to the regional budget amounted to 70.3% (-35.6 billion rubles) compared to the first quarter of 2020. At the same time, regional transfers in the Republic of Sakha (Yakutia) increased by only 6.8% (1.6 billion rubles) and did not compensate for the problems with income tax receipts; in the Sakhalin Oblast in general, a 14.2% reduction in transfers was noted in the first quarter of 2021.

Assessing the impact of the third and fourth waves of coronavirus, we should note that the situation is generally improving. Own budget revenues in the Far East and in the Russian Federation as a whole have been growing both

<sup>&</sup>lt;sup>6</sup> We should note that the lost revenues of Moscow, which had the largest loss of revenue compared to other Russian regions in the second quarter of 2020 (-141 billion rubles), 5-fold exceeded the budget losses of the Sakhalin Oblast. We can assume that such a dramatic decline in budget revenues in the second quarter of 2020 was the real reason behind the termination of lockdown during the second wave of COVID in the autumn – winter of 2020–2021.

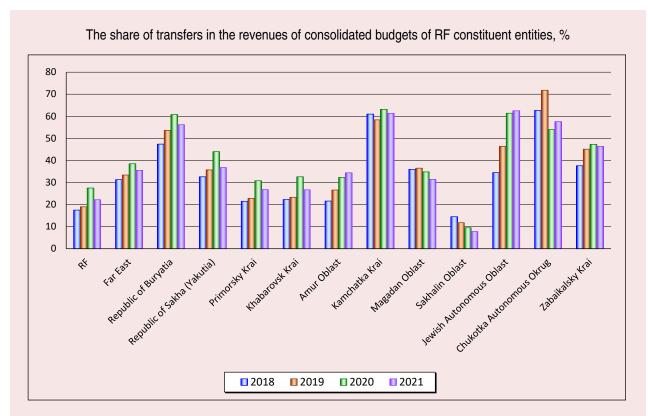
in the third and fourth quarters, and in general for 2021. In the Far East, the regions' own revenues increased by 20%, income tax receipts — by 9%, individual income tax receipts increased by 9%, and the tax on total income — by 25% (Tab. 2). At the same time, we should note that the restoration of income tax, which is most significant for developed and resource-oriented regions, is rather slow and uneven across territories. For example, according to the results of 2021, income tax inflow to the regional budget of the Sakhalin Oblast turned out to be 27%, and in ChAO — 29.2% lower than the level of 2020, respectively.

3. In the pre-pandemic years, the dependence of the budgets of the Far Eastern constituent entities on transfers, reflected by the share of transfers in the revenues of consolidated budgets, was higher than the national average in all Far Eastern regions except the Sakhalin Oblast. During the pandemic years

# (2020–2021), the dependence of regional budgets on transfers in most Far Eastern regions has increased significantly.

We note that in 2018–2019, the volume of subsidies allocated to the budgets of Russian regions grew as a result of an influx of additional funding to the regions so as to finance national projects. However, the growth rate of federal budget transfers at the 2020 stage (the peak of the COVID epidemic) turned out to be noticeably higher. Moreover, as we can see in *the Figure*, the national average share of transfers in regional budgets has increased even more than in the Far Eastern regions that usually receive subsidies.

This can be explained by the fact that in 2020, the increase in subsidization occurred in relatively developed territories of the Volga region, Siberia and the Urals, which had not previously received subsidies from the federal center. Less noticeable



increments in the share of subsidies in the budget revenues of initially highly subsidized regions are explained arithmetically, since the growth of transfers leads to an almost similar increase in the amount of budget revenues and, as a result, the proportion between the amount of the transfer and the amount of budget revenues varies slightly.

In 2021, after the first and second waves of COVID the share of transfers in the revenues of Russian and most Far Eastern constituent entities decreased. However, in the traditionally subsidized regions of the Far East, it either remained the same (Zabaikalsky Krai) or increased (the Amur Oblast and the Jewish Autonomous Oblast).

We should note that in 2020, the dependence of RF constituent entities on transfers did not increase in the city of Moscow, in Khanty-Mansi and Chukotka autonomous okrugs and in the Sakhalin and Magadan oblasts; this can be explained by the specifics of federal policy in dealing with "well-off" regions with high budget security, and focusing on providing financial assistance to subsidized regions. Moreover, in the Far East, the share of transfers in the revenues of Chukotka Autonomous Okrug and the Magadan and Sakhalin oblasts for 2018–2021 even decreased.

4. Over the years of the pandemic, decentralization in the regional financial sphere led to a reduced variability in the choice of budget spending priorities by regional authorities. According to the analysis, during the years of the pandemic, the share of subsidies that actually allow regional authorities to dispose of funds and direct them to the development of the territory in the structure of "transfer assistance" has decreased dramatically.

