

Tax Incentives for Innovative Small Business: The Russian Model

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Abstract Designing an effective tax regime for small businesses remains a pressing issue. The authors engaged a comparative analysis of types and methods of tax incentives for small business and innovative business in global practice. It is concluded that the stimulating function of the taxation system in the Russian Federation has low efficiency and that innovative tax incentives are to be introduced. The authors propose a model of small business taxation with an embedded automatic regulator of the degree of tax burden on particular small entities with regard to their socio-economic impact and innovativeness.

Keywords Small business • Innovation • Tax incentives

Introduction

The Russian Federation has developed an approach to stimulating innovative small business through tax incentives, which consists in the following: tax reliefs are granted to small business as special tax regimes; innovative tax incentives are implemented within the standard taxation regime; innovative business has the opportunity to use tax incentives, granted to residents of special economic zones of technology and innovation type, in an integrated manner.

The objective of our study is to investigate tax incentives for innovative small business in Russia and other countries and to develop a model for improving this instrument for stimulating innovation.

In fact, mechanisms of tax incentives for small business and evaluation of these mechanisms' effectiveness are attended to in various papers. For example,

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contribution of small business to economy as well as types and mechanisms of tax incentives in countries of the Organization for Economic Co-operation and Development (OECD), G20 and EU countries is considered within the *OECD* report (2015) and a study by Blažić (2012). Bergner et al. (2017) suggest a classification of tax incentives and discuss the impact and appropriateness of tax incentives for small- and medium-sized businesses (SMEs) in the European Union. Recommendations for creating an effective tax regime for SMEs are provided by Engelschalk (2007). Logue and Vettori (2010), Yitzhaki (2007) and Engelschalk and Loeprick (2015) state that presumptive taxation systems can enhance small business's tax compliance in developed countries.

Intarakumnerd and Goto (2016) and Gale and Brown (2013) emphasize that stimulation of innovative small business is to be performed by means of tax incentives. A classification of tax incentives for innovation business activity is presented by the European Commission (2014) and Busom (2012).

Approaches to Providing Tax Incentives to Innovative Small Business

Tax Incentives for Small Business in Other Countries

The world's practice has developed two schemes for providing tax incentives to small businesses, which include presumptive tax systems for small business and tax incentives for small business within the standard taxation regime.

Engelschalk (2007) classifies presumptive tax systems for small business into presumptive taxation based on turnover or gross income, presumptive systems based on indicators, combination of turnover and indicator-based systems, patent systems and agreed systems.

According to another approach suggested by Bergner et al. (2017), the following types of tax incentives for SMEs in the European Union are distinguished: expenditure-based tax incentives, which are granted as special depreciation schemes, investment allowances and tax credits (i.e. input-based incentives), and tax incentives that depend on the enterprise's operating results and are granted as special tax rates, tax exemptions and tax holiday (i.e. output-based incentives). Besides, tax incentives are classified into corporate-level incentives and shareholder-level incentives (e.g. general shareholder relief, venture capital incentives). When developing tax incentives for SMEs, additional restrictions can be set on their application with regard to a company's age, location, time period and the area of the taxpayer's activity.

Based on the analysis of tax incentives for micro and small enterprises implemented in the European Union, it can be concluded that only expenditure-based and shareholder-level tax incentives stimulate creation of new jobs and development of new products and technologies (Bergner et al. 2017).

Thus, tax incentives for innovative small business include research and development allowances within the standard taxation regime; however, no additional incentive mechanism for stimulating innovation within presumptive taxation has been developed so far.

Tax Incentives for Small Business in Russia

Presumptive Tax Systems

Tax incentives for small business in Russia are embodied only in the following presumptive tax regimes: simplified tax system (STS), uniform tax on the imputed income (UTII) and patent tax system. These tax regimes substitute for income taxes, property taxes and value-added tax. They have input limitations on the number of employees, turnover and scope of application. STS is based on gross income or gross profit. UTII and patent taxation system use a synthetically estimated amount of income (imputed income, patent fee), which is not related to the actual operating results and is calculated with the following indicators: number of employees, area of the business site, number of vehicles, etc. The size of the final taxable income and the indicators can vary considerably across Russia.

Presumptive tax regimes significantly reduce tax burden on small business in the Russian Federation, which is visualized in Table 1. However, the socio-economic contribution of small business to the development of the nation is insufficient.

For instance, in 2013–2015, the share of revenue from the presumptive tax regimes in the total tax revenues of the consolidated budget of the Russian Federation was only 3%. In 2015, the share of small business employees in the total number of employees was approximately 23%; the share of small enterprises in the total number of enterprises, 42%; and the share of innovative small businesses, 3% of the total number of small businesses (Source: compiled by the authors based on the reported data of the Russian Federation Federal State Statistics Service, <http://www.gks.ru>).

Incentives for Residents of Special Economic Zones of Technology and Innovation Type

Innovation activity is stimulated by means of special innovation tax incentives within the standard taxation regime (i.e. reduction of the tax base for income tax by deducting research and development expenditure, bonus depreciation, VAT relief on inventions and industrial samples, exemption from property tax on objects with high energy efficiency, investment tax credit, etc.)

