

Case study Hungary OP Economic Development

Ex post evaluation of Cohesion Policy programmes 2007-2013, focusing on the European Regional Development Fund (ERDF) and Cohesion Fund (CF) – Work Package 3: Financial instruments for enterprise support

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List of abbreviations

AIR	Annual Implementation Report
СВН	Central Bank of Hungary
СНОР	Central Hungary Operative Programme
EDOP	Economic Development Operative Programme
FE	Financial Enterprise
FGS	Funding for Growth Scheme
FI	Financial Instrument (equal to FEI Financial Engineering Instrument)
HBA	Hungarian Banking Association
HDB	Hungarian Development Bank
HEDC	Hungarian Economic Development Centre Plc.
IB	Intermediary Body
JEREMIE	Joint European Resources to Micro to Medium Enterprises
LEDA	Local Enterprise Development Agency
MA	Managing Authority
MoET	Ministry of Economy and Transport
NDA	National Development Agency
NHWCL	New Hungary Working Capital Loan
OP	Operational Programme
PA	Priority Axis
SC	Saving Co-operative
SMIS	Standardized Monitoring Information System
VCF	Venture Capital Fund
VFH	Venture Finance Hungary Plc.

Executive summary

The FEIs under scrutiny

The applied FI schemes in Hungary concentrated on three main types of financial interventions: (small) loans, guarantees and venture capital schemes. The first loan schemes were already introduced under priority axis 4 (PA 4) of the EDOP in 2007. The number of credit schemes that were later available varied a lot, with two schemes in 2007 and in 2014, and showing a peak in 2010, with four schemes managed simultaneously. The guarantee schemes were designed to fill the market gap in this market segment and varied less across the programme period than the loan schemes. The measures, aimed at promoting venture capital investments, focused exclusively on new, innovative start-ups, with special emphasis on firms in need of seed capital.

Targeting of the credit schemes was very narrow in the first half of the implementation period (2007-2010), focusing only on micro businesses without any specific sectorial or geographic targeting. In April 2010, small companies were also allowed to apply for loans provided under the EDOP loan schemes, followed by medium-sized companies in January 2013. A similar shift to firms with the need for an increased average volume of equity financing can also be observed in the case of venture capital funds.

The various FEI schemes' financial performances differ significantly. The loan schemes lead the line-up, with 122% of the total allocated funds already invested to final recipients, followed by the guarantee schemes with 63.83% and the VC schemes with 52.62% of the total allocated funds.

Out of the overall funds, the share of the non-JEREMIE funds is 21%, which covers private funds attracted as well as the national funds in the form of contributions coming mostly from the Hungarian central budget and the Hungarian Development Bank. The share, which is lower than 15%, is explained by the lower EU co-financing rate in some of the SME credit and working capital schemes.

While the credit schemes have overperformed in terms of financial targets, in the case of the guarantee and VC schemes, a very slow take-up and consequently, slower progress in the allocation of funds could be observed. There are many reasons for the differences in financial performance indicators:

- **institutional**, due to the time-consuming institutional set-up process in the first half of the programming period;
- contextual, due to the post-crisis effects; and
- **strategic**, due to higher demand for credit schemes, especially for the 'Combined MMicrocredit' scheme, which provided simultaneous access to both refundable and non-refundable financial support within one scheme.

There was a breakthrough point in fund allocation in 2010 and 2011, after which both the credit schemes and the venture capital schemes experienced accelerated growth in allocations, commitments, and consequently, in firm-level investments. One of the reasons was the launch of the new Combined Micrecredit scheme, which involved both small loans and grants targeted at micro and small businesses. This FI scheme has turned out to be the 'top product' among the JEREMIE-type products in Hungary. Secondly, from 2010 onwards several amendments have been introduced to the running credit schemes, resulting in some of the most important and stringent credit conditions being significantly relaxed, such as:

- increasing the maximum credit thresholds and refinancing rates specified per types of financial intermediaries;
- fixing the interest rate threshold at? 9%;
- increasing the duration for both investment and working capital loans;
- decreasing the rate of own resources/ capital obligatory described as preconditions to take loans.

