Ex-ante Evaluation of the Financial Instruments from the Operational Programme for the Federal State of Berlin within the European Regional Development Fund (ERDF) during the funding period of 2014-2020

Summary

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1 Goals and Methods

The following summary of the ex-ante evaluation of the financial instruments planned for use within the framework of the ERDF Programme for Berlin during the period of 2014-2020 is concerned with the six instruments listed in the original Operational Programme: Venture Capital Fund for Technology (VCT), Venture Capital Fund for Creative Industries (VCC), Programme for the Funding of Research, Innovation and Technology, *Pro* FIT Loan Programme, Small and Medium-Sized Enterprise Loan Fund Berlin (KMU Fund), Small and Medium-Sized Enterprise Fund for Environmental Loans (KMU-Environmental Loans) and the Guarantee Fund for SME's. In accordance with the requirements of Article 37 of the Common Provisions Regulation for the ESI-Funds 2014-2020, No 1303/2013, each of these instruments will be evaluated according to: component analysis of market failures, coherency and added value-, leverage effect and priority payment, integration in the existing programme strategy and intervention logic as well as possible approaches for the possible further development and shaping of the financial instruments.

Different methods will be used for the individual assessment tasks. An innovative, demand-oriented appraisal model has been developed for the analysis of market failures and investment requirements pertaining to the use of public financial instruments. This is, at its core, based on a secondary statistical analysis of the target group and, additionally, takes existing studies into account. Ultimately, the probability that demand will in fact continue to exist in the future will be examined based on past market developments and expert discussions. As groundwork, preliminary considerations will be made concerning inherent market failures or suboptimal investment conditions that result from uncertainty, market non-transparency and the following supply and demand information asymmetry that can lead to divergence between economic benefit and commercial evaluations (externalities) or to high transaction costs.

The crucial criterion for the evaluation of a financial instrument's added value is its ability to fill the funding gaps and compensate for the market failures that were identified in the market analysis. Added value can only be created when coherency with the other existing offers of financial support can be guaranteed. Coherency can be said to exist when the planned financial instrument can be justifiably and consistently integrated into the totality of existing European, federal and state funding mechanisms. This is the case when the financial instruments make currently existing support instruments redundant or when the existing support mechanisms alone are incapable of closing the gap in demand. Furthermore, added value can be created through complementarity to other instruments, large leverage effect, positive effects on public budgets through back flow, avoidance and reduction of dead-weight-effects and the attainment of (more) challenging political goals. The methodological basis for the coherency and value added analyses is a comparative qualitative analysis of public funding mechanisms taking into account the market analysis.

The leverage effect, in terms of the mobilization of additional private and public resources for projects or enterprises through the deployment of ERDF monies in a fund, will be measured as the proportion of ERDFF funding to the sum of ERDF funding, invested private and public co-financed resources on both the fund and project levels.

The integration of the planned financial instrument in the strategy and goals of the ERDF programme will, for each investment priority, undergo an argumentation analysis and recommendations for monitoring and performance indicators will be provided. Recommendations for deployment provisions (financial instrument management) will be given based on previous experience.

What follows are summarized forms of the central results, conclusions and recommendations for each of the planned funds.

2 Venture Capital Fund for Technology (VCT)

The results of the market analysis show that the expected demand from enterprise foundation and young enterprises in the (high)tech sector during the period 2014-2020 for public equity capital (€91 million) greatly exceeds the VCT Fund’s planned supply of €60 million.

Even under the assumption that not all of those interested in being financed will be able to present a tenable business model, it is safe to say that the planned fund volume will be able to be purposefully invested. Through the regional market knowledge of the fund’s management team, a tailored and need oriented identification of investment worthy business can be expected. Experiences with predecessor instruments support this expectation. Furthermore, the expert opinions accentuate the supportive role that the tech sector specialists from the IBB-Bet team play in the realization of subsequent financing for long term, high volume and growth oriented projects (e.g. Biotech enterprises).

