

Fiscal Measures for Research, Development and Innovation: Cases of Slovenia, Slovakia and Belarus¹

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Abstract

Following the institutional part of the economic transition and the legal/political involvement in European integration process, the Central and Eastern European countries (CEEC) must promote their innovation capacity and competitiveness through innovative processes and products to attain the real transition. This article analyses fiscal measures with the intention to disclose tax incentives design of three CEEC being or not being EU Member States – Slovenia, Slovakia and Belarus. We research whether three small open transitional economies pay enough attention to enhancing innovation by tax measures. The results of comparative analyses have shown that three CEEC have chosen different approaches and models to improve the tax treatment of Research, Development and Innovation (RDI). The differences are essential.

Keywords: indirect fiscal measures, innovation, R&D; Slovenia; Slovakia; Belarus;

JEL Classification: K34, E62, O31

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¹ This research is a part of the project *Reform of corporate income tax systems in the EU as a prerequisite of Lisbon strategy* (Project Number VEGA No. 1/4642/07, 8 members of the project research group, project financed by the Research Grant Agency with Ministry of Education of Slovak Republic, duration period: January 2007 – December 2009).

Introduction

After the institutional part of their economic transition of 1990s and involvement in European integration process, in early 2000s, the Central and Eastern European countries (CEEC) stand at a point where promotion of a country's innovation capacity and competitiveness through innovative processes and products are becoming crucial. In order to increase the economic growth by investments in Research, Development and Innovation (RDI) the policy-makers must design a more efficient and balanced policy mix which includes R&D and non-R&D policy instruments (Unu-Merit, 2006). Policy makers must consider that both policies interact and must define priorities amongst possible routes to raise RDI based on a good view on the needs of the National Innovation System (NIS). External factors² (Hsu and Hsueh, 2009) critically stimulate development in the policy mix, especially the prioritization. The prioritization process requires of strategic intelligence, including on prospective challenges, to be very advanced, which is still to be reached in most EU Member States (Nauwelaers, 2008). Therefore, the attainment of R&D investment goals depends on many factors and is by no means certain (EC-OMC, 2004).

To stimulate business RDI two main types of policies are used by the policy makers: direct financial support (e.g. subsidies) and tax incentives. The use of RDI tax incentives as a policy tool within the policy mix is in the EU (EC, 2002, 2006; Export Group, 2004) as well as in the OECD (2002) clearly on the rise. The intention of this article is to disclose tax incentives design in small open transitional economies of three CEEC being or not being EU Member States – Slovenia, Slovakia and Belarus. We research whether small open transitional economies pay enough attention to enhancing innovations by tax incentives.

Thus, Section 1 provides basis comparisons of the three countries concerning innovations. Section 2 is devoted to review of literature, theoretical background of why should one use fiscal incentives, and empirical literature devoted to the evaluation of the effectiveness of fiscal incentives. Section 3 and 4 map tax incentives and their structure in three CEEC. The main findings and conclusions are stated in the final section.

1. National Innovation System in Slovenia, Slovakia and Belarus

Countries provide a mixed picture in terms of performance on economic indicators related to RDI (Pro Inno Europe, 2009).³ Slovenia (SII – 0.446; GERD – 1.53; BERD – 0.94 in 2007;) joins the group of moderate innovators. Slovakia

² This paper can not cover analysis of external factors.

(SII – 0.315; GERD – 0.49; BERD – 0.18 in 2007) ranges as catching-up country among the poorest innovation performers in the EU-27 (SII – 0.475; GERD – 1.83; BERD – 1.17). Innovation in Belarus that is not involved in the international comparison of innovation performance made by Pro Inno, is low: GERD – 1.15 in 2007 comparing to the USA (2.68 in 2007), the EU-15 (1.88 in 2007) and Japan (3.39 in 2006). Taking into account EU – USA and EU – Japan innovation gaps, situation in the three CEEC is not satisfactory: they face a serious gap behind the other EU players and other most developed third countries (IBFD, 2004; OECD, 2002).