Within the credit schemes, the most active intermediaries were the financial entreprises and the local economic development agencies (LEDAs) in terms of the number of operations (80%). Notably, after the introduction of the Combined Microcredit scheme in 2012, both the financial enterprises and LEDAs concentrated their activities on that highly specific scheme.

It was possible for credit institutions to offer guarantee schemes during the first EDOP implementation period, but the interest in these activities was very limited, particularly from banks. The average values guaranteed by the various institutions did not vary a lot across type of intermediaries, i.e. EUR 10,000, HUF 3 million and the number of operations only reached the low value of 1140 by the end of 2014. While 15 banks and 28 savings cooperatives operated under the portfolio guarantee scheme, which was launched in 2008 and phased out in 2013, the counter-guarantee scheme, which the HF first provided, followed by the publicly-owned garantor organistaion, Garantiqua Ltd from 2011 onwards, was highly centralised.

Although the framework conditions of the guarantee schemes were substantially relaxed during the implementation period by, for example, raising the trigger threshold for defaulting portfolios and easing rules on required collateral, the slow progress of guarantee schemes can be explained by:

- (a) restrictive regulatory rules, for example:
 - (i) restrictions on coupling JEREMIE-type credit schemes with guarantee schemes at firm-level;
 - (ii) double financing cases and limiting guarantees to only investment loans; and
- (b) by the low demand for guarantee schemes by final recipients in general, for example:
 - (i) lack of information on the benefits of the schemes;
 - (ii) low trust in the predictability of the framework conditions).

The 23 qualified VC funds financed 198 projects, with an average equity value of EUR 1.17 to EUR 1.27 million in the case of New Hungary and New Széchényi VC funds and with a value of EUR 147,000 in the case of New Széchényi Seed Capital. After slow take up of these schemes in the first years (2009-2010), the number of fund managers and the volume of allocated equity funds steadily increased after 2010. The economic revival and the improving macroeconomic conditions in the second half of the 2011-2014 progamme period contributed significantly to this upward trend.

The context in which FIs were introduced

Macroeconomic trends and the development of the Hungarian regions showed slow economic growth and consequently very slow or even no convergence in the 2007-2013 period. Structural challenges to growth and recession signs were already evident before the economic crisis hit the country in 2009 (Kopint - TÁRKI 2010).

Throughout the whole programme period, the main macroeconomic indicators performed weaker than those for other countries in the Central and Eastern European region, i.e. the Czech Republic, Poland and Slovakia. This underperformance has been coupled with gradually widening territorial inequalities (EDIOP 2014a; EDIOP 2014b).

In 2010, following the general elections a new government was set up with a qualitative majority of parliamentary support, i.e. controlling more than two thirds of the seats. The ruling party coalition, which is composed of conservative and Christianconservative parties, launched fundamental state reforms in 2011, which resulted in shifts and changes in the political-institutional context. While government responsibilities in charge of Cohesion policy implementation have been reshuffled due to the Prime Minister's office centralising its decision-making, there has been a relatively high rotation of government experts in the field. The EDOP's strategic bottom-line was not revised.

Regional policy interventions had six PAs – one of them was and still is economic development. In 2009, the government initiated a substantial reallocation between the various operational programmes (OPs) with the economic development priority as the striking winner of these reallocations. Most of the additional funding was allocated to the grant-based measures aimed at the complex development of enterprises, particularly for SMEs, but the available funds for JEREMIE-type instruments also increased.

Goals and theory of change (ToC) of FIs

The main strategic objective of the EDOP FEIs was:

(1) to provide access to finance to SMEs that have a viable business plan / feasible investment ideas but cannot get access to external financial sources, such as bank loans, equity finance; and

(2) to promote start-ups with innovative potentials.

The programme did not use specific geographic or sectorial targeting. In addition to these SME policy objectives, the interventions were also aimed specifically at market-making and market facilitation in segments of the financial market where SME financing was fairly underdeveloped i.e. microcredit or in effect non-existent, i.e. seed and venture capital.

The long-term results to be achieved by the FEIs are quite vaguely defined in the OP documents, i.e. promoting growth and job creation. The programme documents also lack explanation of the operating mechanisms to achieve these goals.

