# FINANCIAL POLICY OF INCENTIVE SUPPORT OF SUSTAINABLE DEVELOPMENT AT THE LEVEL OF REGIONAL SYSTEMS: EXPERIENCE OF THE BALTIC STATES

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DOI: https://doi.org/10.30525/978-9934-588-15-0-29

**Abstract**. *The purpose* of the article is to study the experience of the Baltic countries in financial support of regional sustainable development systems. In the research process, the axiomatic method is used, which allows us to formulate a system of inference rules, which allows us to turn the starting points and move from one position to another, as well as introduce new terms (concepts) into the theory of stimulating sustainable development. The comparison method is also used, it allows you to carry out a cognitive operation that underlies the judgments about the similarities or differences in financial support of regional sustainable development systems in different countries. *Methodology*. The study was conducted on the ongoing policy of financial support for sustainable development in countries such as Latvia, Lithuania and Estonia. The results of the study showed that the environmental taxation system is an effective area of financial support for sustainable development in the Baltic States, it has a stimulating effect, as well as a set of financial engineering tools, which include equity (venture capital), loans, loan guarantees, microfinancing and other forms of working capital help. *Practical implications*. Sustainable development of the region can be understood as a process of constant transformation of the qualitative and quantitative characteristics of the regional socio-ecological-economic system, aimed at achieving a dynamic balance between society, the economy and the environment, which ensures the well-being of present

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and future generations in compliance with the principles of equilibrium, balance, harmony, stability, competitiveness and security of the region. The practical implementation of the financial support policy for the sustainable development of regional systems requires coordination with the UN Global Sustainable Development Goals, in particular, decent work and economic growth, sustainable and comprehensive economic growth, can contribute to progress, create decent jobs for all and improve living level, industry, innovation and infrastructure, inclusive and sustainable industrialization together with innovations and infrastructure that I can to develop a dynamic and competitive economic forces that will create jobs and income. *Value / originality*. Research on sustainable development and incentive measures for the sustainable development of regional systems provides the formation of a set of financial security policy instruments that can be applied not only in Latvia, Lithuania and Estonia, but also in other countries seeking to join the European Union, in particular for Ukraine.

## 1. Introduction

At the present stage of development, society has found itself in a difficult position. Almost all countries of the world, regardless of their socio-economic development, are forced to make decisions designed to overcome socio-economic and environmental problems. The complexity of the situation, manifested in social, economic and environmental relations, threatens to become long-term. Economic downturn reduces employment and consumption. At the same time, almost all countries, including Ukraine, face very serious environmental challenges. In particular, climate change poses an unprecedented environmental and economic threat and adversely affects the state of public safety. Conflicts in the system «society – economy – ecology» are growing with increasing frequency. First of all, these contradictions affect the whole society at different levels of natural systems: global, national, regional and local. Each level is characterized by its parameters and approaches to resolving contradictions and negative phenomena associated with the development of society. However, it is clear that it is becoming increasingly difficult to influence every level of society in the direction from global to local. This is explained by the fact that the lower the level, the more practical are the tasks that need to be solved, and the threat of their overcoming also grows. All levels of society are most

at risk of whole territorial entities with unique natural-geographical and resource potential, from which countries – regions are formed. Under the influence of threatening phenomena and processes, regions lose their internal resistance, their relatively supported development is disrupted.

## 2. Understanding the sustainable development at the level of regional systems

The only optimal option for achieving sustainable development of the regions is the idea of regional balance. It follows from a single social optimum, repeatedly violated in the theory of economic development. The main content of the economic equilibrium is the observance of the correspondence between the various components: the cost and material parts of the social product between supply and demand in the market.

In our understanding, the state of dynamic equilibrium of a regional socio-ecological-economic system implies such a state when it can get out of its inherent comfortable state under the influence of external influence (with a minimally safe deviation) and return to a qualitatively better state. This means that the system, while developing, is constantly changing quantitative and qualitative indicators, but internally it remains in equilibrium on which influences of external factors (influence factors). But under the influence of again various factors, the system continues to change, and over time it will again reach equilibrium, about which the candles are the so-called bifurcation points. Bifurcation is associated with the instability of the trajectory of the development of the system, the presence of a situation of choice between several alternatives in which small, random, subjective factors can play an important or even decisive role.