Although the VCT Fund is not free from overlaps with other investment instruments, like the HTGF and ERP Start-up Funds, it successfully delineates itself and focuses on a specific target that is not sufficiently covered by existing mechanisms. Grant programmes such as ZIM, Exist-forschungstranfer or KMU-innovativ are more tightly focused on R&D and, partially, cutting edge research and excellence and are therefore complimentary to the VCT Fund.

The integration of the planned VCT Fund for Berlin can thus be seen to be coherent and consistent as well as, in some cases and particularly with respect to SME’s, complimentary to the existing supply of support instruments for the allocation of equity capital to businesses. The VCT Fund’s ability to counteract the demonstrated market failures is only the beginning. The fund’s construction concept of a minimum 50% private investment participation on the level of individual enterprises can lead to a respectable leverage effect. The expected leverage effect of this instrument is estimated to be between 1:15 and 1:20, whereby substantial additional public and private resources, all the way down to final beneficiaries, will be able to be mobilized.

An additional added value is created by the revolving character of the finance instrument, which, through the production of back flow, can create increased financial leeway for public budgets. Both the results of the coherency and the added value analyses are consistent with the market analysis. It remains, however, appropriate to use publicly financed supplies of equity capital to cover the remaining demand for risk intensive innovation projects in businesses.

Through investment in young tech-oriented enterprises, the VCT Fund, will be able to effectively help achieve the specific objective of the OP, the promotion of innovation, expansion of R&D as well as the growth of innovative capacities within businesses. The fund is therefore well integrated in the instrument mix within Priority Axis 1. Concerning options for implementation arrangements, past experience suggests that it would be wise to once again engage IBB Bet for the management of the fund.

As a result of the considerations above, it is recommended that the fund be established with the designated budget so that the active preparation and support of potential investment projects can be started.

3 Venture Capital Fund for Creative Industries (VCC)

The VCC Fund planned supply of €40 million is also too small to cover the expected demand for public equity capital among enterprise founders and young enterprises (€105 million) in the period of 2014-2020. It is precisely the young, small and innovative undertakings and enterprise foundations that are responsible for the vitality of the creative sector in Berlin, which require professional assistance during the seed and start-up financing phases. They will be capable of continuing to build the profile of Berlin as a national and international creative metropolis.

Goals and target groups for the VC Creative Industries Fund are strongly differentiated from other support mechanisms which are oriented towards creative industry. The presently available public support mechanisms do, however, support infrastructural groundwork and, through networking and marketing approaches, are important supplements. The existing and the planned mechanisms are therefore complementary and create added value.

Due to the wide reaching similarities of the VCC and the VCT, it would have been possible to combine them both in a unified, modularly constructed fund. The marketing advantages for an independent VCC (better optics and recognisability, better solicitation possibilities) and the lack of significant savings from a management merger lead us to recommend that the VCC be founded as an independent fund.

The expected leverage effect of the VCC is estimated to be between ca. 1:9 and 1:11, which means that it will here also be possible to mobilize significant additional funds from public sources, private sources and end beneficiaries.

Thanks to its particular orientation, the VCC Fund will be quite effective towards furthering the innovation specific goals of the OP in Berlin, where the creative industries play an especially meaningful role. The fund represents a reasonable supplementation to the instrument portfolio. With respect to the options for implementation arrangements, previous experiences have shown that it is advisable to once again engage IBB Bet for the management of the fund.

In conclusion, the creation of a public supply of equity capital for the creative industries is reasonable and goal oriented. As a result of the considerations above, it is recommended that the fund be established with the designated budget so that the active preparation and support of potential investment projects can be started.

4 *PRO* FIT LOANS

The analysis of market failures and investment challenges have shown that the loan component of the *Pro* FIT funding instrument is an important instrument for the correction of structural market failures in the area of financing commercial development and market launches, particularly for the SME sector in Berlin. The secondary statistical analysis of the target group emphasized that the €157 million planned volume for the period 2014-2020 will be met by an adequate demand of more than €200 and perhaps even €300 million. The same is true for the start-up funding, where €25 million has been planned for an estimated almost €40 million demand.

