# The Purposefulness and Effectiveness of Supporting Entrepreneurship with Public Funds – EU Funds for the Development of Self-Employment and Startups

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#### Abstract

**Purpose:** The paper discusses issues associated with using funds that support the development of entrepreneurship – the purpose of the paper is to answer questions regarding the purposefulness and effectiveness of financial instruments from EU funds aimed at the development of emerging businesses (startups).

**Methodology:** The paper analyzes previously conducted research studies in the field of the discussed topic, it systematizes and describes the financial instruments from EU funds supporting self-employment and startups in their early stages of activity. It also provides an overview of evaluation reports concerning these instruments. The paper also contains a case study: an analysis of the effectiveness of a selected project supporting the development of entrepreneurship (co-financed from EU funds), in which the method of evaluating the net effect of the support in the short term has been used.

Findings: An analysis of previously conducted research studies has shown that properly designed State aid targeted at those starting up their own business is sensible, as it provides them with seed capital and it helps them survive the most difficult period of the so-called "startup". However, there is a lack of comprehensive studies to confirm the positive impact of business support interventions carried out using EU funds. The methodology of evaluating the net effect used by the Author in the conducted study has made it possible to identify the actual size of the – positive – impact of the selected project on the growth of self-employment.

**Limitations:** The study revealed some limitations – the method and time of the study allow to capture the phenomenon on a micro-scale, in the short term. The institutions that are involved in the process of allocating funds should develop a comprehensive methodology that implements the idea of evaluating the net effect, allowing to assess the effectiveness of the support at regional and national level in the long term.

**Originality:** The originality of the paper consists in applying the theories and results of previous studies to the Polish practice of supporting businesses at their early stages of development as well as applying the method of evaluating the net effect, which allows to determine the actual impact of the intervention.

Keywords: cohesion policy, EU funds, startups, net effect, evaluation

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### Introduction

The entrepreneurship rate of an economy is considered to be a key factor for economic growth and the ability to compete. Supporting self-employment and entrepreneurship with public funds in the early stages of business development is very common in most countries in the world today. The decision to support such ventures is based on the widely described in economics theory of failure of the free-market economy, which assumes that there are situations that confirm market failures and inefficient allocation of resources, the negative consequences of which are evident not only in the economic sphere (see Storey, 1994; Felsenstein et al., 1998). Supporting the development of entrepreneurship has broader social benefits - it is complementary to measures undertaken for combating poverty and social exclusion of individuals and their families (Blanchflower, 2000). Although these measures are targeted at private entities, their aim is to achieve the desired socio-economic goals (Fornalczyk, 1998, p. 13). Therefore, to a certain extent, State intervention involving the support of private sector companies is a justifiable and even desirable tool complementing free-market mechanisms and influencing the decisions of market players (Karpiński, 1992). However, there are also critical opinions concerning this issue. For example, Shane believes that using financial incentives to encourage people to start a business does not translate into economic growth or the creation of a significant number of new jobs, as small, emerging businesses cannot, as a rule, be regarded as tools for creating economic prosperity (Shane, 2009). Whereas research studies conducted by van Praag and Versloot demonstrate that an increase in entrepreneurship is closely correlated with the economic condition of a given country or region, and thus stimulating it - using a variety of publicly-funded financial instruments – is pretty much pointless (van Praag and Versloot, 2007).

The question about the purposefulness and effectiveness of public institutions using financial instruments to support entrepreneurship is particularly important in view of the continuously increasing sums of money allocated for this purpose, which come from EU funds assigned to Poland under the EU Cohesion Policy Program. As noted by the Minister of Regional Development Elżbieta Bieńkowska, the funds that are assigned to entrepreneurs in the form of EU grants will probably increase in subsequent years. This is due to the fact that in the EU's Financial Perspective for 2007–2013 mainly infrastructure investments were subsidized (predominantly in the field of transport and the environment), while in the years 2014–2020 it is planned to put more emphasis on supporting entrepreneurship².

