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Financing and Innovativeness of Small and Medium-Sized Enterprises: The Case of Poland

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10.1 Introduction

The level of innovativeness in Europe is increasing, however the Polish situation is rather poor in this context. The rankings show that Poland is in one of the last positions. Forecasts of improvement in the level of innovation in Europe are estimated at +6% over the recent years with the best results reported by Sweden. This should allow for a better position in this respect than China, although Europe is still lagging behind the economies of, among others, the USA and Japan. Innovation in Europe, Poland

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especially, is a necessity, given that it has been the driving force behind the EU economy for decades, and intensive Innovativeness seems to be a must (Vrontis et al. 2017; Vrontis et al. 2018; Thrassou et al. 2019). However, venture capital (VC) is underdeveloped, which puts the financing of innovation in Europe in poor light, and more so in reference to Poland.

The situation of financing innovations seems to be particularly complicated in Poland, and despite this, domestic SME are characterized by the fact that they plan to invest in technological development, but expect tax incentives (Smart Industry Polska 2018). What prompts enterprises to implement innovations are, among others, improvement in the quality of products and services, increase in productivity of employees and reduction in costs. According to Polish small and medium entrepreneurs, the lack of financial resources is the biggest barrier to long-term innovative activity. However, research in the field of innovation, in the context of cooperation between science and business institutions, indicates that facilitators and drivers have a greater impact on innovativeness than barriers (Davey et al. 2017a, b). This leads to the directions of activities in the field of building innovativeness. However, regardless of the main determinants of innovation, the financial factor refers to Both barriers, facilitators and drivers. In a network economy, which Poland intends to be the part of, the capacity to create innovation should be developed through measures such as (Klimek 2013):

- Orientation towards expected vision of an organization through the future prediction design.
- Using the creativity of individuals in innovation by selected teams.
- Ensuring partnership and cooperation. Most innovations are the result of team efforts which implies movement from competition to cooperation.
- Digital competence resulting from present difficulty to develop innovation without appropriate competences and well-thought-out involvement in the field of ICT.
- Provision of adequate resources and support such as 'open space, technology, access to information and knowledge'.

- Hiring educated staff. Self-education and self-leadership are becoming very important for competence development, while education plays a key role in ensuring the development of innovation-related competences.

Regardless of the above indications, it should be noted that the innovativeness of small and medium enterprises in Poland differs significantly from the average for these enterprises in the European Union. This indicates an urgent need to undertake intensive searches for opportunities to improve the operations of enterprises in the SME sector, focused on innovation, and in particular open innovation, taking into account their innovative potential.

Polish enterprises spend on R&D a total of 28% of all expenditures made in the country (PLN 3.3 billion, i.e. equivalent to 0.23% of GDP), in the overwhelming part financing it from their own resources (with no significant tax reliefs) and in 9/10 conducting research on their own. The second noteworthy difference is the very low level of R&D expenditure incurred by companies with foreign roots. This distinguishes Poland from its neighbors from the CEE (in the Czech Republic and Hungary, the ratio of investments borne by foreign companies to GDP is 4–6 times higher than in Poland, which gives a poor testimony to the quality of Polish industrial policy in relation to the inflow of Foreign Direct Investments, FDI). In the case of domestic firms, Poland is clearly losing out compared to all the countries surveyed.

Finally, the third point concerns the very low level of BERD in the Polish SME sector. The ratio of R&D expenditures to GDP in the SME sector in Poland is 6–8 times lower than in the Czech Republic and Hungary, 5–7 times lower than in Germany and France and 9–14 times lower than in highly innovative economies. This stands in contradiction to popular judgments about the expansion of the Polish SME sector, testifying rather to its conservatism and simple (based on cost advantage) development strategies. Studies, therefore, indicate that it is important to finance innovation and market research based on business capital. On the other hand, a small and residual share of business sector expenditures on research by universities has an impact on a low level of innovativeness.

The aim of the chapter is to present the state of SME innovative activities in Poland and to review the possibilities of financing innovation in the national context.