Furthermore, it is to be expected that the *Pro* FIT funding instrument (grand- and loan-part), particularly in the SME sector of Berlin, will have an activating effect on the cooperation between universities, institutions of higher education, public research institutes and regional SME's, which, through their location in a region heavily influenced by excellent public research, will send strong signals for further economic development.

The planned *Pro* FIT funding for seed- and start-up phases can be mostly defined without overlapping with other instruments for this phases like ERP 'Kapital für Gründung', 'High-Tech Gründerfonds' (HTGF), ERP 'Startfonds' or the VC Fund for Technology (see above). Also the loan-component oriented on experimental development and market preparation has largely no overlapping with other programmes for innovation support like the 'Rahmenprogramm für Forschung und Innovation Horizont 2020 (2014-2020)', Eurostars, 'KMU-innovativ: Produktionsforschung', 'Zentrales Innovationsprogramm Mittelstand (ZIM)', the BMBF-Programme 'Innovative regionale Wachstumskerne' and the ERP-Innovation Programme. Complementarity to the *Pro* FIT loan funding are used primarily regional grants support instruments ('Coaching BONUS', 'Transfer BONUS', 'Innovationsassistent'). Overall, consistency and added value can be observed.

Pro FIT will do more than just make corrections to the market failures shown in the market analysis chapter. Through its extensive variability and the integration of grant and loan components, the requirements of even the most diverse pool of applicants can met with individual solutions. Through the orientation of the instrument on:

- The two innovation phases: experimental development as well as production setup, market preparation and market introduction,
- The additional specialized support of early phases
- in combination with the relatively low requirements for collateral,
- and in the combination with the support for research in industries by the *Pro* Fit Grant -programme

Pro FIT thoroughly fulfils the role of a holistic start up and growth support instrument which can be used by businesses to bring their innovative ideas to market, make their first acquaintance with third party financing and earn the trust of banks or other private investors. It is this approach with which the instrument creates a clear added value in comparison with currently existing funding mechanisms. Through the revolving character of the loan instrument, the generated back flow can be reinvested and thereby increase the financial leeway of the public budget. Both the results of the coherency and the added value analyses are consistent with the market analysis.

The additional public and private monies that potentially need be raised from sources all the way down to the potential beneficiaries have been estimated to have a proportion of ca. 1:1.8 to 1:2.3 for *Pro* FIT in the period of 2014-2020.

The *Pro* FIT loan portion can, through the support of high risk innovation plans, make a direct contribution to the achievement of the OP's specific objectives pertaining to fostering innovation, increasing R&D work and the improvement of innovation capacities within the corporate sector. The fund is therefore well integrated in the instrument mix within Priority Axis 1. Concerning options for implementation arrangements, past experience with the IBB Bet has confirmed their knowledge of the regional market and it is therefore suggested that it would be wise to once again engage IBB Bet for the management of the trust assets in order by the state of Berlin.

In summary, a public offer of a loan-based instrument for entrepreneurial development and market introductory projects appears meaningful and purposeful. Against this background you recommend setting up the loan offer in the prescribed amount and continue the Pro-FIT loan component.

5 SME Loan Fund Berlin – Microcredits and Growth Financing

The analysis of market failures and investment challenges has shown that, for investments in company foundation and growth in the SME sector during the period of 2014-2020, a total estimated demand for public and publically supported financing mechanisms of ca. €242 million exists. The planned fund volume, in contrast, is set at €100.4 million. It should be noted that the demand volume is based on the fraction of the target that, *in consideration of the existing funding* *supply,* continues to have concrete difficulties obtaining funding. A demand thus measured would therefore not, or only minimally, be reduced by competing funding mechanisms.

The financing of small and micro enterprises form, in this situation, a special subgroup and will be handled separately. The following table shows the instrument specific measured demand compared with the endowment of the SME Fund:

Supply and Demand for the SME Funds

	Instrument specific measured demand (€ in millions)	Appropriation (ERDF + co-financing) (€ in millions)
SME Fund		
Micro loans	24	20.00
Berlin Start	218	30.00
Growth loans		53,40
Total	242	103,40

At the same time, there are two loan programmes belonging to the KfW Instruments that have, for many years, been used by enterprises in Berlin.

