
Comparative Study of European and national Programmes Regarding Innovative Capacity of Small and Medium Enterprises

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Abstract

The European market is one of the largest at global level, but still lacks competitiveness in a comparative analysis with other global economies like US and some Asian ones. Innovation is now the key word that drives after it the growing competitiveness of the companies and therefore of its economical environment. Result of research and development activities innovation can bring exponential economical growth on a more global and digitalised market. But growth innovation is also associated with risk failure, therefore the risk finance realm needs to specialise itself in all its forms of intervention as it is the case for public grants for RDI.

Key words: *research development and investments, financial analysis, operational programmes, european grants, innovative capacity*

The Partnership Agreement signed between the European Commission and each Member State provides the existing of certain complementarities between the European Programme for Research and Development - Horizon 2020 and the specialized national programs such as the Competitiveness Operational Programme in Romania.

From these two programmes we will select the sub-measures that are addressing the big challenge that young innovative SMEs are facing for accessing finance for research, development and internationalisation. Specifically we will analyse the Horizon 2020 program, SME Instrument and the Operational Programme for Competitiveness, New Innovative SMEs.

Regarding the aspects related to innovation: Both programmes aim at assessing innovation. From this point of view the program Horizon 2020 - SME Instrument the Management Authority regularly launches call

of proposals on topics related to smart industries. From the perspective of the European Research Executive Agency, the evaluation is mainly assessed through the lens of the experts as the evaluation is carried out by a panel of external experts that are specialists in the selected fields, and has strong knowledge about the leading industrial actors and technical solutions existing on the market in that area. From the point of view of Romanian POC – New Innovative SMEs, innovation is mainly demonstrated by submitting documents that prove it like patents, doctoral thesis, results of a research contract.

Protection of intellectual property issues: both programmes are intended to protect innovation and the investment made through European funds. From this point of view, the SME Instrument allows any strategy for intellectual property protection, beginning with patent licensing at national, European, global level, holding the core technology as an industrial secret, the use of confidentiality agreements with partners and subcontractors, or one can choose to publicly disseminate the research of the results as long as it has the means to exploit it in first. In the POC, protecting intellectual property is demonstrated mainly through registration of the patent at national or other Member State registry and by publishing the doctoral thesis.

Commercialisation: Both programmes are looking for the results of the research – development – innovation process to be funded and become a product, service or process that will be successfully launched on the market (European and global one). So the market potential of the evaluated projects outcomes are assessed in the Horizon 2020 – SME Instrument program according to market studies, the presentation and description of benefits that customers receive, Letters of Intent from distributors, end-users or clients. Moreover, at European level any business model is accepted as long as it can demonstrate viable selling channels and can prove the collection of revenue. Thus we can consider channels as direct sales to the consumer, selling through distributors, licensing the technological solution to other companies, Internet sales etc. The European Experts will evaluate the commercialisation potential taking into consideration the complexity of today's markets and the variety of possibilities of commercialisation existing thanks to the internet and automation. In case of POC, the commercialization is demonstrated by presenting a binding Contract of Sale signed between the producer and the buyers and that have the value at least at the level of the European non-refunding grant.

Without switching to other elements of the evaluation we will draw a few conclusions about the uptake of innovation at European and Romanian levels, conclusions which could explain at least in part the results of Romanian

SMEs in the field compared to other EU countries. For Romania it is noted that the assessment is done mainly formal through presentation by the applicant of written documents stating the criteria to be evaluated. Thus, to prove the innovation patents of doctoral thesis are required, to evaluate the strategy for protecting the intellectual property it is demanded to provide a patent, to assess the commercial potential it is requested to present a binding sales agreement signed by a customer that is obliged to buy the resulted innovative product at the end of the research and development process.

Horizon 2020 SME Instrument proposals submitted per countries 3 February 2016



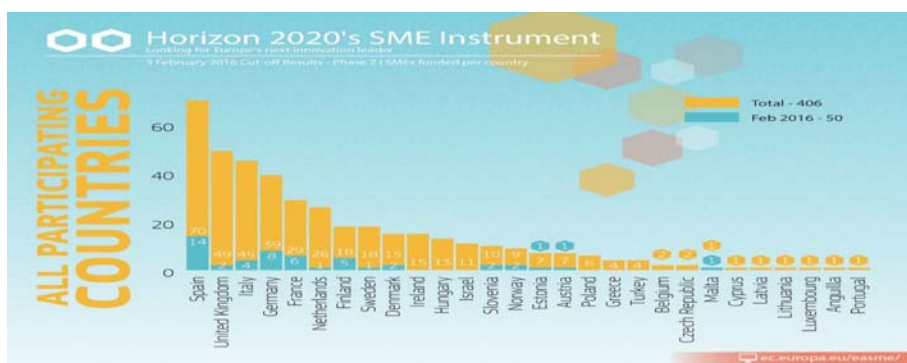
Source: European Agency for SME ec.europa.eu/easme/

