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EVALUATION OF SME COMPETITIVENESS MEASURES UNDER THE 2014-2020 OPERATIONAL PROGRAMME

Summary of the Final Report

Vilnius, 2019-07-22

The evaluation was ordered by the Ministry of Economy and Innovation, following contract No. 8-146 signed on the 18th of October, 2018. The evaluation was co-financed from the European Social Fund and the national budget

Evaluation objectives and questions

The evaluation was implemented in October 2018 – June 2019 under the contract “Regarding the evaluation of SME competitiveness measures under the 2014-2020 Operational Programme” (contract No. 8-146) between Visionary Analytics and the Ministry of Economy of Republic of Lithuania (since January 1, 2019 – the Ministry of Economy and Innovation of the Republic of Lithuania), signed on October 18, 2018. The contract was co-financed from the European Social Fund and the national budget.

The goal of the evaluation is to assess the impact of current measures of the Priority Axis 3 – “Promoting competitiveness of SMEs businesses” – of the Operational Programme (OP) in order to better prepare for the upcoming funding period of 2021-2027. The objectives of the evaluation are:

1. To assess the contribution of the Priority Axis 3 of the OP to the Europe 2020 strategy.
2. To assess the impact of measures of the OP Priority Axis 3 on the desired changes set in the OP.
3. To provide insights and recommendations on how to improve the use of the reserve of funds for this period and on the impact of investments on the achievement of the Specific Objectives of the OP.
4. To provide insight and recommendations for the preparation of the upcoming 2021-2027 programming period.

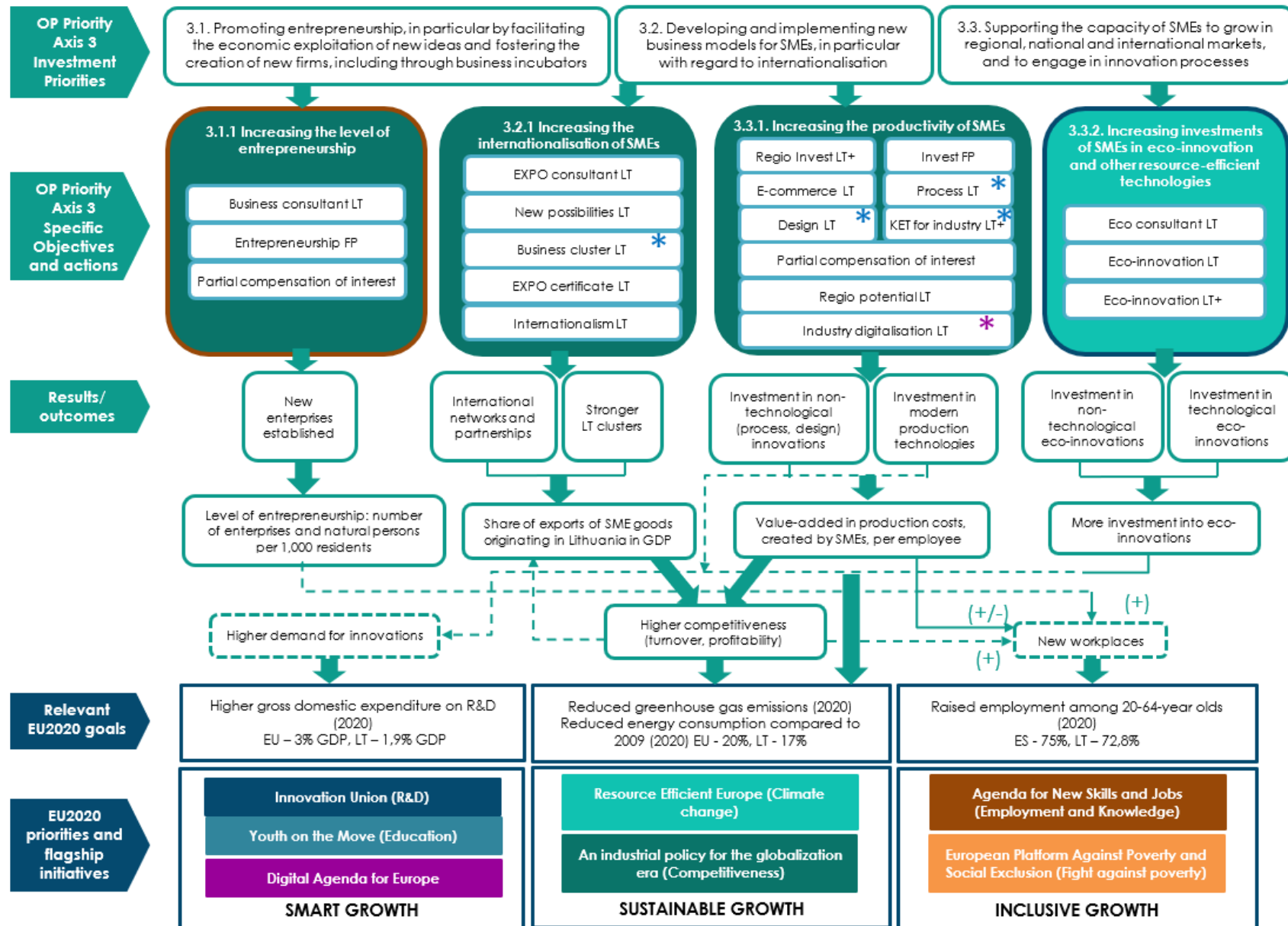
The aim is to answer the following **evaluation questions**:

- How did the measures of the OP Priority Axis 3 contribute to the Europe 2020 strategy? What is their impact?
- Which Priority Axis 3 measures are most relevant to the objectives of the Europe 2020 strategy and generate the highest added value?
- What changes were caused by investments? Why? Are the achieved changes in line with the needs of the target groups? Will the effect be short-term or long-term? Why?
- Have the measures achieved the changes identified in the OP Priority Axis 3? What are they? To what extent are they achieved?
- Which measures worked and which did not (e.g. size of investment, number of actions, financing form, co-financing rate, appropriateness of target group, quality of indicators, effectiveness of project selection criteria)? Why or why not? The most relevant, efficient, and effective measures will be distinguished.
- What steps need to be taken to increase the impact on the growth of entrepreneurship?
- Where should investment be directed in order to have a greater impact on the internationalisation of enterprises?
- What should be changed to have a larger impact on the growth of the productivity of the enterprises? The most effective manufacturing sectors will be distinguished.
- What type of eco-innovation incentives or resource-efficient technologies would have the greatest impact on minimising the effects of climate change?
- What other investments are needed to achieve the largest effect on promoting competitiveness of the enterprises?
- To propose new indicators measuring the competitiveness of enterprises.
- To create a map of Lithuanian counties in which regions would be depicted according to the levels of entrepreneurship, number of jobs, wages, added value created by an employee, exports, received investments, income from sales of products and services, etc.
- Having summarised the data collected during the evaluation, to prepare specific and grounded conclusions on the impact of the OP Priority Axis 3 measures, and to make concrete, detailed, and validated suggestions for improving the use of the reserve of funds for this period.
- Taking into account the new regulations of the European Commission for the funding period 2021-2027, to propose what steps should be taken to achieve major changes with regard to increasing growth and competitiveness of SMEs and how to address current challenges after identifying them.
- What actions would create added value in promoting competitiveness of SMEs not only at the Lithuanian level but also at the EU level?
- Having assessed the expected reduction in EU funding for the upcoming funding period of 2021-2027 and the change in the ratio of the EU and national funding, to estimate their impact on the growth and competitiveness of SMEs, and on the competitiveness of human resources.
- Having assessed the expected reduction in EU funding for the upcoming funding period of 2021-2027, to identify the measures, selection methods and criteria, applicants, indicators, investment levels, etc. that would enable SMEs to continue growing and staying competitive. What is the most effective ratio between the funds allocated to subsidies and to financial measures? How to combine different forms of investment for a single project? Suggestions will be made on the potential forms of application for funding of measures, on the coordination with programs directly managed by the European Commission, and on the implementation of projects in cooperation with foreign partners.

Methods

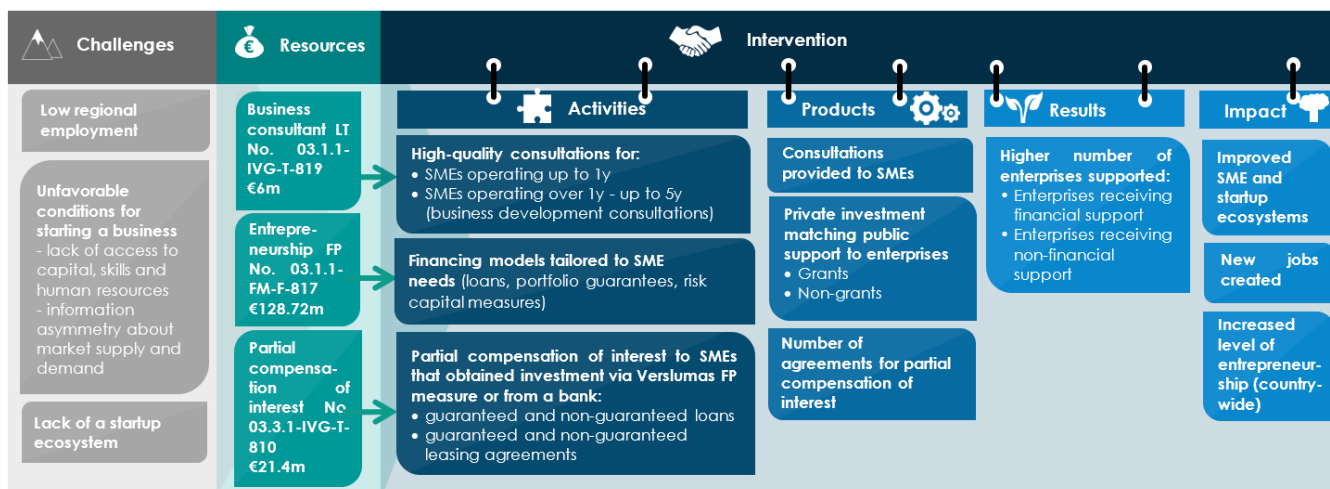
The evaluation methodology takes into account the complexity of the evaluation questions and therefore combines quantitative and qualitative data collection and analysis methods, retrospective and prospective assessment, theory-driven evaluation with counterfactual impact assessments. The following data collection and analysis methods were used: data mining, surveys, desk research, collection of statistical data, interviews, focus group discussions, evaluation result presentation event, counterfactual analysis, statistical and graphical analysis, analysis of foreign practices, cost-benefit analysis, case-studies, comparative analysis of measures.

Contribution of Operational Programme for the European Union funds' investment in 2014-2020 Priority Axis 3 'Promoting Competitiveness of SMEs' to Europe 2020 goals



Source: Visionary Analytics, according to relevant national legislation. The OP Priority Axis 3 actions are colour-coded to indicate their contribution to EU2020 priorities and goals of flagship initiatives. Dotted lines and asterisks depict additional, unintended, and (or) indirect effects of the implementation of OP Priority Axis 3.

Intervention logic of entrepreneurship measures



Note: Entrepreneurship LT measure is outside the scope of this evaluation. Source: Visionary Analytics, according to OP 2014-2020.