Moreover, innovation is stimulated through integrated provision of tax relief to residents of special economic zones of technology and innovation type. These incentives include VAT relief, corporate income tax relief (i.e. the federal part of

Table 1 Tax burden in the Russian economy depending on types of economic activity, %

Type of activity	All businesses			Small businesses		
	2012	2013	2014	2012	2013	2014
Agriculture, hunting and forestry	2.19	2.07	2.69	2.95	2.85	2.56
Fishing, fish farming	9.42	8.12	8.46	5.95	5.71	6.96
Mining	53.86	55.56	59.69	31.44	57.38	158.07
Manufacturing facilities	25.02	24.88	23.95	1.60	1.62	1.58
Production and distribution of electricity, gas and water	15.16	16.78	17.75	2.04	1.85	1.75
Construction	14.92	14.69	15.31	1.18	1.22	1.29
Wholesale and retail trade; repair of motor vehicles, household goods and personal use items	13.37	11.59	12.64	1.25	1.25	1.25
Hotels, restaurants, catering	12.70	12.69	12.36	3.93	4.24	4.15
Transport and communications	16.94	13.85	14.69	2.98	2.62	2.58
Real estate, renting and service provisioning	16.43	16.34	17.05	5.56	5.89	5.87
Education	13.46	13.87	14.91	31.56	32.47	31.04
Health care and social services	8.77	8.80	8.64	4.55	4.80	4.45
Other community, social and personal services	16.61	16.86	16.47	7.16	7.16	7.20
Average tax burden	20.67	19.90	20.64	2.29	2.44	2.87

Source: The table is compiled by the authors based on the reported data of the Russian Federal Tax Service, Form 1-NOM, and the Federal State Statistics Service, GDP section and statistical compilation “Small and Medium Business in Russia”, <http://www.gks.ru/>

the tax rate is 0%; the regional part is reduced), exemption from corporate property tax, transport tax and land tax for a period of 5–10 years and reduced rates of insurance payments to non-budgetary social funds.

A Presumptive Model for Small Business Taxation Targeted at Stimulating Innovation Activity

There is an obvious need to enhance the socio-economic impact of small business and its innovation activity in the Russian Federation. Under these circumstances, presumptive tax regimes remain the primary tax instruments for incentivizing small business in our country. Therefore, we propose a relevant model of implementing tax incentives.

The equation for estimation of patent cost (imputed income) can be presented as follows (Eq. 1):

$$PC = F(\bar{f}_1, \bar{f}_2) \quad (1)$$

where PC is patent cost (imputed input); \bar{f}_1 stands for a group of factors that reveal the scale of business; and \bar{f}_2 is a group of factors that characterize the social and economic value of business or a particular innovation and investment project.

Assessment of Scale of Business

Assessment of scale of business is based on an analysis of reported data for existing enterprises or on the basis of business plan data for new enterprises.

Patent cost (imputed income) is to be directly proportional to the scale of business and inversely proportional to the socio-economic and innovation impact of the enterprise. The analytical equation used to calculate patent cost can be presented as Eq. 2:

$$PC = \left[\frac{V_c * 1}{50 I_0} \right] \quad (2)$$

where PC is patent cost (imputed input); V_c represents the scale of business in ruble; and I_0 stands for an integrated criterion of the socio-economic and innovation impact of business. The range of values of the integral criterion varies from the minimum value, which is close to 0.1, to 1.

The situation, where the value of the integrated criterion of the socio-economic and innovation impact is equal to 1, is best for business. Under this condition, the amount of patent fee will be 1/50 of the sales volume. Conversely, for the least efficient business, the patent cost will be 1/5 of the sales (20%).

Evaluation of the Socio-economic Impact of Business or an Innovation and Investment Project

For the purpose of evaluating the integrated criterion of the socio-economic and innovation impact of an enterprise, or an innovation and investment project, we propose to calculate I_0 as the average of the following components (Eq. 3):

$$I_0 = \frac{(I_1 + I_2 + I_3)}{3} \quad (3)$$

where I_j is the number of jobs created by a business (project), in relation to the best value of all the proposed projects. I_j is calculated by means of Eq. 4:

$$I_1 = \frac{I_1(real)}{I_1(best)} \quad (4)$$

where $I_1(real)$ is the number of jobs created within the enterprise, $I_1(best)$ means the best value of the indicator of all the proposed projects and I_2 is used for budget revenues per one job in relation to the best value of all the proposed projects and calculated as (Eq. 5):

$$I_2 = \frac{I_2 \left(\frac{BR}{JN} \right)}{I_2 \left(\frac{BR}{JN} \right)_{best}} \quad (5)$$

where BR is budget revenues, i.e. revenues from an enterprise to budgets of all levels; JN stands for job number, i.e. the absolute number of created jobs; and $BR/JN(best)$ represents the best of all proposed values of the indicator.