It is necessary to distinguish between stable equilibrium and moving equilibrium, which are mentioned in synergy. The former is characterized by the constancy (immutability) of parameters and processes within the system. That is, any shifts (disturbances, fluctuations) do not affect the state of equilibrium of the system, or rather do not cause changes in the further development of the system. Mobile equilibrium is more close to dynamic equilibrium. The state of mobile equilibrium is manifested when, under the influence of various perturbations from the outside and from the inside (fluctuations), changes in the parameters and all processes in the system occur, and subsequently entail changes in the development of the system.

Dynamic equilibrium is a variable state and has not become in nature. This state combines two states of synergetic equilibrium: stationary (in the understanding that the system is constantly returning to a state of socio-ecological and economic equilibrium), and mobile (in the sense of constantly changing system parameters). That is, the dynamic equilibrium of the socio-ecological-economic system is a state of stationary-mobile in nature, which completely excludes the state of equilibrium and a halt of development. But rather, on the contrary – the constant development of the system (in this case, the regional) with its constant achievement, despite various negative or positive factors, the balance between social, environmental and economic processes. Sustainable development is an extremely complex process in nature. Co-ordination of actions in such related and simultaneously different spheres of the population's life as society, economics and ecology is extremely difficult. It is to solve this problem that it is intended to stimulate the regional socio-ecological-economic system, or region, in order to achieve sustainable development.

The basic principles of sustainable development of the region as a system to which it is necessary to apply incentive tools:

1. The principle of equilibrium of a regional system involves achieving a state of dynamic equilibrium of a regional system aimed at overcoming intra-systemic and external threats by activating internal potential capabilities.

The principle of equilibrium should be the key in moving the regional system towards sustainable development.

2. The principle of balancing the economic, social and environmental subsystems within the framework of sustainable development of the region determines the consideration of the regional system in the context of achieving the optimal ratio of qualitative and quantitative characteristics of the regional system.

3. The principle of harmony means the content of harmony, or the interconnectedness between the social, economic and environmental sphere of the region. This is manifested in the fact that all the regional development goals that must be achieved, the methods for achieving them are interconnected and aim to achieve the end result of sustainable regional development. In a broad sense, harmony must exist between a person and the world around him. The principle of harmony is especially important in that a large number of researchers on the sustainable development of the region

proceeded precisely from the harmonization of processes within the socio-ecological-economic system.

4. The principle of stability of all subsystems of sustainable development requires maintaining the positive parameters of the development of the system for as long as possible. The stability of regional development as an integral part of the stability of a country's development consists of economic, political, social and other types of stability.

5. The principle of competitiveness of subsystems of sustainable development provides for the activation of the region's potential capabilities to build up and effectively use competitive advantages in each subsystem of the region to ensure sustainable development of the region, as well as the introduction of new achievements of scientific and technological progress in the production, environment and social sphere of the region.

6. The principle of security of sustainable development of the region provides for the use of the potential of the regional system, the ability to self-reproduce and prevent the action of destabilizing factors. The security of the region is also the strength of the relationship between the elements of the regional system, contributes to the satisfaction of the interests of the population of the region in the spirit of national interests.

Sustainable development of the region can be understood as a process of constant transformation of the qualitative and quantitative characteristics of the regional socio-ecological-economic system, aimed at achieving a dynamic balance between society, the economy and the environment, which ensures the well-being of present and future generations in compliance with the principles of equilibrium, balance, harmony, stability, competitiveness and security of the region.

Sustainable development of the region is a synthesis of its three components – economic, social and environmental development of the region. The study of the economic component should be carried out in order to achieve equilibrium, balance, harmony, stability, competitiveness and security. Satisfaction of all criteria to determine the sustainable development of the economic component. Similarly, this applies to social and environmental components. The complex of measures of a stimulating nature will contribute to the achievement of the state of the equilibrium regional system and the way out of the nonequilibrium state of the regional socio-ecological-economic system. By this we mean that the object of stimulation is the sustainable