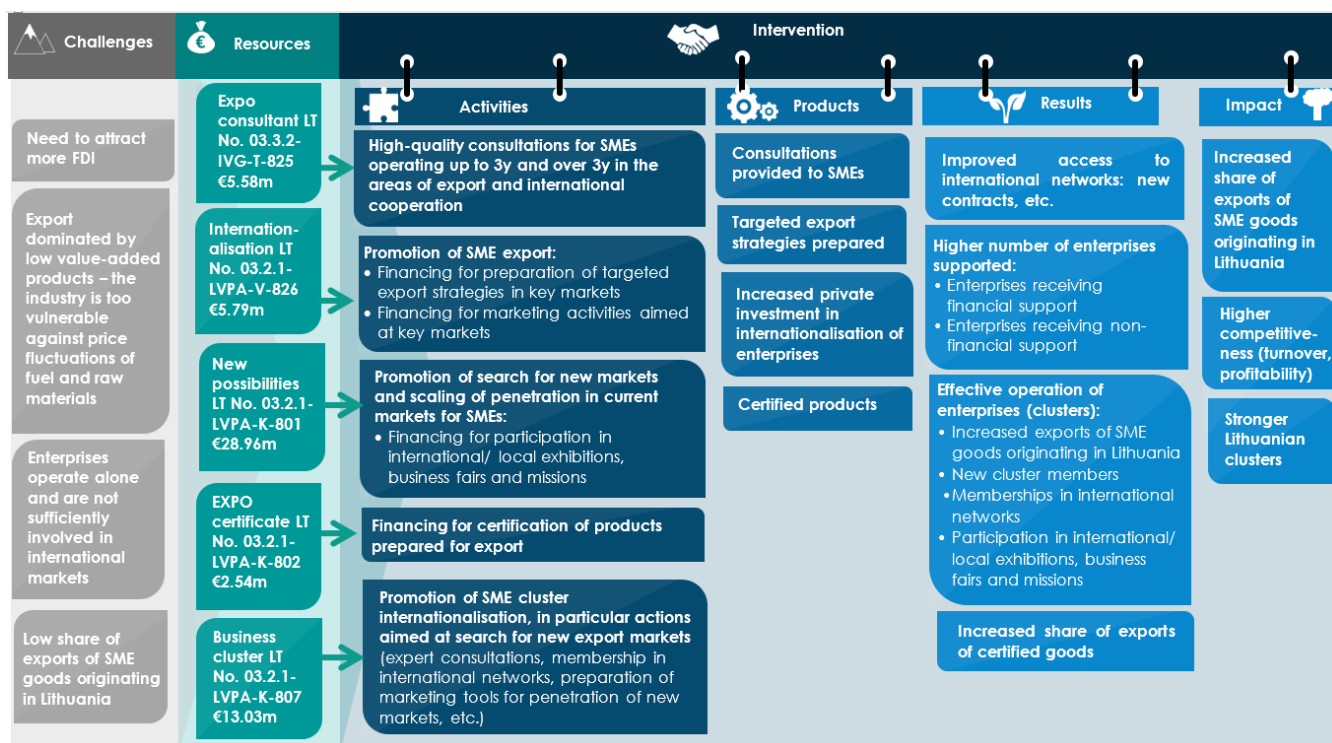
Measures to promote entrepreneurship remain relevant, as despite positive trends in entrepreneurship levels, new and small businesses face harsher market failures than other SMEs. The collected data shows that there is a strong demand for entrepreneurship measures. The main improvement areas for the set of measures are the following:

- There are not enough measures for early-stage start-ups.
- Venture capital activity is limited by the requirements to invest the majority of EU funds in Lithuania.
- There is a lack of high-quality 'soft' measures which are important for the development of a start-up ecosystem.
- Businesses lack information about the current set of measures and their suitability for a particular company.
- There is demand for a small-value (up to EUR 40,000) measure aimed at new business activities (start-up, development, purchase of equipment, rental of premises).
- Some companies have indicated that bank loans are not available even when using a loan guarantee due to insufficient deposit.
- There is still need to improve the regulatory environment concerning the conditions of setting up a business for foreign entities and the availability of employees.

Recommendations

- Develop expert consultations for investors (venture capital investment managers) at the stage of assessing R&D-based business ideas (an important enabling condition for the commercialization of high-quality ideas).
- Combine subsidies, non-financial (mentorship) measures and venture capital to develop start-ups. Encourage beginners to apply for venture capital funding at the concept stage – projects currently funded by the Lithuanian Business Support Agency (LVPA) or the Agency for Science, Innovation and Technology (MITA) often fail due to selection of unviable concepts or inappropriate strategies at the very beginning.
- Implement measures to stimulate the development of business angels' community.
- Ensure access to funding for newly-established businesses (implement financial instruments and assess the potential to expand the small-value voucher measure operated under the Rural Development Program for small businesses in regional areas).
- Maintain a business-friendly environment (e.g. by giving tax breaks for business start-ups, improving the availability of employees).

Intervention logic of SME internationalisation measures



Source: Visionary Analytics, according to OP 2014-2020.