10.2 Research Context

The notion of innovation and innovative actions can be understood differently, which results from the fact that two emerging currents of their understanding arise, i.e. as a process (a specific sequence of activities) and as a result, i.e. new solutions, including not only for the enterprise itself, but also for other stakeholders (Borowiecki and Siuta-Tokarska 2017; Franco et al. 2019; Kleinhans et al. 2019; van Helden and Reichard 2019). For the purposes of research and analysis in the scope of innovativeness of enterprises, the OECD recommendation is often used, in which innovation is defined as implementation of a newly or significantly improved product (product or service), process, marketing and/or organizational method. In addition to the classification of the breakdown of innovation, the growing importance of social innovation may be observed (Brändle et al. 2019; Kern et al. 2019; Lim et al. 2019), which is of particular interest to stakeholders, given its importance as a society, and this should also be borne in mind. Social groups, apart from being in many cases stakeholder groups, in some cases also decide on the financing of innovative activities—crowdfunding (Leonidou et al. 2018; Barbi and Mattioli 2019; Eiteneyer et al. 2019; Thies et al. 2019).

Innovation issues are not decreasing in their importance, but are still substantive topics in terms of knowledge economy or sharing economy (Kusio 2019). Innovation-based business models will be developed in the future and especially this refers to process innovations at companies and business organizations. This is due to the need for improving quality and effectiveness of business performance (Arsovski et al. 2018). Innovations in terms of processes is also important due to the need of effectiveness and economic growth of organizations. There is why product innovations as well as organizational innovations, which are of

process nature, will also be present. Product innovations are usually referred to newly created start-ups and especially those offering technological improvements, whereas other types of innovations are referred to as more often implemented in mature industries (Stawasz 2017; Kusio 2019).

The technological orientation of product innovations are materialized usually in the form of techno-starters, which are small or even micro-sized companies and their appearance is often a result of adjusting to clients' requirements. This could obviously not be possible without entrepreneurial attitudes of the owners who need to be able to have the adequate perceptions of what market requires. Although the process of setting up a company in an administrative way is not so complicated, more discursive may become the methods of scaling the microenterprise performance both in an internal and external dimension, which is strongly correlated with innovations, taking into account scaling in terms of production, processes, market expansion or generally improving internal entrepreneurial performance. Microenterprises do not usually possess appropriate resources in order to proceed or even start scaling processes, which is again the issue of possible open innovativeness and obviously budgeting.

As it might be said that this depends on the individual and unique characteristics of an enterprise, another issue is that most micro-entities face problems of resources shortage. There is a need for external services of knowledge for these companies quite often. The need for resources, which is one of the important elements in the functioning of micro-, small- and medium-sized companies, positively determines the need for cooperation and at the same time the openness of the company. This openness could be characterized as both individual and institutional due to the nature of relationships. There is a need therefore for an organizational cooperation to support organizational innovative capabilities and as a result to impact chances of survival and prolongation of organizational life cycle.

Polish micro-, small- but also medium-sized companies are more and more often looking outside in order to obtain necessary resources for product improvements or generally ideas for new products. The need for

changes as has been indicated, originating from customers' needs and may be more widely defined as arising from the surroundings. In a very large scale there are also globalization factors which more and more strongly influence the processes of necessary and expected changes. The need for positive changes in terms of added value for product or process may be referred to as the imperative. This results from its obligatory nature whether the company expects to survive and successfully operate. The globalization effect is that it determines to a higher extent the need for competitiveness. At the same time it allows to access the wider range of markets with foreign customers or geographically distanced potential clients. Globalization, to a stronger extent, may be observed in a national dimension in influencing open innovations in Poland.

An interesting and at the same time surprising phenomena, in the national context, has been unveiled where the entities competing have started to cooperate. The perspective of a relational surplus may be the explanation of this unexpected organizational behavior. The opportunity to gain and achieve out of relations have overcome the barriers which competitive activities had created. This underlines and confirms the rationale for the definition of imperative in terms of networking. The companies understand that the relational profit of the cooperation with their competitors is more important than threats from the competition. This could be also described as overcoming perception of competition with the relational profit perception. This coopetitional behavior phenomena is therefore observed in Poland.

In the aforementioned circumstances of functioning of enterprises, the openness of innovation processes is present, but at the same time barriers referring to the shortage of resources in terms of innovation implementation. From that perspective, Poland, being listed as a moderate innovator (Eurostat), compared to other European countries, is yet a country with a very low level of innovativeness. Still, in terms of open innovations, Poland could be described as a country with even lower level of innovativeness, which results from the low level of cooperational ties between business and science. This is, to a huge extent, the reason for the low level of entrepreneurial culture as well as the still underestimated innovation budgeting. The lack of financial resources seems to be the cause.

