

DOI: 10.26794/2587-5671-2026-30-1-160-173

UDC 336.02(045)

JEL H21

# Regression Analysis Models for Dividend Income Taxation and Tax Base Erosion Risks Assessment in Russian Regions

O.I. Borisov

Financial University under the Government of the Russian Federation, Moscow, Russian Federation

## ABSTRACT

This article analyzes dividend income taxation across Russian federal subjects using statistical data from the Federal Tax Service of Russia and Rosstat for 2012–2023. The **purpose** of the study is to identify federal subjects exhibiting signs of personal income tax base erosion related to dividend income. This objective predetermined the following research tasks: to develop a regression model for structural and dynamic analysis of dividend income; to identify federal subjects with significant deviations from nationwide indicators; to determine potential tax optimization schemes that may cause these deviations; and to develop a risk-oriented model for identifying federal subjects where non-residents and individual entrepreneurs may potentially utilize “dividend” tax evasion schemes. The research employs econometric modeling (panel regression model with fixed effects), comparative analysis, and statistical analysis. The study establishes a statistically significant relationship between the share of dividends in total individual income and corporate profit dynamics, as well as a strong influence from the proportion of non-residents and individual entrepreneurs receiving dividends. The analysis controls for macroeconomic shocks and time-invariant regional factors such as industry structure and investor profiles. Federal subjects exhibiting signs of personal income tax base erosion related to dividend income were identified, and key factors that tax authorities should consider during tax audits were highlighted. The novelty of this research lies in constructing a regression model for structural and dynamic analysis of dividend income, as well as developing a risk-oriented model for identifying federal subjects where non-residents and entrepreneurs may potentially employ “dividend” tax evasion schemes. The practical significance stems from enabling tax authorities to use the proposed models to identify potential centers of systematic tax evasion scheme usage and facilitate their prompt suppression. The proposed research methodology allows for decomposition at to the municipal level, enabling more precise identification of sources of potential personal income tax base erosion.

**Keywords:** dividend taxation; profit distribution; PIT; tax policy; tax avoidance; regional analysis; risk score; fixed-effects regression

**For citation:** Borisov O.I. Regression analysis models for dividend income taxation and tax base erosion risks assessment in Russian regions. *Finance: Theory and Practice*. 2026;30(1):160-173. DOI: 10.26794/2587-5671-2026-30-1-160-173

## INTRODUCTION

Income taxation of dividends is a complex and multidimensional system with elements of tax incentives for businesses and investors (residents and non-residents), monitoring and detection of signals indicating the prevalence of tax evasion schemes. These, in turn, may be attempts by taxpayers to requalify other types of income as dividends in order to reduce the tax burden, use lower personal income tax rates (hereinafter PIT) and avoid paying insurance premiums [1]. However, this may be a consequence of the reverse process – “disguised”, “substituted dividends”, whose growth is noted by tax authorities around the world.

These problems are most often considered in the context of taxation of cross-border dividends [2, 3], double economic taxation [4, 5], or directly business [6–8]. Much less studied is the problem of avoidance of tax on dividends in favor of domestic individuals, because it is difficult to measure the extent of this phenomenon and estimate where it occurs most often.

### REGRESSION MODEL OF STRUCTURAL-DYNAMIC ANALYSIS OF INCOME TAXATION OF DIVIDENDS IN THE PERSPECTIVE OF SUBJECTS OF THE RUSSIAN FEDERATION

Russia is a very large country with many subjects of the Russian Federation with different levels of economic development. For this reason, in order to identify the directions of further improvement of tax policy with respect to dividends it is necessary to analyze the dynamics of income of individuals for the period 2012–2023 in terms of the subjects of the Russian Federation and establish, whether there is a dividend erosion of the PITR tax base or any significant structural shifts.

Given that the amount of dividends paid directly depends on the financial results of the business, the following regression equation can be constructed:

$$\ln(\text{DivShare}_{r,t}) = \alpha + \beta_1 \ln(\text{BFR}_{r,t}) + \beta_2 s_{r,t}^{NR} + \beta_3 s_{r,t}^{ENT} + \delta_r + \lambda_t + \tau_t + \varepsilon_{r,t},$$

where  $\text{DivShare}_{r,t} = \frac{\text{Div}_{r,t}}{\text{TotalPIT}_{r,t}}$  — is the share of

dividends received by individuals in the region  $r$  in year  $t$  in their total income;

$\text{BFR}_{r,t}$  — net financial result (profit minus loss) of the activities of organizations in region  $r$  in year  $t$ ;

$\beta_1$  — elasticity of the share of dividends in the total amount of income received by individuals in relation to the financial results of the organizations’ activities;

$$s_{r,t}^{NR} = \frac{tp_{NR}}{tp_{all}} — \text{non-resident share of all}$$

individuals receiving dividends in region  $r$  in year  $t$ ;

$$s_{r,t}^{ENT} = \frac{tp_{ENT}}{tp_{all}} — \text{the share of sole proprietors}$$

in relation to all individuals receiving dividends in region  $r$  in year  $t$ ;

$\beta_2, \beta_3$  — variables reflecting the extent of dividend gains due to the increase in the number of special categories taxpayers;

$\delta_r$  — variable, fixing constant characteristics of region  $r$  (demographic factors, industry structure, profile of investors, etc. etc.);

$\lambda_t$  — a variable that takes into account shocks common to all regions in year  $t$  (spikes of inflation, macroeconomic cycles, reaction to sanctions imposed, change in government policies, etc.);

$\tau_t$  — linear time trend to absorb national shifts in companies’ dividend policy;

$\alpha$  — constant;

$\varepsilon_{r,t}$  — accidental error (assumed  $E[\varepsilon] = 0$ ).