In view of the above, this paper will focus on issues associated with the use of funds supporting the development of entrepreneurship. Their assessment could be based on a verification of the programs and projects aimed at supporting entrepreneurship in terms of the so-called evaluation criteria concerning the adequacy of the applied instruments, their effectiveness and efficiency as

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A detailed budget and the projects of the operational programs for the subsequent years are currently being prepared and negotiated. The final details on the amounts that Poland will receive from the EU in the coming years should be known in 2012.

well as the sustainability of the results achieved through them. However, due to the complexity of the issue, the multitude of public instruments aimed at promoting entrepreneurship, as well as due to restrictions on the volume of the text, the key objectives within the framework of this paper shall be as follows:

- an analysis of previously conducted research studies on the purposefulness and effectiveness of supporting self-employment and emerging companies (startups) in the form of subsidies;
- a classification and characterization of the financial instruments from EU funds supporting self-employment and startups in their early stages of activity;
- an overview of evaluation reports concerning the instruments used in Poland;
- a presentation of research results concerning the effectiveness of a selected project supporting the development of entrepreneurship (co-financed from EU funds) determining the net result of this support in the short term;
- a formulation of recommendations and identification of the main barriers (limitations) to conduct further research on the support of self-employment and entrepreneurship in the early stages of business activity.

### The Legal Basis and Purposefulness of Supporting Startups through State Aid

The attention to creating the right conditions for equal competition between companies is the basis of EU legislation. According to Article 87 paragraph 1 of the Treaty establishing the European Community (TEC), any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favoring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the common market. However, this provision is not equivalent to a total ban on supporting the private sector through public funds and that is why by operation of law or by decision of Community authorities some derogations in this regard are permitted.

The European Union defines State aid as any benefit obtained by an entrepreneur from public authorities. Granting State aid to enterprises is allowed as part of support programs for the economic leveling of regions in Member States (regional aid) and support granted to selected sectors of the economy or categories of enterprises that are encountering economic difficulties (sectoral aid). Additionally, so-called horizontal aid programs are permitted, which are targeted at companies regardless of the economic sector or region, supporting the development of selected fields, such as: research and development, innovation, environmental protection, etc. State aid for entrepreneurs can also be granted under the so-called *de minimis rule*<sup>3</sup>.

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<sup>3</sup> De minimis aid is State aid awarded to an enterprise, which does not require notification to or clearance from the European Commission.
Under the law, State aid that does not exceed EUR 200,000 granted over any three subsequent fiscal years does not require notification to or clearance from the European Commission.

A particular area of State aid are emerging businesses (startups). Although it is difficult to refer to a single definition, it can be assumed that a startup is a new business entity in its initial phase of functioning. The period of time during which such an enterprise will be referred to as a startup may vary, but it should be assumed that it continues until the product, service, business model are verified by the market and until the target business model is developed (see Tokila, Haapanen and Ritsila, 2008). A startup is a company that has started its business operations and is in its initial phase of development, regardless of its size, although usually this is a micro or small company.

State aid for startups is usually directed at people or companies that have just started implementing their business concepts. Availability of support for startups increases the supply of entrepreneurship and thus causes a greater part of society to undertake self-employment. Its purposefulness is also based on the belief that entrepreneurship is the basis for the creation of new jobs, and many potential entrepreneurs are not able to obtain/organize the necessary resources to start and develop a business. This situation is pointed out by a number of researchers, who focus their studies around the issue of the "survival" of startups (e.g. Bates, 1990, Holz-Eatkin et al., 1994; Taylor 1999; Falter 2001; Rissman, 2006; Georgellis et al., 2007). The survival rate varies based on the area and time (or even the adopted methodology) of the conducted research. For example, the results of the analyses of the OECD indicate that 30% to 40% of startups do not survive the first two years (Scarpetta et al., 2002). Similar data is provided by research studies conducted in the Polish market. According to the authors of reports on the situation of micro and small businesses in 2010, these types of enterprises find it the hardest to survive the first year of business activity. This is when they are the weakest, and many of them give up continuing their business operations. With each subsequent year of functioning, the entrepreneurs gain experience in running a business and overcoming existing barriers, which translates into an increase in the survival rate of these companies. However, according to the data, only 1/3 of businesses are able to survive another 5 years in the market (Raport o stanie..., 2010).

Based on current research it can be concluded that the factors that increase the probability of startups surviving in the long term fall under three categories: 1) the individual characteristics of the entrepreneur; 2) the attributes of the actual venture; and 3) the conditions characterizing the environment of the startup (Tokila, 2011). It should be noted here that not many researchers focused on the impact of start-up grants on the survival rate of these emerging businesses.