Although the strategic goals are consistent with the results of the ex-ante gap analysis and are justified by other market analyses as well, absorption pressures dominated the second half of the programming period and resulted in slight changes in targeting, e.g. amendments to the credit schemes, relaxing the screening by allowing companies with track record of banking loans access to the funds and in easing the conditions of the various FEI schemes.

With regard to the second strategic objective, the main idea of the programme designers was to invite a large number of financial intermediaries in order to generate competition and ensure operative efficiency by opening the stage for several types of private and public fund managers. These intentions are justified in the case of venture capital, especially seed capital.

Management and implementation of FIs

The governance structure of the Hungarian implementation system is not obvious to match with the EU-standard (hypothetical) structure envisaged in the EU framework regulations. This was also one of the biggest challenges to clarify according to the government representatives interviewed. The adaptation of the EU regulations to the national context required strong effort due to a unique approach used by the national authorities.

The bottom line of the ongoing controversy was that the high number of financial intermediaries (in EC terminology: beneficiaries or fund managers) did not, in fact, mean a high number of financial instruments. In total, the country has basically run 11 different FI schemes managed by one MA, one central Holding Fund Manager and 137 financial intermediaries. The schemes of a given FEI type offered by the different intermediaries, however, were essentially the same by using standardised calls and funding agreements during implementation.

As compared to the original plans, banks were highly underrepresented among the final beneficiaries mainly due to:

- (a) a low level of maximum loan amounts up to 2013, around EUR 166 000;
- (b) perceptions of high administrative and reporting costs; and
- (c) complexity of procedural rules prescribed by the funding agreements.

The MA and the Holding Fund relied on performance-based incentives in calculating the allocations of next-phase ERDF contributions to the financial intermediaries. The so-called "partner-limits" served for sequential allocation of available funds – calculated on the basis of past performance. Although these allocation-limits were shifting upwards on the volume scale during the implementation period, they proved to be good benchmarks for assessing the actual performance of the given beneficiary and helped to reduce implementation risk by allowing sequential allocation of the total funds.

The key performance incentive in the case of the venture capital funds was the asymmetric nature of the loss and revenue-sharing system (i.e., the holding fund taking in the losses above a low amount fixed ex ante in the funding agreement, but not benefiting of final revenues proportional to the co-financing rate).

Monitoring and evaluation of FEIs

Reporting obligations for FI managers are specified in detail in the funding agreements and basically follow the same structure for all FI schemes. An IT system – called Fontium – was developed to serve as a central system for collecting and monitoring all kinds of data from the FI managers. Data obligations are specified for different time spans, there are daily, monthly, quarterly and yearly reporting obligations. Fund managers have to register their operations in Fontium immediately after they have signed a contract assuring that the MA and the holding fund has an up-to-date database of all operations. Indicators about the status and quality of each operation have to be updated at least monthly. A quarterly report that summarizes the status of his or her portfolio has to be submitted by each fund manager.

Apparently, the monitoring system is focusing on operative indicators, collects primarily information and data on the progress of transactions with a specific scoring model used by the holding fund managers to assess the soundness and health of the portfolios run by the fund managers. Collection of performance data at the level of final recipients is based on self-reporting instead of being based on automatic data linking to other government databases with more reliable and up-to-date information (e.g. dataset by the National Tax Authority on the final accounts of all the registered companies in Hungary).

Programme- and priority-level indicators used in EDOP programme documents are poorly designed with regard to almost all types of monitoring and strategic indicators. The publication of the actual values of the indicators is missing in several AIRs for several indicators (e.g. the AIR of 2011 or the values of 'Access of financial mediation in the SME sector' for 2007 and 2008) and there is no methodological guide on the meaning and interpretation of the presented values. During the interviews confusion on the part of MA and fund managers was tangible with regard to the rationale and understanding of the used indicators and consequently, the narrative on their current values.

