The European Proceedings of
Social and Behavioural Sciences
EpSBS

www.europeanproceedings.com e-ISSN: 2357-1330

DOI: 10.15405/epsbs.2020.10.05.21

SCTMG 2020
International Scientific Conference «Social and Cultural Transformations in the Context of Modern Globalism»

MACROECONOMIC CRITERIA OF TAXATION AND INDICATORS OF TAX BURDEN IN ECONOMIC TRANSFORMATION

Musa Shamsudinovich Basnukaev (a)*, Svetlana Konstantinovna Tokaeva (b), Anzhelika Kaprelovna Musaelyan (c), Ismail Tablikhanovich Bataev (d), Islam Yanarsovich Elzhurkaev (e)
*Corresponding author

(a) Chechen State University, 32, A. Sheripova str., Grozny, 364024, Russia, mail@chesu.ru,
Research Institute named after Kh. I. Ibragimov of Russian Academy of Sciences, 21 a, Staropromyslovskoe shosse, Grozny, 364051, Russia, kniiran@mail.ru,
(b) North Ossetian State University named after Kosta Levanovich Khetagurov, 44–46, Vatutina str., Vladikavkaz, 362025, Russia, nosu@nosu.ru,
(c) Rostov State Economic University (RINKh), 69, Bolshaya Sadovaya str., Rostov-on-Don, 344002, Russia, main@rsue.ru,
(d) Chechen State University, 32, A. Sheripova str., Grozny, 364024, Russia, mail@chesu.ru,
(e) Chechen State University, 32, A. Sheripova str., Grozny, 364024, Russia, mail@chesu.ru

Abstract

Current trends in the development of world economy reflect the high level of integration ties, due to close economic and political interaction of individual countries of the world and in the field of taxation. Economic and political integration involves application of common standardized rules for tax policy, removing obstacles to the movement of all factors of production. At the same time, implementation of tax policy is the sovereign right of each state, use of which enables them to form a favorable tax environment within its jurisdiction. The main assessment indicator to compare national tax systems is tax burden. Given that national tax systems have significant differences, it is the tax burden indicator that acts as a quantitative and qualitative measure of the effectiveness of their functioning. Tax system is the material quintessence of interests of the state and first of all, it must ensure financial needs of its functioning. Efficiency of tax system determines the level of tax mobilization in the budget system and effective performance of state functions. To achieve this goal, tax systems must support national production, be flexible in a changing market environment and not impede economic growth. For this reason, some countries seek to implement tax mechanisms that have proven effective in others. This is an objective condition for the similarity of tax systems of many countries that apply the same taxes and payments (VAT, income tax, etc.).

Keywords: Harmonization, integration, competition, tax system, tax burden, efficiency.

https://doi.org/10.15405/epsbs.2020.10.05.21
Corresponding Author: Musa Shamsudinovich Basnukaev
Selection and peer-review under responsibility of the Organizing Committee of the conference
eISSN: 2357-1330

1. Introduction

Conducting a comparative analysis of tax systems of different countries involves a certain set of criteria to assess the level of taxation efficiency. Among them there are applied taxation models characterizing structure of taxes, separate elements of their calculation and payment, mechanism of tax privileges application; character of taxes distribution on levels of budgetary system defining parameters of tax and budgetary authority of each level of power (Table 01); proportions of various set of taxes and fees defining tax fill rate of budgetary system and their influence on process of public reproduction (Bulatov, 2018).

Table 01. Ranking of countries on key indicators of tax systems efficiency, done by PwC in 2017 (https://www.pwc.ru)

Position in ranking	Country	Number of indicators	Overall rate, in %	Place in rating according to		
				Number of payments	Total tax rate	Time spent
1	Maldives	3	9.3	1	3	1
17	Kazakhstan	7	28.1	11	41	68
18	Great Britain	8	37.2	17	82	24
55	France	7	65.3	11	164	38
69	USA	11	46.7	40	131	66
102	Russia	9	46.4	29	132	128
109	Moldova	48	31.2	158	47	98
156	Belarus	18	62.0	63	157	172
181	Ukraine	135	57.2	183	152	175

2. Problem Statement

The main indicator reflecting to a greater extent the impact of tax system on socio-economic development of the state is tax burden indicator. Despite widespread use of this indicator in evaluation and comparative studies, its definition and calculation remain quite controversial and incomplete.

Some important issues for the theory and practice of taxation remain very controversial, they are calculation of tax burden, its optimal level to ensure development of the economy, order of comparison of tax burden in different countries, etc. At the same time, most of the scientific research in recent years is devoted mainly to the definition of indicators of tax burden on the economy as a whole, its individual sectors. Scientific disputes focus on the list of taxes that should be included in the calculation and indicators with which these taxes should be correlated.