The ratio of dividends to total income of individuals was chosen as a result because it would allow to determine the potential erosion of the PITR tax base in terms of dividends (reducing or increasing their share), as well as automatically scaled depending on the size of the region’s economy and number of taxpayers

in it. The logarithmic transformation of  $DivShare_{r,t}$  and  $BFR_{r,t}$  allows to stabilize dispersion and to fix elasticity (percentage change in dividend share when organizations profit changes), and also helps to normalize the skewed distribution of profits and dividends in the income of individuals in different subject of the Russian Federation.

The obtained model is statistically significant and explains about 80.2% dispersion in the logarithm of the share of dividends by regions and years (*Table 1*), i.e. for all subjects of Russian Federation the share of dividends in the total amount of income of individuals is quite closely related to the dynamics of corporate profit. There are no significant structural gaps in the number of shares of dividends in the income of individuals: in all subjects of the Russian Federation, it changed relatively smoothly, without single jumps or falls that would change the trajectory of the trend.

The built model confirms two positive dividend payouts in 2014 and 2016 (*Table 2*) due the devaluation of the ruble and the response to calls from the Russian Ministry of Finance to state-owned companies to distribute at least 50% of IFRS/RSSB profits as dividends. In 2021–2023, by contrast, the widespread reversal in dividend distribution is seen first as a reaction to the COVID consequences, and then as a result of macroeconomic shocks and the impact on business of sanctions imposed. The recovery of distributed dividends aftershocks takes about two years.

The low elasticity of the share of dividends in the income of individuals relative to the financial performance of organizations ( $\beta_1 \approx 0.045$ ) indicates that the increase of companies' profits only slightly leads to an increase of dividends in favor of individuals: only 4.5% of the additional profit of the companies flows into a large share of dividends in the income of individuals. The main reason for this is the low share of dividends in favor of individuals (9–12%) compared to the share of inter-corporate dividends taxed on the

*Table 1*  
**Regression Statistics of the Dependence Analysis of the Share of Dividends Received by Individuals and the Financial Result of the Organizations' Activities in the Context of the Subjects of the Russian Federation**

R-square	0.802
Normalized R-square	0.778
Observation	862
Number of variables (regression)	94

*Source:* Author's calculations based on data from reports in Form № 5-NDFL of the Federal Tax Service of Russia and data from Rosstat.

profits of organizations at a rate of 0% (40% – 62%) (*Fig. 1*).

However, even taking into account the macroeconomic shocks and the low elasticity of dividend payments, their annual growth rate is around 10.3% ( $\tau$ ), reflecting a gradual structural shift towards a higher dividend payment culture (*Table 3*).

$\beta_2$  and  $\beta_3$  are also economically and statistically significant: an increase of 10% in the non-resident share receiving dividends leads to a decrease of about 15% in the dividend share of total income of individuals ( $e^{\Delta\beta_2} - 1 \approx 14,6\%$ )<sup>1</sup>; a 10% increase in the share of individual entrepreneurs receiving dividends leads to a decrease of approximately 17% in the share of dividends in the income of individuals ( $e^{\Delta\beta_3} - 1 \approx 16,8\%$ ). This suggests that regions where a significant portion of dividends are received by non-residents or individual entrepreneurs tend to show a lower share of dividends in the total income of individuals, what the potential erosion of the tax base at the expense of arbitration on the source tax

<sup>1</sup>  $\beta$  represents the change in the logarithm of the share of dividends in the income of individuals when the regression is changed by one unit, keeping all other parameters constant ( $\Delta \ln(DivShare) = \beta_2 \times \Delta s$ ). Since  $\Delta \ln(y)$  – is a logarithm of the relation of the new level to the old level, then

$$\Delta \ln(y) = \ln\left(\frac{y_t}{y_{t-1}}\right) \Rightarrow \frac{y_t}{y_{t-1}} = e^{\Delta \ln(y)}$$

Table 2

**Analysis of Macroeconomic Shocks Influenced the Dividends' Distribution in 2013–2023 Relative to 2012 Values (Indicator  $\lambda_t$ )**

Indicator	Coefficient	Comment
$\lambda_{2013}$	-0.0299	No significant change in dividend distribution compared to 2012
$\lambda_{2014}$	+0.2831	Big jump: due to the collapse of the ruble and falling oil prices, exporting companies recorded excess profits in rubles; state-owned companies paid high dividends
$\lambda_{2015}$	+0.0352	Normalization of dividend payments; mitigation of dividend payments by publicly-owned companies
$\lambda_{2016}$	+0.0550	Growth due to the proposal of the Russian Ministry of Finance to oblige all publicly-owned companies to pay 50% profit under IFRS/ RSSB
$\lambda_{2017}$	+0.0620	Continued normalization of dividend payouts with high heterogeneity
$\lambda_{2018}$	+0.0439	Easing of pressure on state-owned companies, normalization of dividend payments
$\lambda_{2019}$	+0.0576	Year without macroeconomic shocks
$\lambda_{2020}$	+0.0981	Despite COVID, many companies continued to pay dividends; some support was also provided by the increase in ruble earnings
$\lambda_{2021}$	-0.1241	Sharp drop due to companies' decisions to temporarily freeze dividends for business recovery after COVID
$\lambda_{2022}$	-0.0304	The beginning of a reduction in dividends due to macroeconomic shocks, the impact of sanctions, the ban on currency conversion, etc.
$\lambda_{2023}$	-0.1000	Low dividend distribution relative to 2012 baseline due to continued impact of macroeconomic shocks

Source: Author's calculations.

rates, use of requalification schemes in dividends of different types of income from actual work.