Research studies conducted in Spain by Cueto and Mato focused on the survival rate of subsidized companies, set up by men and women, but they did not compare the obtained results to the rates achieved among companies that were set up without public grants (Cueto and Mato, 2006).

Del Monte and Scalera concentrated in their research on the survival rate of small businesses, which were created as part of a start-up program in Italy. Based on the suggested model they attempted to identify the impact of three variables regarding the size and the capital/labor ratio

as well as the fact of receiving a grant on the duration of the business operations of startups. Based on the obtained results (in which this variable turned out to be insignificant) these authors conclude that comparing the survival rate of companies, those that are subsidized as well as those that do not receive any aid, should not constitute a criterion for the assessment of the effectiveness of such programs, since their purpose is to equalize the opportunities of these businesses. The fact that subsidized companies have a similar survival rate speaks in favor of public interventions, which should reduce unequal access to capital for emerging businesses (Del Monte and Scalera, 2001)<sup>4</sup>.

Extremely different results were obtained by Pfeiffer and Reize, who studied the survival rate and growth of employment in emerging companies that were registered in Western and Eastern Germany. The study sample that was analyzed included subsidized companies as well as companies that did not receive any form of State aid. The survival rate of subsidized companies turned out to be lower in both analyzed regions – East and West (Pfeiffer and Reize, 2000).

The most current and complete research studies on the impact of subsidies on the survival rate of startups have been conducted by Tokila. The uniqueness and complexity of these research studies consists in adopting a long time horizon (the research covered a period of 14 years), large samples (more than 20,000 start-up companies) and the use of a quasi-experimental methodology – i.e. comparing subsidized startups with a counterfactual group (identified using the propensity score matching method)<sup>5</sup>. The author of this work focuses on the following issues: determining the survival rate in the analyzed groups and identifying the factors that increase the survival probability of startups in both groups. The obtained results indicate that the average duration of start-up business activity in both groups is the same and amounts to 4 years. However, the survival rate of startups that are supported through State aid turned out to be statistically higher both in terms of their first year of activity and in terms of the whole analyzed period<sup>6</sup>. Interestingly, the author argues that the founders of subsidized firms that failed, registered themselves as unemployed more often, while entrepreneurs that started businesses without subsidies and that also failed, undertook other professional activities (Tokila, 2011).

So far, no research studies with a similar profile have been conducted in Poland. Research studies conducted as part of the process of evaluating the implementation of EU funds also do not provide any information about the impact of subsidies on the survival rate of emerging businesses in Poland. To date, the most comprehensive data on the efficacy of instruments of direct support to companies (the evaluation was conducted 18 month after granting

<sup>4</sup> However, the research studies of Del Monte and Scalera had limited range, and the results should be treated rather as a case study of the given program.

The concept of using counterfactual groups in research studies is explained by Rafal Trzciński in his work: Wykorzystanie techniki propensity score matching w badaniach ewaluacyjnych (Using the propensity score matching method in evaluation studies), PARP 2009.

The survival rate for subsidized businesses in the first year was 79.4%, and for non-subsidized businesses 74%; while for the whole analyzed period these rates for both groups were 44.6% and 37.2% respectively.

the subsidy) are provided by a publication of the Polish Agency for Enterprise Development (PARP), which concerns the support given to companies in the years 2004–2006 as part of the Sectoral Operational Program – Improvement of the Competitiveness of Enterprises (SOP-ICE). However, the analyzed instruments of financial support were not of the "typical" start-up nature – although startups did have the possibility to benefit from investment subsidies within selected Measures of the SOP-ICE, they did not constitute a specifically separate group of beneficiaries, and the Measures were not specifically targeted at supporting emerging businesses in their initial phase of functioning. Hence the share of emerging businesses (i.e. those established in 2005 or later) that benefited from such a subsidy was minor – e.g. for Measure 2.2.1 Support for Enterprises Undertaking New Investments it only amounted to 7% of all the beneficiaries (Ocena instrumentów..., p. 146).