3. Research Questions

The most common tax studies treat the total amount of tax revenues under the optimal tax system as an exogenous variable that is defined by necessary public spending and is correlated with the total GDP. This approach, while valuable, significantly limits other aspects of the assessment. Tax burden, calculated as the share of tax deductions in the structure of GDP, reflects only the level of redistribution of part of national income through the public finance system.

https://doi.org/10.15405/epsbs.2020.10.05.21
Corresponding Author: Musa Shamsudinovich Basnukaev
Selection and peer-review under responsibility of the Organizing Committee of the conference
eISSN: 2357-1330

It is not very productive to analyse tax burden as a share of total tax revenues in GDP from the standpoint of assessing the impact of tax system on behavior of economic entities. Analysis of the ratio of total tax payments to GDP in groups of countries in terms of GDP per capita (adjusted for purchasing power parity (PPP)), did not reveal a clear correlation between tax burden (the tax-to-GDP ratio) and GDP per capita (adjusted for PPP).

In many empirical studies on tax competitiveness of different national jurisdictions, certain types of effective tax rates are considered as an indicator of tax burden and attractiveness of tax policy in a certain country.

4. Purpose of the Study

There are two basic approaches to assessing the existing or preferred tax burden. The first one is used within the theory of optimal taxation. The second one is represented in a wide range of comparative studies of national tax systems in different countries (Gromov & Shatalova, 2017).

The main feature of optimal tax theories is the transfer of traditional criteria of efficiency, justness and administration to various aspects of social security. Therefore, one can make estimates of these components in the same range. On the basis of this theoretical approach, it is convenient to develop recommendations on tax policy in accordance with the changes in social security.

5. Research Methods

The article uses traditional methods (abstract-logical, graphic, tabular, absolute and relative values method) of structural-functional and statistical analysis.

6. Findings

Hidden tax rates have been traditionally used by European researchers as indicators of tax burden and tax attractiveness of different jurisdictions. One more widely used benchmarking tool is the marginal effective tax rate (METR). It is customarily used for comparison of tax climate in different countries for different, similar or comparable investment projects. METR is used for the analysis of income or corporate income taxes and their impact on corporate investments and economic decisions. Effective average tax rates (EATR) inform us about tax burden on economic entities as well (Gromov & Shatalova, 2017).

The METR and EATR estimates are based on microeconomic data. When METR uses microeconomic data, estimates yield different results when studying tax burden in different areas of the economy. This is useful mainly when choosing the exact jurisdiction for a particular investment project.

An example of calculating effective tax rates (ETR) is presented by the World Bank in the Doing Business Project. The project delivers the calculations of current tax rates for a standardized company functioning in the largest cities of more than 180 countries. The results of the calculations for the RF amounted to only 8.4 % of the income tax rate, while tax rates were 7.4 % in France, 20.9 % in the UK, and 23.3 % in Germany (Myalo, 2017). Let us note that different studies of ETR based on microeconomic data may and do sometimes produce disparate results for the same country.

https://doi.org/10.15405/epsbs.2020.10.05.21
Corresponding Author: Musa Shamsudinovich Basnukaev
Selection and peer-review under responsibility of the Organizing Committee of the conference
eISSN: 2357-1330

Implicit tax rate (ITR) estimates are based on macroeconomic data. Invisible tax rates provide us with a tool for analyzing various aspects of tax burden - tax burden on capital, on labor, on consumption and so on. Annually, Eurostat presents a report describing the current situation regarding tax burden in European countries and Norway. The hidden tax rate is the ratio of the tax paid to the national assessment of the tax base. Since there are no two absolutely identical national tax systems, and each one is unique, it is necessary to employ a universal methodology of tax base data provided by national accounts.

The national tax base is assessed as a type of income or expenditure in accordance with the system of national accounts. Therefore, the tax base for estimating the implicit corporate income tax rate will be net income for financial and non-financial corporation sectors and some other items from income account (National accounts).

Measurement of consolidated indicator of tax burden at the national level has a different goal setting: conducting a spatial comparative analysis to assess the value of tax pressure and the level of socio-economic development, to assess the effectiveness of tax policy and identify current problems, to make decisions about the placement of business, etc. In the end, it all comes down to assessing the nature and extent of capital movements based on a comparative analysis of tax burden in different countries.

The annual ratings of world countries on the level of tax burden compiled by a number of global international organizations for these purposes are determined by the aggregate indicator of tax burden, calculated as the ratio of total amount of taxes paid to the value of GDP.

