Ex-ante analysis concerning the possibility of applying financial instruments within the framework of the Regional Operational Programme of Dolnośląskie Voivodeship 2014-2020

Synthesis of study results (phase I, II and III)

Introduction

The "Ex-ante analysis concerning the possibility of applying repayable and mixed financial instruments in Dolnośląskie Voivodeship (DV) within 2014-2020 Programming Period" was conducted by a consortium of companies, i.e. PAG Uniconsult and IMAPP at the request of regional government of dolnośląskie region (*Urząd Marszałkowski Województwa Dolnośląskiego*). The purpose of the study was to evaluate the rationale, form and scope of the use of financial instruments within the 2014-2020 programming period in Dolnośląskie region, to formulate recommendations concerning their model and method of implementation under ROP DV 2014-2020 and to develop a methodology for evaluating the rationale and effectiveness of financial instruments during their implementation.

Current experience in implementing financial instruments

The Dolnośląskie region is one of the seven regions in Poland that actively supports entrepreneurship under JEREMIE Initiative. In 12 regions ROP managing authorities concluded direct agreements with financial intermediaries for supporting financial engineering instruments (FEI), whereas in Mazowsze, Pomerania and in the Kujawsko-Pomorskie region both types of FEI support were implemented. As regards allocation for financial engineering instruments within the framework of regional operational programmes in 2007-2013 in the amount of PLN 406 million, the Dolnośląskie voivodeship ranked high compared to other regions, coming as the second region.

Under the JEREMIE Initiative, entrepreneurs from Lower Silesia in the SME sector concluded 4 291 agreements for repayable funding in the total sum of PLN 521 million by 30 September 2014. As much as 68% of the agreements related to credits and loans under a global loan facility, 19% - to credits and loans subject to a portfolio guarantees and 13% - to counterguarantees. An absolute majority of agreements (89%) was concluded with micro-entrepreneurs. A considerable part of the agreements (30%) involved also businesses operating for no more than 24 months, which should be considered positive because those businesses encounter the greatest problems in obtaining repayable funding from commercial sources.

Qualitative studies proved that in general current support under financial instruments from EU funds is regarded rather positively, also because of the adopted implementation formula with the assistance of a manager of the holding fund. The interviewed financial intermediaries pointed out that poor recognisability of loan funds and guarantee funds, usually not subject to any specific legal regulations and formally not distinguished in any manner from other non-banking, often purely commercial sources of funding, is a certain problem.

In case of both types of funds (in particular, however, guarantee funds) the possibility of providing financing from structural funds only for supporting development-related objectives (pursuant to the prevailing EU regulations) and also lack of a clear, unambiguous definition of development-related purposes are a serious drawback. Because of this the offered funding is not attractive enough for some entrepreneurs seeking funds mostly for working capital purposes.

During the study attention was given to another important matter, i.e. the level of risk – from the lender's point of view – relating to loss due to unpaid loans or paid out guarantees. According to some respondents in case of certain products the risk should be elevated as to address the support better. A very serious challenge from the point of view of financial intermediaries is also – in many cases – the relatively low level of their capitalisation and consequently limited possibilities as regards own contributions and the maximum value of the projects, which shall become a serious challenge in the 2014-2020 programming period.

An important matter to which the respondents drew their attention had been also (in case of loan funds) interest rates for the granted loans. A considerable part of the loans was granted as de minimis aid with a low, preferential interest rate. The representatives of financial intermediaries agreed that the offered loans should be – naturally – more attractive than commercial financing; however, they rightly pointed that in the next programming period the minimal level of interest rates ought to be regulated to a slightly greater extent.

Important are also the limits of managing costs, significantly lower during the 2014-2020 period than in the 2007-2013 period. According to respondents, considerable reduction of managing costs coupled with a broad scope of controlling & reporting obligations may become a serious threat for efficient implementation of financial instruments.

As regards individuals starting business activities who were awarded loans under Measure 6.2 of Operational Programme Human Capital, usually they pointed to the great attractiveness of the offered loans, in particular owing to relatively low interest rates and also because of the lack of possibility of obtaining repayable funding from other sources. Regarded positively was also the grace period option in the repayment of the principal.