10.3 The State of SMEs Innovativeness in Poland

According to reports (KPMG 2014) for almost half of the Polish enterprises innovativeness is the strategic objective in business performance, and almost 80% of medium- and large-sized companies are in progress with innovative activities. Almost half (44%) of the Polish companies are afraid of loss and investment risk and this refers to multifunctional innovative activities. Most Polish companies (80%) plan to increase the range of innovative activities.

According to the results of a survey of domestic academic firms, among the determinants that led them to innovativeness, the issues of bank financing opportunities, venture capital funds and business angels were generally assessed in a similar way to those of other determinants such as: academic incubators, legislative conditions, access to infrastructure, etc. The most important determinant of innovative activities was the level of the sector's competitiveness (over 80% of indications), the second factor was venture capital funds and loan funds and business angels (69.80% of indications). Generally most "financial" determinants have been indicated by above 60% of companies in comparison to other remaining "non-financial" determinants of innovative activities. The financial factor is therefore considered as a strong incentive for innovative activity, but not as strong as the threat of competition in the sector. Innovative activity conducted by enterprises in Poland is characterized by a higher share of innovative industrial enterprises than service enterprises; see Fig. 10.1, where data are presented in this respect for the period 1998–2017.

The data in Fig. 10.1 shows that the share of innovative enterprises in Poland increased with the growth in their size class in the whole period analyzed, both among industrial and service enterprises. Taking into account the particular years of the analysis, it was shown that:

- Among small service enterprises the share of innovative enterprises decreased in total until the years 2009–2011. In later periods a slight increase in their share was observed and in the years 2014–2016 the share of innovative small enterprises constituted 11.2% of their total, and in the years 2015–2017: 11.3%.

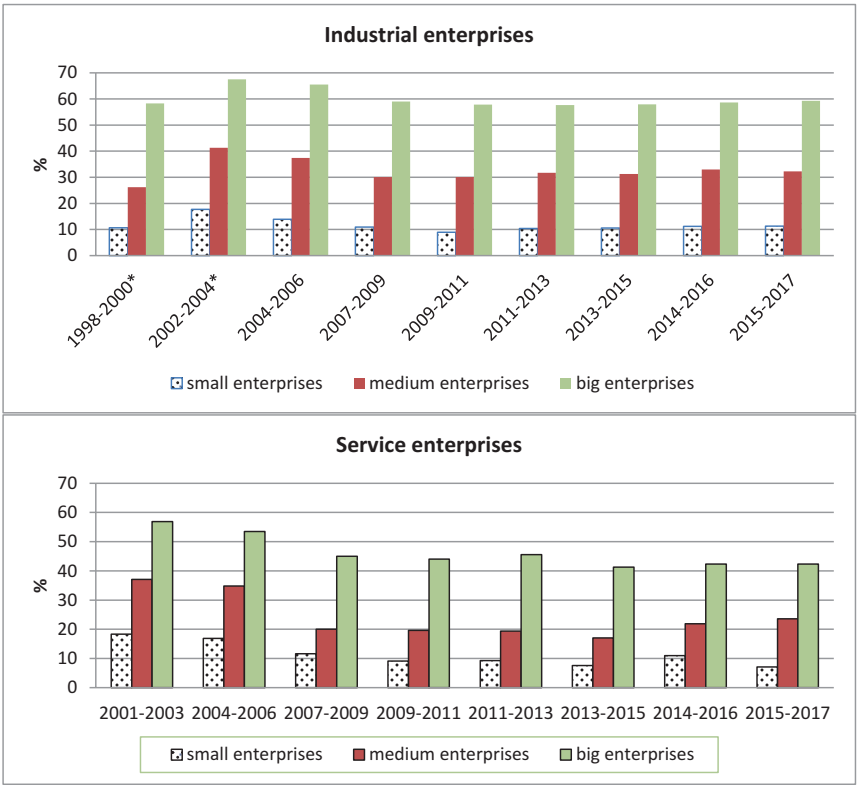

Fig. 10.1 Share of innovative industrial and service enterprises in Poland by size class for each period from 1998 to 2017 (in % of the total for each period from 1998 to 2017). (Source: Own elaboration)

- Among medium-sized industrial enterprises a similar dependence was shown as follows in small industrial enterprises, with a share of 33% in 2014–2016 (similarly, in 2015–2017: 32.3%).
- Among small service enterprises, the share of innovative entities decreased from 18.3% in 2001–2003 to 9.1% in 2009–2011, and in 2015–2017 it constituted only 7.1%.
- Among medium-sized service enterprises, the share of innovative entities also significantly decreased from 37.1% in the years 2001–2003 to 17% in 2013–2015, it increased to 23.6% between 2015 and 2017.