Outcomes of FI implementation

The majority of the credit schemes was realised as investment loans, with two 'outlier' intermediaries, banks and credit cooperatives, which concentrated their efforts on allocating mostly working capital loans to businesses. The average amount of the loans allocated to businesses, i.e. final recipients varied substantially across schemes and type of financial intermediaries, also depending on the actual scheme. In general, the investment pattern was the following:

- credit institutions, i.e. banks and credit cooperatives focused their efforts on small- and medium-sized firms with relatively larger volumes of financial needs. Both the average and median loan amounts are significantly larger in the case of banks than in the case of other financial intermediaries, e.g. EUR 83,000 as a mean loan value and EUR 42,000 as the median loan value;
- financial entreprises took the chance to invest primarily in micro- and small entreprises of substantially smaller investment needs;
- LEDAs concentrated foremost on micro- and small businesses with very low amounts of average loan size, e.g. under EUR 20,000 and occasionally with more personalised linked services, e.g. mentoring and coaching in business planning - at least, in the case of the most successful local agencies, as interviews suggested. Based on stakeholders' views, LEDAs' performances and their strategic consistency substantially vary throughout the country, ranging from extremely committed local agencies with embedded networks at the local level to rent-seekers in the field.

The top sectors benefiting from the most volume of credit/ guarantee schemes are:

- commerce;
- manufacturing; and
- tourism;

as compared to the leading role of firms with a strong R&D profile in the case of the venture capital funds.

The EDOP and its PA 4 was designed specifically to support SMEs and enterprise development in the Convergence regions. Although FEIs had already been widely used in Hungary in the 2000s (financed by national funds), this was the first time, that Cohesion policy introduced JEREMIE-type instruments as an alternative to non-refundable support, which was mostly grants that were used exclusively in the previous programme period. This new PA under the economic development programme was planned to be a large-scale pilot initiative to test and see whether and how far microcredit, small loans, guarantees could perform better than grants in terms of reaching out to the main target group (micro- and small firms with very low access to external financial resources, such as bank loans) and in terms of cost-efficiency.

The EDOP was successful if the high commitment rate (over 90%) and our estimation on the benefit to costs ratio (1.29), which implies that EUR 1 costs of operating the loan schemes (EDOP PA4.1) will produce EUR 1.29 induced investment at the firm level is considered. In 2014 over 90% of the final beneficiaries were micro and small firms, 64% of them still with no track record in taking bank loans. These figures are very much in line with the initial intentions.

By the end of 2014 the programme registered 13,055 companies as final recipients under PA 4, with close to 14,000 transactions. Regional allocation of funds is relatively balanced, and monitoring data also suggest that due to EDOP interventions 61,896 new jobs were created by 2013 (no data available to the particular job effect of the FEIs) and according to our estimations EUR 1 contributed by ERDF funds generated EUR 1.42 of total public and private capital investment on gross average.

It is hard to assess the effectiveness of the interventions in terms of result and potential impact indicators due to the fact that all the FEI schemes are still in progress (only 25% of the 14,000 transactions have been closed by the end of 2014). Nevertheless, the official monitoring documents report on the actual values of some of the result indicators of the programme (AIR 2014)) – such as:

- on the decrease of the number of micro, small and medium-sized enterprises without access to financing resources (loan) by 5.8%points by 2013 as result of PA 4 (target value: -12.8 %points change in the share of those SMEs in the total population by 2015).
- on the improving access to financial mediation in the SME sector by +4.2%points change in the share of SMEs having access by the end of 2013 (target value: +10% points change by 2015).

Unfortunately, the source of these data and the calculation methods are not clearly specified in the official reports. Nevertheless, indeed if we look at the SMAF index for Hungary between 2007 and 2014, we can see that the overall score for Hungary has improved, rising from 81 to 95 (with the similar trend of the SMAF debt sub-index and with the SMAF equity finance sub-index performing even better in scores, hitting the EU baseline in 2013 with a score of 103).

These figures suggest a slow convergence in SME financing and a slowly closing gap in the Hungarian financial markets. It should be subject of future analysis how far the improvement in both the credit and equity financing indicators is sustainable and what kind of effective contribution the EDOP FIs may generate in terms of growth and productivity effects at the micro level. Counterfactual-based impact assessments should answer these questions after the programme closure (as early as 2017).