The main cause for applying for a loan under JEREMIE Initiative related to costs. The average declared interest rate of a loan under JEREMIE Initiative amounted to 2.1% with the median and mode equal to 2.0% and standard variation of 1.4 p.p. The average declared interest rate for commercial loans and credits for which SMEs from the Dolnośląskie region applied came to 7.6%, with the median of 7.0% and standard variation of 4.2 p.p. Half of the final beneficiaries admitted that in the absence of a loan under JEREMIE Initiative they would have not been awarded commercial external funding or would have obtained lower sums. SMEs with lower income, lower employment levels more often declared that without a loan under JEREMIE Initiative, the value of investment expenditure would have been much lower or they would have a problem in obtaining commercial funding ($p=0.10$, $p=0.02$). More than 90% of loans granted under JEREMIE Initiative had been intended for investment purposes, a definite minority for working activities relating to business growth, which proves greater convergence between the structure of loans granted under JEREMIE Initiative and the structure of external funding not granted to SMEs from Dolnośląskie region on the commercial market than the structure of external funding awarded to SMEs in Dolnośląskie region.

Among beneficiaries of guarantees granted within the framework of the counterguarantee scheme under the JEREMIE Initiative more than half of entrepreneurs admitted that simpler procedures were the cause for choosing the guarantee, whereas 1/10 of entrepreneurs pointed to lower costs. A major part of the respondents benefiting from portfolio guarantees and guarantees granted under the counterguarantee scheme admitted that the proposal of the bank itself was an important reason for opting for the guarantee. More than 60% of respondents declared that the portfolio guarantee was recommended by the bank and only 1/5 admitted they applied for the guarantee themselves.

The size (in absolute and relative values, i.e. referred to the level of income) of the financial gap of the declared unimplemented investments and the percentage of enterprises in the financial gap does not differ basically from the end beneficiaries under the JEREMIE Initiative and other micro-companies and SMEs in the Dolnośląskie region ($p=0.85$; $p=0.59$). Similarly, there is no significant difference in the size of the financial gap of the non-awarded external funding for entities being beneficiaries of JEREMIE Initiative and other micro-companies and SMEs within the region ($p=0.25$). However, this does not prove ineffectiveness of the support offered in the form of financial instruments: the value of investment expenditure in 2014 was statistically higher than among end beneficiaries under JEREMIE Initiative as compared to other micro-companies and SMEs in the region ($p=0.01$). End beneficiaries of loans under JEREMIE Initiative statistically more often also plan to increase employment in 2015 ($p<0.01$).

The social & demographic structure of final recipients of loans granted under the *Loan Fund of ESF* is not consistent with the structure of individuals who started a business within the last 12 months in Poland according to the Social Diagnosis data. Social groups underrepresented among final recipients of loans compared to the population of individuals who started a business in Poland in 2013 include – among others – persons aged 50+ and men. The areas of operation of persons starting a business as a result of a loan granted under the *Loan Fund of ESF* are varied, with the largest group of entrepreneurs providing gastronomic and hotel services, producing food products, clothing, and shoes and rendering financial and insurance services.

The average value of a loan under the *ESF Loan Fund* amounted to PLN 41 thousand, with a median equal to PLN 50 thousand, which means that the loan in the highest sum set forth in the rules was awarded to more than half of the beneficiaries. 70% of final beneficiaries declared they had no problems in obtaining a collateral. 80% of borrowers regarded as “very good” or “good” the growth prospects of their business over the next 12 months.

The mean and median of the interest rate of a loan under the ESF Loan Fund equalled to 2.5% with a standard variation of 0.5 p.p. 40% of beneficiaries declared that the maximum interest rate, still acceptable from the point of view of the project undertaken by them, could be slightly higher than the actual interest rate. The mean of the difference between the maximum expedient interest of a loan and the interest rate actually applied came to 0.7 p.p., with the median of the difference equal to 0 p.p.