development of the regions. Sustainable development is not the current state of the regional system or even the national one. But the sustainable development of the region is a prospect, a priority to which it is necessary to strive. It should be remembered that it is stimulating tools that influence the system's desire to achieve sustain-able development of the region and to get out of the current state of the regional system. It is clear that any regional system seeks to prevent a state of disequilibrium, however, due to various factors (external and internal), initiatives to achieve sustainable development of the region can be stopped at the beginning. Therefore, it is necessary to stimulate sustainable development: firstly, in order to achieve sustainable development as a strategic goal; secondly, on the subject of achieving dynamic equilibrium of the regional system; thirdly, in order to achieve the optimal ratio of qualitative and quantitative characteristics of the regional system, namely, achieving a balance of sustainable development of the region; fourthly, on the subject of achieving the relationship between the social, economic and environmental spheres of the region, that is, achieving harmony; fifthly, on the subject of maintaining over the long term the positive parameters of the development of the regional system, namely, achieving stability in the sustainable development of the region; sixthly, with a view to enhancing the potential of the region to build up and effectively use competitive advantages in the social, economic and environmental spheres of the region, that is, to achieve regional competitiveness; seventh, on the subject of achieving the ability of the regional system to self-reproduction and preventing the action of destabilizing factors, namely, achieving security of sustainable development of the region.

It is also necessary to stimulate the development of regions because the regional level is a link between the local and national levels, and now more and more often – between the national and global ones.

It is in the regions that the most investment and innovative funds are attracted, because regional systems are the building blocks of any state. Regarding the sustainable development of the regions, it should be remembered that the stability of the system is first of all the interconnection (linkage), the mutual influence of the three main components of the system (economy, society and the environment). It is possible to influence the regional system through stimulating measures from the standpoint of socio-economic development, and the result will be the development of society and

the economy. But environmental problems will remain unresolved, which is unacceptable. In this case, the approach to solving problems from the standpoint of sustainable development allows you to influence the system comprehensively, harmoniously and at the same time, without highlighting any of the system components or functional processes. That is why the object of activating influence in the framework of the study should be precisely the sustainable development of the regions.

### 3. Financing actions in the context of achieving the Sustainable Develop-ment Goals in the Baltic states

The BSR is made up of nine countries and a number of metropolitan areas. The region encompasses Estonia, Latvia, Lithuania (the Baltic States) Sweden, Denmark, Finland, Germany, Poland and North-West Russia, with St. Petersburg and Kaliningrad Oblast, the Russian exclave between Poland and Lithuania. All the countries except Russia are members of the European Union. The paper examines only those BSR countries which are EU member states – Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden.

The European Council in its Sustainable Development Strategy has defined that the overall aim of sustainable development strategy is to identify and develop actions to enable to achieve continuous improvement of quality of life both for current and for future generations, through the creation of sustainable communities able to manage and use resources efficiently and to tap the ecological and social innovation potential of the economy, ensuring prosperity, environmental protection and social cohesion [7]. According to Hjorth P. and Bagheri A, a sustainable region demands a mutual balance among economic, social, cultural, political and naturally environmental development. Joining together the four dimensions of environment, economy, politics and society, sustainable development refers to a process in which the economy, environment, politics and ecosystem of a region change in harmony, and in a way that will improve over time. Sustainable development must be seen as an unending process defined neither by fixed goals nor the specific means of achieving them [9].

Until the second half of the 20th century a limited understanding of society's interaction with nature prevailed. Now people are aware that natural resources are not perpetual and any human activity influences nature both

in the short and in the long term. Environmental management has become a theme of vital importance among entrepreneurs in all BSR countries. Society and the business world have changed their attitude towards the environment – very often issues connected to the latter have become serious arguments in the decision making process. According to Dimante D. and Atstaja D., the ability to improve the environment is a significant task for enterprises in order to maintain international competitiveness. This necessity influences BSR countries' enterprises more and more, as there are high environmental standards in the European Union, and these standards are constantly being improved through regulation over the course of time [3].

