Ministry of Finance of the Republic of Latvia

6 July 2018

Executive Summary

Ex-post evaluation "Evaluation of the contribution of European Union funds to entrepreneurship support in 2007 – 2013 programming period and impact assessment of these investments"

Service contract No. FM2017/31 (TP IZV)

NACIONĀLAIS ATTĪSTĪBAS PLĀNS 2020

EIROPAS SAVIENĪBA
Eiropas Savienības struktūrfondi un Kohēzijas fonds

IEGULDĪJUMS TAVĀ NĀKOTNĒ

EY
Building a better working world

In accordance with the National Strategic Reference Framework for the 2007 – 2013 programming period, the support of EU funds was aimed to promote a faster economic growth of the country, approaching the average level of welfare of the EU Member States. Ex-post evaluation "Evaluation of the contribution of European Union funds to entrepreneurship support in 2007 – 2013 programming period and impact assessment of these investments" is prepared in accordance with the agreement between the Ministry of Finance of the Republic of Latvia and Ernst & Young Baltic Ltd. signed on October 12, 2017 on performing the ex-post evaluation; it intends to carry out impact assessment of 11 activities and their subactivities of the Operational Program "Entrepreneurship and Innovation" that are directly oriented towards development of business and innovations, as well as the impact assessment of one activity of the Operational Program (OP) "Human Resources and Employment" aimed at starting entrepreneurship.

The purpose and tasks of the evaluation

The aim of the evaluation is to assess the contribution of the EU funds during the 2007 – 2013 programming period to the transformation of the economy towards higher added value, productivity and efficiency of resources, as well as to assess the impact of investments on the competitiveness of enterprises and the promotion of innovations. To achieve the goal, an in-depth analysis of support activities has been conducted, including the impact assessment of the EU funds on indicators characterizing competitiveness of enterprises as turnover, gross and net profit, number of employees, amount of taxes paid, etc., by analyzing the results at the level of the implemented projects.

The tasks of the evaluation are:

1. To evaluate the effectiveness of the EU funded entrepreneurship and innovation support actvities and to analyze the results achieved (four evaluation questions);
2. To carry out the effectiveness and impact assessment, incl. the counterfactual impact assessment, of the EU funded entrepreneurship and innovation support activities (five evaluation questions).

Methodology

The evaluation methodology is developed for each evaluation question to be answered within the tasks defined.

Task one:

1. An analysis of each of the development issues and limitations mentioned in the OP "Entrepreneurship and Innovation" in the field of business development and innovations was performed. The contribution of EU funds to each of the identified development problems and limitations by the end of the OP "Entrepreneurship and Innovation" eligibility period has been assessed based on the CSB and/or Eurostat data from 2016, and also considering the achieved outcome, output and impact indicators of the OP "Entrepreneurship and Innovation". The assessment of research and development (R&D) was performed considering the role of R&D in moving towards the goals of the Europe 2020 strategy.
2. An analysis of the output and outcome indicators at the level of Operational Programme, support activities and subactivities was performed, comparing to the indicators defined in the Operational Programme and the addition to the Operational Programme, and evaluation of the factors contributing to or preventing the achievement of the goal set in the Operational Programme and its addition was performed.
3. An analysis of support activities by the type of implementation was performed. To perform the analysis, a set of criteria was developed that includes the key features of effective implementation conditions, including quantitative and qualitative indicators, analyzing the time of preparation and adoption of planning and implementation decisions, the balance of supply and demand, and the success of project implementation.
4. An analysis of the success and failure causes of activities and implemented projects was performed at the level of grants and financial instruments, as well as activities. The analysis included the evaluation of target groups, evaluation of projects selection and implementation, assessment of achievement of indicators and compliance with economic situation. Taking into account the results of the first, second and third evaluation question, it is concluded which influential factors cause the success or failure of the activities and the implemented projects, mainly focusing on the systematic factors.