Conditions of implementation

The legal framework for implementing financial instruments within the period 2014-2020 compared to the 2007-2013 period underwent considerable changes; in particular it became more detailed. Resources for financial instruments shall be provided differently, i.e. based on tranches that should not exceed 25% of the operational programme’s contribution to a particular financial instrument. Another important change involves the possibility of combining financial instruments with other repayable and non-repayable instruments financed from EU funds. The rules of financing guarantee instruments have also changed significantly, together with the limits of costs and fees for managing financial instruments.

Analysing the possibilities of using financial instruments

Within the scope of the study the possibility and rationale of using financial instruments in a number of areas, i.e. investment priorities had been analysed. Key conclusions and proposals are presented below.

Within the framework of investment priority 1b (IP 1.2 of ROP DV) the use of financial instruments is not recommended because of the support planned on a substantial scale under the national project – Operational Programme "Smart Growth", wherein Priority 1b is oriented on supporting such instruments on a countrywide level (Priority Axis 1 in OP SD focuses mainly on supporting R&D activities, including also through equity instruments).

In investment priority 1.5 (IP 3c) projects shall be implemented that help develop micro-companies, small and medium enterprises; moreover, it has been envisaged under ROP that support shall be provided to a large extent via financial instruments. The scope of necessary intervention was precised in the analysis through a diagnosis of the situation of enterprises, based on a quantitative study. The study shows – *inter alia* – that there are significant differences in the number of micro-companies and medium enterprises implementing investments (with such differences working against micro-companies) and that situation stems from the inability of micro-companies to finance such investments from own funds and low availability of repayable funding for them. Although the percentage of enterprises declaring the ability to finance the planned investment from their own funds is relatively high in Dolnośląskie region, then taking into account similar studies conducted in other regions across the country, the overall financial gap of SME counted as a sum of non-awarded financing in 2014 accounted for almost PLN 7.9 billion (of which nearly PLN 7.5 billion related to micro-companies) and counted as a sum of non-implemented projects in 2014 was equal to PLN 10.5 billion (of which PLN 9.1 billion for micro-companies). The current intervention to a large extent focusing on numerous, relatively small projects (which is a proper attitude in the light of the diagnosis) cannot eliminate the gap in terms of its scope. Because of this it is reasonable to continue current activities and to expand them under instruments financed from the funds of the 2014-2020 perspective. At present intervention addressed to enterprises is based mostly on loans, with a relatively small importance of guarantees and the main motivation among borrowers is the lower price of the loan rather than its greater availability.

In designing instruments to be implemented in intervention targeted at enterprises, attention was given firstly to ensure that the identified problems were addressed to the largest extent, secondly to establish an effective and efficient system not competing with the market offer and finally to ensure that grants are awarded above all for projects of a high innovation/new technologies potential (the awarding of the grant should be conditioned on the introduction of new products/services/technologies). In connection with the above, to maximise the impact of ROP on the SME sector, it was proposed to focus on guarantees and micro-loans and loans in small amounts (up to PLN 500 thousand) and for such narrowed instruments the gap is equal to approx. PLN 1.9 billion and proposed allocations amount to PLN 66 million in case of guarantees and PLN 93.5 million in case of micro-loans and PLN 142.5 million in case of loans (i.e. in total PLN 302 million).

With the assumed leverage of 6.7 for guarantees the proposed allocation in fact stands for a significantly greater guarantee action than thus far, which due to the early stages of development of the guarantee institutions in the region and competition on the country level may be hard to achieve. However, because of little distortions of the market caused by guarantees, the universality of the product and its high leverage, attempts should be made to develop this type of instruments within the framework of ROP, targeting loan instruments at such cases where the financial gap results from other reasons than insufficient collateral. In case of micro-loans and loans, it is proposed to establish interest at least at the level of corporate credits (or at least market-based in the understanding of EC regulations in this respect) – such solution shall decrease the competition of the ROP offer with the market offer and at the same time the addressing of the support shall be improved – the attractiveness of financial instruments for final recipients should result in this model in particular from their greater availability.