The „ERP-Gründerkredit – StartGeld“ (Enterprise-Resource-Planning - Founder’s Loan – StartMoney), due to a high degree of similarity between target groups, the objects of aid and support conditions can be expected to be in partial competition with the SME Fund. With an already relatively low estimated demand by enterprises with funding difficulties, it remains questionable whether the entirety of the planned €30 million for the support of company foundation, factoring in an average loan size of €50,000, could ever be dispersed. And that despite the high expected quality of IBB’s consultation services.

The KfW funding option „ERP-Entrepreneur“ can also be expected to partially compete with the SME Fund for the same reasons listed concerning the KfW Founder’s Credit. The demand for the KfW Entrepreneur credit during the period 2009-2013 (minimum €68 million, maximum €150 million per year) shows that in order to compete with KfW Entrepreneur credit, despite the respectable volume of total expected demand for growth funding, the corresponding SME Fund offerings must possess, in conjunction with similarly attractive conditions, other advantages (i.e. consultation, supervision, credit approval in comparatively poor risk classes).

Nevertheless, the SME Fund shows potential for creating added value for the following reasons: First, the market analysis shows that despite the above named competition, funding gaps can exploited through effective marketing and the use of the IBB’s regional market knowledge; and second, the calculated demand for company foundation and growth credit of €216 million exceeds the offerings of the SME Loan Fund by more than 250 percent, which means that despite competing against other instruments, the SME will be able to meet a portion of the expected demand

The planned provision of microloans at the level of €20 million represents a reasonable, essential and value adding measure to reduce the funding availability bottlenecks for small and micro enterprises.

The additional public and private monies that potentially need be raised from sources all the way down to the potential beneficiaries have been estimated to have an expected leverage effect of ca. 1:3 to 1:4 for the SME Loan Fund.

The SME Loan Fund can, together with the other instruments, make an important contribution to the attainment of higher productivity in Berlin's economy, as is planned in the OP's second Priority Axis. It makes company foundation and growth financing possible for small and micro enterprises as well as for large and midsize enterprises, especially in the extension of credit to enterprises with low credit-worthiness that would otherwise, if at all, only partially be supported. With respect to the options for implementation arrangements, due to the market knowledge of the IBB, it is again advisable that they be engaged for the management of the fund.

In their totality, the results of the investment challenges analysis as well as the results of the coherence and value added analyses show that the total demand by businesses with funding acquisition difficulties for company formation and growth exceeds the planned fund volume by more than 250%. Due to the flexible application possibilities for resources from the fund, the mathematical verification of the emphasis on demand from the area of the enterprises concerned is not critical. In practice, it can be expected that young enterprises and individual company foundations will require loans from the Berlin-Start module larger than the assumed €50,000 and thereby justify its relatively extensive endowment.

More critical for the success of the fund, however, is the competitive relationship with KfW instruments, which, in theory, could be quite attractive for precisely the enterprises currently reporting funding difficulties. The true proportions of the potential competition cannot, in this case, be clearly evaluated. The two offers differ, in practice, primarily in ‚soft factors' that are not explicitly clear in the funding conditions. The main soft factor is thathat the IBB, through their work with commercial banks in the region, is in possession of more detailed market knowledge, better access to regional businesses and has quicker, leaner consulting and processing methods as well as the willingness to extend credit to otherwise credit-unworthy lenders. This means that the IBB is indeed in the position to create added value; they can offer businesses access to credit which have, as of yet, otherwise had difficulties in attaining funding. In contrast, it is rather unlikely that the enterprises that currently report funding acquisition difficulties will suddenly gain access to KfW programmes that have changed only very little in their conditions over the past years.