Task two:

5. The purpose of the counterfactual analysis is to compare the changes in the competitiveness of the intervention group (i.e. beneficiaries of the EU funds) with changes in the competitiveness of the control group (which is formed based on random selection from the general group that has not been subject to intervention). The impact assessment was carried out focusing on indicators that charectarize entrepreneural competitiveness – net turnover, average number of employees, gross and net profit, amount of taxes paid, asset turnover ratio, return on equity and added-value created per employee[1]. To perform the assessment, the counterfactual analysis method "difference in difference" was used. The counterfactual assessment also includes the assessment of the medium-term impact of the EU funds.

   In addition to the counterfactual assessment, a competitiveness assessment was conducted among the beneficiaries using the Cobb-Douglas production function, evaluating production factors – labor and capital,

[1] In order to ensure data comparability in time, financial indicators, incl. tax revenue has been adjusted using the gross domestic product (hereinafter - GDP) deflator, expressed in 2010 average prices.

and total productivity that explains other factors influencing competitiveness. The production function was evaluated separately before and after the implementation of EU funds in order to analyze productivity changes over time.

6. An analysis of the leverage effect for the financial instruments was performed at the level of financial instruments and transactions split by activities and subactivities, and the types of financial instruments therein included. To perform leverage calculations, data from Altum closing reports for each financial instrument at the level of transactions was used, as well as the data from addition of the Operational Programme on public funds allocation for financial instrument type activities was used.
7. Cooperation between research and business sectors has been studied by analyzing R&D investments of the beneficiary (average development costs and intangible investments) against the share of the largest cooperation partner based on the value of transactions that are subject to the VAT, i.e. evaluating whether the total value of transactions between the beneficiary and its largest cooperation partner exceeds 50% of the total value of transactions of the beneficiary that are subject to VAT (in groups yes/no).

   Within the evaluation question, also export-turnover ratio of all the beneficiaries in comparison to R&D investments or the enterprise (correlation index) was analyzed.
8. Kaplan-Meier survival estimate was used to estimate the proportion of surviving new enterprises at specified internvals (one year), and to calculate the total survival probability over a longer period of time by multiplying the proportion of each year,.
9. An assessment of the efficiency of the investments of EU funds was performed by comparing the EU funds invested in each of the activities / subactivities with the results of the counterfactual analysis on the impact of the intervention.

In accordance with the evaluation requirements, the ex-post evaluation includes several levels of analytical dimensions: analysis of the support of the financial instruments and grants; analysis at the activity and subactivity level; analysis by the groups of enterprises according to predefined criteria (NACE classification, OECD technology intensity classification, statistical region (NUTS3), national development center or county level, size of enterprise, activity duration of the enterprise).

The main conclusions of the ex-post evaluation are:

1. During the previous programming period, the problem of low entrepreneurial activity, as well as the goal of the Strategy “Europe 2020” to promote job creation has been effectively addressed. In most of the activities, there was a significant positive impact of EU funds’ investments on the average number of employees of beneficiaries. However, recurring reallocation of financial support between activities and sub-activities has in fact limited the achievement of other important policy objectives such as investments in R&D. It is possible to explain the initial reallocation of funds with the circumstances caused by the economic crisis and the need to facilitate a faster transfer of funds to entrepreneurs. However, at the later stage of the programming period the the reallocation of funding among the activities was most likely initiated by the need to fully implement the planned support of EU funds.
2. The responsible institutions managed to quickly transfer funds of nationally managed financial instruments to the market, which was a significant support to businesses, especially in the years of the economic crisis and subsequent years. In addition the counterfactual impact analysis indicates that financial instruments can be considered to be the most sustainable form of the support to foster business competitiveness in the medium term.
3. Despite that high level planning documents promote the progress of the Latvian economy towards entrepreneurship in high-technology sectors and high value-added industries, in fact the support for innovations and high value-added activities in the previous programming period were not well targeted towards such entrepreneurs. The impact of EU funds’ investments on the competitiveness has been observed in enterprises operating in other sectors, rather than sectors classified in OECD. That can be partially justified by insufficient or small number of observations – there is a large number of enterprises in Latvian economy that operate outside OECD classified sectors, which is proven also by segmentation of beneficiaries.
4. The impact of activities focused on business development in the regions is considered to be insufficient to solve the regional development problems. Due to insufficient number of observations, the counterfactual analysis cannot be performed to assess the impact of the support activity 2.3.2.2.1. "Support for investments in micro, small and medium-sized enterprises in specially supported territories" on entrepreneurs operating in regions outside Riga and suburban regions of Riga. In addition, the impact of this activity on enterprises registered in the counties (including suburban regions of Riga) is not statistically significant. The results indicate that projects with positive impact on the competitiveness in the supported territories were, in fact, implemented by entreprises that were registered in Riga. However, based on the analysis no further conclusions can be drawn on the in-depth reasons for the success of these projects. In addition, during the 2007 – 2013 programming period, the regional policy was planned to be shifted from the investments in the specially supported territories to the accessibility to growth centres, but in reality, an activity supporting entrepreneurs in growth centres was not developed.
5. There was a lack of timely available public information on planned funding during the 2007 – 2013 programming period, which limited the ability of enterprises to purposefully plan their operations by taking into account the