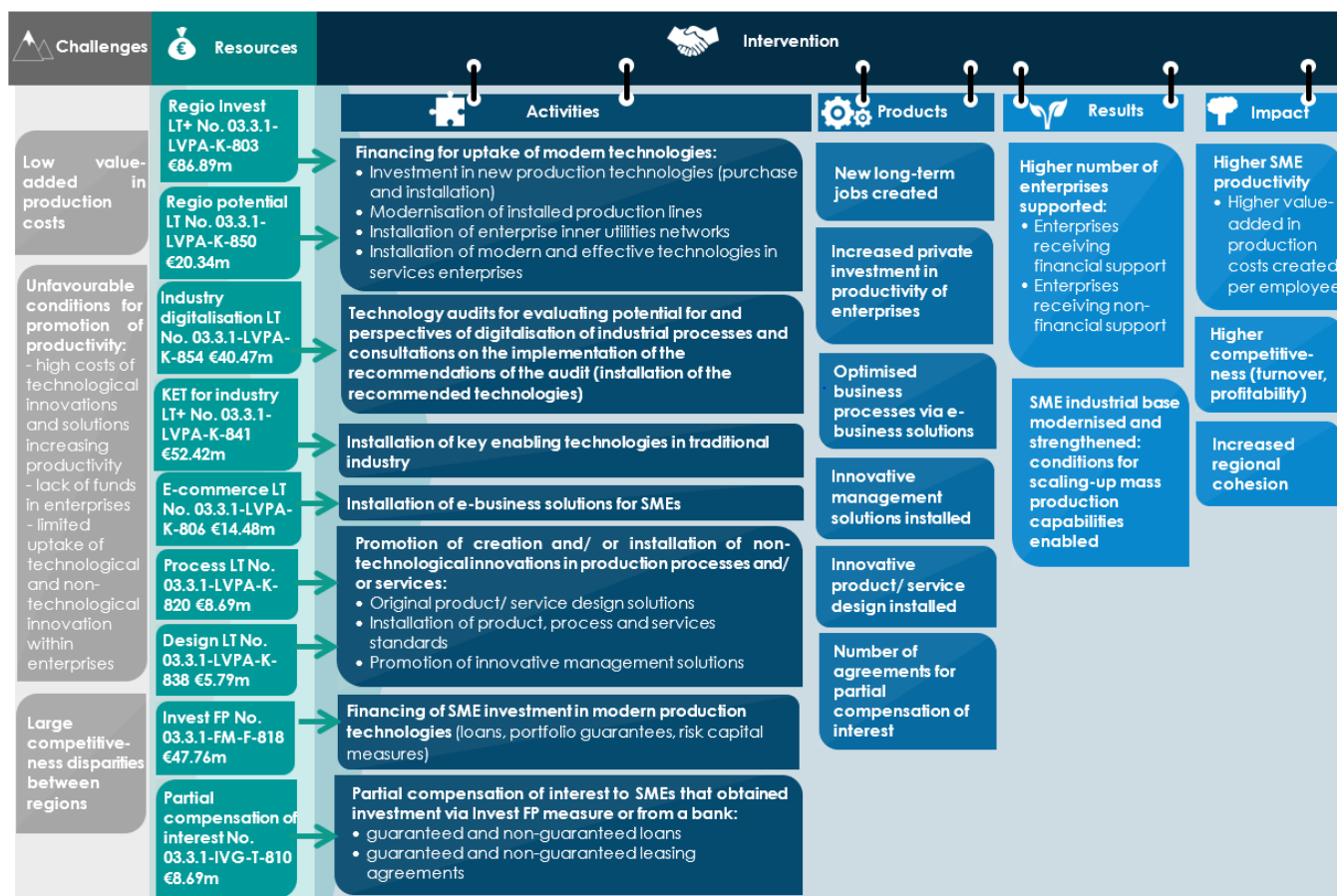
Measures aimed at increasing export are, in principal, relevant, however, their direct contribution to export growth in the short-term is limited, as the scale of the measures is not large and the country's exports are subject to significantly stronger external factors and cyclical fluctuations. The demand of measures with project tendering is varied. Measures in high demand are 'EXPO certificate', 'New possibilities LT', and 'Business cluster LT', while the demand for 'Expo consultant LT' is lower. The main improvement areas for the set of measures are the following:

- The design of the measure 'New possibilities LT' faces complex challenges – the current model does not encourage consistent participation in exhibitions and rather only frequent participation in different exhibitions; there were cases of fraud when group visits to exhibitions or business missions were used for tourism purposes; a better role for Enterprise Lithuania in this instrument would be to focus exclusively on coordination (by prioritizing export markets in different sectors and organizing market entries through the most appropriate channels).
- Businesses lack knowledge of sales and marketing in Western markets, and specialists with specific competencies.
- The EU-funded measures for clusters are fragmented as they are distributed between Priority Axes 1 and 3. It is especially important to promote a long-term strategic attitude of cluster members, to change the mentality of businesses and to foster a cooperative culture, to develop the cluster coordinators' abilities to make use of the cluster infrastructure.

Recommendations

- Design consistent export promotion programs to raise awareness of Lithuanian businesses and their products and services, including 'soft' consultations, business missions, study visits, and presentation of opportunities abroad.
- Consider merging current internationalization measures into long-term multi-stage business development programs ('New possibilities LT', 'Expo consultant LT', 'EXPO certificate LT').
- Concerning the measure 'New possibilities LT', differentiate the amount of funds allocated for participation in exhibitions, as well as reduce turnover requirements for start-ups, extend the term of project implementation (in order for SMEs to attend annual exhibitions more regularly).
- In the future, implement Stairs of Excellence measures (using ESIF and/ or budget funds) in order to attract more international funding (Horizon 2020 SME instrument, upcoming 'Invest EU', 'Digital Europe' programmes).
- Co-finance international partnerships, create incentives to attract international business accelerators, etc.
- Consolidate cluster measures distributed between Priority Axes 1 and 3, finance measures to strengthen export-oriented mature clusters and technology platforms. Special attention needs to be given to those measures that are aimed at implementation of Industry 4.0 initiatives, increasing access to foreign markets, implementation of export strategies, engagement in international clusters and value-chains (prioritizing BSR clusters, EU-supported clusters and strategic value chains, and other international partnerships). In the new period, it is necessary to ensure that the funding allocated to Lithuania-based clusters is sustainable: clusters should join real value chains (complementing each other's activities), create products collectively. It is recommended to implement long-term (multi-year) measures, consisting of several stages with intermediate results.

Intervention logic of SME productivity measures



Source: Visionary Analytics, according to OP 2014-2020.