Let us consider the rating of countries by the level of tax burden, compiled by the results for 2016 by OECD. First of all, it should be noted that the methodology for calculating tax burden indicator differs somewhat from the calculations used by the IMF, a number of international monitoring agencies and audit companies. The main differences relate to constituents of tax indicators included in the calculation formula. In the OECD method, the calculation of tax burden involves taking into account key taxes applied in the studied countries: taxes on profits, income and capital gains; payroll taxes (including social contributions); property taxes; taxes on goods and services; taxes on international trade and transactions (taxes and customs duties are taken into account when moving goods across the customs border).

Russia is in the zone of moderate tax burden, among the OECD countries, the level of its tax burden on the economy is significantly lower than even the national average. Even lower is the level of tax burden calculated by this method in the United States, their tax system has always been characterized by high tax pressure.

This method, like any others, based on aggregate indicators, contains a number of errors. First of all, this is the absence of accounting for a number of payments of a tax nature, but not related to their category. In Russia, such payments include environmental and recycling fees, payments under the "Platon" system, payment for state services, insurance payments. The latter are essential in the fiscal burden on Russian business. None of the associated countries has such a level of encumbrance of the wage and salaries fund as in Russia. This leads to mass tax evasion, which significantly distorts the real value of tax burden.

The PayingTaxes annual “profile” rating for 190 countries of the world for 12 years in a row is done by experts of the World bank and the international audit and consulting company

https://doi.org/10.15405/epsbs.2020.10.05.21
Corresponding Author: Musa Shamsudinovich Basnukaev
Selection and peer-review under responsibility of the Organizing Committee of the conference
eISSN: 2357-1330

PricewaterhouseCoopers. By the way, the data of this particular rating for each country are indicated in the corresponding part of general international rating of the World bank – DoingBusiness.

According to the PayingTaxes 2017 rating, the real tax burden on business in the world as a whole is 40.6 %. Calculations are based on legislatively established in each country both tax and various non-tax obligations of an unspecified nominal company with a staff of 60 people (for Russia it is a small enterprise), fully owned by private national owners. The indicator for Russia is 47.4 %. Among all regions of the world, only South America has higher one (Evstafyeva, 2016).

In general, out of 190 countries covered by the PayingTaxes rating, 45 of them have a higher level of general tax and non-tax burden on business than in Russia (Bondarchuk, 2005). They include, for example, Argentina (106 %), China (68 %), Czech Republic (50 %) or France (63 %), as well as India (61 %), Italy (62 %), Mexico (52 %) or Sweden (49 %). And in terms of the share of taxes on labor, only eight countries are ahead of Russia (36.1 %); they are France (53 %), Belgium and China (49 % each), Slovakia and Brazil (40 % each), as well as Belarus and Estonia (39 % each) and the Czech Republic (38 %).

High rates of insurance payments are considered one of the main reasons for the existence of a large-scale “shadow" sector in the Russian economy. According to the center for socio-political monitoring of the RANEPA, about 33 million people, or 44.8 % of all employed people, were included in the "shadow" labor market in Russia in 2017 (in 2006 – 45.1 %, in 2013 – 44.5 %, in 2016 – 40.3 %) (http://www.expbiz.ru / accessed date: 12.10.2019).

Many experts recognize incorrect inclusion of taxes charged on individuals in the calculation of tax burden on business. In their opinion, the share of these taxes in the total value of tax revenues in many countries is not only different, but also are not comparable. For example, in Russia, the total share of taxes on individuals is estimated to be about 4 %, and in economically developed countries it reaches 10 %. The share of income tax revenues in the total revenues of the budget system of developed countries is from 30 to 50 %, in Russia this figure is much more modest – from 10 to 15 %. Accordingly, in these countries, tax burden on the population will be much higher than in Russia. The World bank and the International Monetary Fund survey, reflected in the Price Waterhouse Coopers (PwC) report "Paying Taxes", resulted in a ranking of countries in the world on several key characteristics that present the effectiveness of existing tax systems. It revealed the basis of efficiency criteria: convenience in paying taxes, total tax burden, number of payments, complexity and time for their calculation and payment. Depending on certain criteria, which included in addition to the tax and other fiscal burden the time spent on relevant procedures for calculation and payment of taxes, Russia ranked the 102nd place in the ranking of 183 countries studied (Agirbova, 2017).

According to the assessment (table 1), the simplest regimes are applied in the Middle East and Asia. The Maldives came in first place as their tax system applies only 3 tax payments with a cumulative tax rate of 9.3 %.