In case of part of the projects in investment priorities 4a (3.1) and 4g (3.5) grants shall be the optimal form of funding. This applies in particular to projects comprising the development of power engineering networks for the purpose of renewable-energy-source installations, projects relating to thermal energy and/or undertaken by public institutions (including but not limited to local authorities), power engineering projects relating to chosen technologies, where a stronger incentive effect should be created than the incentive achievable owing to financial instruments, co-generation installation using conventional energy carriers and projects consisting of the construction of micro and small renewable energy sources (RES) installations. The greatest potential for using financial instruments occurs in case of power engineering projects, where beneficiaries shall apply concurrently for support in an auction system. For such projects a preferential loan scheme is recommended, with a sum of approx. PLN 46.2 million to be allocated for this purpose from the funds of ROP. The auction system (defined in the Act on RES) shall be introduced in 2016 and the success of the proposed financial instrument shall depend on the practical functioning of that scheme. Its assumptions should be verified once again in mid-2016.

The analysis shows that the use of financial instruments in investment priority 3.2 (4b) is profoundly justified in terms of economy. The positive economic net current value of investments oriented on increasing energy efficient in SME sector should be guaranteed by power audits. In addition, the repayable form of funding for the projects shall become an additional factor disciplining the beneficiaries and ensuring a reasonable scope of undertaking. We recommend that a sum of approx. PLN 69 million is intended from the ROP allocation for the preferential loan scheme (60% of the allocation for the entire investment priority). In case of part of the projects it may be recommended to establish additional incentives to motivate beneficiaries to report investments of a particular importance for the specific objective (e.g. above-average drop in energy consumption in an enterprise). For such enterprises grants shall be the optimal form of support.

In case of projects relating to power efficiency of building sector (investment priority 3.3 [4c]), we recommend that support in the form of financial instruments is offered to part of the potential beneficiaries implementing investments in the sector of residential construction. Thermo-modernisation projects implemented in this area have – as a rule – positive net current value, according to earlier power audits. The questionnaire-based study conducted for the purpose of this analysis among beneficiaries proves that lack of access to repayable financing is one of the major barriers limiting the scale of investments of residential co-ops and condominiums.

We recommend allocating a sum of PLN 73.5 million under ROP funds for preferential loans. The remaining allocation ought to be intended for grants, which should cover public utility buildings and some types of residential buildings: council houses, historical buildings and buildings in areas subject to local revitalisation plans. To produce incentives for potential beneficiaries, grants should be offered also for projects that present a particularly large contribution to the specific objective.

In case of IP 3.4 (4e) the use of financial instruments is not recommended due to at least several causes. Above all, projects that would be financed under that investment priority (purchase of low-emission public transportation vehicles) to a very limited degree bear a commercial character (delivery of public transportation services). Moreover, local authorities usually have no problems in gaining commercial funding.

An important argument against the use of financial instruments in this priority is the fact that considerable financial resources shall be blocked in order to lend the aforementioned credits or loans for a longer period. However, those "blocked" funds could be intended – in our opinion – for other purposes, both in the form of grants as well as financial instruments. In this situation worth consideration is the use of non-repayable instruments (grants), also in the form of subsidised interests against commercial credit facilities.

In case of investment priority 4.1 (6a) the use of financial instruments is not recommended. Despite the potential profitability of part of project types to be supported (points of selective collection of municipal waste, installation for waste processing), the practice of the waste management system in Poland cannot guarantee to investors payment flows sufficient to use repayable support.

For the intervention planned with repayable instruments in investment priority 8.2 (IP 8iii), with a well-defined objective and scope of intervention, certain doubts relate to the allocation of EUR 22 million. With the ROP loan offer addressed to the unemployed for business start-up, grants financed by the Labour Fund, "Support at the Start II" programme and grants under ROP shall be competitive. In the last case this situation stems from the fact that the proposed allocation is greater than 20%, while at the same time it has been assumed that max. 20% of the funds shall be awarded to individuals not in a special situation on the labour market. At the same time attention should be given to the fact that unlike competitive programmes, ROP funds may also be addressed to non-active persons starting a business – considering that movements from non-activity to self-employment are greater than from unemployment to self-employment, then - even if young people and graduates are excluded from the group of beneficiaries – the demand for support is assessed at the level of at least several thousand loans annually. Considering all aforesaid factors, max. 20% of the allocation, i.e. EUR 11 million should be dedicated to the loan instrument and an instrument symmetrical to the "Support at the Start II" loan, targeted mainly at non-active persons, should be established based on the above.