The only publicly available research studies on the effectiveness of support for startups concern the support that emerging businesses in Silesia could obtain as part of Measure 3.4 of the Integrated Operational Program for Regional Development, which was implemented in the years 2004–2006. However, this research is limited to determining the impact of receiving a subsidy on the development of the business by its owners, and completely ignores issues associated with the impact of the subsidy on the survival rate of the company. 90% of the subsidized entrepreneurs that participated in the research study claimed that the received funding had a significant impact on the development of the company. This effect should be considered both in terms of direct impact and in terms of added value in the form of stimulating new investments and new projects "forced" by this support. According to the respondents, the received support had the greatest impact on improving the financial situation (e.g. increased revenues, reduced costs, increased net profit) – this view was shared by almost 95% of the respondents. The increased number of customers of products or services, which was observed in nearly 90% of the surveyed companies, was considered to be the most important direct result of the projects (*Ocena wpływu...*).

# The Characteristics of the Instruments Supporting Self-Employment and Startups Funded by the EU

Since its accession to the EU structures, Poland has become a full-fledged subject and beneficiary of the EU Cohesion Policy Program. As part of two consecutive financial perspectives for the realization of adopted operational programs Poland will receive a total of over 80 billion EUR (respectively 12.8 and 67.3 billion EUR). These periods, aside from the allocated amounts, also vary in terms of the program documents based on which funds were implemented. Therefore, when classifying EU funded support instruments for startups one should consider the differences in the adopted budgetary solutions within both perspectives.

Generally speaking, EU funded instruments supporting self-employment and entrepreneurship in the early stages of business activity include:

- direct subsidies, which, considering key issues based on the activity and the program, depend on: the amount of funds allocated for a given entrepreneur, the period of time the company has operated in the market (here we distinguish subsidies for the unemployed to start a business and subsidies for businesses that are active in the market for no longer than 3 years from the date of application), the place of business (rural or urban);
- bridging support (accompanying subsidies), which is granted for 6 or 12 months from the
  date of the contract for granting bridging support, and includes financial bridging support
  paid out monthly to cover the costs of ongoing operations;
- preferential loans (so-called renewable instruments);
- credit guarantee funds, which provide a guarantee for financial liabilities for credit-worthy entrepreneurs that do not have the securities required by the funding institution. The guarantees that are granted to entrepreneurs range from 50% to 80% of the loan. In some cases the maximum value of the guarantee is limited to a specific amount.
- indirect support provided to institutions in the business environment, the task of which is to support entrepreneurs in running their businesses. An example of such support could be aid provided in the form of business incubators, information and advisory assistance as part of the National SME Services Network (KSU) and the PARP Information Center, education assistance as part of the trainings offered by the e-learning platform of the PARP Academy.

Sometimes, the resources aimed at supporting emerging businesses in their initial phase of functioning are available as part of a wider support program for the SME sector. For example: in programs that provide support for micro-enterprises the regulations include a provision that only companies that operate in the market for no longer than 3 years may apply for a subsidy. In other cases support for startups is one of the possible to obtain forms of support (e.g. as part of the ongoing project: "Support for investments of the SME sector and startups through loans under the JEREMIE initiative of the Kuyavian-Pomeranian Voivodeship").

Because of the assumptions made in this paper, further considerations will only concern support in the form of subsidies (grants) for the establishment or development of an emerging company (startup).

In the years 2007–2013 16 regional operational programs are realized at provincial level. Each of them provides for the possibility of obtaining a business start-up grant for entrepreneurs, although the criteria for obtaining such a grant, including the guidelines concerning the financial terms (the amount of the grant, the minimum or maximum value of the investment, etc.) indicated in the program documents vary per region. For example, in the Masovian Voivodeship business start-up grants are available under Measure 1.5 *The Development of Entrepreneurship*<sup>7</sup>. A subsidy for the purchase of tangible and intangible assets associated with the establishment of a new business or the expansion

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<sup>&</sup>lt;sup>7</sup> As a result of Measure 1.5 of the *Regional Operational Program of the Masovian Voivodeship*, by the end of 2013 it is planned to aid 1000 enterprises (600 micro- and 400 small enterprises) in the form of direct investment aid (Ekspertyza..., 2010, p. 3).

of an existing business can be granted to micro-enterprises, but they have a specified minimum and maximum amount of project financing (respectively PLN 117,647 and PLN 588,235).