opportunities of EU funds in future, especially in the medium term. While some of the activities were open throughout the programming period, others were organized in one or more rounds without a transparent approach of the funding split by years or throughout the programming period. Entrepreneurs had an opportunity to get acquainted with planning documents and informative materials on timely manner, but there was limited information on the planned timing for actual implementation of activities. There has also been a tendency of uneven use of funding observed during programming period.

Conclusions on the impact of EU funds on policy objectives and the effectiveness of the implementation system of EU funds

1. **The contribution of the EU funds to entrepreneurship during the 2007 – 2013 programming period was mainly focused on the support of entrepreneurial activity and production capacity**. Initially, the OP "Entrepreneurship and Innovation" contained three support directions: support to start entrepreneurship, support to promote innovations and regional development. However, as a result of the amendments of the Operational Programme and the reallocation of funds, the support for increased production capacity, regardless of the sector of activity or regional affiliation of the enterprise, became the most financially significant support.
2. Several reallocations of the funding between the activities were based on the demand and not on solving the targeted economic structural problems promoted by the government as a policy maker. Initial reallocations were strategically justified by the economic crisis and the need to invest more in activities that would provide faster access to funding for entrepreneurs. During the later phases of the programming period, funding allocations between the activities were based on the need to fully use the EU funding. **Reduction of funding for activities related to the research and development support** limited the ability to achieve the goals of R&D activities.
3. **Latvia has exceeded the EU average number of enterprises per 1000 inhabitants**, partly due to the contribution of the EU funds allocated to the promotion of the entrepreneurial activity. Despite the fact that it is reasonable to consider that the micro-entreprise tax regime has had an impact in promoting this indicator, the ESF and ERDF investments supporting establishement of enterprises have also played a role in boosting the number of enterprises – the number has increased from 20 enterprises in 2004 to 52 enterprises in 2016. Taking into account the current number of enterprises per 1000 inhabitants in Latvia, support to start entrepreneurship may not be a priority in the future, shifting resources to more priority policies.
4. Innovation support was allowed for **too wide types of new products and new technologies**, in project selection criteria accepting projects aiming to support both global and European level innovations, as well as state and enterprise level innovations. This aspect has resulted in a situation that most of the funding was allocated mainly for entreprise level innovations, not reaching the impact on R&D invesment growth or the competitiveness of supported enterprises.
5. Despite the fact that the high-level planning documents promoted the the progress of the Latvian economy towards the entrepreneurship in high-technology sectors and high value-added industries**, in the field of innovations and high added value activities, the support was not purposefully focused on the high-tech sectors**.
6. Based on the analysis of the types of the support through financial instruments, it can be concluded that **nationally managed financial instruments could be faster accessed by beneficiaries, i.e. reached the market more efficiently** than the financial instruments governed by foreign institutions. Taking into account the accumulated experience and knowledge of LGA (Guarantee Agency of Latvia), which was gained from the planning documents developed by the European Investment Fund, as well as the ability to better understand the needs of the local Latvian market, the operations of nationally managed financial instruments are considered to be more effective when assessing the financial life cycle and reuse of financial resources. At the end of the period, a substantial progress towards the consolidation of management of financial instruments was achieved based on the arguments of management efficiency and coordination aspects.
7. Inaccurately **scoped target groups and support demand amount** not allowed to fully use the available EU funds. In several activities the financial amount of the submitted project applications exceeded the amount of available funds several times; while in other cases – insufficient amount was requested. Instead of redefining the selection conditions and communicating with the target group, the funds were reallocated from lower to higher demanded activities.
8. **A lack of fiscal discipline in the financial management of the supported enterprises**, receiving public funding, but not submitting the annual reports to the State Revenue Service (SRS), was identified. There was a lack of communication between the SRS and the management authorities of EU funds that would allow to detect inappropriate actions by the beneficiaries, for example, whether there is no situation, when SRS has information that the enterprise has ceased its economic activity, while it still actively cooperates with the LIAA (Investment and Development Agency of Latvia), receives and uses EU and/or state budget funds.
9. There was a **lack of timely available public information on planned funding during the 2007 – 2013 programming period**, which limited the ability of enterprises to purposefully plan their operations by taking into account the opportunities of EU funds in future, especially in the medium term. While some of the activities were open throughout the programming period, others were organized in one or more rounds without a transparent approach of the funding split by years or throughout the programming period. Entrepreneurs had