In investment priority 8.4 (8v) the use of financial instruments is not recommended. The intervention shall be provided in the form of two types of projects: services enhancing employee qualifications rendered within the scope of the Register of Development Services and support in the form of outplacement. In both cases grants shall be the optimal form of support. This arises out of the need to create an incentive on such a scale that would otherwise be non-achievable for example in case of a loan instrument.

Within the scope of IP 6.3 (9b) the use of financial instruments is not proposed because the list of potential projects complimentary to the intervention of the European Social Fund and at the same time qualifying for repayable funding is very limited. In case of local authorities debt limits and in case of entrepreneurs difficulties in identifying relevant projects may become the key barrier. Also the specificity of the Lower Silesia region is important, i.e. a great number of old buildings, including also edifices subject to the supervision of a conservator-restorer, the refurbishment of which is high-priced and the necessary incentive effect is much easier achieved with non-repayable financing.

Investment Priority (IP)	Instrument	Proposed allocation	Final recipients Specific criteria
1.5 (3c)	Guarantees	PLN 66 million	SME
	Micro-loans	PLN 93,5 million	Micro-companies and small enterprises
	Loans	PLN 142,5 million	SME
3.1 (4a)	Loans	PLN 46,2 million	Power energy companies
3.2 (4b)	Loans	PLN 69,0 million	SME
3.3 (4c)	Loans	PLN 73,5 million	Housing co-ops, condominiums (*wspólnoty mieszkaniowe*), social rental housing (*TBS*)
8.2 (8iii)	Micro-loans	PLN 39,05 million	Unemployed and non-active individuals aged 30 and more

According to analyses, apart from financial instruments and non-repayable instruments, the use of mixed instruments may be considered, i.e. instruments combining both types of support. The area in which the use of mixed instruments together with their possible form is worth consideration is the subsidy for credit and loan interest rates, in part granted from own contribution of the financial intermediary, whereupon it should be possible to reduce interest rates for the final recipients and on the other hand to increase leverage (the multiplier effect). We suggest considering such mechanism especially in case of chosen projects (or with a varied intensity, depending on the type of the financed project) under IP 3.2 and 3.3, possibly also in case of micro-loans under IP 1.5 and IP 8.2.

Analysis of the guarantee risk

Within the 2014-2020 period guarantee instruments are subject - in result of a separate ex-ante study, supplementing the ex-ante evaluation of financial instruments - to an evaluation of expected and unexpected risk, i.e. financial resources sufficient to guarantee a particular value of the credits/loans and to cover the related pay-outs. The risk according to our estimates would account for 25%, with the capital multiplier equal to 4 and the rounded multiplier in the understanding of the Delegated Regulation (value of granted loans and credits vs. contribution under ROP) equal to 6. In case of instruments addressed only to business start-ups, we suggest that overall risk is defined at the level of 30%. For such instruments the capital multiplier is equal to 3,33 and the multiplier in the understanding of the Delegated Regulation is equal to 5.

Assumptions of the ex-ante study update

This ex-ante study ought to be updated, depending on the situation on the market. Whenever public repayable or non-repayable funding emerges on the market, which has not be envisaged in this study, competitive towards financial instruments offered under ROP DV 2014-2020, this study should be updated. In case of ROP DV 2014-2020 the ex-ante study of financial instruments should be updated – in our opinion – at least once every two years, for the first time no later than in mid-2017 or at the end of 2017 (for the 2015-2017 period) and for the second time in mid-2019 or – alternatively – depending on the needs. In the last case we suggest, however, that the study should be updated at least once within the period of implementation of ROP DV 2014-2020, for example in mid-2018. Subject to updating in each variant should be all relevant matters relating to the implementation of financial instruments, addressed in this preliminary analysis, or other matters, which shall prove important when implementing the instruments or the analysis of which shall be in the core of the European Commission's attention.

The structure of FI implementation

As regards the structure of FI implementation, we suggest that a model based on the fund of funds should be adopted and two such funds selected, i.e.