The hypothesis that a decrease in the share of dividends in the income of individuals with an increase in the number of non-residents and individual entrepreneurs is related to tax optimization is confirmed by the reverse effect of increasing the share of residents among

dividend recipients. When the resident share increases by one percentage point, the logarithmic share of dividends in the income of individuals increases by about 0.87%. If the share of residents receiving dividends increases by 10 percentage points, the share of dividends in physiotherapy income rises by about 9% ( $e^{\Delta\beta_{RES}} - 1 \approx 9,1\%$ ). The percentage of residents among dividend recipients shows high

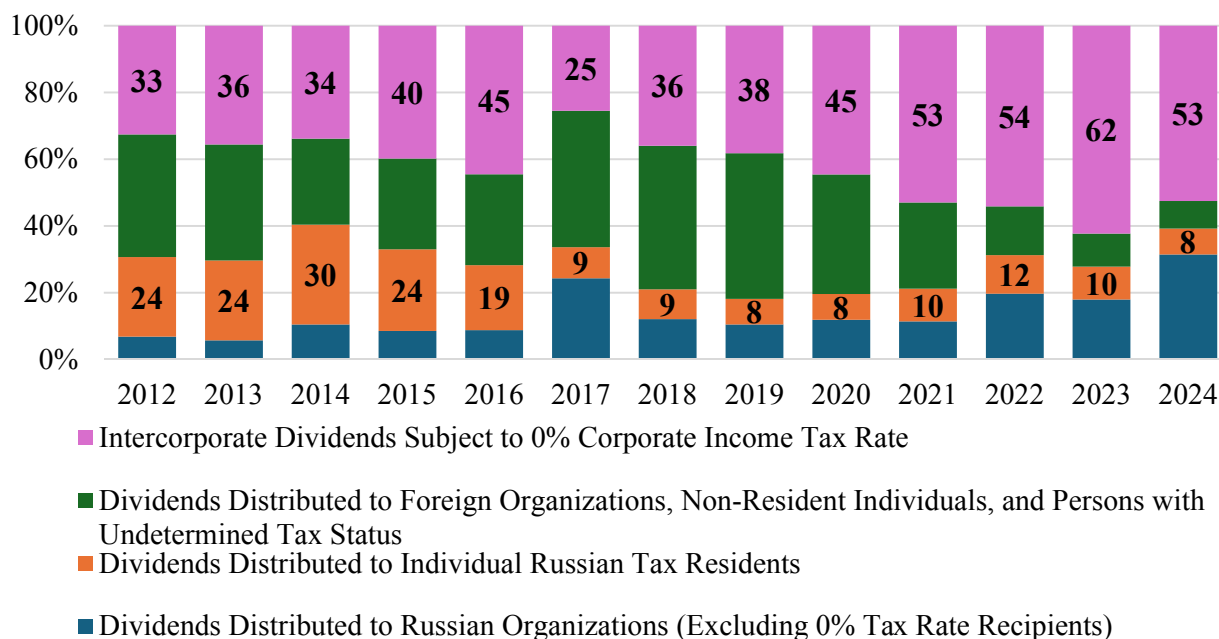


Fig. 1. Structure of Dividend Payments by Russian Organizations According to the Main Groups of Shareholders (Participants), %

Source: Author's calculations based on data from reports in Form No. 5-NDFL of the Federal Tax Service of Russia.

Table 3

Analysis of Other Indicators Characterizing the Dynamics of the Share of Dividends in the Individuals' Income

Indicator	Coefficient	t-statistic	P-value	95% CI
$\tau$	+0.1027	10.730	0.000	[+8.4%. +12.1%]
$\beta_1$	+0.0448	1.942	0.052	[0%. +9%]
$\beta_2$	-1.4829	-1.943	0.052	[-297.9%. +1.3%]
$\beta_3$	-1.4618	-1.847	0.065	[-301.3%. +9%]
$\alpha$	-4.3066	-11.444	0.000	[-504.4%. -356.9%]

Source: Author's calculations.

statistical significance ( $t$ -criterion 13.369;  $P$ -value 0.000). The confidence interval with a probability of 95% is in the positive range (from +0.741 to +0.996). This means that even in the most pessimistic forecasts, increasing the resident share by just one unit leads to a rise in the logarithmic share of dividends by at least 0.741%.

However, this indicator was not included in the model because it does not meet the

objective of identifying subjects of RF with high risk of tax evasion by individual groups of taxpayers.

Indicators not included in the model should also be noted due to lack of statistical significance of their impact on the system as a whole:

$$\rho_{r,t}^{NR} = \frac{avg\ div_{NR}}{avg\ div_{all}} \text{ — average size of dividends}$$

Table 4

**Indicators of the Subjects of the Russian Federation with an Extremely High Share of Dividends  
in the Individuals' Income Compared to the All-Russian Level**

Subjects of the Russian Federation	$\delta_r^*$	Deviation from the all-Russian level**
Kamchatka Region	+0.9983	+171.4%
Kaliningrad Region	+0.7895	+120.2%
Leningrad Region	+0.6935	+100.1%
Chelyabinsk Region	+0.6077	+83.6%
Altai Republic	+0.5513	+73.6%
Smolensk Region	+0.5062	+65.9%
Moscow Region	+0.4865	+62.7%

Source: Author's calculations.