From the above it can be easily seen the formalism of the evaluation system of European projects in Romania. In other words, one can observe that old bureaucratic habits of covering personal work by papers continue to exist also in the innovation realm. But why? One of the reasons is that in Romania, compared with the European Union where the evaluation is performed only by external experts, the assessment of the projects is carried most of the times by civil servants employed by the Managing Authorities that is related to the Ministry that coordinates the respective operational program. In other words, by non-involving in the evaluation process professionals or specialists from the private sector, we face a regretful situation where civil servants (and not precisely experts in the field) tend to cover their work and option with papers, avoiding that way being held accountable on the success or insuccess of the project finance. Even if beginning with 2013, there have been several attempts to externalise the evaluation procedure focusing on contracting individual experts or specialists, in the last years, even those initiatives have

been denaturated into public acquisition contracts hunted by companies that are looking for profit and less on providing the needed expertise through individual specialists.

The lack of accountability of the evaluator makes the whole process of innovation evaluation of European projects in Romania to be a purely formal activity. The whole Competitiveness Program appears to be a form without content, an system designed to automatically translate in Romania the European concepts. This mechanism of automatically copying European policies have a direct impact on enterprise competitiveness, which partly explains the statistical results of Romanian SMEs in the European program Horizon 2020 SME Instrument. As it can be seen in the statistics of the European Agency for SMEs only one innovative project from Romania was financed through the H2020 SME Instrument, namely **CargoList.eu**, which shows the differences of perception on innovation.

Horizon 2020 SME Instrument awarde projects per countries 3 February 2016



Source: European Agency for SME ec.europa.eu/easme/

Another issue arising from this brief comparative analysis regards the distorted perception that evaluation in Romania has on risk. Thus, when analyzing even the strategic documents underlying the program Horizon 2020 and the EU and National Strategies on Competitiveness, we notice that most projects in research - development - innovation, although they have great potential for growth, implies a great risk of success. This inverse correlation between innovation and success is well understood in Europe and especially in America. Thus, in America, especially in the Silicon Valley a vibrant ecosystem of innovation has developed that includes a strong component of private risk finance. This type of financing for innovation, generically referred

to as venture finance is generally made through private equity investment through accelerators, networks of business angels, seed capital funds or venture capital funds, investors understanding very well the risks associated with innovative projects, but willing to accept them due to the enormous gains that arise from successful innovative projects compared to losses associated with failed projects.

What we want to stress is that research - development - innovation projects are high risk projects and requires an assessment carried out by professional experts in the field, which may originate from the private finance sector (banks, investment funds, etc.). The fact that in Romania the evaluation of innovative projects is mainly carried out by civil servants often exceeded by the daily news in the specific innovative industry, unfortunately justify the excessive formalization and totally ineffective evaluation process of innovation.

Misunderstanding the risks associated with innovation made the Guidelines for Applicants for the POC Innovative SMEs requires the applicant to prove the commerciability of the products through mandatory documents as a Contract of Sale that binds the buyer to purchase in the future the expected results of the research – development – innovation project funded through European grants. This situation itself is anachronistic because it manages to turn a risk financing mechanism in one of the safest ways of financing that are to be found only in factoring for example. If an SME should already have a purchase agreement with a buyer, it would be more effective to turn to a bank for a credit or factoring product. Also, if a buyer is obliged to purchase a future product it could very well turn to a bank for buyer credit for example, making, why not, and exclusivity deal for marketing that product for a further period of x years. Unfortunately, requesting such mandatory documents is again a matter of form that is unlikely to reflect the real intent of the signing parties of the contract. Anyway the penalty for not buying the product at the established value of the grant is to reimburse the difference of the European Grant, acting like credit with free interest for the implementation period (not a first in the absorption of EU funds in Romania). So, more than likely, in this case there will be presented properly written contracts, that are in a great majority not reflecting a reality.