1. The (first) Fund dedicated to implementing financial instruments envisaged in IP 3c (instruments: guarantees, micro-loans and loans – aimed at reducing the financial gap, relating to the sector of micro companies, small and medium enterprises) and 8iii – instrument aimed at encouraging entrepreneurship (supporting business start-ups);
2. The (second) Fund responsible for implementing financial instruments envisaged in other priorities – preferential loans targeted at improving power efficiency (in enterprises and beyond – in multifamily residential buildings). Allocation for financial instruments under investment priorities (IP 4a, 4b and 4c) assigned to the second fund of funds shall be equal to more than PLN 188 million.

Worth considering is also a solution (based on the experience of the 2007-2013 period) under which the first of the aforesaid fund of funds would be responsible only and solely for implementing financial instruments under IP 3c and the implementation of financial instruments under IP 8iii would be delegated to the Dolnośląski Wojewódzki Urząd Pracy, which would then select and supervise the activities of financial intermediaries.

As regards types of financial instruments, we consider reasonable the use of *off-the-shelf* instruments – in that group the *renovation loan* – within the scope of investment financing, supporting power efficiency in buildings (an instrument dedicated to such investments). In case of instruments supporting SME – *risk sharing loan* but on condition that the financial capability of intermediaries is strengthened when using measures of support under the 2007-2013 perspective.

Financial instruments vs. indicators

All investments implemented with the use of the proposed financial instruments shall have positive impact on the accomplishment of specific goals of ROP DV (measured with result indicators defined in the programme) and the construction progress assumed in the programme (product indicators). In particular, the instruments shall help:

- increase the average number of innovative enterprises among the total number of industrial enterprises (contribution of instruments under IP 5.1 to the change defined in ROP at the level of approx. 18%);
- increase the number of installations generating power from renewable sources in the region's power balance (contributions of the instrument under IP 3.1 to the change defined in ROP at the level of approx. 2%);
- reduce power consumption as per GDP (contribution of the instrument under IP 3.2 – positive vs. verification within the scope of evaluation of ROP DV);
- reduce total sales of thermal energy for municipal & housing purposes (contribution of the instrument under IP 3.3 to the change defined in ROP at the level of approx. 9%).

Exit policy and monitoring

As regards the strategy of exiting from financial instruments, it is suggested that - if the instrument is popular, the assumed indicators are achieved or surpassed, the offered financing is not a major competition towards commercial financing and also there is no significant competition with another instrument (in the form of a grant or repayable instrument) financed from public funds - financing from the resources repaid to the instrument ought to be continued.

If decisions are made regarding possible continuance of financial instruments, the following factors are vital: necessity of continuing the support because of the existing needs and achievement of the public policy goals, the existence or absence of competitive public instruments available on a national or regional level and adverse effects, if any, of a particular instrument within the eligibility period, such as elimination of financing from the commercial sector.

Finally, the decision on the probable continuance of the instrument should depend on necessary data gathered and analysed within a scope corresponding to this ex-ante analysis, focusing on the effects of use by final recipients of a particular financial instrument under ROP DV 2014-2020 such as the implemented investments, financial situation of final recipients, size of employment and turnover levels, comparison of the offer of a particular financial instrument and the offer of the commercial sector: formal conditions, interest rate and other fees, required collaterals, analysis of statistical data pointing to the necessity or absence of the necessity to continue intervention with the use of public funds in a particular area.

As regards the monitoring of FI implementation, the scope of gathered information necessary for preparing reports on this issue is detailed in the Commission Implementing Regulation (EU) 821/2014, in particular Annex I thereto. Notwithstanding the requirements laid down in the said regulation, gathering additional data should be considered, useful from the point of view of MA ROP DV and also the fund of funds (provided that the mechanism is adopted). Such data ought to be submitted eventually to the Managing Authority but should be gathered by the fund of funds, relevant intermediary institution or the same MA if for chosen measures it shall chose financial intermediaries itself.

Methodology

Phase I

Within the scope of Phase I of the study a focused interview was held with the representatives of financial intermediaries offering debt financing (credits, loans) under JEREMIE Initiative or with the use of other public funds and a focused interview with the representatives of financial intermediaries offering guarantees under JEREMIE Initiative or with the use of other public funds and also three individual in-depth interviews (IDI) with final recipients of the support in the form of financial engineering instruments under JEREMIE Initiative and five individual telephone interviews (ITI) with final recipients of the support in the form of loans under Measure 6.2 of OP HC.