Within the innovative activity of SME sector enterprises, one can distinguish those entities that implement product and/or process innovations, as well as marketing and/or organizational innovations, and also those that cooperate in the scope of innovation. Data in this respect obtained by enterprises of the SME sector in Poland in comparison to EU SMEs are presented in Table 10.1, taking into account selected years in the period 2006–2018.

The data presented in Table 10.1 show that in the years 2006–2009 the shares of SME implementing innovative activity in Poland increased accordingly, and then in subsequent periods they systematically decreased and it concerned both:

- SME enterprises introducing their own innovations (from 17.2% in 2009 to 8.3% in 2018)
- SME cooperating with other market entities (from 9.3% in 2009 to 3.5% in 2018)
- SMEs introducing product or process innovations (from 20.4% in 2009 to 13.3% in 2018)
- SMEs introducing marketing or organizational innovations (from 29.1% to 11.4% in 2018)

Table 10.1 Share of innovative enterprises of the SME sector in Poland and in the EU in selected years in the period 2006–2018 (in %).

Description		2006	2007	2009	2013	2016	2018
Enterprises in the SME sector introducing their own innovations in their total number	PL	12,5	13,8	17,2	11,34	10,1	8,3
	EU	21,6	32,4	30	31,83	28,7	28,8
SME sector enterprises cooperating in the field of innovation in their total number	PL	9,1	9,1	9,3	4,15	3,9	3,5
	EU	9,1	7,7	9,5	11,69	10,3	11,2
SME sector enterprises introducing product or process innovations in their total number	PL	–	–	20,4	14,36	13,1	13,3
	EU	–	–	33,7	38,44	30,6	30,9
Enterprises in the SME sector introducing marketing or organizational innovations in their total number	PL	19,3*	19,3	29,1	19,95	14,2	11,4
	EU	34,0*	48,1	40,0	40,30	36,2	34,9

Source: Own elaboration

*The data refer to enterprises conducting organizational innovations.

It is worth noting, however, that the NBP (National Bank of Poland) survey results indicate a much higher percentage of innovative enterprises in Poland defined as mature entities, among small, medium and large entities, which would indicate a stronger position of mature entities in this respect against the background of newly established or young ones, with an unstable position on the market of SME sector entities.

It should be stressed, however, that there is a clear difference in the scope of shares of SME implementing innovative activity in Poland in relation to the total number of SMEs in comparison to the EU average (SME in the EU), which is expressed by significantly lower results of SMEs in Poland (about 2–3 times). Among the main reasons for the lack of introduction of innovation, entrepreneurs of entities inactive in Poland pointed to: costs of innovations being too high, inability to finance them from internal sources, difficulties in obtaining public grants or subsidies for innovations, and legal regulations creating uncertainty and additional burdens.

Therefore, the results indicate the unfavorable situation of SMEs in Poland in this respect and the need for changes, because the implementation of innovative activity contributes not only to the increase in productivity of enterprises, but also promotes a rapid growth of these entities in terms of employment and income. Also worrying are the indicators illustrating the results of the implemented innovative activity, expressed, e.g., by the number of patent applications or the share of exports of goods, the so-called high technology, which in comparison to other EU countries are significantly weak. Moreover, it is indicated that the activities of Polish enterprises are generally imitative (according to data for 2014, only 2.2% of enterprises from Poland introduced a new product innovation on a global scale and this was the lowest result among the EU countries). This is evidenced taking into account the low level of percentage of Polish companies that introduced product innovations related to those which introduced product imitations. The European situtation in this context—comparison between product innovations and product imitations—is much better. A similar situation is observed in the area of process innovations.