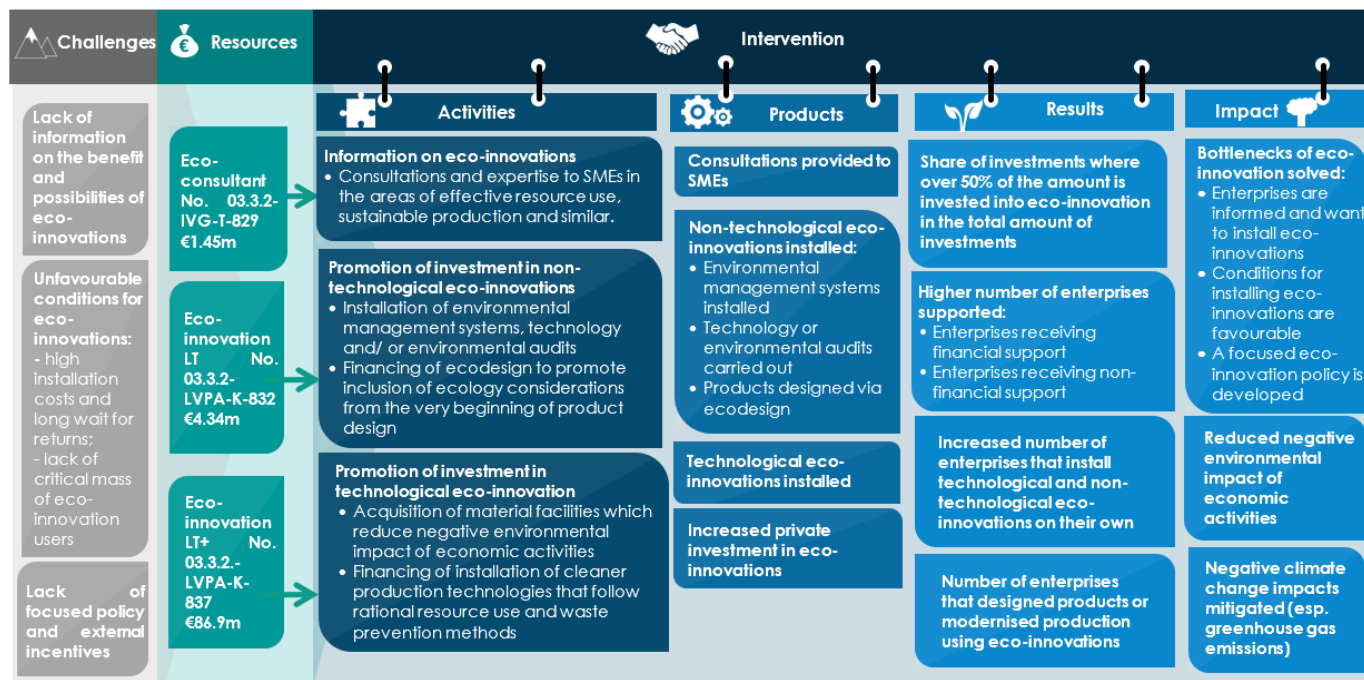
Measures are relevant as productivity indicators in Lithuania remain low in comparison to other EU countries. It is particularly important that significant amounts of investments are directed to businesses operating in regional areas, in order to address the issue of Lithuania's territorial cohesion. Such an investment strategy is reasonable, as the competitiveness in regional areas is lower compared to the big cities due to weaker absorptive capacities. In many cases, the demand for the measures is higher than the supply. Lithuanian industry sector is dominated by low and medium-low technology companies. As wages and wage-related costs grow, the competitiveness of such companies is diminishing. In order for such companies to remain competitive, it is particularly important to invest in higher value-added products, increasing productivity and digitization. Enterprises are still choosing to set up relatively simple digital technologies (automatization, ERP resource management systems or robotics), therefore it is especially important to foster digital maturity of businesses and encourage investment in advanced Industry 4.0 areas.

Recommendations

In order to accelerate the modernization of enterprises, it is necessary to ensure continuous incentives for technological progress in Lithuanian enterprises and to reduce the administrative burden in the new period. The priority areas for ESIF investment in the upcoming period are the following:

- Financial incentives for technology upgrades in areas relevant to high-tech Industry 4.0 areas (robotics, Internet of Things, 3D manufacturing, etc.), giving priority to SMEs in regional areas.
- In order to promote the branding of export-oriented Lithuanian companies and value-creating processes, investments in trademark, process, and business model innovations are necessary.

Intervention logic of SME eco-innovation measures



Source: Visionary Analytics, according to OP 2014-2020.

Investment in eco-innovation measures is substantiated – Lithuania is among moderately eco-innovative countries, however, the demand for these measures is low. Currently, Lithuanian companies are more concerned with productivity growth investments that pay off more quickly.

Recommendations

- Carry out educational activities for companies on eco-innovation and its benefits (The Ministry of Economy and Innovation and Lithuanian Business Support Agency are currently engaged in such activities which need to be continued in the future).
- Create other incentives for eco-innovation activities, such as tax breaks.

Resource sufficiency of the measures

Most project managers are satisfied with the current level and intensity of funding. The current funding intensities are largely in line with the private spending threshold, which the survey respondents see as appropriate to implement projects (44-55%). In the new funding period, the share of required applicant funds per project may increase. The requirement for a higher percentage of own funds is not a significant threat to the attractiveness of subsidy measures that finance large-scale projects (especially those related to modernization of infrastructure). On the other hand, during the preparation for the new period, it is worthwhile to consider whether subsidized projects could be financed through financial instruments, in order to increase the efficiency and leverage effect of investments. Meanwhile, for measures targeting start-ups and new business, the intensity of public funding should be relatively higher than that of mature companies (but not necessarily higher than the funding intensity of the current instruments), as low intensity of public funding for such measures could prevent participation of such businesses in these measures.

Recommendation

In order to reduce the administrative burden on companies, various instruments could be integrated into complex measures for businesses (upgrading of technologies would be complemented by non-technological innovations. Complex activities could be financed via a single financial measure (a single loan to support the implementation of technological and non-technological innovations). Lower intensity of subsidy financing (at least 45-55% of own funds should be required in projects aimed at increasing business competitiveness) could ensure that only viable enterprises are financed. Some companies could also benefit from financial instruments such as loans or guarantees.

Effectiveness of the measures

From the perspective of administrative costs, the most effective measures are high value subsidies, while the least effective ones are low value subsidies. When comparing the cost of administering one invested euro, the 'Regio Invest LT+' measure is the cheapest as it costs 0.005 EUR to administer a one-euro investment for the implementing institutions. In contrast, administering a one-euro investment of the 'Business consultant LT' measure costs 0.03 EUR for the implementing institutions. Meanwhile, on average, administering one euro of all financial instruments costs 0.01 EUR for the manager of the fund-of-funds (INVEGA).

Financial measures are more effective having accounted for the additional benefits that they entail. Their effectiveness is determined by the factor of returning funds and sufficient efficiency in attracting private funds. Moreover, financial measures distort the market less, contribute to the continuity of business operation, and mitigate the effects of lack of funding during economic and financial recessions. Financial measures, especially venture capital funds, provide mentoring, which contributes significantly to the competitiveness of an enterprise.