Business start-up grants are also available under Measure 6.2 Support and Promotion of Entrepreneurship and Self-Employment under the Human Capital Operational Program (HC OP), where up to PLN 40,000 can be obtained in the form of a one-time grant and around PLN 1000 of monthly bridging support (granted during the first 6 or 12 months after opening a business). As in the case of the above-described Measure 2.5 of the Integrated Operational Program for Regional Development, aside from the grants, beneficiaries also receive support in the form of training and consulting<sup>8</sup>.

A special solution has been adopted as regards support for people living in rural areas who want to start their own businesses in rural areas or in towns of up to 5 thousand inhabitants. They can apply for a startup grant as part of Measure 312 Support for the Creation and Development of Micro-Enterprises under the Rural Development Program. This grant can amount to 50% of the costs of the eligible net investments and the minimum amount of the grant is PLN 10,000 (with net costs of PLN 20,000), while the maximum amount is PLN 300,000 (with net costs of PLN 600,000 and more). However, in order to apply for this grant a number of conditions must be met – for example, the person applying for the grant must be younger than 60 years and cannot be insured in the Agricultural Social Insurance Fund (KRUS).

Another form of startup support that is currently available are subsidies for the unemployed who want to start their own business, which are granted under the HC OP system projects carried out by Regional Labor Offices. An unemployed person may receive a one-time grant (resources) for starting a business, including for the costs of legal assistance, consulting and advisory services in connection with starting this business, in the amount specified in the contract, but no more than 6 times the amount of the average wage (approximately PLN 16,000). For example, in the year 2011 the Labor Office of Warsaw allocated funds for startups from the European Social Fund as part of the system project "The Labor Market is Waiting" under Sub-Measure 6.1.3 *Improvement of Employment Ability and Increase of the Level of Professional Activity of the Unemployed*.

Startup support is also provided for under Measure 8.1 Support for Business Activity in the Field of Electronic Commerce under the Innovative Economy Operational Program (IE OP). The grants are intended for undertaking projects in the field of e-business (more specifically: the provision of e-services)<sup>9</sup>.

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Later in the paper the assumptions and assessment of the effectiveness of a sample project realized under Measure 6.2 of the HC OP are presented.

Just like in the previous period, a number of measures have been provided for to support business investments, which, although they are available to companies at their early stages of activity, due to the specificity of the areas that are being supported, they cannot be regarded as "typical" measures ensuring funds for startups. Such measures include, for example, measures of the IE OP (including grants for research & development and the implementation of the results of R&D activities, grants for consultancy services regarding the preparation of documentation and analyses necessary to attract external investors to buy shares, grants for startups in the export sector) and to a lesser extent measures of the Infrastructure and Environment Operational Program — I&E OP (including BAT-investments that reduce the production of hazardous waste generated in the production process).

# An Analysis of the Effectiveness of Support For Startups Within the WSAB Project

In this section of the paper the results will be presented of research studies on the effectiveness of the support offered under the project "Warsaw – the Capital of Ambitious Business" (WSAB)<sup>10</sup>, carried out by the City of Warsaw and the Kozminski University under Measure 6.2 of the HC OP using the method for evaluating the net effect. This method involves the following:

- > measuring the total effect of the project, as the overall change in terms of the established target;
- > separating the independent change of the realized project from the change that can be attributed to the impact of the intervention (net effect) (Górniak, 2007).

In view of the above, in the case of the WSAB project the key issue was the question of whether the percentage of people who had started their own businesses differs significantly among the group of people who took part in the project and the group of people who did not participate.

The study was planned and carried out in several stages, as described below.

- 1. Determining the percentage of participants that have started their own business (both with financial support obtained under the project and without this support). In order to supplement the data from the project documentation on the number of people who have started their own business using the non-repayable grant, a CATI<sup>11</sup> survey was conducted among the beneficiaries who participated in the project, but did not receive the grant for the implementation of their planned business concept. The study population consisted of N=285 people of which 143 people were participants in the first and 142 in the second round of the WSAB project.
- 2. Determining the counterfactual group and exploring the entrepreneurship in this group. This stage required taking the following actions:
  - identifying and creating a database of people who applied to participate in the project but did not
    take part in it, as a group with characteristics most similar to selected characteristics of the beneficiaries of the project (in this case it was the desire to start a business and living in Warsaw);
  - a random selection of a sample from the created database of people that applied to take part in the project and passed the stage of formal assessment (N=2307) of size n=357 people – equivalent to the number of participants in both rounds of the WSAB project;
  - creating a so-called counterfactual group;
  - conducting CATI surveys, in which, among other things, the percentage of people who
    have set up a business was studied.