The RDI policy system in Slovakia was exposed to the large modifications since 1989. The institutional restructuring of the RDI system (Šarmír, 1996) has led the transformation process from conditions of “real socialism”, over the phases of the general socio-economic transformation in the former Czechoslovakia and in the independent Slovak Republic (Zajac, 1997, 1999) to a dual economy in the late 1990s and early 2000s (Zajac and Baláž, 2007). The EU accession (Klas, 2002) had major impact on RDI policy mix and instruments. Despite all changes, Slovakia, her NIS must still innovate for more efficiency and effectiveness, and consider also other factors, with a major importance for innovation development and creation of a general innovation, such as promoting framework, like liberal tax environment, low bureaucracy, efficient capital markets, and high mobility of skilled labour force (Baláž, 2000). The Erawatch Country Report (Baláž, 2009) exposes problem of the underfinanced Slovak RDI system and the need for the structural reforms in Slovakia including also transformation of the fiscal system. At present the Slovak policy mix for R&D relies heavily on instruments directly in the R&D domain (Baláž and Berger, 2007; Baláž, 2008). According to the Policy Mix Report (Baláž and Berger, 2007), the Slovak economic policy did not allow any tax credits or other forms of indirect assistance to R&D-organizations in 1998 – 2006.

The institutional framework of innovation policy in Slovenia has gone through several changes (Ovin et al., 2006). In the 1990s Slovenia established a complex NIS. Despite some problems due to the past institutional development, the positive pressure of the EU contributed to a better and more effective institutional development. The Erawatch Country Report (Bučar, 2009) noticed an important trend since 2006 in active application of fiscal policies to promote business-sector investment in RDI. According to the Inno-Policy Country Report (Bučar, 2008) these trends are attributed to the introduction of the RDI tax incentives. In 2006 RDI investment grew by impressive 23% compared to the stagnation of

³ Summary innovation index – (SII); Gross Domestic Expenditure on R&D (GERD); Business Expenditure on R&D (BERD).

real growth in BERD in the previous two years. It is not clear, if the increase happened only in 'traditionally' RDI intensive sectors or whether the restructuring and growth of RDI will reflect in other industries as well. Breitfuss and Stanovnik (2007) mention smaller crowding-out effects due to rather weak interactions between financial R&D policy instruments (grants, tax incentives) and non-financial R&D measures (like incentives for networking co-operations, infrastructure provisions).

Belarusian economy has been traditionally oriented in manufacturing. Therefore, the level of innovations is usually evaluated in the industry only. After Soviet Union's break-up the sustainable relations between suppliers and consumers were temporarily destroyed and shocked by the foreign competition. Some studies (Young et al., 2002) prove that Belarus managed to save the inherited education system and industrial potential. But, still, its innovation sphere in the 1990-ies became hardly competitive and comparable to the global levels (Bohdan, 2006).

2. Fiscal Measures for RDI within the Policy Mix

Governments use tax incentives in order to replace two market failures (Unu-Merit, 2006): asymmetric information between lenders of funds and R&D performers, and R&D externalities. Other types of failures that can be removed with tax incentives are the lack of human capital and a potential tax competition.

The increasing importance of tax incentives shows that many countries feel that these instruments boast a number of clear advantages over direct measures. Governments use them to reach a broad range of firms involved in RDI activities, since they are generic, cause relatively low administrative costs comparing to direct financial support, and lower the effective cost of RDI. An easy accessibility to these measures (CREST, 2006) enables to the private sector to decide what is the most productive way to invest, and causes less risk of governmental failure. On the other hand, tax incentives can become very costly for the government, if they are successful and cause firms to do more RDI. They are useful only if firms generate profits and have enough financial resources available (Unu-Merit, 2006). Despite all listed advantages of fiscal measures, concerning optimization of the policy mix, direct financial measures and fiscal measures have different roles within a policy mix. Therefore they should complement each other (Export Group, 2004).

There are different classifications of fiscal measures. Expert Group Report (2004) distinguishes them by the type of expenditure they support (current or capital) and the type of relief they provide (deferrals, allowances or tax credit). EC (2002) classifies them by three typically identified mechanisms: tax allowance,

tax credit (volume-based and incremental measures), and special depreciation of assets, as well by the areas tax incentives are focused on: support to invention-innovation activities and support to environment favourable for innovation.