In our interviews both government and market stakeholders emphasised the significant market making effect generated by the venture capital funds and a potential market clearing effect in the case of the SME microcredit segment. They also pointed to some indirect (hardly measureable) effects – such as, the evolving start up network linked to the JEREMIE-type interventions, the improved market know-how about this type of financial instruments, the generally positive image/ positive perceptions of these instruments as forms of market interventions.

In our view, the cost–effectiveness of all of these instruments could be improved – primarily by:

- linking the access to microcredits to business support services, especially to such services as mentoring, coaching and peer-learning,
- simplifying the regulatory framework and investing in more pro-active branding and sales activities in the case of guarantee schemes (as also confirmed by many stakeholders interviewed), and finally by
- adjusting the business terms and conditions for fund holders to those usually applied by market investors in a sound market context – see reducing the management fee closer to the business-as-usual benchmark rates (2%), implying carried interest (even if closer to the low-level rates, like 10-15%) and fix a feasible hurdle rate (around 8-9%).

Introduction to the case study

The case studies look more thoroughly (in a specific local setting) at the design, purpose and management of the financial instruments (FIs) used in the programmes, as well as their effects on the programme area. The main points covered by the case studies are:

- the context within which FIs were introduced
- goals and theory of change of FIs
- management and implementation
- monitoring and evaluation
- outcomes
- effectiveness and added value
- problems and solutions in carrying out the case study

The case study examines the full range of evaluation questions given in the tender specification for Task 3 including 9 main evaluation questions and around 40 subquestions. This large number of individual questions was clustered in the reporting template to be manageable.

OP and FIs under scrutiny, sources, approach

This case study examines the FIs implemented under the Hungarian OP Economic Development 2007-2013 (EDOP 2013).

The case study is based on a desk review of relevant documents (calls for expression of interest, studies, evaluations, programme documentation and other materials) and interviews with the informed persons from the Managing Authority (MA), the Holding Funds and the fund managers as well as final recipients.

The report is organised around six chapters:

Chapter 1 addresses general aspects of the EDOP and the specific FIs implemented under this programme.

Chapter 2 maps out the conceptual model, the ToC of FIs and examines core elements of the ToC such as the market gap assessment the division of labour between FIs and the fit with other instruments.

Chapter 3 verifies the implementation of the FI and tells the 'performance story' of topics such as governance, management, cost, managing the portfolio, including risk management, and the capacity of actors to run FIs.

Chapter 4 addresses the provisions for monitoring and reporting and examines the evaluation activity.

Chapter 5 verifies the initial outcomes of FI implementation at different levels (related to the instrument, the financial market and the final recipients) including the leverage effect, the extent to which FIs revolve, and short- and long-term results.

Chapter 6 focuses on how implementation and practice (examined in sections 3, 4, 5) fit with expected goals and the ToC described in section 2. The experts also assess achievements regarding operational and strategic goals as set out in the ToC based on the evidence in previous sections, and draw conclusions on the optimum scale of the FIs, the impact on the related market of venture capital and equity, where relevant, and summarise good practice. Last but not least, are comments on problems and solutions in carrying out the case study.

1 Short presentation of the FEIs in the OP and context

Key findings

- ERDF-supported FIs were introduced in Hungary for the first time during the 2007-20013 programme period.
- Priority Axis (PA) 4 of the Economic Development OP (EDOP), which covers all of Hungary except for the capital region, was labelled 'Financial instruments' and allocated EUR 727 million, or 22% of the OP volume. PA 4's main objective was to facilitate SME access to finance.
- There are 11 FIs under EDOP, five loan products, three guarantee products and three VC products. All products are managed by one Holding Fund (VHF Plc.)
- By the end of 2014, 93% of the planned budget for PA 4 was transferred to the EDOP programme and earmarked for the JEREMIE-type measures. The 7% difference was entirely due to the VC schemes, which committed only 59% of the planned funds (EUR 162.5 million).

1.1 OP characteristics

ERDF-financed financial instruments were first introduced in Hungary in the 2007–2013 programme period. All ERDF-financed FIs for enterprises are included under two national Operative Programmes: the Economic Development Operative Programme (EDOP) and the Central Hungary OP (CHOP).