Sustainable ideas become more and more popular in Latvian. It contributed to a number of factors, both economic (the need to conserve resources and energy) and social (consumer dictated market, high standards of quality and comfort), and environmental issues (responsibility for climate change and pollution reduction). Sustainable building has several benefits to sustainable development. Creating high-quality, environmentally friendly and healthy living space, ecological, economic and social sustainability are promoted, it is a way how to live more environmentally friendly and healthy, without sacrificing modern comforts and traditional standards of quality, but at the same time thinking about our children and grandchildren's future and the rights to live in a clean environment. Some of sustainable building's elements, such as using of natural resources and materials, has been known in the Latvian historical buildings. As rightly noted Tambovceva T., Geipele I. and Geipele S., a modern sustainable building combines centuries of proven expertise and modern technological solutions for optimal balance between tradition and innovative solutions. The decision of the European Parliament determines that until 2019 all new buildings would have to meet zero-energy requirements, thus these new buildings by themselves must produce as much energy for heating as they consume [15].

According to Global Goal 8, decent work and economic grow, sustained and inclusive economic growth can drive progress, create decent jobs for all and improve living standards. Globally, real GDP per capita and labour productivity have increased, and unemployment has dropped back to pre-financial-crisis levels. However, sluggish growth overall has prompted a rethinking of economic and social policies to achieve the transformational objectives of Goal 8 so as to meet economic growth targets in

least developed countries; increase employment opportunities, especially for young people; reduce inequalities across regions, age groups and genders; decrease informal employment; and promote safe and secure working environments for all workers [17].

Energy intensity, which is to be perceived as productivity of one of production factors (energy productivity) depends on behaviour of household (heating, refrigerating), transport mode, level of technology, institutions, including energy consumption culture etc. According to Tvaronavičienė M., industry is important consumer of energetic resources, hence disparities in countries, most likely will be replicated in all compounding consumers; 1) energy import, expressed in percentage terms has to be taken into account. Reasoning behind this sequence of comparative analysis is following: country can allow a luxury of being energetically inefficient if it has own energetic resources and does not depend on energy import. That context has to be taken into account while evaluating Lithuania's or any other country's prospects to develop sustainably and remain competitive in mid-range; 2) alternative and nuclear energy (percent of total energy use) has to follow already comparisons indicated above. The purpose of this step of comparative analysis is to clarify if tendencies in alternative energy fostering allow contribution of this kind of energy to sustainable and competitive development of industry in the future. If there is no tendency growth tendency, it means that alternative energy does not play propriate role in sustainable development; 3) high technology exports as % of manufactured goods, we believe, has to be observed. This characteristic of industry development would provide information, necessary to induce tendencies of all considered indicators into one generalizing picture. In case country appeared not sufficiently energy efficient and additionally energy dependent, well developed high technology sector of industry could mitigate negative effects and condition rather high international competitiveness; 4) concluding remarks about current economic structure, industrial development ant plausible future trends are to be formulated [18].

Entrepreneurship is multi-dimensional and can be considered in different contexts, but its importance for economic development and social wellbeing is unquestionable. It is usually related to the following positive effects as: economic growth through new businesses creation; increased competitiveness at firms and countries levels; employment.

Economists tend to define entrepreneurship from an occupational, a behavioural or an outcomes point of view. From the occupational point of view, entrepreneurs are simply those who are self-employed and/or business owners. As rightly noted Naudé W., behavioural definitions of entrepreneurship are related to the 'Schumpeterian' behavioural view by which entrepreneurship needs to be distinguished from other related activities, such as business ownership, business financing or business management. As it is stated, today many entrepreneurship scholars tend to agree that the defining feature of entrepreneurship is innovation through spotting and utilizing opportunities [11]. According to Balkienė K and Jagminas J., from the outcomes perspectives, entrepreneurship is usually examined by its contribution to different parameters of the economic development and quality of life. nt growth; productivity and unlocked personal potential [2].

Stam E. took notice of the following necessary conditions under which the concept of entrepreneurship is defined: 1) existence of entrepreneurial opportunities (environmental changes: technological, political/regulatory, social/demographic); 2) difference between people (in their willingness and ability to act upon an opportunity); 3) risk bearing, uncertainty until the entrepreneur pursues the opportunity; 4) organizing (new way of exploiting the opportunity); 5) innovation: recombination of resources into a new form that is by implication not a perfect imitation of what has been done before, and thus involves a change in the marketplace [13].