Evaluation of the degree of business (project) innovativeness (I_3) can be performed on the basis of determining a complex (integrated) criterion of innovativeness (Eq. 6). The complex (integrated) criterion of the innovativeness of a small enterprise's development and operation includes expert fractional assessment of the general innovativeness criterion according to its resource intensiveness and ten local indicators that are averaged in a ratio of 2/3 to 1/3. It should be taken into consideration that reduction in significance of the resource intensiveness of the economy should be 2/3:

$$I_3 = CCI_e = \frac{2^*}{3} EID_e + \frac{1^*}{3} \sum_{i=1}^{10} K_i^* \frac{1}{10} \quad (6)$$

where CCI_e is the complex (integrated) criterion of innovativeness of business's (enterprise) development and operation, EID_e represents the degree of innovativeness of business (enterprise) according to the resource intensiveness and is obtained by means of Eq. 8 and K_i stands for the indicator of enterprise innovativeness (Eq. 7):

$$K_i = \frac{p_i}{p_{i(best)}} \quad (7)$$

where p_i is the value of the enterprise's local indicator that reveals innovative activity of business. $p_{i(best)}$ represents the best value of the indicator across enterprises or projects proposed for implementation:

$$EID_e = \frac{ri(T-1)}{ri(T)} \quad (8)$$

where $ri(T-1)$ is resource intensiveness per unit of added value in the base period and $ri(T)$ is resource intensiveness per unit of added value in the analysed period.

The local indicators that are used to evaluate degree of innovativeness comprise the following:

1. Amounts of market-promising innovative products according to the degree of novelty (new products) in the total volume of production
2. Share of promising innovative products according to the degree of novelty (improved products) in the total production volume
3. Preparation of patent applications
4. Obtaining protection documents on applications for inventions
5. Obtaining protection documents on applications for discoveries
6. Total science and innovation costs
7. Internal costs of research and development
8. Personnel engaged in research and development
9. Ratio of the degree of commercialization of research and development to the total amount of research and development
10. Share of products sold on the world market

The presented method can also be used in situations, where enterprises themselves rather than specific innovation and investment projects are selected for comparison analysis. However, in this case, with regard to companies that submit their data for a particular session of expert committee on the cost of patents, it is required to use the best value of enterprises' performance as the base for calculating relative values (denominators to calculate I_1 and I_2).

Thus, the proposed model for determining patent cost is practical and illustrative and makes it possible to ensure greater fairness in taxation of small business as well as efficient and targeted tax regulation in this sector because special feature of this model is that the degree of the tax burden on small business is established depending on its socio-economic contribution to the national economy and its degree of innovativeness.

Conclusion

It is obvious that the modern practice of taxation of small business requires elaboration and introduction of a new mechanism that will establish correlation between the degree of tax burden and business performance of innovative small business entities. This will ensure goal-oriented tax incentives for innovative small business and increase the socio-economic and innovative effect of their operations.

The model we have developed is a contribution to solving the stated problem because implementation of the model can enable us to harmonize the aspects of equity and efficiency in taxation. This model can also be used in European countries.

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References

- Bergner S, Bräutigam R, Evers MT et al (2017) The use of SME tax incentives in the European Union. Discussion paper number 17-006. SSRN Electron J. <https://doi.org/10.2139/ssrn.2910339>
- Blažić H (2012) Preferential corporate income tax treatment for SMEs: an international comparison. Available via SSRN. <https://ssrn.com/abstract=2334770>. Accessed 1 Jan 2017
- Busom I (2012) Tax incentives or subsidies for R&D? Working paper number 2012–056. SSRN Electron J. <https://doi.org/10.2139/ssrn.2330222>
- Engelschalk M (2007) Designing a tax system for micro and small businesses: guide for practitioners. Working paper number 42435. Available via World Bank. <http://documents.worldbank.org/curated/en/980291468158071984/Designing-a-tax-system-for-micro-and-small-businesses-guide-for-practitioners>. Accessed 12 Jan 2017
- Engelschalk M, Loeprick J (2015) MSME taxation in transition economies: country experience on the costs and benefits of introducing special tax regimes. Policy research working paper number 7449. Available via World Bank. <https://ssrn.com/abstract=2676418>. Accessed 1 Jan 2017
- European Commission (2014) A study on R&D tax incentives. Final report working paper number 52–2014. <https://doi.org/10.2778/447538>
- Gale WG, Brown S (2013) Small business, innovation, and tax policy: a review. SSRN Electron J. <https://doi.org/10.2139/ssrn.2467620>
- Intarakumnerd P, Goto A (2016) Technology and innovation policies for small and medium-sized enterprises in East Asia. Working paper number 578. Available via SSRN. <https://ssrn.com/abstract=2812432> Accessed 10 Jan 2017
- Logue KD, Vettori GG (2010) Narrowing the tax gap through presumptive taxation. Law and economics working papers number 8. Available via University of Michigan Law School. http://repository.law.umich.edu/law_econ_current/art8. Accessed 10 Jan 2017
- OECD (2015) Taxation of SMEs in OECD and G20 countries. Organization for Economic Co-operation and Development. OECD Publishing, Paris. <https://doi.org/10.1787/9789264243507-en>
- Yitzhaki S (2007) Cost benefit analysis of presumptive taxation. SSRN Electron J. <https://doi.org/10.2139/ssrn.979921>