In enterprises of the SME sector in Poland, a significant heterogeneity of their entities is observed, which has an impact on the specificity of

their innovative behaviors (some of them implement them through internal activities, others through cooperation or complicated connections) with other market entities. Low level of expenditures on R&D and cooperation with scientific and research centers and institutions supporting the development of regional entrepreneurship influences the result of participation of small enterprises in Poland conducting internal R&D activity at the level of 23% of the total number of innovative companies. Barriers to knowledge in these entities are related to the frequent lack of appropriate competences of the owner or managerial staff, which implies the lack of separate R&D units, regardless of financial issues in this respect. Limitations concerning knowledge of SME managers result in the lack of proper use of appropriate tools and modern management methods, including in the scope of innovation, and moreover, the functioning of enterprises in the SME sector, especially the smallest units, is oriented on operational activity, often without determining the level of risk and lack of scenarios of the state of the environment and development strategy.

Data presented on the innovative activity of enterprises of the SME sector in Poland show the need for active changes in this area not only at the EU level (EU programs and funds), but above all at the national level, because external conditions clearly affect the transformation of the existing sources of competitiveness of enterprises and indicate the need for implementation of development based not only on investments but also on innovation.

10.4 Financial Opportunities to Support Innovations in Poland

The financing of innovative activities may be considered both from the point of view of financing the phase of innovative solutions and the phase of implementing them. What seems to be particularly interesting from a national perspective is the fact that innovative activities are concentrated in large companies. It seems that such a specificity, which may not only concern Poland, but also from the perspective of the country, seems to be much more ‘acute’. This may be a result of the generally high level of

possibilities of financing development by large enterprises, which have sufficient financial means to do so. According to the results, the majority of investments are still made by enterprises from their own resources. The specificity of financing development activities is closely related to innovation, and investments are correlated with innovative solutions. From the perspective of mature industries, as was indicated, financing is mainly about activities aimed at organizational, process and marketing innovations, and in new and emerging start-ups these are mainly product and service innovations.

The issue of financing innovative actions can also be seen from the perspective of whether the financing concerns public or non-public units. In case of innovations financing it is possible to classify financing the creation of ideas and financing the implementation of ideas. The level of funds needed, for an individual, to implement the ideas is much higher than in case of their creation. This does not mean, however, that the phase of creating innovative solutions is a small financial burden for the enterprise (Tylżanowski 2016). The Polish case has a uniqueness when financing innovations is concerned. For years the economy has been centralized and the level of innovativeness, though its existence was observed, has not been high enough. The financial issues were the general problems, but also the issue of entrepreneurial culture, which had existed, but at the very low level. The stage of implementation of innovative solutions was a serious barrier also due to bureaucratic obstacles. Centrally oriented processes in economy were drivers in every aspect of economic processes which caused many problems. This generated long-lasting negative experiences and difficult-to-overcome challenges for the future. This may be observed now and financing should be the supportive instrument.

On the other hand, the categorization of financing for public and non-public entities concerns the enterprise sector, not only because of the division into enterprises in which the state's participation is significant, but also because of the financing of interdisciplinary consortia comprising entities from the public and private sectors (Kusio 2019). The issue of consortia creation is the reason for the need for open innovations. They, being largely discussed within Europe, are also the subject of research interest in Poland, even though the need for them could be described as much more significant. Open innovations, from the point of view of

previous centrally planned negative Polish experiences, seem to be a promising solution, to an extent higher than even other EU countries. The consortia issue should therefore be given a special level of importance. Financing of innovative projects can be categorized according to the criterion of the need to return funds to:

- Repayable: borrowing financial resources from various institutions, including financial institutions such as banks
- Non-repayable, including venture capital recapitalization or EU grants

Although in the case of funding of a nature that can be defined as non-repayable, the organization obtaining the funds is not usually obliged to return them, it is not possible to speak of a total non-repayability in this case. The condition for obtaining financing from funds of a subsidy nature is the necessity to prove innovation or the obligation to make available the results of a given innovative project. In a sense, therefore, an organization brings a return which may be of a social nature, i.e. in line with the nature of the financial resources it has obtained.

The characteristics of the division of repayable and non-repayable financing are related to the specificity of institutions providing co-financing. The main criterion is the objectives of these organizations, i.e. those that are financially or socially oriented. Financing innovations is connected with their specificity. The higher the level of social effects caused by the implementation of innovations, the greater the chances for a higher level of non-returnable co-financing.