As stated before, the penalties which the beneficiary of such financing should support if it fail, merely completes this picture of innovation in Romania. Thus, according to Applicant's Guide POC, Innovative SMEs, the beneficiary is obliged until the end of the sustainability of the project (implementation period + monitoring period), generally five years, to cash in revenues from the new developed product, at least at the amount awarded

as grant. The penalty if this criterion is not met by the applicant is the reimbursement of the difference. Basically, in the example from the above paragraph we can observe a great precautionary of the Management Authority to minimize its own risk associated with failure of absorbing funds allocated to the Operational Programme. As is known, each MA is assessed and audited to measure the effectiveness of using European public money. But in this case, the solution found for the assessment of innovative projects cancels the innovation aspects associated with such projects.

Implementation of Multiannual Financial Framework 2007 – 2013

Member State	Budget 2007 – 2013 billions Eur	Budget 2007 – 2013 per capita Eur	Contracted amount billions Eur	Contracted percent %	Payments made in 2007 – 2013 billions Eur	Payment percent (absorption) %
Bulgaria	6,674	927	7,7	115%	5,1	77%
Czech Republic	26,303	2502	25,2	96%	18,1	69%
Estonia	3,403	2588	3,3	98%	3	87%
Hungary	24,921	2523	28	112%	21,7	87%
Latvia	4,530	2278	4,8	105%	3,9	86%
Letonia	6,775	2301	6,8	100%	6	88%
Poland	67,186	1745	68,2	102%	52,5	78%
Romania	19,175	961	20,3	106%	10	52%
Slovakia	11,651	2149	13,1	112%	7,6	65%
Slovenia	4,101	1989	4,3	104%	3,4	83%

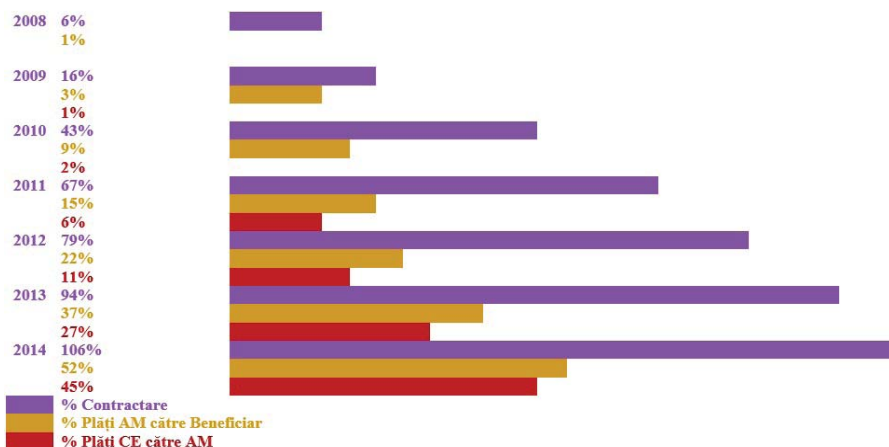
Source: <http://www.ecsif.eu/Pagini/Master-EUG-Bucharest.aspx>

Regarding the results of the European funds absorption per countries place Romania on the second lowest place in Europe after Bulgaria. But concerns of MA to improve the rate of European funds absorption should take into account effective measures and not only formal ones like is the case of the bankability of European projects. Thus, the bankability of European projects which translates to the profitability of European projects suggest that these should be attractive for private sector financing, so it is important that the expertise assessment associated with the bankability of European projects to be drawn from the private and integrated into the public domain of European funds. As this was done only episodically in Romania, the Managing Authority followed the beaten and safer path, which unfortunately is not right for an innovative business model.

Implementation of Multianual Financial Framework 2007 – 2013 in Romania

Implementarea CFM 2007 – 2013 în România

2007



Source: <http://www.ecsif.eu/Pagini/Master-EUG-Bucharest.aspx>

Conclusions:

As recommendations for improving the Competitiveness Operational Program we recommend the integration of an evaluation model originated in the private innovation funding. Still, this evaluation mechanism request attracting specialised competencies in finance and innovation all of that being widely found in the private financial realm. Also, by attracting external experts in the evaluation mechanism we can also guarantee the principle of autonomy by not being exposed to any form of pressure from superiors. Also as external applicants do not know the external experts identity can improve the assessment ensuring its objectivity. An external expert knows the market and can better assess the potential of a business through the continuous assimilation of knowledge and information in the field.

And in terms of financial projections, the financing template for the Application of POC presents some difficult to understand requirements for the innovative realm. Thus, according to the applicant's guide, the applicant must make financial projections for the next 15 years. Considering that most start-ups fail after 3 years, it is hard to believe that the financial projections can be more than an exercise of imagination. In principle innovation is related to the changing economic environment and to present financial estimates for a period of 15 years, is totally unrealistic and unnecessary.

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