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As a result of a recruitment selection process a group of 240 training participants was selected (120 in each round), who could participate in training courses on how to run your own business and individual consultancy sessions. Upon completion of such a training course, based on individually elaborated business plans, a group of 60 participants was elected (30 in each round), who received a grant disbursed in two tranches of up to PLN 40,000 for running their business.

<sup>11</sup> CATI (Computer Assisted Telephone Interview) is a tool for conducting research involving computer-assisted telephone interviews.

3. An analysis of the collected data and a compilation and comparison of the test variable in the counterfactual group and the group of final beneficiaries in order to evaluate the net effect of the project.

Figure 1 | Schematic representation of evaluating the net effect of the WSAB project

Determining the percentage of project participants that have started their own business Determining the percentage of people in the cointerfactual group that have started their own business Comparing the results in the counterfactual group and the group of final beneficiaries in order to evaluate the net effect of the project

Source: own elaboration.

Additionally, alternative sources of funding outside the project that were obtained to start a business were identified, as well as plans of the respondents to start a business and make use of EU funds.

The research study was conducted in April 2011 and included two groups: participants of the project that did not receive a grant for the implementation of their planned project and a so-called counterfactual group (a total of 479 people). The first study group consisted of 122 people, representing 43% of the population of people who participated in both rounds of the project, who did not receive a grant (N=282). The most common reason for not participating in the study was the inability to get hold of the people by telephone. Therefore, it was assumed that the sample was representative of the entire 282-element community.

The study of the counterfactual group included 357 people who were randomly selected from the database of people applying for participation in the WSAB project but who failed to qualify.

Table 1 | The size of the study populations and the number of people participating in the study

	The size of the study population (N)	Number of analyzed subjects (n)
Project participants that did not receive the grant	Round I — 139 Round II — 143	Round I — 57 Round II — 65
Counterfactual group	2307	357
Source: own elaboration.		

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### Research Results

As a result of the project 222 people started their own business, of which 72 people (36 people in each round) received financial support in the form of non-repayable grants. Since one of the requirements to apply for the grant was to register a business, a verification was conducted of the number of participants who, despite the fact that they had not received the grant, at the time of the research **actively** ran their business. Participants of both rounds of the project (study sample: 122 people) were asked the following question: "Is the business actively run (i.e. not suspended or closed down)?". A positive answer to that question was given by 40 people, which represents 32.7% of the study sample. Taking 32% as the point estimate of the fraction of all the project participants that did not receive grants (with a standard error of estimate of 0.04), it can be assumed that the number of people that have established and actively run a business among the general population (N=282) is 92. By adding the number of project participants who have started and actively run a business without a grant to the number of people who have started and actively run a business with the support of a grant, we get the result of 164, which represents about 46% of all participants of the project.

For comparison: the results of the counterfactual group indicate that the percentage of people that have decided to start a business is 22% (79 people in a group of 357 respondents).

Therefore, it should be concluded that the WSAB project has generated a positive net effect: the difference between the number of participants of the project that have started their own business (with or without a grant) and the number of people from the counterfactual group that have started their own business is higher by 24 percentage points (46-22 = 24 percentage points).

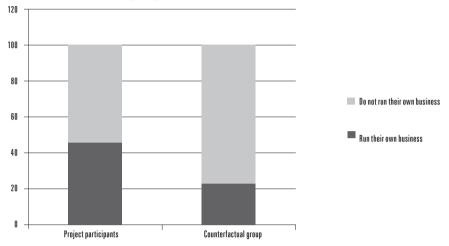
The leverage effect – which in this case caused the project participants to use resources other than public for the development of entrepreneurship – could result from the effectiveness of the training and consulting provided by the project. Those who took part in the training and consultancy sessions were equipped with practical knowledge, they received professional help, which helped them set up a business, convinced them of the possibilities of success and consequently of the purposefulness of engaging their own resources for the implementation of their business idea.

Table 2 | Running a business and participation in the WSAB project

	Actively running a business		Not running a business		Total	
	n	%	n	%	N	%
Project participants	164 (72+92)	45.9	193	54.1	357	100
Counterfactual group	79	22.1	278	77.9	357	100
Source: own elaboration.						