One significant weakness of many NIS is lack of a systematic evaluation of RDI policy, including fiscal measures. To improve fiscal measures for RDI on the basis of formal evaluations, different methods should be used since they have clear comparative advantages in addressing different evaluation issues. There are two approaches to evaluate the effectiveness of any tax policy designed to correct the insufficient supply of a quasi-public good (Hall and Van Reenen, 2000): the first method asks whether the level of the good supplied after the implementation of the policy is such that social return is equal to the social cost; the second method compares the amount of incremental industrial R&D to the loss in tax revenue. Most evaluations of the effectiveness of the R&D tax credit have been conducted using the second method (benefit-cost analyses). Warda (2002) evaluates the impact of R&D tax incentives on the cost of R&D using the B-Index. This indicator tries to compare the different forms of R&D tax incentives internationally. The value of the B-index depends on the income tax treatment of R&D. The more favourable its tax treatment of R&D, the lower is a jurisdiction's B-index and, other things being equal, the greater the amount of R&D that will be conducted by its corporate residents. To overcome the disadvantages of the B-Index the simulation model European Tax Analyzer (ETA) was developed. The ETA is a firm model measuring the impact of a tax incentive on a company's tax level (Jacobs and Spengel, 2002) by putting the after tax income including the tax incentive in relation to the after tax income excluding the tax incentive. Guellec and Van Pottelsberghe's (2000) study quantifies the aggregate net effect of government funding on business R&D. Grants, procurement, tax incentives and direct performance of research are the major policy tools in the field. Study reveals following conclusions: (1) direct government funding of firms' R&D and tax incentives has a positive effect on business financed R&D; (2) these two policy instruments are more effective when they are stable over time; (3) direct government funding and R&D tax incentives are substitutes; (4) the impact of direct government funding on business R&D is more long-lived than that of tax incentives. CREST (2006) resumes that useful methods for the evaluation of tax incentives include case studies, survey-based evaluations, econometric studies, and counterfactual analyses. It recommends the evaluations of tax incentives to have an integrated approach using a variety of different methods to understand how the incentive actually functions. Unu-Merit (2006) recommends measurement of efficiency of tax incentives by both quantitative and qualitative characteristics.

Obviously, theorists and governments face dilemmas of professional specialization providing quite deep and one-sided insights and impact on one hand, and of the requisite holism providing equally deep and less one-sided ones, but requiring a mostly unusual interdisciplinary creative cooperation on the other hand. The latter is more complex and complicated in work process, but less so later because it offers the requisite wholeness of insights and outcomes.

3. Tax Incentives to RDI in Slovenia, Slovakia and Belarus

The differences between Slovenia, Slovakia and Belarus concerning RDI are essential, although all three countries used to belong to the socialist CEEC. The question now reads: what are they trying to do to catch up with the more advanced countries?

3.1. Tax Incentives within the CIT Regime

This part focus on tax provisions within the Corporate Income Tax (CIT) regime that is accessible for innovative firms, i.e. on additional tax provisions that enable taxpayers to further reduce the businesses costs of performing innovation related activities. The measures below are typically used to provide incentives over and above the basic allowance (EC, 2002): extra tax allowance, tax credit, and special depreciation of assets.

Extra Tax Allowance

An extra allowance enables firms to deduct more than 100% of their innovation activity expenditure from their taxable income. *Slovenia* uses a general tax allowance in Corporate Income Tax Act⁴ (CITA) which is 30% but not more than 30.000 EUR and under special conditions, additional 10% if the investment was made in the statistical regions with up to 15% under the average development level, or additional 20% for R&D investment in regions where the development gap is more than 15%. The eligible costs comprise both the purchase of equipment and new technology for the purposes of R&D, the costs of labour, and the purchase of licenses. The Income Tax Act⁵ (ITA) in *Slovakia* provides no additional targeted measures in the form of deductibility of the innovation activity expenditure from taxable income. The tax treatment of a subsidy granted for acquisition of long-term material and immaterial assets might be considered as an extra tax treatment. The subsidy in the form of state aid for investment under

⁴ CITA. Official Journal RS Nr. 117/2006 date 16. 11. 2006, 12303 with supplements.