Note: \* Median logarithmic share of dividends in each individual entity of the Russian Federation, less the Russian-wide value after taking into account the elasticity regarding the financial results of organizations' activities in this entity ( $\beta_1$ ), macroeconomic shocks ( $\lambda$ ) and linear trend ( $\tau$ ); \*\* Here and further the rate of deviation of the share of dividends in the total amount of income of individuals in the subject of the Russian Federation from the general level is calculated as  $PctGap_r = (e^{\delta_r} - 1) \times 100\%$ .

to non-residents relative to all individuals receiving dividends in region  $r$  in year  $t$  (regression factor 0.0004;  $t$ -criterion 0.438;  $P$ -value 0.662; confidence interval  $[-0.1; +0.2]$ );

$$\rho_{r,t}^{ENT} = \frac{avg\ div_{ENT}}{avg\ div_{all}} \text{ — average size of dividends}$$

to individual entrepreneurs relative to all individuals receiving dividends in region  $r$  in year  $t$  (regression coefficient  $-0.0082$ ;  $t$ -criterion  $-0.606$ ;  $P$ -value 0.544; confidence interval  $[-3.5; +1.8]$ );

$$-\gamma_{r,t}^{ENT} = \frac{tp_{ENT}}{Pop_{ENT}} \text{ — share of individual}$$

entrepreneurs who received dividends in the total number of individual entrepreneurs in region  $r$  in year  $t$  (regression coefficient 0.2729;  $t$ -criterion 0.572;  $P$ -value 0.567; confidence interval  $[-66.2; +120.8]$ ).

### IDENTIFICATION OF SUBJECTS OF THE RUSSIAN FEDERATION WITH DEVIATIONS FROM THE NATIONAL INDICATORS

The analysis allows to divide all entities of the Russian Federation according to the size and statistical significance of the gap between the share of dividends in the total amount of income of individuals, as well as to allocate entities of the Russian Federation in which this share exceeds the level of more than 60% (Table 4), but the separation itself is statistically significant ( $|t| \geq 1.96, p < 0.05$ ).

Such deviations may be due to economic reasons. At the same time, they may indicate the risks of conventionally using schemes to requalify individuals' incomes into dividends for the purpose of taxing them at 13/15% instead of 13/22%, as well as evasion of insurance premiums.

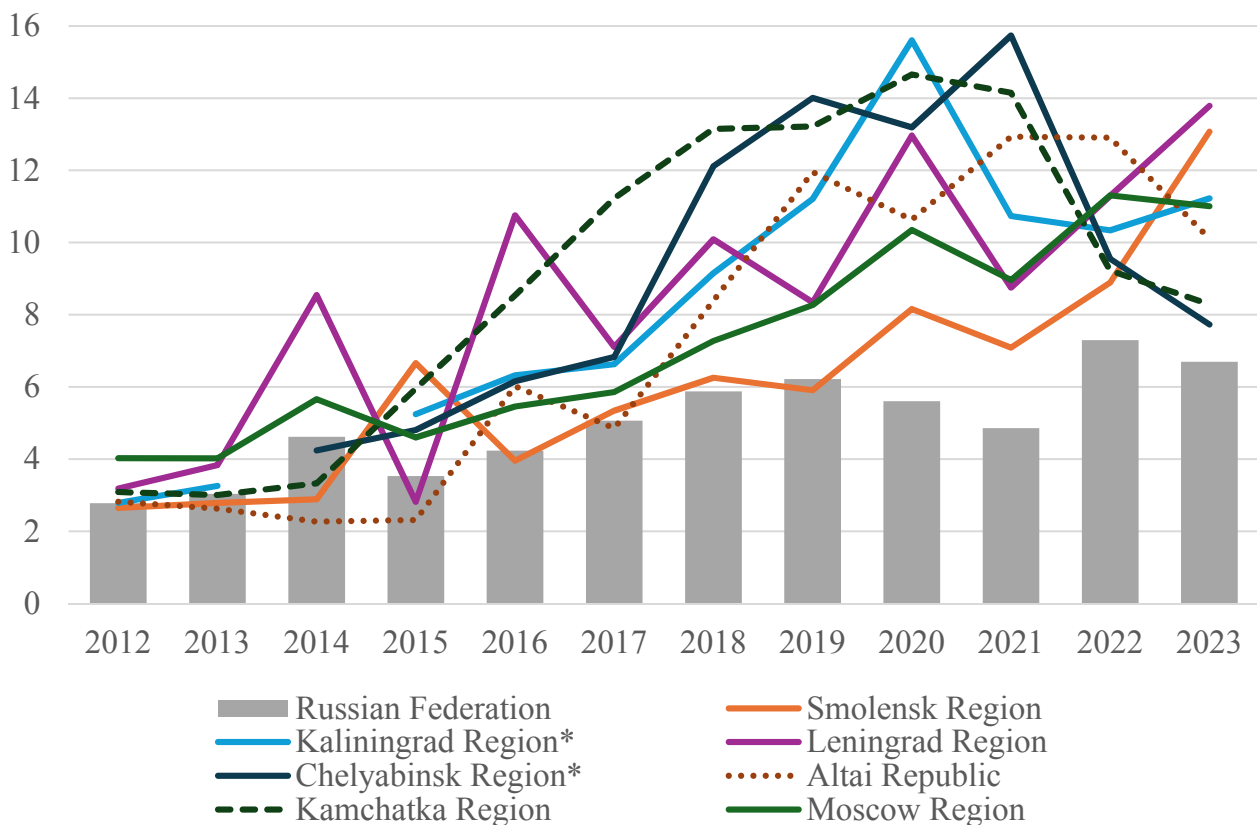


Fig. 2. Dynamics of the Share of Dividends in the Individuals' Income in the Subjects of the Russian Federation with an Extremely High Deviation from the All-Russian Level, %

Source: Author's calculations based on data from reports in Form No. 5-NDFL of the Federal Tax Service of Russia.