According to Global Goal 9, industry, innovation and infrastructure, inclusive and sustainable industrialization, together with innovation and infrastructure, can unleash dynamic and competitive economic forces that generate employment and income. They play a key role in introducing and promoting new technologies, facilitating international trade and enabling the efficient use of resources. However, the world still has a long way to go to fully tap this potential. LDCs, in particular, need to accelerate the development of their manufacturing sector if they are to meet the 2030 target, and scale up investment in scientific research and innovation. On a positive note, the carbon intensity of manufacturing industries declined at an annual rate of almost 3 per cent from 2010 and 2016, showing a general decoupling of CO2 emissions and GDP growth. Total official flows for economic infrastructure in developing countries reached $59 billion in 2017, an increase of 32.5 per cent in real terms since 2010. Further, impressive gains have been made in mobile connectivity.

Lundström A. and Stevenson L., analysing the government practice of different countries in the business innovation promotion, indicated a number of barriers inhibiting the development of innovative new firms: intellectual property issues, lack of adequate premises, lack of pre-seed developmental and early-stage equity financing, lack of entrepreneurial and management skills, lack of interaction effects between possible innovations and potential entrepreneurs and lack of a dynamic environment to stimulate overall entrepreneurial activity. They also stated that evidence exists to support the idea that innovative entrepreneurship is likely to be more effective in environments where entrepreneurship is highly valued and supported by society [10].

In the emerging market economies (countries in transition) the sustained economic growth based on the use of innovation has come forward as the major objective of government policy. In countries rich in resources, decision makers have increasingly realized that economic development based on their exports is hardly sustainable given the volatility of external market demand and prices. In other countries, poor in natural resources, there has been no alternative to innovation-based development since the start of transition [20]. According to Balkienė K., this justifies an important role of national innovation policies for the development of sustainable innovativeness ensuring higher economic and social value creation and future prosperity [1].

Traditionally, EU cohesion policy support to businesses and local authorities has almost exclusively taken the form of non-repayable grants or subsidies. However, in the current structural funds programming period (2007-2013), financial engineering instruments (FEIs) have emerged as a significant support mechanism in addition to grant assistance. Thus, "in 2007-2013 the use of different modes of financial instruments has become more widespread. Financial instruments are quickly growing in variety, scope and amounts committed to them. In the 2014-2020 period an even wider application is envisaged – the financial instruments can be used in all policy areas where feasible" [5]. Financial engineering instruments include the following: equity (venture capital), loans, loan guarantees, micro-finance, mezzanine finance and other forms of revolving assistance. The final recipients can be SMEs or other recipients of public funding, such as urban development funds and energy efficiency/renewable energy projects, and even individual citizens.

According to Global Goal 17, support for implementing the SDGs is gaining momentum, but major challenges remain. A growing share of the global population has access to the Internet, and a Technology Bank for LDCs has been established, yet the digital divide persists. Personal remittances are at an all-time high, but ODA is declining, and private investment flows are often out of sync with sustainable development. Moreover, global growth has slowed due to ongoing trade tensions, and some governments have retreated from multilateral action. With the stakes so high, strong international cooperation is needed now more than ever to ensure that countries have the means to achieve the SDGs.

The Information is one of the main resources, which together with other material resources – energy, financial and natural is included in every product or service and defines product's competitiveness and business results. Modern business sustainable development also depends on how effective business is using information, therefore we believe that the information could be taken as a source and mean of the modern business sustainable development. Information resources form one of the most important markets in Latvia – information market. In terms of development information market is ahead of national economy growth in Latvia.

As rightly noted Gaile-Sarkane E. and Ščeulovs D., information resources are characterized by specific properties and features: information resource has some level of entropy; it is non-material resource; it might be saved on various medias; it has fixed value (price); it might be transformed into managerial goals and tasks; it might have various indicators and degrees (ranks) of importance (technical, juridical, social, etc.); information resource has the same properties as have marketing elements (marketing mix, segmenting, etc.); importance degree of the information resource might be fixed or variable in various systems; information resource provides stimulating effect on new idea generation; utilization of information resource or its elements contributes to reduction of the uncertainty level during products manufacturing, distribution, usage, etc.; information resource is not possible without information technology and its development [8].

Social innovation is one of the "Europe 2020" strategy's seven flagship initiatives that the European Commission has drawn up to determine the national, European and international measures that would be implemented in the field of innovation in order to achieve the goals set by the "Europe

2020" strategy. According to Dobele L.; Grinberga-Zalite G. and Kelle L., special attention to the social innovation is provided in scope of the European Union's initiative "Innovation Union", which emphasizes the need to incorporate social innovation support measures for the European Social Fund programmes in 2014-2020 [4].