⁵ Income Tax Act No. 366/1999 Coll. of Laws; Income Tax Act No. 595/2003 Coll. of Laws.

the Investment Aid Act is exempt from the taxable revenues and will be capitalized over the depreciation period either through the straight-line, accelerated tax depreciation method or proportionally. The *Belarus* CITA does not provide any extra tax allowance for RDI.

Tax Credit

Tax jurisdiction can allow taxpayers to deduct a percentage of the firm's innovative activity expenditure from their tax liability or tax bill by applying a variety of possible schemes (EC, 2002): volume-based, incremental, and mixed scheme of tax credit. Based on the State Aid Act No. 231/1999 Coll. of Laws provisions *Slovakia* can provide targeted investment incentives, the rules of which are stipulated in a separate Act, i.e. the Investment Aid Act No. 561/2007 Coll. of Laws. Under its provisions, the investment aid occurs in four forms, i.e. the subsidy to acquisition costs of long-term material and immaterial assets, the income tax credit, the cash grants for new jobs, or the cash grants for training. All forms of investment incentives are considered to be forms of state aid and must follow conditions stipulated by State Aid Act. The provisions of income tax credit are directly incorporated into the ITA, all other provisions are outside the CIT. However, income tax credit is not generally accessible to all taxpayers; it is a targeted tax measure to support some activities, among them also RDI. Therefore, an income tax credit can be provided to taxpayers, who decide for investment aid including tax credit, which is available in five consecutive years. *Slovenian* and *Belarus* tax jurisdictions do not provide taxpayers with this possibility.

Special Depreciation of Assets

Except the general annual depreciation rate, there are no additional or special depreciation rules used exclusively for invention-innovation activities in *Slovenia*, *Slovakia* and *Belarus*.

3.2. Tax Incentives Outside the CIT Regime

One tax provision existing outside the CIT regime is also the treatment of the salaries of researchers within the personal income tax act (PITA).

According to *Slovenian* PITA⁶ there is no special treatment of the income – salaries of researchers. Income from innovations created on jobs is as a normal salary with no possibility of income tax relief. The taxable base for royalties (income from the transfer of property rights – copyrights, technical innovations) is classified as an income received; a general reduction by a standard deduction of 10% of the income is applicable. Grants paid only by state or governmental

⁶ PITA. Official Journal RS Nr. 117/2006 date 16. 11. 2006, 12272, with supplements.

foundations are not taxable. Other income such as business grants is not fully exempt from the taxable base but only up to the minimum wage, increased for 60%. The income from rewards for scientific research received from the Republic of Slovenia or local community, which is not treated as an active income, is exempt from the taxable base. Tax incentives for the entrepreneurship are the same as for legal entities.

The income tax system in *Slovakia* is global not scheduler. Thus provisions on taxation of capital incomes, such as interest incomes, dividends and capital gains from securities, bank savings accounts, social security benefits that originate in voluntary third pillar of social insurance are incorporated within the ITA. All kinds of capital incomes, except dividends, are taxed, and no specific tax treatment is given for those linked to venture capital and the RDI activities. The RDI activities in private sector in Slovakia can be supported by state aid measures that are governed by the provisions stipulated in the State Aid Act No. 231/1999 Coll. of Laws amended by Act No. 434/2001. Alongside with other areas such as the development of regions, environmental protection, aid for small and medium-sized enterprises (SMEs), retrieving and restructuring of business in troubles, steel industry, ship industry, automotive industry, a state aid can be provided for RDI. In general, there are two forms of state aid: the direct and indirect ones. The indirect state aid may appear in several non-tax forms but also as tax. The tax form of the indirect state aid is the relief from taxes, penalties, fines, interest rates, or other possible sanctions that can be imposed by the Tax Authorities under the Tax Administration Act, the Health Insurance Act, or the Social Insurance Act. The individual researchers' and entrepreneurs' income tax treatment is governed by the provisions of personal income tax as integral parts of the ITA 595/2003 Coll. of Laws. The provisions on income tax credit are available also for natural persons – entrepreneurs, provided that they hold decisions on investment aid including tax credit. The royalties received by natural persons and entrepreneurs are subject to withholding tax of 19% and there is no special treatment in case of RDI. The income from rewards for scientific research is not specially treated and it is not subject to any tax relief. Salaries of researchers are treated in an ordinary way and no tax relief is accessible. The tax treatment of meal allowances for business trips could be considered as tax incentive to enhance RDI outside the CIT regime. They are not subject to personal income tax, which can be considered as favourable tax treatment. This pays also for meal allowances for business trips that are paid to researchers from research grants. The tax treatment of meal allowances for business trips is generally accessible for all taxpayers.