Note: \* Official statistical data are unavailable for the Kaliningrad Region for 2014 and for the Chelyabinsk Region for 2013.

The economic reasons for these deviations are as follows:

- Kamchatka region (+171.4%) shows a significant increase in income. However, despite the existence of large mining and fishing companies, the total income base of individuals is relatively small. This is due to the fact that many employees work by shift. In such circumstances, even single large dividend payments can have a significant impact on average income, creating the effect of a “thin tax base”.
- Kaliningrad Region (+120.2%) is a special economic zone in which many holding companies are registered. Significant tax preferences and large flows of foreign direct investment can create favorable conditions for tax evasion and require special attention by the tax authorities.
- Leningrad Region (+100.1%) is a port and industrial hub with many holding companies, which may indicate the risk of tax avoidance

schemes and require cross-analysis using customs data, as well as information on controlled foreign companies (CFC).

- In the Chelyabinsk Region (+83.6%) large metallurgical and mining conglomerates are registered, so the deviation from the general Russian level may be due to high dividend distribution rates or high fluctuations of the companies' own financial results. 1/3 of the dividends paid to individuals come from individual entrepreneurs, while non-residents receive 1/5.
- The Republic of Altai (+73.6%) is characterized by a small economy and a small number of high-income companies, so there may also be an effect of the “thin tax base”.
- In the Smolensk Region (+65.9%) a relatively small population and a rather high size of dividends in favor of individual entrepreneurs.

Table 5

### Indicators in the Subjects of the Russian Federation with an Extremely Low Share of Dividends in the Individuals' Income Compared to the All-Russian Level

Subjects of the Russian Federation	$\delta_r$	Deviation from the all-Russian level
Republic of Tuva	-2.5796	-92.4%
Nenets Autonomous Region	-1.4364	-76.2%
Republic of Kalmykia	-1.4215	-76.1%
Chukchi Autonomous Region	-1.4094	-75.9%
Jewish Autonomous Region	-1.4314	-75.6%

Source: Author's calculations.

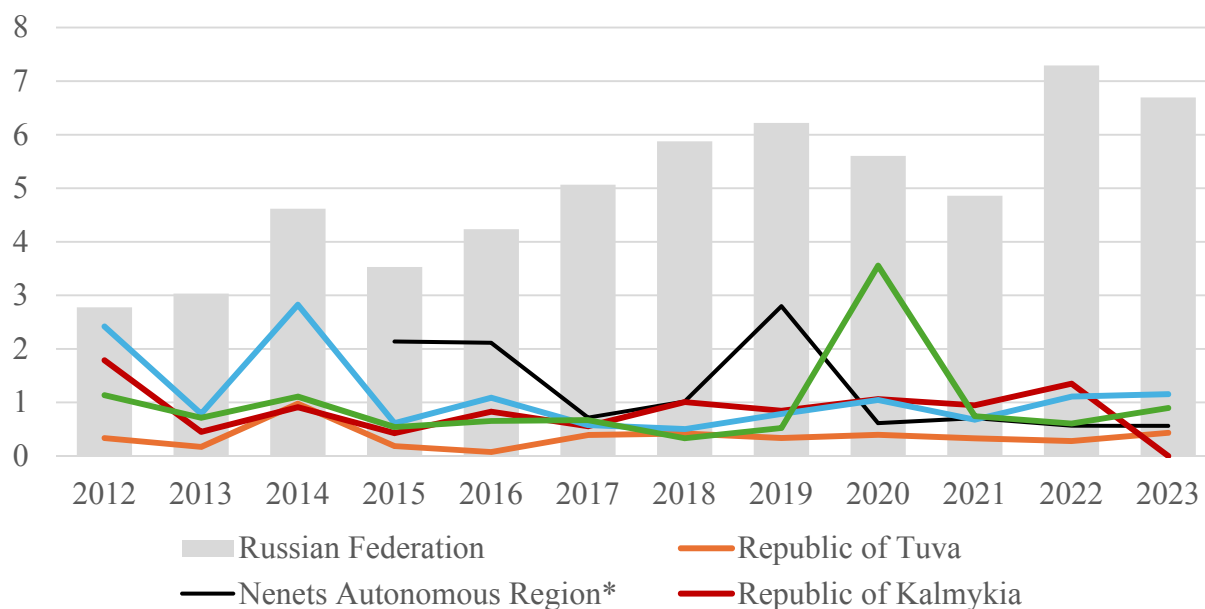


Fig. 3. Dynamics of the Share of Dividends in the Individuals' Income in the Subjects of the Russian Federation with an Extremely Lower Level Compared to the All-Russian Level, %

Source: Author's calculations based on data from reports in Form No. 5-NDFL of the Federal Tax Service of Russia.

Note: \* Nenets Autonomous Okrug was part of Arkhangelsk prior to 2015.

• The Moscow Region (+62.7%) is one of the largest industrial and economic centers in Russia, where several special economic zones are registered.

However, it should be borne in mind that since 2015, deviations from the general Russian level have steadily increased in almost all of the designated entities (Fig. 2). This requires checking whether there are high dividends on several companies of systemic importance

to the region, or whether there are risks of spreading tax evasion schemes.

The proposed model makes it possible to highlight those subjects of the Russian Federation in which this share, on the contrary, is below the national level by more than 60% (Table 5), and the gap itself is also statistically significant ( $|t| \geq 1.96$ ,  $p < 0.05$ ). This group includes remote regions with relatively low income of individuals. If a negative gap was

observed over a relatively short period of several years, it could be assumed that an unusually low share of dividends means that the business reinvests or retains profits and there is no risk of conventional tax base erosion.

