

CHAPTER 2.

TAX INCENTIVES AND INSTRUMENTS OF DEVELOPMENT INNOVATIONS AND INVESTMENTS IN SME

FISCAL INSTRUMENTS OF SUPPORTING INVESTMENT AND INNOVATIONS: EXPERIENCE OF SOME DEVELOPED COUNTRIES OF EUROPEAN AND NON-EUROPEAN CONTINENT

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Economic growth of every country depends not only from smart governance but also from development of high-tech innovative export oriented SMEs. The share of Singapore, one of the smallest countries in the world, in the global hi-tech export accounts 6.4%, South Korea — 6.21%, Poland — 0.67%, Check Republic — 1.07%, Ireland — 0.99%. At the same time, Ukraine's share is less than 0.1%. Moreover, the GDP composition by sector in countries with significant technological advancement differs from Ukrainian. In such countries as Finland, USA, Ireland, Japan, South Korea, Singapore and other advanced countries (average, without of Ukraine) the agriculture has relatively low share of GDP, below 3%. However, all of them has rather high share in global hi-tech exports. Ukraine has a substantial high share of agriculture in its GDP structure, at about 14%. In general, GDP structure in Ukraine is similar to the technologically advanced countries; but taking a closer look at the

Ukrainian export composition in 2015, can be seen a relatively high share of services and commodities in it (62%), however industry accounts only 38% of all exports. Even in Ukrainian IT industry services 79% export are mostly outsourcing and bring low added value. Therefore, Ukraine creates a commodity economy with many risks: citizens of Ukraine could not find well-paid job within the country and will not be able to use their potential in it. At the same time, European governments are fighting for potentially highly qualified taxpayers. Countries with the same human capital index as in Ukraine, have an average GDP at 30 000\$ per capita, but in Ukraine it is less than 8000\$. Consequently, we can observe a constant brain drain in Ukraine.

To stop such situation, we should study experience of highly developed countries in attracting investments and boosting interest to innovations, determine priority areas of government supporting innovations in these countries and ways of usage fiscal instruments to stimulate investments. Finally, these will help to develop substantiated decisions how to apply the best practices in this sphere in Ukraine.

Practice shows that all highly developed countries has programs to attract highly qualified professionals from abroad. For example, Iceland is a relatively innovative country which innovation strategy to 2020 targets eco-innovation as a key growth sector. In line with this, 3% of the public R&D budget was allocated to environment, which is one of the highest shares in the OECD countries. Industry is the main funder of environment- and energy-related R&D, and there are several eco-innovative companies in Iceland [1]. However, while patenting activity in general has been on par with that in other OECD countries, there have been very few Icelandic patent claims in environmentally relevant sectors.

Sustainable Economic Growth Strategy in Canada follows three paths:

- building economic foundations (support willing governments to build the necessary legislative and regulatory business, industrial, and financial framework upon which sustainable growth can take place);
- growing businesses (enhance the financial viability, productivity, and competitiveness of SMEs, resulting in increasing employment opportunities for the poor);
- investing in people (improve the employment potential of individuals to increase access to and benefits from opportunities in the informal and formal business sectors) [2].

Key efforts of Canadian Government are directed on achieving such goals as: establishment of more micro, small and medium-sized viable enterprises, especially those led by women; micro, small and medium-sized enterprises that are strengthened and that have improved their productivity and return on investments, resulting in increased stable formal employment opportunities for the poor; and the development and accessibility of suitable credit and financial services that result in business, trade, and industry growth to benefit the poorest population groups.

Canada's government supports activities that:

- strengthen support for the development and growth of SMEs with a special emphasis on women;
- aim to increase the productivity and sustainability of businesses, based on realistic market potential to fill value chain gaps, which will result in increased long-term formal employment opportunities for the poor;
- strengthen and increase the availability of financial institutional products and services, including microfinance, which will result in greater job creation for the poor.

On the other hand, among priority sectors that are defined and regularly reviewed by Government's diversification policy in Luxemburg are ICT, space, life sciences, materials and production technologies, automotive components and smart mobility, Eco innovation and logistics [3]. The priority spheres in Denmark are R&D and ecological assistance. Government create some funds, for example, Innovation Fund Denmark, which invest in perspective projects. Moreover, tax policy in Denmark stimulates eco-friendly businesses.