Social innovation is influenced by different factors and conditions that exist in the external and internal environment of an organization, which accordingly determine the development of social innovation in the country. One of the biggest political and legal obstacles for social innovation in Latvia is lack of legal recognition. Social innovation is not defined as one of priorities how to mitigate social problems; there is insufficient social innovation "policy coordination" (cooperation in the policy domain) and "operational coordination". This explains the fact that activities related to social innovation are held periodically. As rightly noted Raisiene A.G., social innovation development is significantly influenced by external funds. In Latvia, social innovation activities mainly are financed from the EU Funds and foundations, however, special support instruments should be made for development of social innovation at national level. There is insufficient information on social innovation in Latvia, which leads to the lack of data and measurement. Social innovation development depends also on society values and norms, their ability to take a risk and accept changes. For successful development of social innovation collaboration skills between different stakeholders are very important [12].

### 4. Financial support policy for sustainable development at the level of re-gional systems in the Baltic States

Before achieving sustainable development of the region, the system must achieve a state of equilibrium, harmony, balance, stability, competitiveness and security. The measure of achieving a dynamic equilibrium state will be determined by a set of features. Each of the signs will be the limit, the output or failure of which the system means failure to achieve sustainable development. However, it remains uncertain to stimulate the regional socio-ecological-economic system through the mechanism of formation of motivation for intra-regional self-organization of the system in order to achieve sustainable development of the region.

Indeed, when it comes to stimulating regional systems to achieve an equilibrium system in the short term and sustainable development in the long term, first of all we understand the creation of internal motivation for the self-development of the region, that is, intensify the desire of the regional system to achieve sustainable development. Motivation can arise under external influence on internal processes and phenomena characteristic of particular regions. However, motivation often arises as a conscious desire to achieve a goal.

Motivation is based on two categories – need and reward. From the standpoint of the region's sustainable development, the need should be understood as a stimulating principle, the fundamental principle of the region's development, strength, moves the region towards sustainable development through achieving equilibrium, harmony, stability, balance, competitiveness and security of the region's sustainable development. It is the regional need that will be that initial link, it directly begins any activity at the regional level.

In the context of regional sustainable development, the reward will be the receipt of social, economic and environmental benefits for regional business entities as a result of achieving sustainable development of the region.

In the context of regional sustainable development, the reward will be the receipt of social, economic and environmental benefits for regional business entities as a result of achieving sustainable development of the region.

The stimulus acts as an external catalyst for the development of the regional system, aimed at achieving dynamic equilibrium of the region, and then its sustainable development.

A regional system cannot exist without incentives for development; it depends on them. Especially this dependence is amplified at the stage of deterioration of the situation in one or several spheres of life. Incentives in this case will have both a tangible form (direct financial influence through investments) and a non-tangible form (indirect influence through permissions and agreements). Incentives for regional development, in contrast to motives, are conscious, targeted specific measures that prompt action. The action of the incentive is associated not only with a direct impact on the activities of the economic structures of the region, but also with the demonstration of a specific embodiment. In other words, incentives affect the system, requiring the achievement of a result with high efficiency. Thus, the region's incentive pro-

vides for the involvement (attraction) of external influences on the regional system to achieve sustainable development of the region.

Stimulating the sustainable development of the region will mean the process of intensifying the incentives by state and regional authorities of the regional socio-ecological-economic system aimed at achieving sustainable development of the region.

The full-fledged activity of a regional subject is possible under the influence of incentives and motives arising from interests. The overall goal of regional development is aimed at meeting all the needs of the region (social, economic and environmental) through the active work of regional actors under the influence of stimulating and motivating catalysts.

The financial support of the policy of stimulating the sustainable development of the region is a goal-oriented process, which consists in attracting, distributing and redistributing funds to finance incentive measures to achieve the social, economic and environmental goals of the region, the main goal being to achieve sustainable development of the region in compliance with all signs of sustainability. The main subjects of financial support for the policy of stimulating sustainable development of the region are: regional business entities, state and regional authorities and households.