In this case, however, a significant negative gap is observed throughout 2012–2023 against the background of generally positive total financial results of the companies' activities (Fig. 3). This points to systemic problems: companies generate profits but do not distribute dividends in favor of individuals. This may be partly explained by the high proportion of subsidiaries that pay out inter-corporate dividends. At the same time, the presence in most of these regions of sudden and repeated increases in the share of dividends in the income of individuals suggests that something is causing business to systematically avoid dividend payments and use alternative methods of moving profits, that may be related to the use of tax optimization schemes.

### POTENTIAL TAX OPTIMIZATION SCHEMES USING OECD DIVIDENDS

According to the preliminary analysis, the subjects of the Russian Federation with high deviations in the share of dividends in the total sum of income of individuals show that taxpayers derive disproportionately large benefits from receiving revenues precisely in the form of dividends. Similar anomalies can be explained by using several types of tax optimization schemes.

First of all, the use of special economic zones (hereinafter — SEZ) and territories of leading development (hereinafter — TLD), in which organizations pay income tax to organizations in the federal budget at a rate of 0% and in regional budgets — at reduced rates, according to the laws of the relevant subjects of the Russian Federation (p. 1.8 art. 284, art. 284.4 of the Tax Code of the Russian Federation). Various types of SEZ are present in most of the subjects considered in the Russian Federation (Table 6), giving the opportunity for

unscrupulous entrepreneurs to register their companies in these territories to subsequently distribute the received tax-free profit with the payment of dividends only by PIT on rates (13/15%). In this case, the tax burden will be reduced at least from ~34.8% to 13/15%, i.e. more than a third [9, 10].

In addition to the mentioned SEZ, there are several special development zones of the Far East in the Kamchatka region: the free port of Vladivostok, the territory of the leading development “Kamchatka”. The laws of the Kamchatka Region provide for a 0% tax rate to be added to the regional budget for the first 5 years after receipt of the first profit; 10% — in the next 5 years. Given that the exponential increase in the share of dividends in the income of individuals in Kamchatka region has been noted since 2015, this may be a direct consequence of the entry into force of the Federal Law from 29.12.2014 No. 473 “On territories of leading development in the Russian Federation” and Resolution of the Government of the Russian Federation from 28.08.2015 No. 899 “On the creation of the territory of the advance development “Kamchatka”.

Similar reasons for the high share of dividends in the income of individuals can be in the Kaliningrad region, which is also a SEZ. Profits from the implementation of investment projects in it for the first 6 years are taxed at 0%, and during the next 6 years — at the basic rate of income tax reduced by 50% (para. 6, 7 art. 288.1 of the Tax Code of the Russian Federation). The Oktyabrsky Island is a special administrative area of the Kaliningrad region and plays the role of an internal off-shore [11]. For the international holding companies registered on it, significant tax benefits are provided: dividends received from subsidiaries, under certain conditions completely exempt from income tax (pp. 1.1 para. 3 art. 284 of the Tax Code of the Russian Federation); dividends paid to foreign shareholders are taxed at the rate of 5% (pp. 1.2 para. 3 art. 284 of the

Table 6

**Special Economic Zones in the Federal Subjects of Russia with an High Deviation from the All-Russian Level of the Share of Dividends in the Individuals' Income**

Subjects of the Russian Federation	Type of Special Economic Zones, name	Date of creation	Corporate income tax rate
Smolensk Region (Smolensk District)	Industrial-type SEZ "Stabna"	27.09.2021	0% for the first 7 years; 5% from 8 to 10 years; 13.5% since 11
Leningrad Region (Kingisepp District)	Industrial-type SEZ "Ust-Luga"	25.05.2022	5% first 5 years; 11% 6–10 years; 13.5% since 11
Moscow Region (Dubna)	Technical-implementation type SEZ "Oak"	21.12.2005	2% for the first 5 years; 7% from 6 to 10 years 15.5% since 11
Moscow Region (Stupino District)	Industrial type SEZ "Stupino Quadrato"	август 2015 г.	
Moscow Region (Fryazino)	Tech-Implementer type SEZ "Istok"	31.12.2015	
Moscow Region (Kashira)	Industrial-type SEZ "Kashira"	07.11.2019	
Moscow Region (Domodedovo)	Industrial type SEZ "Maximicha"	27.10.2020	
Jewish Autonomous Region	TLD "Amuro-Hinganskaya"	27.08.2016	
Chukchi Autonomous Region	TLD "Chukotka"	10.01.2019	

Source: Compiled by the author.

Tax Code of the Russian Federation). Tax preferences contributed to the change of tax residence on the island Oktyabrsky parent company "Rusal" (previously registered in O. Jersey), holding company CYAN (formerly resident in Cyprus), international companies Yandex, Avito and many others [12]. The presence of many international companies also affects the increase in the size of dividends in favor of individuals, because the holding company draws dividends from many subsidiaries throughout Russia, which are generally taxed at 0%, and then distributes

them to the direct owners (residents and non-residents).

**RISK-ORIENTED MODEL  
OF IDENTIFICATION OF SUBJECTS  
OF THE RUSSIAN FEDERATION  
WITH POSSIBLE USE BY INDIVIDUAL  
ENTREPRENEURS "DIVIDEND" SCHEMES  
OF EVASION FROM TAXATION**

Another factor increasing the share of dividends in the income of individuals may be conversion into personal income dividends to avoid paying insurance premiums, as well as PIT at more

progressive rates (13/22%). These schemes are similar to the Brazilian phenomenon *pejotização* (term derived from “Pessoa Jurídica” – “legal entity” in Portuguese), when the employment relationship between a company and employees is replaced by a relationship between the company and another specially created intermediary company, which distributes the income received in the form of dividends to its shareholders (former employees of the company) [13–16].