As a result of the factors considered, the most complex organization of tax system was observed in Belarus and Ukraine. Russia is almost on a par with the United States, with about the same degree of organization of the tax system in terms of the total tax rate.

https://doi.org/10.15405/epsbs.2020.10.05.21
Corresponding Author: Musa Shamsudinovich Basnukaev
Selection and peer-review under responsibility of the Organizing Committee of the conference
eISSN: 2357-1330

At the same time, the US position on the basis of applied criteria is significantly ahead of the Russian Federation. Primarily, because 11 major taxes are applied in the US, with an effective rate of 46.7 %. Also, the US is focused mainly on direct taxation, the ratio of direct and indirect taxes is 7: 3.

Of course, this approach to assessing the effectiveness of tax system (in terms of simplicity of its organization) cannot be considered correct, because it does not consider the level of economic development of the country and its integration into the international trade system.

Given the peculiarities of modern tax systems functioning in the world, it should be noted that they are the result of centuries of development and long-term transformations, which are based on the historical stages of the evolution of society and state.

This determines the specifics of national tax structuring, their mechanisms and various combinations and complicates the comparative analysis of aggregated data. At the same time, the comparative assessment of individual taxes (indirect taxes, taxes on company profits and personal income, property taxes, etc.) is also quite controversial, since the built-in mechanisms used in each of the tax models (the method of calculation and payment, tax incentives and adjustment factors) differ significantly across countries, reflecting general nature rather than any advantages or disadvantages.

Nevertheless, it is possible to get an idea of existing tax systems of studied countries by a number of indicators: according to the level of fiscal withdrawal in the GDP structure (this indicator reflects the scale of fiscal claims of the state), key tax rates (VAT, tax on profits, income tax), the nature of the tax distribution at the levels of power, stimulating or restraining-oriented tax policy, etc. (Zibareva & Sakhchinskaya, 2017).

Tax burden, as an indicator of the condition of tax system and effectiveness of tax policy, only partially functions in macroeconomic analysis. Its role is most pronounced in the analysis of the degree of tax pressure at micro level (at the level of an economic entity or an individual).

In Russian tax practice, the tax burden indicator is used for a generalizing assessment in the analysis of socio-economic status of the regions (macroeconomic approach) and to identify tax evasion in relation to individual economic entities (microeconomic approach). However, the methodology for calculating the indicator itself remains poorly effective (Nikulina, 2017).

Tax burden, as a quantitative indicator, is determined based on the percentage of the calculated tax in relation to taxable base. Thus, the concept of tax burden is similar to the effective tax rate. The same algorithm is used to determine the total tax burden in the country (by the percentage ratio of the total tax payments to gross domestic product). It is obvious that in this context it is very difficult to determine the real tax pressure, since the calculation method contains a number of errors (fallout from the total value of tax burden of payments of a different nature, but also mandatory and regular – they were mentioned above).

7. Conclusion

Given the above, it is necessary to calculate at the macro level the indicator of not tax but fiscal burden with the inclusion in the calculation formula of the totality of existing taxes, fees, as well as non-tax payments.

https://doi.org/10.15405/epsbs.2020.10.05.21
Corresponding Author: Musa Shamsudinovich Basnukaev
Selection and peer-review under responsibility of the Organizing Committee of the conference
eISSN: 2357-1330

The value of tax pressure is not only an indicator of quantitative measurement, but also of qualitative characteristics: labor intensity and complexity of tax calculation, filling and submission of tax reports, complexity of tax accounting procedures, etc. All these indicators together should create not a formal, but a real picture of parameters of tax pressure for a better assessment of the current tax system.

References

Agirbova, A. A. (2017). Tax system as a legal category and the institution of financial system of the state. *Sci. alley, 15*, 565–569.

Bondarchuk, N. V. (2005). Relative indicators of tax burden. *MEPhI sci. sess., 13-3*. https://studylib.ru/doc/3861319/n.v.-bondarchuk-otnositel._nye-pokazateli-nalogovoj-nagruzki

Bulatov, T. V. (2018). Modern tendencies of economic development of the world. *Econ. of foreign countries, 1*.

Evstafyeva, A. Kh. (2016). Correlation of tax definitions: system of taxes, tax system and tax administration. *Issues of reg. econ., 1*(26), 79–82.

Gromov, V. V., & Shatalova, S. S. (2017). Assessment of tax burden according to the IMF methodology. *Power and Econ., 1*, 74–83

Myalo, O. I. (2017). Features of modern tax systems. *Sci. and method. electr. J. "Concept", 39*, 426–430. http://e-koncept.ru/2017/970412.htm

Nikulina, O. M. (2017). Tax burden in Russia: basic approaches. *Finance, 2*.

Zibareva, E. V., & Sakhchinskaya, N. S. (2017). Tax system of Russia and its comparative analysis with tax systems of developed countries. *Bull. of Samara Acad. for the Human. Ser. Econ., 1*(19), 80–82.