In 1996, the *Belorussian* authorities started a program to attract foreign investors by establishing Free Economic Zones (FEZ). Resident of a FEZ pay preferential taxes. The tax rate on VAT (10%), the unified tax (1%) and the tax rate on incomes of foreign legal persons (5%) are lower than the general tax rates. Investment profits are not taxable in Belarus; they are exempt from value added tax (VAT) within 5 years and reduced for 40% in the subsequent years. Residents of the FEZ pay the income tax rate of 15%, profit tax is paid at the rate of 12% of taxable profit (general rate established by the law is 24%). The profit received by the FEZ residents selling the products (work, services) of their own production is released from taxation for the period of 5 years from the moment of its declaration. In 2005 a High Technologies Park was established. Park residents are exempt from taxes, levies and other payments to the Republic's budget and other funds, VAT, from profits tax, Customs Duties & VAT imposed by custom bodies, as well as real estate tax. Instead, a single payment is introduced and set at 1% of revenue, an amount which is to be transferred to the Park Administration account. The 'Decree on the High-Tech Park'⁷ also provides individuals with certain tax incentives. The income received by individuals from Park residents as well as the income received by individual entrepreneurs is taxed at 9% and excluded from the aggregate annual income of the individual. It should also be noted that the income tax rate for foreign legal entities (with no permanent establishment for business operations on the territory of Belarus) on dividends, interest, royalties, if such income is paid by a Park resident, is 5%. The park residents shall not be liable for the offshore fee (15% of the transferred amount) when paying dividends to their parent companies. Companies involved in innovation activity and with turnover, connected with innovation goods, are free of the VAT.

4. Analysis of Tax Incentives to RDI in Slovenia, Slovakia and Belarus

The selection of typical innovation activities for the support through the provision of tax incentives depends on government's selection and varies from country to country. In this part we study what exactly innovation tax incentives in Slovenia, Slovakia and Belarus focus on. According to the EC Report (2002) tax incentives may focus on (1) support of invention-innovation activities and (2) support of environment favourable for innovation, i.e. tax incentives that promote the innovation framework.

⁷ Decree of the President of Belarus on the High-tech Park, signed on September 22, 2005.

4.1. Tax Incentives to Support Invention-innovation Activities

Business RDI Expenditures

The research expenditures incurred by a taxpayer are immediately deductible from the tax base or deferred and then amortized using a straight line method according to the CITA or internal accounting policy. The RDI expenditures in *Slovenia* are deductible or recognized as expenses if they are required to acquire taxable revenues. Expenses that are not required to acquire revenues are expenses for which it follows that they are of a private nature and they do not conform to normal business practice. *Slovak* firms may depreciate RDI costs by using generally accessible depreciation methods and allowances. No specific depreciation rules apart from accelerated depreciation of assets with increased residual value are allowable.

RDI Capital Expenditures

Slovenia allows companies to write off all current revenue expenditures on RDI against their taxable profit in the year expenditure takes place. The RDI expenditures are subject to amortization, if they are treated as capital expenditures. *Slovenia* has only a standard depreciation rule for tangible (e.g. laboratory equipment, building) and intangible assets (e.g. software, patents). There are no special depreciation rules (free depreciation or accelerated depreciation) that would allow larger sums to be written off the value of assets in their earlier years than in later years. *Slovakia* and *Belarus* have no special depreciation rule and therefore no extra tax allowance. *Slovakia* has only a standard depreciation rule for tangible and intangible assets and no special depreciation rules like free depreciation or accelerated depreciation for RDI.