The effectiveness of a form of financing should be interpreted in light of the suitability of the form of funding for the needs of the target groups. Standardised administration of subsidies enables the provision of funding for more applicants (hundreds or thousands of them). Loans and guarantee measures are the most efficient financial measures from the perspective of administrative costs as most of the required steps are done by financial intermediaries (for example, they register *de minimis* state aid to companies). Meanwhile, venture capital funds, given their design, invest in a much smaller number of companies – from 10 (in case of development funds) to 45 (in case of accelerator funds) companies. Venture capital fund measures are more suitable for start-ups as these measures reduce the risk of death-valleys. In contrast, medium-sized companies lack the ability to establish themselves in the markets and sell competitive products or services, not investment.

Strategic suggestion

The proportion of funds dedicated to financial instruments should be increased. For example, start-ups should be targeted via risk capital measures, while loans and guarantees should be targeted towards mature enterprises (these measures are not appropriate to young enterprises that do not have sufficient deposits; microcredits, however, are a suitable alternative).

Although the institutions devote considerable attention to improving the implementation of measures, the **administrative burden (especially at the project selection stage) remains a shortcoming.** There is still room for improvement in the measure implementation process. The application procedure should be even simpler – this is particularly important for subsidy measures (Ministry of Finance is in charge of the application form). The application selection period should be shortened, the selection criteria simplified and presented in an easily understandable and unambiguous fashion.

Strategic suggestions and recommendations

- Review the principles of services by changing the approach of institutions from administration of measures to high added value business development. During the new programming period the measures should be enlarged and more comprehensive. Hybrid measures are also encouraged. Different forms of funding could be applied per single project, if it is possible under EU regulation (e.g. 20% of total funding for one project could be provided as a subsidy, while the rest of the funding could be secured by the enterprise as a bank loan, with the aid of a state guarantee or partial reimbursement of interest).
- In the current programming period, changes in the administrative system could help companies benefit from the existing measures. This requires a more consistent planning of measures (measure call plans should be announced as far in advance as possible, deviations from schedule should be minimised) as well as an interactive and user-friendly online 'map' of all available measures.
- The administrative burden for the applicant could be reduced if SMEs could send a single application to a business agency in order to be redirected to the most suitable measures by assigned mentors. In this case detailed documents on financial stability, business plans, etc. would be submitted only once.
- Refine the evaluation process of start-up project proposals – proposals could be evaluated by a professional mentor team by inviting the proposal authors to pitch their idea. Only the riskiest or most competitive proposals should be invited to pitch in order to mitigate the amount of pitches.

Impact of the measures

Summary of measures expected complementarity (added value)

	Contribution: measures foster new business investment	Product: projects and products would not have been developed	Behavioural: measures encourage new behaviour (entrepreneurship, export, partnerships, etc.)	Result: measures have impact on competitiveness indicators
Entrepreneurship measures	High	Average-high	Average-high	Average (no net impact found, but it may occur in the future)
Internationality measures	Average-high	Average-high	Average-high (evidence on net impact found)	Average-low (no evidence on net impact)
Productivity measures	High	Average-high	Average	High (evidence on net impact found)
Eco-innovation measures	High	Average-high	Average	Average-low

Source: Visionary Analytics. Note: due to the various risks and limitations of the counterfactual impact assessment, all conclusions should be interpreted with caution. Additional impact evaluation should be repeated when the measures will be fully implemented.

The target value of the level of entrepreneurship (result indicator of the Specific objective 3.1.1 of the Operational Program) was exceeded in 2012 before the implementation of the measures has even started. External factors (e.g. significantly improved economic situation after the crisis, shrinking population distorting the relative rate of the enterprise population) had a significant impact on the growth of the level of entrepreneurship in this period. **Despite that, the measures promoting entrepreneurship will help improve conditions for new business creation and as a result will have a long-term impact on the level of entrepreneurship.** Financial measures, especially venture capital funds, will contribute to it the most significantly, as such instruments help shape business and investor behaviour that favours new business creation. Large amounts of planned investment accompanied by mentoring should have a long-term impact on the viability and development of the SMEs that received investment. However, start-ups are not sufficiently targeted, especially at the stage of idea generation. The evaluation has found no evidence of impact of measures upon the viability of the start-ups yet.

Measures promoting internationalisation will slightly contribute to the promotion of competitive products' export and to the involvement of companies in international networks, giving it an initial impetus through the creation of new contacts (e.g. positive weak net impact of the measure 'New possibilities LT' on the establishment of new contacts with international trading partners and new trade contracts was found). Most of the measures finance activities that only indirectly contribute to the growth of enterprises' exports. Direct impact on exports is not expected, and therefore **the sustainability of the internationalisation measures' impact is questionable.** The measures are too small to have significant impact on the result indicator of the Specific objective 3.2.1 of the OP 'Share of exports of SME goods originating in Lithuania in GDP'. This indicator is highly dependent on the general economic situation in Lithuania and the world. The sustainability of investment in clusters is also limited as most clusters would not survive without public support.

Measures promoting productivity will have the greatest impact on SME competitiveness indicators. Counterfactual impact evaluation results show that the measure 'E-commerce LT' has a positive, albeit modest, impact on average wage in SMEs (+66 EUR after the end of the project). This measure provides medium-sized investments, which suggests that larger measures are also likely to have an impact on the competitiveness of companies. Value-added in production costs, created by SMEs, per employee (result indicator of the OP Specific objective 3.3.1) is steadily growing since 2011 and achieved 90 % of target value in 2016. **Measures promoting productivity have the potential to contribute not only to the result of this indicator but also to regional cohesion. Long-term impact of productivity measures can be expected.** Almost all respondents who received funding intend to continue the project activities with their own funds after the project is finished. The sustainability of the impact should be ensured as investments per SME are large in some measures (e.g. 'Regio Invest LT+', 'Industry digitalisation LT', 'Regio potential LT') and the results of investments are tangible.