The priority spheres in Slovakia are automotive & mechanical engineering industries, production and processing of iron and steel, ICT and services, consumer electronics and electrical equipment; in Latvia — smart energy, advanced ICT, knowledge intensive bio-economy, biomedicine, medical technologies and biotechnology, smart materials, technology and engineering; in Hungary — advanced technologies in machine industries, ICN and information services, sustainable environment, agricultural innovation, clear and renewable energies, healthy society and wellbeing. In Poland among priority spheres of innovative development are innovative agriculture and agree-food industry, modern textile and fashion industry

(including design), medical industry, pharmaceuticals and cosmetics (including health resort medicine), energy (including EE, RES), IT and telecommunications (ICT). In Estonia — ICT in industry, data analysis and information management, e-health, knowledge-based construction, biotechnologies in food.

In the USA Environmental Sustainability, Economic Sustainability, Social Sustainability [4] are among main spheres of economic development. They suggest that in a truly sustainable environment, an ecosystem would maintain population, biodiversity, and overall functionality over an extended period of time. Ideally, decisions that are made should promote equilibrium within our natural systems and seek to encourage positive growth.

Similar to environmental sustainability, economic sustainability in the USA involves creating economic value out of whatever project or decision you are undertaking. Economic sustainability means that decisions are made in the most equitable and fiscally sound way possible while considering the other aspects of sustainability.

Social sustainability in the USA is based on the concept that a decision or project promotes the betterment of society. Future generations should have the same or greater quality of life benefits as the current generation do. This concept also encompasses many things such as human rights, environmental law, and public involvement & participation.

We can conclude that innovations and investments in R&D are among the priority spheres in most developed countries. At the same time in the strategy of Ukraine “Ukraine 2020” the innovation development as a priority is not even defined at all. Top 10 priorities in Ukraine strategy 2020 are reform of national security and defence system, renewal of authorities and anti-corruption reform, judicial and law enforcement reform, decentralization and public administration reform, deregulation and development of entrepreneurship, healthcare reform, tax reform, energy independence, popularization of Ukraine in the world, as well as promotion of state interests in the global information space [5].

To enhance investment in most developed countries various fiscal instruments and tax preferences are used. For example in Canada there are tax credits of the federal government Scientific Research and Experimental Development (SR&ED). From these tax credits benefit many small businesses by providing broad support for their R&D investments. The SR&ED

tax credits provide over 3 billion Canadian dollars in R&D tax credits annually [6, p. 31-34]. This tax credit is focused on supporting R&D expenditures, whereas other complementary support is also required for non-R&D based innovation and innovation projects directly focused on achieving productivity and employment growth in SMEs. There are also several direct SME innovation programmes in Canada, although total expenditures on these programmes is well below that on the SR&ED investment tax credits. In 2014-2015 near 2500 SMEs received contribution funding for technology projects from the National Research Council's, Industrial Research Assistance Program and approximately 10000 SMEs benefited from technical and business advisory services, often delivered by the programme's 250 Industrial Technology Advisors [6, p. 31, 33].

In Luxembourg companies usually pay around 29.22% corporate tax, that is higher comparing to Ukraine (18% tax rate on CIT). However, the net income connected with intellectual property rights (for example when exploiting a sub licence) enjoys an 80% exemption of the corporate income tax [7]. In other words, one pays a maximum effective tax rate of 5.8% on intellectual property income. Net income under this intellectual property regime is the difference between the gross revenue from the intellectual property right and any expenses directly related to such rights, including the annual write-offs and, where appropriate, the deduction of losses. When an intellectual property company sells qualifying intellectual property rights with a profit, then the 80% exemption also applies to these realised capital gains [7].