Technology Transfer

Slovenia uses 30% or, under special conditions, additional 10% or 20% for RDI investment. The investment aid under the Investment Aid Act in *Slovakia*, which can take the form of tax credit, can be granted to the next types of investment projects: (1) industrial production, (2) technology centers, (3) strategic services centers, and (4) tourist trade. A technology centre is deemed to be a place where the beneficiary of the investment aid undertakes activities that lead to the improvement or change of products, production process or production technologies. Tax credit is applicable, provided that the following conditions are met: (1) a new technology centre is raised or an existing one is extended, (2) acquisition of long-term tangible or intangible assets in total sum not less than SKK 40 mill. (EUR 1.3 mill.) provided that at least 50% is covered by legal or individual person's equity capital, (3) 60% of total number of employees at least must hold university degrees.

Industrial Design and Process Engineering

The industrial design and the process engineering are technological innovation activities which lie outside RDI and may form a constituent element of large RDI projects. The main activities are tooling up and industrial engineering as well as industrial design and production start up, defined according to the Oslo Manual. The percentage of the tax allowance in *Slovenia* is 30% or, under special conditions, additional 10% or 20%. *Slovakia* and *Belarus* do not specially promote industrial design and process engineering arising of RDI project.

Implementation of Quality Certificates

The implementation of quality standards is only a technological innovation when it leads to a significant improvement in production, goods, and service distribution. Nevertheless, it can not be considered that any implementation of quality standards is an innovation. *Slovenia* promotes a tax relief for the implementation of quality certificates, if the implementation of quality standards can be defined as innovation. The percentage of the tax allowance is 30% or, under special conditions, additional 10% or 20%. *Slovakia* and *Belarus* do not specially promote the implementation of quality certificates.

Software, Communication Technology

Tax incentives should be designed to promote the purchase of new technology, investment in Internet access, investment in information and communication technologies (ICT), and the preparation for e-commerce. *Slovenia* allows a short period in depreciation of software (50%). The percentage of the tax allowance is 30% or, under special conditions, additional 10% or 20%. There is no special tax treatment of software and communication technology in *Slovakia* and *Belarus*.

Patent Applications

Companies register technological advances for patent protection in order to maintain the competitive advantage acquired. *Slovenia* is one of the countries to include the cost of registration and maintaining a patent (as intellectual property) within its RDI tax credit and the percentage of the tax allowance is 30% or, under special conditions, additional 10% or 20%. In *Slovakia* patent applications are promoted by the precondition to be met when taxpayer applies for the income tax credit. Qualified costs that are subject to investment aid in any form, including tax credit, consist of either: (1) long-term tangible assets acquisition costs, (2) intangible assets acquisition costs up to the 50 % of long-term tangible assets provided that their origin is in transfer of technologies such as acquisition of patents, licenses, know-how or non-patented technological knowledge, or (3) gross salaries of employees whose jobs were created acknowledging investment project.

4.2. Tax Incentives to Support the Innovation Framework

The incentives aimed at promoting business activities in general may also stimulate innovation, even if they are not designed with this objective primarily. These incentives may foster relevant aspects related to innovation, such as the financing of innovation companies, or training of company staff in the operation of new products.

Training

Training can be defined as a technological innovation activity when it is required for the implementation of a technologically new or improved product or process. The percentage of the tax allowance in *Slovenia* available also for training tax incentives is 30% or, under special conditions, additional 10% or 20%. In *Slovakia*, expenditures spent on education and re-qualification program of employees, own educational facilities, education of apprentices in own facilities are deductible up to the limit, unless they are subsidized by public spending.