In 2020, there was an unprecedented increase in the amount of transfers — by 54% in Russia and by 25% in the Far Eastern regions. At the same time, targeted types of assistance (subsidies, subventions, other intergovernmental transfers) grew most rapidly in the structure of transfers; this automatically reduced the much-needed independence of regions in managing budget resources (*Tab. 3*).

In fact, it turned out that additional financial assistance transferred to the regions could only be spent on pre-agreed directions.

The dynamics of different types of transfers were dictated by various reasons.

The outstripping growth of subsidies is largely explained by an increase in assistance to the regions in terms of payments of child benefits (birth of a third child, benefits for children from 3 to 7 years

	Growth dynamics, %							
Type of transfers	2019/2018		2020/2019		2021/2020			
	RF	FE	RF	FE	RF	FE		
Gratuitous receipts (transfers)	117.6	125.4	153.9	125.0	97.4	103.1		
Grants-in-aid, total	89.2	97.3	141.1	118.1	78.4	92.7		
Including:								
- grants-in-aid for equalization*	104.8	102.3	106.3	108.6	100.1	100.2		
- grants-in-aid for balance**	63.6	76.9	235.5	169.2	51.8	129.9		
Subsidies	145.0	189.4	181.6	198.4	117.9	141.0		
Subventions	119.6	123.3	152.8	143.5	85.7	95.4		
Other intergovernmental transfers	172.4	198	149	94.2	110.2	90		

Table 3. Dynamics of changes in the amount of transfers

<sup>\*</sup> Grants-in-aid for equalization of budget security are provided to RF constituent entities whose level of estimated budget security does not exceed the level established as a criterion for equalizing the estimated budget security of subjects of RF constituent entities.

<sup>\*\*</sup> Unlike grants-in-aid for equalization that are calculated according to a given formula, grants-in-aid for balance are a less formalized mechanism to support RF constituent entities. Its main goal is to address those financial problems of the regions, which cannot be solved within the framework of the general methodology for the distribution of grants-in-aid for equalization.

old). In total, these two subsidies accounted for about a quarter of all subsidies received by the regions in 2020 (Zubarevich, 2021b). The remaining subsidies were intended to co-finance national projects.

Other intergovernmental transfers are similar to subsidies, but can be provided in order to co-finance the expenditure obligations of the corresponding budget in full (as for subsidies, they are provided on the terms of shared financing). This type of transfers has a broader list of reasons for their provision compared to subsidies. In essence, this is the least transparent transfer tool of federal budget support for the regions.

In the Far East in the pre-pandemic 2019, the growth rate of other intergovernmental transfers overtook the average Russian indicators (198% and 172.4%, respectively), while in the pandemic years, the trends in the Far Eastern and all-

Russian other intergovernmental transfers became multidirectional. In the Russian Federation in 2020–2021, the growth of this type of transfers continued, which led to an increase in the share of other intergovernmental transfers in the structure of transfers received by regional budgets from 23.4% in 2019 to 25.6% in 2021. In the Far East, a sharp increase in other intergovernmental transfers in the pre-pandemic period was replaced by an absolute reduction in their size and a drop in the share of this type of transfers in the structure of transfer revenues of the Far Eastern regional budgets from 27.2% in 2019 to 17.8% in 2021 (*Tab. 4*).

Against this background, the growth of subventions was explained by the need to address employment issues in a crisis (we are talking about funds for unemployment benefits), since the payment of unemployment benefits is one of the federal powers.

Table 4. Dynamics of the volume and structure of transfers from other budgets of the budgetary system

		Volume (billion rubles)						
Type of transfers	20	2019		2020		2021		
	RF	FE	RF	FE	RF	FE		
Gratuitous receipts (transfers)	2453.1	360	3776	450.1	3676.4	464.1		
Grants-in-aid, total	924	180.5	1303.7	213.1	1021.9	197.6		
Including:								
- grants-in-aid for equalization	675.3	152.7	717.9	165.9	718.3	166.3		
- grants-in-aid for balance	248.7	27.9	585.8	47.2	303.6	61.3		
Subsidies	557.5	50.2	1012.3	99.6	1194	140.4		
Subventions	396.6	31.7	606.2	45.5	519.6	43.4		
Other intergovernmental transfers	575	97,6	853,8	91,9	940,9	82,7		
	Share (%)							
Type of transfers	20	2019		2020		2021		
	RF	FE	RF	FE	RF	FE		
Gratuitous receipts (transfers)	100	100	100	100	100	100		
Grants-in-aid, total	37.7	50.1	34.5	47.3	27.8	42.6		
Including:								
- grants-in-aid for equalization	27.5	42.4	19.0	36.9	19.5	35.8		
- grants-in-aid for balance	10.1	7.8	15.5	10.5	8.3	13.2		
Subsidies	22.7	13.9	26.8	22.1	32.5	30.3		
Subventions	16.2	8.8	16.1	10.1	14.1	9.4		
Other intergovernmental transfers	23.4	27.2	22.6	20.5	25.6	17.8		