The main links of financial support of the policy of stimulating the sustainable development of the region within the finances of business entities include: finances of social institutions operating in the region (funds owned by regional business entities not engaged in commercial activities), finances of commercial enterprises of all forms of ownership operating in the region ( funds of all business entities operating in the region, and in their activities are aimed at the maintenance of profit), public finances institutions and charitable foundations operating in the region (funds of business entities engaged in public activities).

The tax incentives for sustainable development of the region are significantly affected by: finances of commercial enterprises of all forms of ownership operating in the region, finances of social institutions operating in the region, finances of public institutions and charitable foundations operating in the region, as well as finances of households in the region.

The stimulating mechanism of the tax on corporate profits should be set up in such a way that it contributes to the development of production, the accumulation of capital and the return of the economy towards scien-

tific and capital-intensive industries, which in turn requires: determining the object of taxation; setting tax rates; determination of the list of tax benefits and the conditions for their provision of business entities.

Environmental taxes promote sustainable energy development, as they allow internalizing the external costs of atmospheric pollution in the energy sector. Energy production and consumption are a major source classical pollutants and greenhouse gas (GHG) emissions. Almost of the all EU member states (MS) apply pollution taxes as the most important economic tool for mitigating the environmental impacts of various economic activities. As rightly noted Štreimikienė D., Šikšnelytė I., Zavadskas E.K. and Cavallaro F., considering the importance of the energy sector in terms of its contributions to total atmospheric emissions in the EU, it is supposed that environmental taxes are important drivers of sustainable energy development. Environmental taxes, as the main tool for the integration of negative externalities that are related to atmospheric pollution, are imposed to create incentives for reducing fossil fuel consumption and switching to renewable energy sources or fuels that have a lower carbon content and thus cause less pollution [14].

The Greening European Semester aims at switching from labor and corporate profit taxes to environmental taxes, and supposes to help in achieving sustainable economic recovery and ensure economic growth and an increase in employment. Therefore, environmental fiscal reform or green tax reform covers tax shifts from labor to environmental pollution and resources consumption, and allows achieving both environmental and economic objectives together [6]. The EC develops annual country-specific recommendations for EU MS. Countries are required to revise prepared National Reform Programs for each year by taking into account specific recommendations developed by the EC. MS should address the main priorities identified by the EC in their National Reform Programs. These priorities, first of all, are related to modifying the taxation system and decreasing the share of labor taxation in total tax revenues. At the same time, the share of taxes related to resource consumption and environmental pollution should be increased in total tax revenues. The environmental taxes promote the increase of resource efficiency by energy efficiency, recycling, and the reduction of EU dependency on energy import.

For example, in Latvia, the environmental taxes in 2015 covered the fuel excise duty, subsidized electricity tax, motor vehicles registration

tax, motor vehicles circulation tax, company car tax, pollution taxes, and resource taxes. In Latvia, energy taxes covered both taxes on energy. The main types of environmental charges in Estonia are pollution and natural resource charges. The pollution taxes in Estonia cover air pollution charges on atmospheric emissions, water pollution charges, and charges for depositing waste in landfills. Natural resource taxes include water abstraction charges and mineral extraction charges products that were used in transport, and stationary pollution sources. Lithuania implemented economic instruments for environmental regulation in 1991. The environmental taxes that have been applied in Lithuania currently cover the fuel excise duty, motor vehicles registration tax, the heavy goods vehicle tax, pollution taxes, and resource taxes. There is one type of energy tax in Lithuania: excise duty. The following energy carriers are subject to excise duty: energy products; coal, coke, and lignite; electricity; and other products if they are sold or used as motor fuel, fuel additives, or as heating fuel.

Investment and innovative stimulation of sustainable development of the region is associated with: finances of commercial enterprises of all forms of ownership and finances of public institutions and charitable foundations operating in the region (funds raised from such business entities should be directed to investments in certain socio-environmental and economic projects, implemented in the region).

Particular attention must be paid to attracting foreign direct investment to achieve sustainable development of the region. Foreign direct investment is a source of capital for investments in the production sector, the introduction of advanced technologies, know-how, advanced management and marketing methods, as well as social infrastructure and environmental projects. In addition, unlike loans and credits, entrepreneurial investments, while not increasing the external debt of the state, contribute to the accumulation of funds for the development of production, thereby stimulating directly a foreign investor.