Figure 1 shows these data in graphical form.

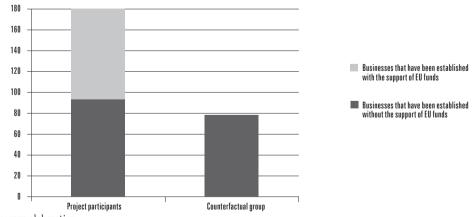
Figure 1 | The percentage of emerging, actively run businesses in the group of participants of the WSAB project and in the counterfactual group



Source: own elaboration.

It should be emphasized here that the analyzed data point to the so-called **leverage effect as a result of the project**. The leverage effect occurs when a public intervention encourages beneficiaries to private spending for the purpose of the intervention. With regards to the project in question, the fact that some participants did not receive a grant did not translate into passivity of these participants – the percentage of project participants that have decided to start their own business without State aid (26%) was higher by 4 percentage points compared to the number of people from the counterfactual group that have started a business (22%).

Figure 2 | The number of startups in the group of project participants and in the counterfactual group



Source: own elaboration.

## **Alternative Source of Capital Required to Start a Business**

Under the WSAB project only 20% of all the participants received financial support in the form of non-repayable grants to cover the costs necessary for starting up their own business. The remaining beneficiaries, who wanted to implement their business ideas after completing the training part of the project, had to look for other sources of funding in order to cover the costs involved. In order to identify other sources of funding for startups than grants, the respondents were asked the following question: – "Where did the funds come from that you invested in establishing your own business?".

At this stage no founds are needed

But funds (outside the WSAB project)

Loan

Own resouces

Counterfactual group

Figure 4 | Alternative sources of funding costs associated with starting a business in the studied groups

Source: own elaboration.

More than 88% of the project participants that did not receive a grant, and yet decided to start and run their own business, used their own resources for this purpose. One person declared having received a grant from EU funds other than those that financed the WSAB project. The responses of the counterfactual group were slightly different, although also in this group the majority of the respondents pointed to own resources (74%). In this group there is a higher percentage of people opting for applying for EU funds other than those available under the WSAB project (16%). The fourteen percentage points difference between the groups in terms of declaring the use of own resources confirms the occurrence of the leverage effect – the beneficiaries use private funds to a greater extent, while those who are not beneficiaries of the project, more often look for funding in the form of State aid.

It is worth noting that both the project participants and the people from the counterfactual group hardly ever opted for a loan to cover their financial contribution necessary for establishing their own business. This situation may be due to several reasons – difficulties in obtaining

a commercial loan associated with the reluctance of banks to support new ventures the success of which carries a relatively high risk, or the high costs of such loans, which are difficult to bear for newly established companies. In view of the above conclusion, it is important to emphasize the importance of projects aimed at supporting businesses in their initial phase of activity, which is characterized by a high risk of loss of financial liquidity and limited possibilities to raise funds from commercial institutions co-financed from public funds. The reason for the observed low percentage of people opting for loans may be, however, the specificity of those applying to participate in projects subsidized by the EU – their decision to take part in a project being the result of the unwillingness or inability to take out a loan on commercial terms.

### Plans for Starting a Business

In the course of the study the percentage of people from both studied groups – the project participants that did not receive a grant and the counterfactual group – was determined who, despite having declared the willingness to start their own business at the recruitment stage, decided not to do so. In the first group this percentage was 54.1%, and in the second group it was 77.9%. In order to examine the plans for starting a business, these people were asked a question about their plans for setting up their own business and subsequently the hypothesis was verified regarding the presence of significant differences in this respect between the two groups.

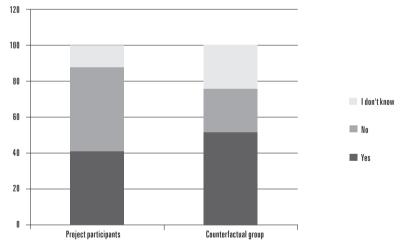


Figure 6 | Are you planning to start your own business in the near future?

Source: own elaboration.

An analysis of the received responses indicates that the desire to start a business in the near future is declared by more than half of the respondents from the counterfactual group, while this percentage among the project participants amounts to only 42%. Whereas as many as 46.5% of the surveyed beneficiaries of the project, compared to 27% of the respondents from the counterfactual group, are not planning to start their own business in the near future. A significant

difference between the two groups of respondents can also be seen in terms of their indecisiveness on the matter (the response "I don't know" was given by 21% of the project participants, who have still not started a business, and 11% of the respondents from the counterfactual group).