an opportunity to get acquainted with planning documents and informative materials on timely manner, but there was limited information on the planned timing for actual implementation of activities.

10. The funding **expenditure was not equally balanced throughout the programming period**. Although the management authorities of EU funds defines a principle of "N+2" in risk management, the uneven distribution of funds througout the programming period was a limiting factor for potential beneficiaries to count on support and plan their activities for future timely.
11. **Administratively heavy implementation mechanisms** have been applied, in particular in the support provided through financial instruments and business incubators. Administrative costs of individual financial instruments, especially the venture capital, have been so high that despite the co-financing of a venture capital managing authority, the market received smaller amount of funding than initially contributed by the ERDF. The multi-level implementation system has decreased the ability to manage support effectively and did not provide the policy makers with full data on the provided support, including the data on supported and non-supported enterprises.
12. The implementation of multi-level **projects complicated the monitoring and governance process** in relation to characteristics of enterprises and their further development. The more levels were used for support administration, the less data and poorer quality data was available on specific support. Obviously, the procedures established and their application did not ensure the process of data collection and accumulation so that data would be fully traceable and reliable. Not all support providers still exist (e.g. business incubators), and a lot of data are not available or cannot be easily obtained from information systems or documents.

Conclusions on the results of counterfactual impact and effectiveness assessment of the investments of EU funds