Both venture capital (VC) and private equity (PE) are of special interest from the national perspective due to the fact that they are investing in companies that are not listed on the stock exchange (Ignatiuk 2014). VC funds are an alternative instrument for financing the activities of unlisted SME sector companies, which have at their disposal an innovative product, production method or service unverified by the market. Lack of market verification means high investment risk, but also the possibility of a significant increase in the value of invested capital (Ignatiuk 2014). Private equity (PE) investments are made by private investors in order to develop a new product or technology, increase working capital, improve

the balance sheet or other larger expenses and for scaling micro-companies this is of special need in the Polish case.

VC concerns investments in the early stages of development and in the expansion phase. VC is considered to be a variety of PE. The current level of PE investment in relation to GDP in Poland is 0.13% per annum and is three times lower than the situation in the Scandinavian countries (Rokosz 2019). Financing through VC may be preceded by financing by business angels, but also by EU or non-EU subsidies. This applies to a financing period of up to one or even two years after the start of operations. Grant funds, which belong to the non-returnable form of granting support, also include consultancy, i.e. non-financial forms, supporting entrepreneurs starting their business activity. The creation of project consortia may also be attended by persons conducting sole proprietorship, i.e. natural persons conducting business activity. Focusing on the national dimension on the offer of subsidy financing at the stage of setting up a business is related to the issue of low level of economic innovation in the country, which is identified, among others, with underfunding of innovative activity (Rokosz 2019). Other problems indicated are: lack of synchronization of particular programs of active innovation support policy, lack of defined metrics and lack of monitoring of progress in implementation of given assumptions. The problem of financing innovation relates mainly to microenterprises and start-ups, although the lack of adequate financing also concerns companies from the small sector (10–49 employees), as well as those employing more than 250 employees.

From the point of view of open innovations, the creation of which is based on solutions outside the entity and refer to the consortial projects, financing may also concern the entire consortium. The purpose of consortium constitution is in this case of creation and implementation of innovative solutions. Consortia implementing innovative solutions include both public and non-public institutions and those which are more oriented towards creating concepts as well as those oriented towards implementing concepts. In public programs financing implementation projects with a strong innovative accent, the interdisciplinary level is obligatory and it seems that a similar mode of decision on financing should be further deepened. The Polish participation in international consortia, which are constituted in the EU level in order to obtain

financial resources for R&D activities is generally limited to partnership, not as the leader but as the member and there are not as many entities as could be expected and included within applying teams (KPK 2019). The participation of companies from the SME sector, which are perceived in consortia as implementing units of innovative and unique results developed during the project, is of great importance here. The need to achieve financial and material effectiveness determines the uniqueness of an innovative initiative. The attractiveness of joining the consortia, from the Polish SMEs perspective, results from, among others, the donative nature of the funds.

The large variety of financial mechanisms in a form of financial programs—funds available at the Polish level as well as European level—indicates that there are financial opportunities for companies. Small and medium-sized companies are the ones towards which the supportive activities are directed by a variety of institutions. The financial perspective may seem prospective due to the wide range of financial Polish and EU programs. The ability to utilize those funds is however another issue. Polish companies, especially the small ones, often cannot meet the requirements easily in terms of obtaining external funding. The wide variety of financial sources for innovation financing is less problematic than the barriers to use those opportunities.

One main institutional support comes from the Polish National Center for Research and Development—the ministerial-level body with strong direction towards financing of innovation-related activities. The Polish name is *Narodowe Centrum Badań i Rozwoju* (NCBiR) and the main domain of the institution is to support the initiatives leading to the development of the Polish economy. The mission of NCBiR indicates the supportive role of the institution in terms of both companies and research units. The support refers directly to the institutions and development capabilities to create and utilize solutions based on research results in order to support furthermore Polish economy and Polish society. As the mission clearly states, the Center supports both sectors: business and science, this is also clearly referred in financial programs being offered by the Center. Within the Center, a variety of financial opportunities is directed to Polish enterprises. What is also important with reference to NCBiR is that it is the national and public body whose domain is

supporting innovations, but based on research, and preferably high-quality research, coming from class universities. The Center represents the national level of support and it supports innovative solutions both at the conceptual as well as the implementation stage.