The impact of eco-innovation measures (and the spill-over effects) has not manifested because of the lack of critical mass of companies that implement and understand the benefits of eco-innovation. Taking into account the low demand for eco-innovation measures, it is unlikely that the target of result of the OP Specific objective 3.3.2 indicator 'Share of companies that have implemented environmental innovations' will be reached. The value of this indicator has fallen by more than half from 2012-2014 to 2014-2016. **Eco-innovation measures have the potential to achieve long-term impact, but in this period only short- to medium-term impact is expected.** Very few survey respondents have indicated their intention to invest in eco-innovations in the future. The relatively lower popularity of these measures may be explained by the lack of absorptive capacities of Lithuanian SMEs. As financial intensity of measures is likely to decrease, the attractiveness of the measures would also be further reduced, especially in the regional areas, and especially as economic growth decreases and the elements of economic stagnation appear. Alternative measures (e.g. tax incentives) should be considered.

The following measures create the highest added value:

1. 'Entrepreneurship FP', especially venture capital funds – the highest added value both in the Specific objective 3.1.1 and the whole Priority Axis 3. The measure addresses one of the key market failures SMEs face – insufficient

access to financial resources. Successful launch of venture capital funds provides optimism that the abundance of funds will stimulate the development of investment culture in Lithuania. Venture capital funds will have to invest part of their funds in newly established companies and thus contribute to the creation of new, viable SMEs. The remaining investment will promote rapid development of SMEs and improvement of performance indicators – venture capital managers provide a lot of non-financial benefits to the companies as they transfer business management knowledge, help to create a proper business development strategy, improve the company's reputation and credibility.

2. Majority of measures fostering productivity – 'Regio Invest LT', 'KET for industry LT+', 'E-commerce LT', 'Process LT', 'Design LT', 'Regio potential LT', 'Industry digitalisation LT' (financial instruments in this specific objective and the measure 'Partial compensation of interest' have less added value during the economic upturn).
3. 'New possibilities LT' and 'EXPO certificate LT' – relatively largest added value in promoting new contacts with trading partners.
4. 'Eco-innovation LT+' – relatively largest added value for eco-innovation promotion measures (there are no alternatives to this measure for financing technological innovation in the market).

The measures 'Business consultant LT', 'Expo consultant LT', and 'Eco-consultant LT' creates low added value. The design of the consultation measures is deemed inappropriate: it is difficult to prevent the improper use of funding, the sustainability of consultations is not guaranteed, and the quality and impact of the consultations is questionable.

Recommendation

Due to the ineffective implementation of the consultations, the consultation measures should not be financed by ESIF investments or the design of current measures should be changed substantially. The following alternatives could be considered:

- Implementation of only specialised consultation measures (e.g. legal advice on intellectual property). The consultations should be funded based on fixed costs.
- A database of video tutorials on general topics (e.g. how to set up a business).
- Integration of business consulting into other measures. This would allow to increase the relevance of consultations and address the existing drawbacks related to the quality and impact of the measures.
- Broadening of the range of services, for example, by increasing the scope of mentoring services, providing opportunities to attract consultants (including mentors, board members) from abroad, especially for export advice.

The experience from this period shows that ERDF funding fails to create an attractive consultation scheme. However, business consultations are important for the business ecosystem. The consultations should be provided either under market conditions (ideally financed via private funds) or with partial state budget support.

Business competitiveness promotion needs in 2021–2027

In order to create a smart economy in Lithuania in the future, interventions stimulating the growth and competitiveness of SMEs in the new period need to take into account six interrelated challenges:

1. **Slow structural change and the 'middle income trap'**. Low-value-added businesses dominate the Lithuanian economy. The competitiveness of such businesses is declining rapidly. The export structure is still dominated by exports of less technology-intensive products. In addition, rising wages create pressure for business competitiveness. These challenges are strengthened by negative demographic trends, lack of skilled labour, and lack of innovation and investment. Lithuania is in danger of falling into the 'middle income trap', as the country is running out of resources for growth and knowledge-intensive growth is not guaranteed. New opportunities for even low-value-added sectors are created by the investment in new technologies and upgrading in global value chains, including the strengthening of start-up ecosystems (see below).
2. **Upgrading in global value chains (GVC)**. Involvement in GVC and strengthening of GVC positions ensures access to market, knowledge, and technology, creates incentives for modernization, upskilling of employees, creating higher value-added products and jobs. For small, countries lacking fossil fuels such as Lithuania, significant involvement in the international market is the only way forward. Compared to the EU-28, the industry accounts for a much higher weight in Lithuania's economic structure (about 20% of GDP), about 60% of production is exported. However, the majority of Lithuanian companies work in the least profitable positions in value chains: they are raw material suppliers, produce or export intermediate products or simply carry out orders of large international companies.

Recommendation

Technology bridge measures would allow to develop networks with strategic partners in target markets, therefore giving companies access to information necessary to create knowledge about global value chains, to conduct in-depth GVC analysis and develop forecasts, including analysis of specific GVC participants (suppliers, end product developers). In addition, this knowledge could be used to make decisions about financing engagement in GVC and clusters. Knowledge creation can be done by "Enterprise Lithuania" (continuation of the measure 'Internationalisation LT'), sectoral associations or clusters.

3. **Industry 4.0 and Future Technologies.** New technologies create preconditions for a significant increase in flexibility and deliver high levels of productivity. According to some data, up to 50% of production equipment must be replaced by 2025. Although the results of Lithuanian companies in integrating digital technologies are higher than the EU average, the scale of companies' investment in modernization is not sufficient. Only 24% companies are planning to invest in Industry 4.0 technologies.
4. **Globally competitive start-up ecosystems.** In the last decade, Lithuania has created a favourable business environment, but the Lithuanian start-up ecosystem is not considered significant in the European context. The number of start-ups in Lithuania is growing, but there is still a lack of investment in internationally competitive technological start-ups. Potential investors lack the courage and knowledge to invest at the concept stage. Various venture capital funds have been set up by ESIF funds, but their compatibility and efficiency need to be improved, especially in the early stages of start-up development combining them with 'soft' measures (e.g. mentoring). The current funds also face funding gaps between EU programming periods. Not a single 'unicorn' has been grown in Lithuania so far. The exit of born global start-ups from Lithuania is inevitable as companies grow, hence, it is crucial to encourage companies to keep at least part of their operations in Lithuania for as