Contracting Researchers

The incentives promoting the contracting of researchers encourage the hiring of specialist researchers. *Slovenia* has no additional tax relief in the CITA for those expenses; contracted researchers are recognized as deductible expenses and the percentage of the tax allowance in *Slovenia* is 30% or, under special conditions, additional 10% or 20%. In *Slovakia*, the Investment Aid in any form, including income tax credit, is applicable for technology centers that are the subject of investment project. If 60% of all employees of technology centre are university graduates, the taxpayer who decides on investment aid can apply for the investment aid in the form of tax credit. No tax incentives for contracting researchers are available in *Belarus*.

Co-operation between Companies and Research Organizations/Universities

One objective of fiscal incentives to innovation is to increase the co-operation between companies and research centers or universities. The RDI developments carried out in affiliated research centre shall be transferred to companies and shall lead to innovation projects. The percentage of the tax allowance in *Slovenia* is 30% or, under special conditions, additional 10% or 20%. *Slovenia* supports collaboration of companies with universities and research centers also by a possible reduction of the taxable base for the donation paid in cash and in kind for scientific and educational purposes, but only for payments made to the residents of *Slovenia* or the residents of the EU Member States that are established under special regulations for performance of such activities and up to an amount equivalent to 0.3% of the taxpayer's taxable revenue in the current tax period.

There are no special provisions to support co-operation between companies and research organizations/universities in *Slovakia* and *Belarus*.

Creation of Innovative Firms and Share of Ownership in New Innovative Firms

Slovenia and *Slovakia* have no tax incentives to stimulate funding of new innovative firms by private investors. *Belarus* has special regulation, i.e. the ‘Decree on the High-Tech Park’ that promotes the creation of innovation firm inside a FEZ. The residents are exempt from taxes, levies and other payments, from profit tax and the VAT as well as real estate tax, but are required to pay fix tax of 1% of revenues. The income received by the individuals is taxed with lower tax rate of 9% and exempt from the aggregate annual income of the individual.

The list (Table 1) of incentives includes all usual measures inside the factory/technology part of the business process in all three CEEC under investigation.

Table 1

Tax Incentives in the Three CEEC

	Belarus	Slovakia	Slovenia
Target corporation tax incentives			
Special allowance			X
Tax credit		X	
Special depreciation			
Tax incentives for invention-innovation activities			
Business RDI expenditure			X
RDI capital expenditure			
Technology transfer		X	X
Industrial design and process engineering			X
Implementation of Quality certificates			X
Software, communication technology			X
Patent applications		X	X
Tax incentives to support the innovation framework			
Training		X	X
Contracting of researchers		X	X
Co-operation between firms and research institutes/ universities			X
Creation of innovative firms and shared ownership in new innovative firms	X		

Note: X indicates the presence of a tax incentive.

Source: Own elaboration.

Conclusions

Presented data show that innovation performance (SII, GERD, BERD) in the three CEEC is weak and does not reach the EU average. In the light of literature review the core of our article was devoted to mapping whether, and to which degree (heavily or not) the three CEEC governments build on theoretical and research results and include tax incentives to support RDI into their policy mixes.

Our finding is that in overall, no investigated country heavily uses tax incentives to support RDI. It is obvious that tax incentives to support RDI in Slovenia, Slovakia and Belarus have not been playing important roles in their policy mixes. Two out of three surveyed countries adopted tax incentives to innovations within their CIT regimes, but with different approaches. Slovenia prefers more complex network and requirements of tax allowances. Slovakia launched tax credit on RDI. Belarus tax regime mainly relies on tax incentives outside of CIT regime, i.e. on the FEZ. The Slovenian tax regime provides strong support to innovation activities. Slovakia deems her tax credit is satisfactory enough. The requirements to be met strengthen technology transfer and patent applications, but weak support is provided to training and contracting researchers. Among the three CEEC, Slovenia shows the best innovation performance and government of Slovenia puts much more attention to tax incentives to support RDI than the Slovak and Belarussian governments do. This proves that small open post-communist economy that is member of EU and Euro-area can use specific tax measures to support RDI and it does so. This challenges the Slovak and Belarussian governments in the time of economic crisis. The lack of holism in data collection in measuring the impact of innovation, the lack in systematic evaluation of RDI policy, including fiscal measures, belongs to significant weaknesses of all three NISs.

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