13. On average, all analyzed activities / subactivities **show a positive intervention impact** on the net turnover of enterprises, the average number of employees and gross profit, as well as the increase in capital and labor productivity.
14. **The goal of the Europe 2020 strategy to promote creation of new jobs has been effectively addressed** – the positive effect of interventions in the most of the activities is directly related to the increase in the average number of employees.
15. The **growth of net turnoever was most effectively promoted through activities aimed at investing in expansion of core business**. Activities / sub-activities, where EU funds have been invested most effectively concerning the net turnover increase by taking into accoung the statistically significant positive impact of intervention, are 2.1.2.2.2 "Development of new products and technologies – support for the introduction of new products and technologies in production" (enterprises in groups: "Other business activities" and "Non-OECD classication industries"), 2.3.1.1.1 "Acquisition external markets – external marketing" (enterprises in groups: "County" and "Suburban regions of Riga") and 2.3.2.2.1 "Support for investments in micro, small and medium-sized enterprises in specially supported territories (SSTs)" (enterprises in group: "Formerly registered enterprises"). At the same time, it is worth noting that there may be a selection bias within the intervention group of the activity 2.3.1.1.1 "Acquisition of external markets – external marketing", given that enterprises that have applied for the support from this particular activity can be most likely described as more active in the expansion through export markets (resulting in the net turnover growth), rather than the enterprises that have not applied for the support from the particular activity.
16. Activity **2.1.2.4 "High value added investments" was the most competitive and most stimulating activity in the medium term among the grant support activities.** The medium-term impact of this activity has been positive not only on the turnover of enterprises and number of employees, but also on the gross and net profit indicators and the created added value per employee. EU funds investments within the activity 2.1.2.4 "High value added investments" have been the most effective in terms of gross profit growth. The impact of the EU fund investments on the competitiveness of enterprises has been observed for enterprises operating in other sectors than A (agriculture, forestry and fisheries), B (mining), C (manufacturing), F (construction) or OECD classification, for entreprises that are registered in suburban regions of Riga, and that are small or recently established enterprises. The positive impact on the competitiveness of enterprises in the medium term was caused by EU funds' investments through grant support activities 2.1.2.2.2 "Development of new products and technologies – support for the introduction of new products and technolgoeis in production" and 2.3.2.2.1 "Support for investments in micro, small and medium-sized enterprises in specially supported territories (SSTs)" and support for the activity 2.3.2.1 "Business incubators".
17. **The support of EU funds for cooperation between business and research field in the short term has not had a statistically significant impact on the competence centers and cluster partners, with the exception of small and recently established enterprises.** However, in order to make thorough conclusions on the results of cooperation between the business and research sectors in these activities / subactivities, it is necessary to carry out a mid-term analysis which is currently not feasible, but will be possible in 2021, by analyzing the business indicators of competence centers and cluster business partners for the year 2020.
18. **The net profit and added value of entrepreneurs supported by the financial instruments has been rather negative in the short term, but in the medium term it turned positive.** Even though a decline in net profit in short-term was observed, in later years the return on investment to paid-in taxes and growth of value added was higher than that of the control group and – in comparison with the beneficiaries receiving grants – more

often statistically significant positive intervention impact was observed during the period straight after the project implementation (when comparing the second and third reference year).

19. **In almost all of the grant support activities support of EU funds has not led to a positive impact on added value generated by entrepreneurs in a medium-term**, with an exception of the most effective grant support activity 2.1.2.4 "High value added investments". In the period after the end of EU funded projects, positive intervention impact was observed only in the increase of tax payments in two grant support sub-activities (2.1.2.2.2 "Development of new products and technologies – support for the introduction of new products and technologies in production" and 2.3.1.1.1 "Acquisition external markets – external marketing"), but also to other competitiveness indicators in all financial instrument activities (with the exception of only 2.2.1.4.2 "Mezzanine loans and guarantees for the development of enterprise"). Consequently, funding of the financial instruments is considered to be more sustainable by ensuring the medium-term intervention effect, including after the project implementation.
20. **The financial instrument support has been more effective among newly established enterprises** (established since 1 January 2007), with an exception of activity 2.2.1.1 "Holding fund for investments in guarantees, high-risk loans, venture capital funds and other financial instruments", where the EU funding has led to a positive intervention impact on both newly and formerly established enterprises, but the EU funds have been more efficiently invested in enterprises that have been established before 1 January 2007. Thus, it can be concluded that high risk investments in older enterprises have been with higher returns.
21. **The effectiveness of support to business development in regions (outside Riga and suburban regions of Riga), cannot be fully evaluated using counterfactual analysis methods**, taking into account that the number of enterprises registered in regions (outside Riga and suburban regions of Riga) was relatively small in the activities / subactivities to be assessed. Thus, the results of counterfactual analysis on the role of the EU funds in supporting entrepreneurship in regions (outside Riga and suburban regions of Riga) are mainly statiscally insignificant.
22. **2.3.2.2.1. "Support for investments in micro, small and medium-sized enterprises in specially supported territories (SSTs)" has been more effective in increasing competitiveness among the older enterprises** (registered before 1 January 2007). EU funds have been highly effective in this group of enterprises, both in terms of turnover growth and gross and net profit figures, as well as the amount of taxes paid. **Enterprises that have received support within this activity have a very low productivity in overall factors, but at the same time, a higher labor productivity.** Counterfactual analysis has not been carried out at the level of regions (outside Riga and suburban regions of Riga) for this activity due to insufficient number of observations, but the overall support impact of this activity on the enterprises registered in counties is not statistically significant. Thus, the results indicate that **the projects in the SSTs have had positive intervention impacts on enterprises with legal address in Riga,** however, no further conclusions can be drawn on the in-depth reasons for the success of these projects.
23. **Investments of EU funds have been effective for entrepreneurs working in sectors A (agriculture, forestry and fisheries), B (mining), C (manufacturing) and F (construction), who have received support within activity 1.3.1.2 "Support for self-employment and starting entrepreneurship".** The intervention effect is statistically significant for enterprises operating in the C and F sectors that have received guarantees for improving the competitiveness of enterprises (2.2.1.3) and for incubated enterprises (2.3.2.1). **In other activities statistically significant contributions from EU funds have been observed only to enterprises operating in other sectors than A, B, C or F.** There is a large proportion of enterprises in the economy of Latvia operating in sectors that are not included in the OECD classification. In this target group a statistically significant positive impact of EU funds on competitiveness has been observed more often. That is partly due to the fact that there was sufficient number of observations to perform counterfactual analysis. Activity 2.2.1.3. "Guarantee for improving the competitiveness of enterprises" has had a positive impact on the enterprises in the low-tech sectors – the result of the intervention was a rapid growth in the turnover of these enterprises, net profit, taxes paid and added value created.