10.5 Open Innovations Financing as a Perspective for Poland

Financing of open innovations, one of the less discussed sources of financing in the national perspective and especially directed towards open innovations, is the PFR Open Innovations FIZ. The program is dedicated to small and medium-sized companies that implement innovative initiatives in the formula of open innovation. Capital raised with the help of funds allows for certification of R&D results, creation of prototypes or development of further R&D works and their development. In order to obtain financing from PFR Open Innovations FIZ, an own contribution of 40% is required, the investment period lasts from 2018 to 2023.

Another source of national financing for initiatives aimed at creating innovations in the open formula is the Open Innovation Network established by the Industrial Development Agency. It is an EU project which, in the form of an instrument such as open innovation, aims to transfer technology to small and medium-sized enterprises. Within the Open Innovation Network it is possible to obtain co-financing for the purchase of such innovative solutions as know-how, patents, utility models or industrial designs. The value of the project cannot be lower than PLN 100,000, but the maximum amount of funding that can be obtained is up to PLN 200,000. National programs aimed at improving the use of the potential of SMEs, including human and material resources, include, inter alia, the HORIZON 2020 program, the Operational Programme 'Intelligent Development'—at the national level, 'Regional Operational Programmes'—at the regional/local level. The Ministry of Economy formulated the Innovation and Economic Effectiveness Strategy 'Dynamic Poland 2020' (SIEG), of which the Enterprise Development Programme 2020 is the executive program. The main objective of SIEG is a highly

competitive economy (innovative and efficient), based on knowledge and cooperation.

One of the most interesting and probably most promising possibilities of financing interesting ideas, their development and implementation is crowdfunding, which can also be defined as social financing. It consists of collected funds from Internet users for a specific initiative, not necessarily the business one. In the context of innovation, collections concern the development and creation of unique products usually. The beginnings of social financing are connected with the creation of the 'Indiegogo' platform in 2008, and then with the 'Kickstarter' platform in 2009, which is currently considered to be the most popular platform of this type for raising funds from Internet users. At the turn of 2014 and 2015, the market grew by 140% to the value of €30 billion, and according to forecasts in 2025, the value of the social finance market can oscillate around €100 billion. Awareness of the crowdfunding concept itself is not yet sufficiently widespread among the Polish society; research indicates that about half of Internet users know this English language term (Kowalczyk and Dudycz 2018). What is interesting is Polish Internet users are most likely to recognize foreign platforms rather than domestic ones: 'Kickstarter' was recognized by the largest representation of respondents, and only later were native crowdfunding platforms indicated, such as 'Polakpotrafi.pl' or 'Wspieram.to'. The willingness to participate in social financing campaigns results, among others, from the expectations of certain preferences connected with the future purchase of new products. Unfortunately, the barrier to joining crowdfunding actions is a long period that must elapse in order to obtain an innovative product. A significant barrier is also the risk associated with decisions to transfer funds, although as much as 80% of indications refer to an amount below PLN 100 declared for the willingness to join a social financing campaign. It seems that the explanation for this issue is that Internet collections are not only a business goal. Collections often concern various initiatives, including social, cultural and charitable ones.

For organizations financing the transfer of financial support for a specific project, it is tantamount to obtaining a guarantee of increasing the potential of the institution for which support is granted. Network cooperation, which results in innovative solutions, including actors

representing science, business and public administration, promotes mutual learning from at least different points of view, which representatives of these sectors have. Divergent views, which can even be described as clashes or discussion conflicts, often lead to effects of a compromising nature, which means benefits that will be obtained during the implementation of a given project will be able to be shared by public, scientific and business beneficiaries Ejdys et al. (2012).

The tendency to join community financing is connected with the expectation of obtaining unique values. Therefore, it seems that the higher the level of expected benefits from an innovative product, the higher the declared level of funds paid to the campaign should be. Forecasts of a very dynamic development of the crowdfunding market confirm not only the growing saturation of Internet access, but also the growing tendency to participate in such campaigns. It is a very positive perspective for companies and individuals whose aim is to develop and implement innovative solutions.