The advantage of dividends is that they are not remuneration for work, and therefore do not form part of the social contribution base, and are also subject to the less progressive scale of the PIT, that allows business owners to set themselves a minimum wage for the relevant subject of the Russian Federation, and to distribute most of the profits to themselves, related shareholders and other affiliated persons in the form of dividends, saving on insurance contributions, and also trying to avoid a significant excess of earnings of 5 million rubles, so that the PIT rate remains 13% [17]. By saving on insurance contributions, the tax burden will be reduced at least from ~43% to 13/15%, i.e. almost a third. In combination with regional tax benefits for OECD residents, the effective tax rate becomes quite low, sometimes comparable to classic offshore schemes.

This requires an additional static analysis of the dynamics of dividends coming to individual entrepreneurs and non-residents, across different subjects of the Russian Federation. Using the previously highlighted indicators  $s_{r,i}^{ENT}$  and  $s_{r,i}^{NR}$ , it is possible to build the following risk-oriented model of identifying subjects of the Russian Federation with the possible use by individual entrepreneurs and non-residents of “dividend” tax avoidance schemes:

$$RiskScore_r = \max(s^{ENT}, s^{NR}).$$

Risk indicator is the share of sole proprietors or non-residents more than 20% of total dividend recipients:

$$RiskFlag_r = \begin{cases} 1, & \text{if } s^{ENT} \geq 0,2 \text{ or } s^{NR} \geq 0,2 \\ 0, & \text{otherwise} \end{cases}$$

The limit value is established by experts and reflects the risk area: a high concentration of individual entrepreneurs or non-residents among dividend recipients may indicate the emergence of pockets of “dividends” schemes to avoid taxation and demand more attention from territorial tax authorities.

Statistical analysis showed that an unusually large average dividend in favor of sole proprietors or non-residents ( $\rho_{r,i}^{ENT}$  and  $\rho_{r,i}^{NR}$ ) is not related to a systematic increase (or decrease) of the total share of dividends in the composition of income of individuals in the region. Indicators not included in the model. However, for information purposes they are also shown in the results to comprehensively interpret the results obtained.

The model allowed to identify five subjects of the Russian Federation with a high risk of taxpayers using “dividend” tax evasion schemes (Table 7):

- in the Jewish region, the share of individual entrepreneurs among dividend recipients was 42%, with the average size of dividends in their favor exceeding the average Russian size by 35%, which is an alarming fact, considering that this area is not among the leaders among the subjects of the Russian Federation in terms of economic development;
- in the Magadan region and the Khakassia Republic, the share of individual entrepreneurs among dividend recipients was 25% and 21%, and the average size of dividends in their favor exceeded the Russian average by 43% and 45% respectively;
- in Kamchatka and Kaliningrad Region, the share of individual entrepreneurs among dividend recipients was 20%, combined with the fact that the share of dividends in the income structure significantly deviates from the general Russian level (by 173.8% and 123.4% respectively), this may indicate the risks of spreading tax evasion schemes.

Table 7

**The Subjects of the Russian Federation with the Highest Risk of the Spread of “Dividend” Tax Evasion Schemes Among Individual Entrepreneurs and Non-Residents, According to Data for 2023**

Subjects of the Russian Federation	$\rho_{r,2023}^{ENT}$	$\rho_{r,2023}^{NR}$	$S_{r,2023}^{ENT}$	$S_{r,2023}^{NR}$	$RiskScore_r$	Risk Flag
Jewish Autonomous Region	1.35	–	0.42	–	0.42	+
Magadan Region	1.43	–	0.25	–	0.25	+
Khakassia Republic	1.45	–	0.21	–	0.21	+
Kamchatka	0.76	–	0.20	–	0.20	+
Kaliningrad Region	1.15	0.30	0.20	0.03	0.20	+
Sevastopol	1.86	0.04	0.19	0.05	0.19	±
Astrakhan Region	2.73	1.31	0.19	0.01	0.19	±
Yamal-Nenets Autonomous Region	0.22	0.03	0.19	0.01	0.19	±

Source: Author's calculations.

Three more subjects of the Russian Federation fell into the zone of increased control: Astrakhan region (0.19), Yamal-Nenets Autonomous District (0.19), Sevastopol (0.19). Although the share of dividends in favor of individual entrepreneurs did not exceed the established limit, it is significantly higher than the 95 per cent ( $\approx 12\%$ ).

### CONCLUSION

The proposed models made it possible to identify subjects of the Russian Federation in which there are anomalies regarding dividends as incomes of individuals, including individual entrepreneurs. Such anomalies can be caused by the use of tax evasion schemes and cause significant losses both for the budgetary system of the Russian Federation and for the budgets of public extrabudgetary funds. Given that dividends have a more preferential treatment of income tax compared to other types of income of individuals, this requires special attention by the tax authorities and taking into account the identified facts in the risk-oriented tax administration process.

The analysis carried out is very relevant both from a scientific and practical point of view.

From a scientific point of view, it contributes to the development of econometric analysis of tax statistics, allowing to identify patterns of intra-Russian distribution of dividends taking into account the share of individual entrepreneurs and non-residents among their recipients, what is a new approach to detecting tax evasion signals. The model of panel regression with fixed effects makes it possible to separate the influence of macroeconomic factors and permanent characteristics of specific subjects of RF for isolated assessment of impact of assumed risk factors. All this makes it possible to find out whether the financial behavior of taxpayers in individual subjects of the RF is distorted.