Subsidies for equalizing budget security (the most transparent type of transfers) are calculated according to an established formula and are generally relatively stable over the years. Their growth in 2020 was about 6-8%, which is comparable with inflation parameters. But this is exactly the kind of assistance that allows the regions to distribute it independently in accordance with their own vision of regional problems. According to the data in Table 4, the share of equalization subsidies in the amount of transfers of the Far Eastern regions decreased from 52% in 2018 to 42% in 2019 and 36.9% in 2020, amounting to 35.8% in 2022. Grants-in-aid aimed at ensuring the balance belong to force majeure tools of budgetary policy (they increase during crises).

Thus, during the pandemic period, the share of equalization subsidies that the Far Eastern regions could spend independently on their own needs in the total amount of transfers decreased from 42.4% to 35.8%.

5. The crisis revealed a lack of clear criteria in the provision of "transfer assistance" to the regions. Transparency of assistance provided to RF constituent entities has deteriorated during the pandemic crisis, which actually creates negative stimuli for regional development, giving rise to the desire of regional governments to lobby for special financial preferences from the federal center.

The reason for the situation lies in the deterioration of coordination of assistance to the regions by federal structures, since regional transfers are provided to the territories not only by the Ministry of Finance, but also by other federal bodies. We find a deterioration of transparency as we analyze the ratio of budget losses<sup>7</sup> of the Far Eastern constituent entities to the volume of additional transfers of the current year compared to the previous one.

According to the data in Table 5, in 2020, the own budget revenues of the Far Eastern constituent entities increased by only 1.7 billion rubles,

Table 5. The difference between the loss of own (tax and nontax) revenues of consolidated budgets of RF constituent entities and the amount of additional transfers (billion rubles)

		•	,	
		2021 compared to 2020 (decline of the pandemic)		
dynamics of own revenues	dynamics of the amount of transfers	dynamics of own revenues	dynamics of the amount of transfers	
1.7	101.7	159.2	26.1	
0.0	14.6	9.2	1.9	
-6.1	32.3	72.4	10.7	
-5.4	16.5	25.5	-0.3	
-0.2	18.2	19.7	-4.9	
9.8	11.8	6.6	6.8	
0.4	12.5	5.6	4.0	
7.0	2.6	5.0	-0.4	
-14.5	-6.8	6.2	-2.7	
0.1	5.9	1.0	2.3	
9.0	-11.3	-2.1	1.7	
1.6	5.3	10.1	7.2	
	(peak of the dynamics of own revenues  1.7  0.0  -6.1  -5.4  -0.2  9.8  0.4  7.0  -14.5  0.1  9.0	revenues         amount of transfers           1.7         101.7           0.0         14.6           -6.1         32.3           -5.4         16.5           -0.2         18.2           9.8         11.8           0.4         12.5           7.0         2.6           -14.5         -6.8           0.1         5.9           9.0         -11.3	(peak of the pandemic)         (decline of the dynamics of own revenues           1.7         101.7         159.2           0.0         14.6         9.2           -6.1         32.3         72.4           -5.4         16.5         25.5           -0.2         18.2         19.7           9.8         11.8         6.6           0.4         12.5         5.6           7.0         2.6         5.0           -14.5         -6.8         6.2           0.1         5.9         1.0           9.0         -11.3         -2.1	

<sup>&</sup>lt;sup>7</sup> Budget losses ("lost revenue") is the difference in the budget's own revenue (tax and nontax) of the current year in comparison with the previous year.

and 101.7 billion rubles of federal transfers were additionally "poured" into the region. At the same time, the Sakhalin Oblast received the least support at the peak of the pandemic in 2020. The oblast was not compensated for a 14.5-billion-ruble decrease in own revenues in 2020 compared to 2019; moreover, the amount of transfers it received was reduced by 6.8 billion rubles. Apparently, federal authorities considered that the Sakhalin Oblast, being a "rich" oil and gas producing region, would manage to solve the current financial problems on its own, as well as Chukotka Autonomous Okrug, a mining region whose transfer support was reduced by 11.3 billion rubles; while, for example, the Republic of Yakutia and Primorsky and Khabarovsky krais received very significant transfer compensation for much smaller reductions in their own revenues than the Sakhalin Oblast by the end of 2020.