Therefore the establishment of the SME Fund in the designated magnitude can, from our perspective, be recommended. Especially regarding loans to finance growth, adequate marketing and supervisory activities for the announcement of the new offer should be planned, to reach the objective to raise the number of lendings. A particular focus on the financing of commercial innovation, whose relatively uncertain chances for success lead to a high potential for damaging future credit-worthiness, could help accentuate the utility of this particular instrument when compared with similar SME Fund support programmes.

6 Guarantee Fund for SME's

In the market analysis for the period 2014-2020, the need for high volume guaranties (> €1.25 million) is only expected in very few rare cases and leads to the relatively low volume of guaranteed loan claims of ca. €3-5 million. Assuming a default of 30%, the necessary fund volume would be €0.9-1.5 million. In the past, the demand for high volume guaranteed loans was low, remarkably lower than national the average, in fact.

While the SME Guarantee Fund is a coherently integrated instrument in the existing guarantee instrument portfolio, the SME Guarantee Fund from the ERDF period 2009-2013 remains available for use as a tool to respond to short term needs. Theoretically, a later implementation, after the expiration of the previous instrument, would be sufficient to respond to emergent situations and to satisfy the state guarantee guidelines.

Due to the current and prospectively low future demand for high volume sureties, the establishment of the guarantee fund is not recommended.

7 SME Fund for Environmental Loans

The specific potential demand for public loans for CO_2 reduction measures amounting to ca. €49 million could be established through the market analysis. This demand can arise from two business groups: businesses that desire to invest in energy efficiency and business that are active in the renewable energy sector. The potential demand is significantly higher than the SME Fund for Environmental Loan's planned volume of €40 million and there is little reason to believe that the demand can be met by currently existing public support mechanisms, such as those of the KfW or the energy efficiency portion of the BENE Berlin programme. Although the estimates of this particular demand potential concur with the multifaceted and extensive potential saving and operative requirement findings from the ‚Feasibility for a Climate Neutral Berlin 2050' study, the observed low demand for energy efficiency loans by businesses in Berlin indicates that there are no obstacles. The below average demand of the SME's for funding from the KfW energy efficiency programme as well as the low use of grants for energy efficiency in the framework of the UEP II Programme Berlin (Evaluation of the Environmental Relief Programme II 2013) offers further evidence thereof.

Signs of excess demand cannot be established based on the data. That could only occur in practice if a large number of businesses from Berlin were to react to clearly more favourable funding conditions and actually decided to make additional environmentally relevant investments. As a result, the risk exists that the planned environmental loan fund will not be able to activate the present demand potential. The orientation of this fund is therefore an attempt to respond to weaknesses in the current offerings and thereby offer the SME's with smaller and midsize investment needs a more attractive complete package of loan services. Linking consulting and quality control measures with the loans as well as using the windows of opportunity associated with other energy efficiency measures already planned as part of commercial modernization or expansion measures are part of this approach. In support of the potential success of this method is data showing that 28.5% of businesses list a lack of funding sources as a reason for the reluctance to invest in energy efficiency while 37% list uncertainty about the factual savings associated with such investments as the reason for their reluctance (KfW Business Survey 2014, p. 47). Whether the SME Environmental Loan Fund can be successfully implemented will depend not only on an effective marketing strategy to mobilize the potential demand, but will also depend on price fluctuations in the energy market and the appeal of the interest conditions, which are more likely the true deciding factors for investment choices by businesses.

The additional public and private monies that potentially need be raised from sources all the way down to the potential beneficiaries have been estimated to have an expected leverage effect of ca. 1:2 to 1:3 for the SME Environmental Loan Fund.

Through the SME Environmental Loan Fund, additional incentives for investment at the commercial level can be strengthened in order to meet the $C0_2$ emissions reduction goal. The instrument is therefore well suited to the third Priority Axis of the OP and reasonably compliments the other instruments which are primarily aimed at different target groups. In addition to other factors, the possibility for combining environmental loans with other types of loans makes it advisable for the fund to also be managed by the IBB.

Despite the difficulties concerning the mobilization of demand potential described above, the establishment of the SME Fund for Environmental Loans is recommended because its construction and the planned implementation modalities give reason to hope that the existing barriers can indeed be overcome.