Statistical tests demonstrated that the fact of participating or not in the project was an important differentiating factor for the responses obtained to the question regarding plans for starting a business<sup>12</sup>. It is therefore necessary to consider how participation in the project had a negative impact on the willingness to be self-employed. This may have been caused by the fact that participation in the training and consulting sessions made part of the beneficiaries realize that, for some reasons – e.g. insufficient knowledge, lack of entrepreneurial abilities and attitude etc. – they should not sacrifice their future for the career of an entrepreneur. The knowledge that they acquired during the training and consulting sessions has allowed for a better assessment and negative verification of their chances for success in running their own business. Such a conclusion would confirm the purposefulness of combining training and consultancy with grants as a form of support.

### **Recommendations and Limitations for Further Research**

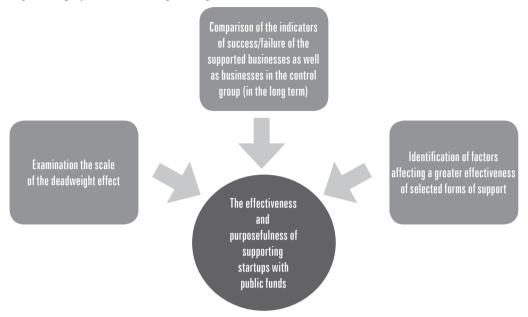
The above presented method of evaluating the net effect of projects/programs that support emerging businesses (startups) seems appropriate for examining the effectiveness and purposefulness of State aid in this regard. However, it should be noted that its use in practice may prove to be difficult and in extreme cases even impossible. An initial assessment shows that the biggest barrier in examining the effectiveness of startup support is the availability of data. Firstly, in order for the analysis to be accurate and reliable, a long-term observation approach needs to be adopted. The institutions that conduct such programs do not update the databases of the beneficiaries after the shelf-life of the project (2–3 years after the end of its implementation). Difficulties will also arise on account of the type of data that can be obtained from the available databases (e.g. the Central Statistical Office of Poland – GUS, the Regional Data Bank – BDR, the National Court Register – KRS), which limit or prevent the use of the Propensity Score Matching method when generating a counterfactual group in evaluating the net effect of a given program/measure/project. Also a low survey return rate may prove to be problematic, which is characteristic of this type of study group.

In terms of the final objective, which is to support entrepreneurship, the most important aspects of effectiveness are the elimination of the deadweight effect<sup>13</sup> and the sustainability of the achieved results – i.e. the ability of the aided entrepreneur to survive and to make profits in the long run, whereas effectiveness is achieved only when both these conditions are met at the same time.

Pearson's Chi ^ 2 test: 10.8099, at a significance level of p=.004496.

<sup>13</sup> The deadweight effect means that the measured effects of the conducted program or project would have been achieved in the given field or sector even if no such program or project would be implemented at all.

Figure 7 | The recommended basic areas of research on the effectiveness and purposefulness of supporting self-employment and startups with public funds



Source: own elaboration.

Research on the effectiveness of such support should provide the opportunity to answer the question regarding the factors that influence the success of aided entrepreneurs. These factors should be identified on the institutional side of the implemented measures (program assumptions, i.e. the accessibility criteria, the amount and terms of aid, the method and quality of business plan assessments, providing consultancy/training for grant recipients – to what extent, at which point in time of the process, etc.), as well as in terms of the characteristics of the beneficiaries (previous experience, abilities, etc.).

What remains a debatable issue is the purposefulness of verifying the effectiveness of startup support only in terms of economic profit. It must be remembered that European funds are instruments of the EU Cohesion Policy and their objective is to achieve certain social goals, hence the specificity of the programs and projects of support for entrepreneurs conducted using these resources. Here the special emphasis should be mentioned that the donor places on issues of equal opportunities, which are reflected in the guidelines regarding the provision of assistance to people at risk of marginalization in the labor market (e.g., people over 45 years old, the disabled, women, etc.). Therefore, the question arises to what extent the evaluation of effectiveness should be limited only to a verification of the success of the aided entrepreneur in terms of economic profit.

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