Recommendations

1. Considering the degree of achievement of the objective of entrepreneurial activity, the **possibilities to further support entrepreneurial activity combined also with other policy objectives should be considered**, for example, to support the creation of new fast-growing companies, the creation of companies in specific sectors or regions, gender equality in business, etc.
2. **In regard to promoting innovations, the cooperation between the Ministry of Economics and Ministry of Education and Science** should be improved in order to better coordinate the support provided to science and innovations and improve its complimentarity. Furthermore, methodological support shall be provided for a systematic presentation of the R&D expenditure in the annual reports of enterprises and national statistics.
3. **Implementation conditions should be closely linked with the policy objectives and selected support options**, and any changes to the conditions (in particular the changes proposed by the potential beneficiaries) must be consistent with the content of the policy and should contribute to the achievement of the objectives.
4. Consolidation of the support providers is based on several aspects: it ensures a more convenient support provision, reduces support provision costs, improves support management, ensures a higher quality of supervision, and facilitates the access of the support from a territorial reachability perspective. To guarantee

optimal service to the beneficiaries, incl. from the point of view of territorial accessibility, the **location of the CFLA (Central Finance and Contracting Agency) customer service and the advisory function within the Altum Regional Network should be considered.**

5. **Support provision conditions should be clear and aligned with the project cycle** and funding split over the years shall be balanced throughout the programming period. Furthermore, a **timely and qualitative communication with potential beneficiaries for future support plan should be provided,** and sufficient supervision and control of the progress of the support plan implementation should be ensured.
6. Monitoring **performance indicators at the enterprise level should be directly related to the specific support conditions**. **A clear link** between the achievement of the performance indicators and the sanctions for not achieving those shall be ensured.
7. **All the data on final beneficiaries of support and funding, regardless of the funding type or support provider, shall be gathered in one data base**, i.e. information system KPVIS (Cohesion Policy Management Information System) should also include data quality supervision function of final beneficiaries in order to ensure that the data are complete, true and reliable.
8. **Diversification of the achievement of two policy objectives – promotion of R&D investments and promotion of entrepreneurship in regions – shall be ensured**, taking into account, firstly, that regional entrepreneurial problems were most efficiently addressed through investments in core business expansion, incl. through the acquisition of the external markets, and, secondly, support to specially supported territories was the most effective among enterprises registered before 1 January 2007, while R&D investment was higher among new and small enterprises.
9. **At the end of 2014 – 2020 programming period an evaluation of the impact of competence centers and clusters on the achievements of R&D goals shall be performed** in order to better understand the results of cooperation between the entrepreneurship and research sectors.
10. **The proportion of financial instruments in the total support of EU funds to entrepreneurs shall be increased** (but still not eliminating grants), thereby promoting a more sustainable, i.e., medium-term impact on the competitiveness of entrepreneurs.