In order to diagnose the use of financial instruments, to obtain opinions of the entrepreneurs concerning the support and their experience in this respect, anonymous computer-aided telephone interviews (CATI) were held among random groups n=154 of final recipients of support under JEREMIE Initiative and n=50 of final recipients of loans under the ESF Loan Fund and also an analysis of secondary data of financial intermediaries of loans, portfolio guarantees and guarantees granted under a counrterguarantee scheme of the JEREMIE Initiative. Because of the characteristics of the borrowers and the funding, based on a two-level grouping method 4 clusters of SMEs were distinguished, who were final recipients of the loans granted under JEREMIE Initiative. The maps of spatial distribution of the support granted under JEREMIE Initiative by poviats of the Dolnośląskie region were developed based on the Method of Natural Breaks by G. Jenks.

Phase II

Within the scope of qualitative studies in phase II twenty two IDIs were held with the representatives of the experts' milieu (representatives of MA ROP DV, Bank Gospodarstwa Krajowego, financial intermediaries under JEREMIE Initiative and Measure 6.2 OP HC, banking sector) and with potential final recipients of the support in the form of financial instruments under ROP DV 2014-2020 and also six ITIs with potential final recipients of support. Moreover, a focus group interview (FGI) was conducted with the representatives of the Managing Authority and the planned intermediary bodies under ROP DV 2014-2020.

Quantitative studies were performed based on two stratified random groups of potential beneficiaries of financial instruments. Anonymous computer-aided telephone interviews (CATI) were held among the following samples: stratified random $n_{11}=369$ of microenterprises, $n_{12}=150$ small enterprises and $n_{13}=100$ of medium enterprises (non-proportionate allocation, similar to Neyman's allocation) and a stratified random group of $n_{21}=69$ condominiums and $n_{22}=31$ residential co-ops in Dolnośląskie region. SME allocation in the sample because of qualification in PKD (Polish Classification of Businesses) section and the period of the firm's operation had been defined on a proportionate basis. The results were weighted against post-stratification weights. Global values of the financial gap were determined with the use of Horvitz-Thompson estimators.

The financial gap was defined in two categories: investments not implemented because of the unavailability of the loan, credit or leasing (i.e. taking into account also a situation when the enterprise decides to withdraw from applying for repayable financing because they anticipate they shall not be able to fulfil the criteria or the conditions offered thereto shall not be favourable) and because the external funding was not granted. Using the method of two-level grouping 4 clusters of

SME in the financial gap were determined. The purpose of the SME study was to define the size of the unrealised investment plans of SMEs, to identify factors for which the enterprise remained in a financial gap and to diagnose the situation of SMEs in the Dolnośląskie region. The study of housing co-ops and condominiums aimed to define global values of the financial gap in terms of thermo-modernisation and renewable sources of energy and to obtain opinions of the representatives of co-ops and condominiums regarding the use of financial instruments and the potential of the investments.

Phase III

Within the scope of Phase III six individual in-depth interviews were conducted with potential final recipients of financial instruments supported under ROP DV 2014-2020 and with other key institutions: two IDIs with firms contributing to the preparation of projects in the area of energy, one interview with a potential final recipients of financial instruments under IP 4c (residential co-op) and three interviews with the representatives of local authorities.

For the purpose of the study an online questionnaire (CAWI) was conducted with 22 representatives of financial intermediaries in Dolnośląskie region, i.e. 12 loan funds (institutions granting loans), 4 guarantee funds and 6 cooperative banks. The study was anonymous and the response ratio (RR) accounted for approx. 50%. Online and telephone support was offered to respondents. After 5 days from questionnaire submittal, respondents were called and prompted about the possibility completing the questionnaire. The purpose of the questionnaire was to define investment categories with regard to which financial institutions would be interested in granting repayable funding, to obtain opinions of financial institutions regarding the acceptable amount of management costs and the form of FI implementation preferred by them.