In Denmark, tax preferences are just for R&D. Denmark also allows tax credits for R&D, which are most commonly used by new SMEs, although they are not restricted by firm size. For entities that have a tax loss of up to 25 million Denmark crones that results from R&D expenditure, the company can have the tax value of the deficit (up to Denmark crones 5.87 million) paid out [8]. The loss that is able to be carried forward is reduced by the loss that forms the basis of the amount paid out. Denmark has one of the highest environmental tax rate in the EU. So, it encourage eco-friendly businesses. Denmark has been promoting eco-innovations since 2006, when the Danish Parliament requested the Danish Government to launch the first eco-innovation scheme, underpinned by a comprehensive policy framework in support of activities and initiatives in favour of the environment and combating climate change. After the Danish Local

Government Reform in 2007 created five completely new regions in Denmark, green growth initiatives got off due to the synergy effects that the reform offered. Industrial symbiosis and public procurement are two areas that seem particularly to have benefitted from this. However, the new Danish Government (June 2015) has taken a more market oriented approach to green transition with the view that enterprises will implement green business models without the need of comprehensive state support, hence some drastic cuts have been proposed and taken place that will affect circular economy developments. In view of this, the latest Scoreboard results are a result of the work of previous governments and it needs to be seen how the latest policy developments will affect Denmark's result in the future [8].

According to Denmark's Statistic, the amount spent on research and development corresponds to 2.96 percent of Denmark's GDP and includes all research efforts carried out in the country, both by public institutions and private sector. The Danish government helped fund projects worth 21.6 billion kroner (1.07 percent of GDP), while private companies invested 38.3 billion kroner. Only Sweden and Austria invest more in innovation among the OECD countries in the EU.

One of the significant measures implemented in the Slovak Republic is tax deduction for research and development expenses, which will cover a broad selection of eligible costs, including 25 % of research costs, 25 % of the wages of all newly hired employees in the first year of employment and 25 % of the yearly increases in R&D costs [9]. The tax deduction is managed by the Slovak Ministry of Finance.

Moreover, Slovak government has implemented measures to boost research activities in SMEs, promote development and innovation competences and support high-growth innovative companies. The government also continued to implement its innovation vouchers scheme. The areas in which the most important policy initiatives were adopted in the reference period are [9]:

- Entrepreneurship, for which the adopted and ready-to-implement measures include a government-approved plan for a start-up postgraduate scholarship programme and a voucher system to support the protection of intellectual property in start-ups.

- Responsive administration on which Slovakia set up a National Business Centre, providing a comprehensive business support system under a single umbrella organisation.

– Skills and innovation on which tax deductions for R&D expenses were introduced, and Slovakia intended to establish regional innovation offices.

From the beginning of 2016, Polish entrepreneurs conducting activities in the area of research and development (except from those, who pursue SEZ activities) could benefit from an income tax reliefs. Part of the following costs related to R&D works can be additionally deducted from the tax base [10]:

- Gross wages and compulsory contributions of R&D employees;
- Cost of materials and resources directly related to R&D activities;
- Cost of expertise, opinions, advisory and other equivalent services as well as costs associated with the acquisition of R&D results provided or performed by scientific institutions
- Costs of use of R&D equipment dedicated exclusively to R&D activities
- Tangible and intangible assets' depreciation write-offs for the assets used within R&D activities

Small and medium entrepreneurs may additionally deduct the costs of obtaining a patent for an invention. The additional write-off from the tax base in the 2016 amounted to: 30% of the wages and compulsory contributions of R&D employees and 20% for micro, small and medium entrepreneurs and 10% for large entrepreneurs of all the other costs.

However, since 2017 the amount of tax credit is increased to:

- 50% of all the costs for SMEs;
- 50% of the wages and compulsory contributions of R&D employees for large entrepreneurs;
- 30% of all the other costs for large entrepreneurs [10]

According to the signed Strategy of development 2030, priority areas in Russia Federation are:

- integration of support functions for small and medium-sized businesses;
- stimulation for the production of small and medium-sized enterprises, including through increased access to enterprises, procurement of goods, works, services of public sector organizations;
- creation of conditions for increasing labour productivity in small and medium-sized enterprises;
- ensuring the availability of resources for small and medium-sized enterprises;

- improving the policy in the field of taxation and non-tax payments;
- Improvement of the quality of state regulation in the sphere of small and medium business;
- stimulating the development of entrepreneurial activities in certain territories.