Strategic suggestions and recommendations

- The priorities of business growth promotion should change, prioritising the development of high impact and born global start-up ecosystems, attracting such start-ups from around the world, creating, growing and maintaining Lithuanian start-ups. Improving the regulatory environment remains important. The following measures could be implemented in order to provide niche opportunities in technology and attract global start-ups from all over the world: improving the environment for business start-ups from other countries, improving employee access through standards and non-financial measures (such as Start-up Visa, Star-up Employee Visa).
- Ensure an appropriate design of calls for venture capital funding so that a start-up could apply for investment at every stage of development. It is important to ensure that there is no funding gap in 2021-2023, as it happened during the transition from 2007-2013 to 2014-2020 funding periods. During the new funding period venture capital funds should satisfy start-up needs and ensure their viability.
- Increase the accessibility to venture capital and acceleration programmes abroad (e.g. create a measure to help start-ups to cover part of the cost of participating in foreign accelerator, provided that the business will be developed in Lithuania and not abroad for a certain period of time).
- Create incentives for globally-oriented start-ups to stay in Lithuania. This is relevant not only to start-ups interested in the development of their products, but also to Lithuanian venture capital fund managers interested in return on investment and their want to remain an important investor in the company.

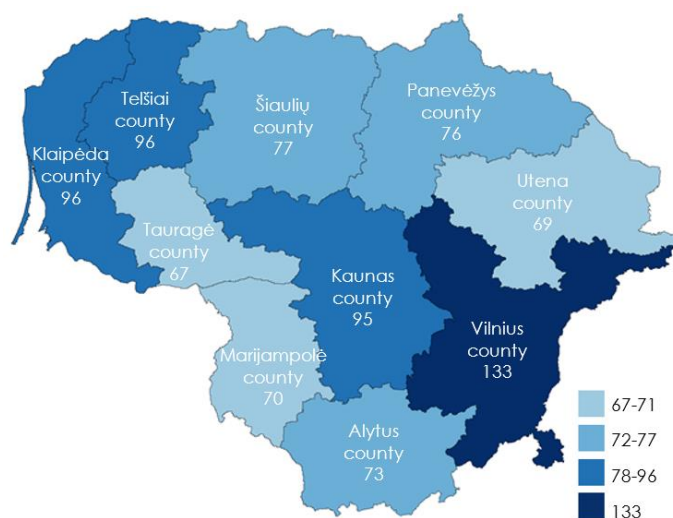
long as possible, while improving access to target markets and international capital funds.

5. **Competitiveness and cohesion of Lithuanian regions.** Regional disparities remain large and are increasing. Competitiveness of the capital region exceeds the Lithuanian average by 33% and is twice as high as the average of Tauragė, Utena and Marijampolė regions. There is a particularly large gap in foreign direct investment. Regions with the lowest productivity have the weakest absorption capacity, and most developed regions 'suck up' human capital and investment. Strengthening of Lithuania's competitiveness is inseparable from attracting investments into regions and 'resetting' their development strategies.

Strategic suggestions and recommendations

- In order to increase the competitiveness of Lithuania it is particularly important to revive the regions by attracting investment and 'resetting' their development strategies. In addition, during the 2021-2027 EU funding period opportunities provided by Policy Objective 5 'A Lithuania closer to citizens' for integrated regional development programs should be properly exploited.
- Development of youth entrepreneurship and creativity (e.g. trainings, talent competitions programs for non-urban municipalities, awards and prizes for young entrepreneurs, integration of entrepreneurial skills into general education and higher education). Cooperation with other ministries (SADM and ŠMSM) responsible for ESF-funded measures is very important in implementing these activities.
- Development of regional cooperation networks. The management of such networks should be transferred to either market participants or municipalities.

Heatmap of Lithuania's regional competitiveness



Source: Visionary Analytics.

6. **Reducing the dependence from EU structural funds.** Lithuania is already implementing a significant number of financial instruments for SMEs that aim to diversify business financing sources with the help of EU funds. Previous evaluations found that not all subsidies have a clear added value, they create substantial administrative burden and form a 'culture of subsidies' – organisations or entire sub-sectors that are dependent on public financing.

This evaluation also finds that the administrative burden of subsidies is too high. In order to further reduce the dependence on EU structural funds, a move from subsidies to financial instruments is encouraged. This is also recommended by the European Commission.

Key messages for the new 2021-2027 period

According to the revised methodology for allocating EU funds to Member States, **Cohesion Policy funds for Lithuania should decrease by almost a quarter.** The funds received and their distribution among the five policy objectives of the new Operational Programme will depend on the national decision as to whether to program funds for Lithuania as a single NUTS-2 region or two separate regions – Capital region and Central and Western Lithuania region. In the first case, Lithuania, as a single NUTS-2 region, would be classified as a transitional region. According to the rules on concentration of EU funds provided in the draft regulations, the funding of the EU funds will decrease, but **due to the increase of the national contribution share, a similar amount of funding will be available for the same priorities as for the implementation of 2014-2020 Operational Programme.** In the case of Lithuania as two separate regions, programming of EU funds in Lithuania would not increase, but this scenario will likely entail more flexible EU fund concentration provisions and lower national contributions to measures programmed for the Central and Western Lithuania region. However, losses in the Capital region, which also faces socio-economic disparities across municipalities, should be taken into account. While the overall EU funding will decrease in the new period, the funding for Policy Objective 1 will not be significantly lower than in the current period because of EU fund concentration provisions. Special attention will be dedicated to this policy objective in the upcoming period. In addition, most of the business competitiveness measures in the new period will require to contribute much more than 15% of private investments. Therefore, a decision to invest in R&D and digitization infrastructures (including high-speed broadband infrastructure) can become a major risk factor. Such measures and projects require huge investments at the expense of other interventions under Policy Objective 1. Impact on the competitiveness of SMEs and human resources will mainly depend on measures chosen in the new period and their implementation (not on the quantity of investments but on their quality).