10.6 Conclusions, Implications and Further Research

The issue of innovativeness in the Polish case is of special importance. From the time perspective, the economy suffered due to centrally planned activities within the country and this has caused many present disadvantageous results as has been indicated. Still Polish enterprises differ significantly from those European and especially SMEs. Research on the innovativeness level shows still underdeveloped innovative activities of national companies. And yet when discussing Polish innovativeness there is even a stronger need to improve due to the need for adequate adjustment to the current innovative level of SMEs performance. That is where acceleration in terms of innovativeness support is needed. The increase in the need to support innovation in the country implies new challenges in the policy sphere at the national, but above all regional, level given the importance of smart specialization.

Current innovation processes in Poland resulting from changes in the organization's environment are increasingly of a supra-local nature. This

is influenced by internationalization and globalization, and in particular by European integration. One of the key factors describing innovative processes is the necessity of their dynamization and intensification, which results from the need to maintain a competitive position. The greater the range of the organization's activity, the higher the level of dynamization and intensification of innovation. The possibility of meeting the innovation requirements is the openness of innovative processes, which is determined on one hand by the need for access to external resources and on the other hand by the tendency to share their resources. This implies, on the part of enterprises, the need to pay attention to appropriate knowledge management within the company. Enterprises, especially domestic ones, being part of the SME sector may not notice, but also be unaware of, the possessed knowledge capital; however, it is a potential subject of research for the future.

Taking into account the need to dynamize innovative processes, directly related to openness to access to shared knowledge, as well as to making it available, one should also pay attention to the characteristics of the level of innovativeness. The organization should be characterized by an internal tendency to implement innovation, the ability to implement innovation, and readiness to take risks inherent in the implementation of new ideas, concepts, ideas and inventions, the origin of which is largely due to human capital (Pichlak 2014).

Innovative capacity is what influences the development of innovation to a large extent and determines the possibilities of creating innovative solutions. The ability of the national economy or enterprises to innovate is the basis for achieving a higher level of development and a higher level of creativity and readiness for innovative development. The innovative capacity determines the level of innovativeness of all business units, in particular those with a high innovative potential, e.g. spin-off companies or newly established innovative enterprises. Innovative capacity is defined as that relating to research, intellectual, creative and technical activity, which indicates its reference to the nature of the enterprise's functioning. Innovative capacity of individual organizational units, such as SME, is of special importance in a regional context. As Varga and Szerb pointed out (2002) in his studies, there are dependencies between the expenditures on scientific research in a given center or centers, and the effectiveness of

economic development in the territory where these investments are located. The results of the observations indicate (Feldman 1994) that the mere funding, even at a high level of scientific research, without a 'critical mass' of high technology enterprises and lack of production facilities, venture capital and entrepreneurship culture, means that there is no 'spillover' effect, i.e. the phenomenon of extrapolation. However, the spatial concentration of high technology production and business-related services gives a definitely positive effect together with the intensive local knowledge flow of academia-business. Equally noteworthy is the relationship between the costs of knowledge transmission and increasing the distance in the geographical sense. This dependence, at a later stage, affects the direction of the desired impact of the research entities. The local environment, if it develops in the field of high technology production and is accompanied by the concentration of business-related services, should have a very positive impact on the development of the region. This implies the significance of EU-based financing instruments towards smart specialization support. The results of supporting regional development through the concept of smart regional specialization can certainly be an interesting subject for research.

The main obstacles in innovation financing in Poland is the level of costs—for SMEs. Also what has been indicated are generally high innovation costs, key limited possibilities of innovation financing from the internal sources of the enterprises and difficulties in obtaining finances from public sources, such as public grants or innovation subsidies, but due to own limited resources, of which contribution is a must. Other obstacles were considered legal regulations, which lead to uncertainty and additional difficulties. Innovation leads to growth in terms of enterprises' productivity, their growth in employment, but also incomes and yet it is a key factor in regional development. The use of a specific financing source depends on the specificity of a given undertaking, the level of the expected budget for an innovative project and the extent to which it is adequate to the financial offer of various institutions, such as public or non-public. Moreover, depending on the type of funds obtained, the type of investments undertaken Banaszak et al. (2016) by a consortium or a single enterprise will also depend on the type of funds obtained. Open innovations as closely correlated with the consortia formula of

innovativeness increase may be for the Polish case an opportunity which seems not to be properly perceived. This implies the need for further research on the level of engagement of Polish SMEs not only in the innovative activities but especially open-innovative activities. What should also be fruitful in the Polish case is the reference to other European SMEs in terms of open innovations.

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