So, as can be seen from Development strategy declared principles, the main instruments, which Russian Federation uses, are tax benefits and subsidies for stimulation SMEs development. Government of Russia Federation also makes all possible to simplify access to financial recourses for SME by different Federal programs. They are not always fiscal instruments. Until 2030, government wants to have micro- and small business' part in GDP at the level of 40 % (now it is only 20%). State support for innovation, according to the Federal Law, can be realized in the following forms: granting of privileges on payment of taxes, fees, customs payments; provision of educational services, information and consulting support, assistance in the formation of project documentation; formation of demand for innovative products; financial security (including subsidies, grants, loans, loans, guarantees, contributions to the authorized capital); implementation of targeted programs, subprograms and implementation of activities within the framework of the state programs of the Russian Federation; export support; provision of infrastructure. Official data shows that in 2016 Russian Federation spent only 0,2 % of GDP for innovation support and development, in 2014 — 0,18 %. It is rather a low level, which hardly could boost their economy.

Talking about the USA, its tax-related fiscal policy affects retail businesses by changing the amount of disposable income people have to spend. Higher taxes, or an expansion of taxable items, lowers consumers' net income, making them more budget conscious and apt to limit expenditures to necessities [11]. Lower taxes leave more money in consumers' pockets to spend on goods and services retailers offer. Fiscal policy that involves government spending and adds to the federal deficit can lead to higher interest rates. This can increase the cost of credit and mortgages that may make consumers think twice about purchases. It also may encourage them to save, leaving less of their take-home pay for trips to the store.

Among variety of incentives that countries in a global market offers to attract businesses, especially innovative business, are the next:

- France provides cash grants, loans, tax credits and tax holidays, reduced SSC, reduced tax rates, accelerated depreciation on R&D assets, patent-related incentives.
- Belgium offers tax credits, cash grants, income tax withholding incentives, patent-related incentives, tax exemptions, reduced tax rates, tax deduction (including super deduction), loans, VAT reimbursement, reduced SSC
- Hungary provides cash grants, reduced tax rates, tax credit, patent-related incentives, reduced SSC, tax deduction (including super deduction)
- Netherland delivers income tax withholding incentives, reduced tax rates, tax credit, patent-related incentives, reduced SSC, tax deduction (including super deduction), accelerated depreciation on R&D assets, cash grants
- UK offers cash grants, tax credit, patent-related incentives, accelerated depreciation on R&D assets.

From the mentioned above information we can conclude that each country use rather large scope of instruments to stimulate investments and increase interest to innovations. There should be mentioned that the EU countries strategy for 2020, “the Strategy of smart sustainable and inclusive growth” includes three main goals: smart growth — development of knowledge-based economy and innovation; sustainable growth that means more efficient usage of resource, develop environmentally friendly and competitive economy; and inclusive growth that indicates high employment, economic, social and territorial unity. Public servants in Ukraine should take the EU and non-EU countries experience into consideration when they develop decisions concerning boosting innovations and economic development in Ukraine in order to achieve goals of sustainable development. tax policy in Ukraine should stimulate eco-friendly businesses, development of innovative agriculture and agree-food industry and provide tax preferences for R&D.

Ukraine has all chances to join the global community and great possibilities to become a highly developed country with a knowledge-based environmentally friendly and competitive economy. The key reasons of it are great advantages comparing to other countries: high quality human capital, competitive hi-tech developments, space and aviation industry, outstanding math and biotech schools, leading position in the global market of IT industry. Ukraine ranks third in the world by the number of certified IT specialists, after the USA and India.

Therefore, Ukrainian government should reconsider the priorities of the Development Strategy and encourage informal investors, including business angels and crowdfunding network, which play important role in financing innovative SMEs in developed countries. This will force the development of innovative SMEs and make them more competitive in the global world. It needs to enforce government support of both innovations and SMEs development due to the types of government support in political, legislative and economical spheres. Moreover, well-balanced government policy of supporting innovations will contribute to improving wellness, prosperity and achieving goals of sustainable development in Ukraine.

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