The European Union takes a rather favourable view of financial instruments. The European Commission Staff Working Document puts it the following way: “The possibility of using the same funds several times through various revolving cycles contributes to the impact and sustainability of the instruments. As such, the impact of revolving funds can be many times greater than grant assistance, giving them a particular added value and rel-

evance in times of budgetary constraints. The impact/multiplier effect is further strengthened by the accumulation of interest generated and dividends paid to the funds. The revolving character of such instruments creates enhanced incentives for better performance on the part of the final recipients – such as better quality of projects and greater financial discipline. Also, the participation of private sector funding guarantees the input of expertise and know-how. Specific expertise in supporting, for example start-up SMEs, can be invaluable. Drawing upon this expertise helps to improve the overall quality of projects" [5].

Financial instruments require a rather different implementation mechanism than do classical non-repayable grants. This is reflected in the institutional and organisational set up of financial instruments for the 2007-13 programming period which is characterised by the widespread use of holding funds as first stage intermediaries between the Managing Authority and the disbursement of funds to final beneficiaries. This applies in particular for the EU12, many of which started using financial instruments for the first time. This form of management was promoted by the EC together with the European Investment Bank (EIB) and the European Investment Fund (EIF) both of which benefited from special treatment which by-passed the requirement for tendering [16].

The importance allocated to different financial instruments varies. In Lithuania, soft loans, micro-loans, guarantees, credit insurance and venture capital are all available for SME assistance. Similarly, in Latvia all types of instrument are present: loans, guarantees and venture capital. Estonia has just two instruments: loan funds and two guarantee funds.

The SME Loan programmes offered in Latvia were originally designed as additional sources of funding for small and medium-sized manufacturing exporters in order to finance the purchase of new equipment and other longer-term investments. However, as the economic crisis evolved credit demand shifted from longer-term capital investment to short-term working capital needs. At the same time, the economic crisis caused most banks to become much more conservative in their lending and consequently, just when their need was most acute, many enterprises were not able to access bank credit for working capital. In contrast, capital loans from the Latvian Mortgage and Land Bank, albeit at relatively high cost to the borrowers, were a popular instrument in 2010, but with the resumption of more normal lending in 2011 this activity decreased. Because of limited co-funding

options for investment projects, the pick-up of VC related measures has been slow in both Latvia and Lithuania. In Lithuania the Ministry of Economy is planning to reallocate EUR 40 million to financial instruments most demanded by SMEs. Similarly, in Latvia a new EUR 25 million mezzanine activity was introduced at the end of 2011.

Although grants and loans may finance the same project, grants cannot be used to write off loans. In the view of Lithuanian officials, this interpretation narrows the potential use of financial instruments and increases administrative burdens as well as contradicting earlier messages from the Commission. Contracts with financial intermediaries for implementation of financial instruments were signed in 2009 or 2010, in full understanding and interpretation that loans issued can co-finance expenditure also cofinanced by grants as long as state aid rules are respected. The current interpretation might punish countries like Lithuania who were the first to follow the invitation of the Commission for wider use of financial engineering measures as a means of mitigating the effects of the financial crisis, including combined use of grants and financial instruments.

Innovative stimulation of sustainable development of the region should involve raising funds for the development of innovations in the social, economic and environmental spheres aimed at achieving sustainable development of the region. In order to promote innovative stimulation of sustainable development of the region, it is necessary to take into account such an important factor in achieving sustainable development of the region as scientific and technological progress. Under the influence of the introduction of scientific and technical achievements in the production changes occur both in the indicator of supply and demand. Scientific and technological innovations can lead to the use of new methods of production, can directly affect the production costs and the number of employees in the production and indirectly the price of products and incomes of the population.

## 5. Conclusions

Research on sustainable development and incentive measures for the sustainable development of regional systems provides the formation of a set of financial security policy instruments that can be applied not only in Latvia, Lithuania and Estonia, but also in other countries seeking to join the European Union, in particular for Ukraine.

The results of the study showed that the environmental taxation system is an effective area of financial support for sustainable development in the Baltic States, it has a stimulating effect, as well as a set of financial engineering tools, which include equity (venture capital), loans, loan guarantees, microfinancing and other forms of working capital help.

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