From a practical point of view, the results of the analysis can be used by the Ministry of Finance and the Federal Tax Service to improve approaches to risk assessment based on tax statistics. The risk-based approach in governance, control and oversight involves the active use of models, including the identification of regions emerging from the

general trend for further detailed analysis, Identifying sources of disparities at the municipal level, and then to specific taxpayers. This risk-based approach facilitates efficient resource allocation and helps to respond

quickly to the proliferation of tax evasion schemes. The results of macroeconomic analysis of the behaviour of economic agents also provide ideas for improving tax policy and administration.

## REFERENCES

1. Advokatova A.S., Balatsky E.V., Goncharenko L.I., et al. The impact of income taxation on social inequality in Russia. Moscow: KnoRus; 2024. 224 p. (In Russ.).
2. Konduktorov A.S. Countering tax evasion and investment attractiveness of the Russian economy: Problems and solutions. *Ekonomika. Nalogi. Pravo. = Economics, Taxes & Law.* 2022;15(1):165-172. (In Russ.). DOI: 10.26794/1999-849X-2022-15-1-165-172
3. Polezharova L.V. Improving the efficiency of anti-tax base erosion regimes through tax modelling. *Journal of Tax Reform.* 2019;5(2):148-165. DOI: 10.15826/jtr.2019.5.2.065
4. Milogolov N.S., Berberov A.B. The problem of double economic taxation of distributed profits and reform scenarios in Russia. *Finance: Theory and Practice.* 2022;26(5):207-219. DOI: 10.26794/2587-5671-2022-26-5-207-219
5. Polezharova L.V., Razu S.B. Elimination of economic double taxation of dividends. *Ekonomika. Nalogi. Pravo. = Economics, Taxes & Law.* 2022;15(2):146-155. (In Russ.). DOI: 10.26794/1999-849X-2022-15-2-146-155
6. Burdelova T.N. Improving the fiscal policy of the Russian Federation in relation to companies paying “excessive” dividends. *Ekonomika. Nalogi. Pravo. = Economics, Taxes & Law.* 2022;15(2):167-172. (In Russ.). DOI: 10.26794/1999-849X-2022-15-2-167-172
7. Mukhin D.A. Analyzing the factors influencing the dividend payments of Russian public companies at the present stage. *Finansy i kredit = Finance and Credit.* 2025;31(8):63-78. (In Russ.). DOI: 10.24891/kgncx
8. Faber M. Is the best dividend strategy to avoid them? SSRN. 2024. DOI: 10.2139/ssrn.5271422
9. Gladkova A.A., Polinskaya M.V. Offshore zones in the Russian Federation and features of taxation. *Epomen. Global.* 2025;(63):14-20. (In Russ.).
10. Milogolov N.S., Tsagan-Mandzieva K.N. Comparative analysis of provisions of the Russian law related to the establishment of special administrative districts (SAD) in the Kaliningrad region and the Primorsk territory and holding regimes applied in foreign countries. *Finansovoe pravo = Financial Law.* 2020;(5):31-34. (In Russ.). DOI: 10.18572/1813-1220-2020-5-31-34
11. Turgel I.D., Bozhko L.G., Zinovyeva E.G. Cluster approach to organization of special economic zones in Russia and Kazakhstan. *R-Economy.* 2019;5(2):71-78. DOI: 10.15826/recon.2019.5.2.008
12. Pyanova M.V. Assessment of tax regimes applicable to preferential territories. *Nalogi = Taxes.* 2025;(3):22-27. (In Russ.). DOI: 10.18572/1999-4796-2025-3-22-27
13. Alvarez B. Shifting paradigms: The consequences of misclassifying employees as entrepreneurs. SSRN. 2024. DOI: 10.2139/ssrn.4598482
14. De Farias S.N.P., de Oliveira Souza N.V.D., Varella T.C.M.Y.M.L., de Andrade K.B.S., Soares S.S.S., Carvalho E.C. Pejotização and implications for nursing work in Brazil: Repercussions of neoliberalism. *Revista da Escola de Enfermagem da USP.* 2023;57: e20220396. DOI: 10.1590/1980-220X-REEUSP-2022-0396en
15. Muller A., Marques F. A pejotização como superação ao regime empregatício: liberdade ou falso consenso? *Revista Da Faculdade De Direito De São Bernardo Do Campo.* 2024;30(1). URL: <https://revistas.direitosbc.br/fdsbc/article/view/1229/1027> (accessed on 15.08.2025).
16. Da Silva J.G.R.D., Sanches W.F. Pejotização como estratégia de fraude trabalhista: Análise dos efeitos na proteção dos direitos dos trabalhadores. *Recima21.* 2024;5(1): e516020. DOI: 10.47820/recima21.v5i1.6020
17. Pugachev A.A. Risks of PIT evasion in the framework of the 2025 tax reform. *Sibirskaya finansovaya shkola = Siberian Financial School.* 2025;(2):63-69. (In Russ.). DOI: 10.34020/1993-4386-2025-2-63-69

## ABOUT THE AUTHOR



**Oleg I. Borisov** — Cand. Sci. (Econ.), Assoc. Prof., Department of Taxes and Tax Administration, Faculty of Taxes, Audit and Business Analysis, Financial University under the Government of the Russian Federation, Moscow, Russian Federation

<https://orcid.org/0000-0002-0350-1885>

oborisov@fa.ru

*Conflicts of Interest Statement: The author has no conflicts of interest to declare.*

*The article was submitted on 17.02.2025; revised on 28.07.2025 and accepted for publication on 22.08.2025.*

*The author read and approved the final version of the manuscript.*