Improvements in the economic situation in 2021 and, as a result, an increase in the regions' own revenues by 159.2 billion rubles led to a reduction in the amount of transfers by 26.1 billion rubles compared to 2020, but over 38% of this amount of aid was sent to the Republic of Sakha (Yakutia), which is difficult to explain, because Yakutia in 2021 demonstrated the most significant increase in its own budget revenues among the Far Eastern regions (72.4 billion rubles). The Sakhalin Oblast and Chukotka Autonomous Okrug were "overlooked" once again. This situation confirms that in the context of the pandemic, intergovernmental relations as well as the decision-making system on budget assistance to the regions as a whole are nontransparent.

The impact of the pandemic on regional budget expenditures was manifested primarily in a significant increase in health care costs. The pandemic revealed serious discrepancies in the level of medical care that have developed in different regions, which in reality manifested itself in a shortage of COVID beds in many regions, especially during the second wave of the crisis.

Another priority of regional budgets consisted in the problems of social policy and social protection manifested in the growth of unemployment benefits, child support benefits, etc. The growth of another significant social item of expenditure of regional budgets — spending on education — in all regions lagged far behind health care spending and was within inflationary parameters.

Another consequence of the COVID crisis was the growth of nonsocial expenses. We are talking about raising the subsidies allocated to the housing and utilities sector from regional budgets in order to avoid raising tariffs for housing and communal services for the population in conditions of declining incomes of the latter. Moreover, despite the pandemic, regions continued to implement national projects and receive subsidies for these strictly defined purposes; thus, the total amount of subsidies (targeted transfers) increased in the Far Eastern regions for 2019–2021 by 90.2 billion rubles or 2.8-fold compared to 2019. At the same time, grants-in-aid for equalization (nontargeted transfers most "desired" by regional authorities) increased less than 1.09-fold over the same period, by only 13.6 billion rubles in 2019–2021.

#### **Conclusion**

The COVID epidemic is not over yet. For the Far East, the first and second waves of the epidemic had the most significant impact on the condition of regional budgets. Data for 2021 show a certain mitigation of the impact of the third and fourth waves of the epidemic on the regional budget system through intergovernmental transfers. The results of 2022 may clarify the impact of COVID restrictions, but we can expect that the main trends and potential risks have already been identified. The impact of the first wave turned out to be the most significant for the Far East and its regional budget system. Due to the lockdown, oil and gas producing regions (Sakhalin Oblast), as well as mining regions (Kamchatka and Zabaikalsky krais, Republic of Buryatia) suffered most. The second

wave of coronavirus provoked a 5.1% drop in the revenues of consolidated budgets of the Far Eastern regions in the first quarter of 2021, which was due to a 31% decrease in income tax inflows to the budget of Yakutia and a 70% reduction in the inflow of this tax to the budget of the Sakhalin Oblast, while at the same time the volume of transfers to the regions of the Far East decreased.

In general, in the Far East, the pace of overcoming the coronavirus crisis differs in various regions. Regions specializing in manufacturing are recovering faster; the process is slower in mining regions. The main condition for overcoming the budget crisis was a large-scale increase in federal aid, which allowed most regions to compensate for the loss of their own budget revenues.

The impact of the third and fourth waves of the coronavirus crisis on the economy of the Far East and the regional budget sphere can be assessed as weak in general. The stagnation of extractive industries continued; as a result, in the analyzed period of 2020–2021, problems of forming the tax base were noted in most of the mining regions. Thus, we can forecast that the condition of regional budgets will depend more on the transfer support from the federal center.

At the same time, we have found a lack of clear criteria in the provision of "transfer assistance" to the regions. Transparency of the aid provided to RF constituent entities has deteriorated during the pandemic crisis, which may lead to the formation of

anti-incentives for regional development, giving rise to the desire of regional governments to lobby for special financial preferences from the federal center.

Since the regions, despite the pandemic, continue to implement national projects, receiving subsidies for these purposes, the total amount of subsidies increased in the Far Eastern regions for 2020–2021 by 90.2 billion rubles or 2.8-fold compared to 2019. At the same time, grants-in-aid for equalization (nontargeted, the most "desirable" transfers) increased only 1.09-fold over the same period. This means that the measures actually taken to stimulate fiscal policy in the eleven Far Eastern regions do little to create conditions for the prospective post-crisis modernization of their economies, mainly aimed at addressing the current problems of forming the revenue part of regional budgets.

The results of the study contribute to the identification of practice-oriented aspects of overcoming the noneconomic shocks of the coronavirus pandemic on the regional budgets of the Far Eastern macroregion, substantiate the need to improve approaches to providing transfer assistance to problem regions, making it more "transparent" for regional governments. Practical significance of the study is due to the possibility of applying the findings in the activities of public authorities aimed at addressing problems in the implementation of intergovernmental policy in the Far Eastern macroregion of Russia.

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Received September 20, 2022.