This case study presents an ex-post evaluation of the JEREMIE-type instruments¹ run under EDOP. EDOP represents 10.90%² of the total OP resources. 24% of EDOP sources, in total EUR 703 million, was finally allocated to FEIs by 2014 (KPMG 2013; EDOP AIR 2014; EDOP 2007). Support through FIs is provided in the form of loans, guarantees and venture capital, through 11 schemes in total.

The JEREMIE-type financial instruments were offered within Priority Axis 4 of the Economic Development OP and Priority Axis 1.3 of the Central Hungary OP. The instruments were replicated between the two OPs, so the available schemes were exactly the same in the two operative programmes except that the EDOP targeted the convergence regions (every region except Central Hungary) while the CHOP targets Central Hungary. In this case study we focus exclusively on EDOP.

The main strategic goal of EDOP was to encourage the permanent growth of the Hungarian economy. An overview of the strategic goals, specific goals and related priority axes is depicted in Figure 1. The strategic goal should be reached through four priority axes:

¹ Financial instruments co-financed by EU funds under a joint initiative of the European Commission. JERE-MIE stands for Joint European Resources for Micro to Medium Enterprises. More information: http://www.eif.org/what_we_do/resources/JEREMIE/

² Source:

http://www.ahkungarn.hu/fileadmin/ahk_ungarn/Dokumente/Wirtschaftsinfos/HU/Statistik/INFO_HU_NFT2 _2007-2013_hu.pdf

- 1. R&D and innovation
- 2. Complex development of corporate capacities
- 3. Development of the business environment
- 4. Financial instruments

Under EDOP the Priority Axis 4 was set up exclusively for financial instruments. According to programme documents and AIR 2013 the main objective of this PA was to overcome the limited access of credit, guarantee, and capital resources on the market. However, based on interviews with key stakeholders from the planning phase, the idea of introducing financial instruments was also strongly driven by their assumption that their FEIs may represent more efficient forms of SME supports than grants. Another explicit objective of PA 4 was market making and market facilitation especially in the field of venture capital and micro credit.

Figure 1: FIs in the context of the OP ("objective tree")

Strategic goals		ermanent growth o al capital (2.2 in Ol		onomy by the devel	opment of the			
Specific goals	Increase in Research & Development and innova- tion capacity, activity, as well as coop- eration	Complex de- velopment of corporate ca- pacities	Development of the busi- ness envi- ronment	To facilitate the access of SMEs to fi- nancing re- sources				
Priority axes	1	2	3	4				
	R&D and in- novation for competitive- ness	Complex de- velopment of enterprises (focusing on SMEs)	Improvement of modern business en- vironment	Financial in- struments	Technical as- sistance			
Contribution FIs				Implemented by 3 types of FIs (credit, guaran- tee, venture capital)				
Horizontal princi- ples	Equal opportunities, sustainability, regional policy							

Source: (EDOP 2007) , own adaption

The total budget of PA 4 was planned to be EUR 703.81 million with an 85% cofinancing ratio from ERDF funds (EDOP 2007). After the reallocation of funds in July 2009 as a response to the financial crisis the funds for PA 4 were increased to EUR 727.08 million (AIR 2013). After the reallocation PA 4 represented 21.62% of the total budget of the OP. More than half of total funds (EUR 418.75 million) were allocated to loan schemes. The second reallocation³ followed in 2013 when funds were taken from the loan (EUR 48.21 million) and guarantee (EUR 16.07 million) schemes and given to the venture capital measures. The main reasons for this move listed in the 2013 AIR were the enhancement of the possible most efficient use of remaining resources.

Table 1: Planned	allocation of	FERDF fin	nance for	FIs and	related	grants	in the
OP							

	Planned ERDF* (EUR million)	Planned total sources (EUR million)	Repay- able FIs (EUR million)	Non- repayable grants (EUR mil- lion)	Share of FIs	Share of grants
PA 4 Financial instruments	570.10	670.70	670.70		100%	0%
4.1 Loans	295.14	347.23	347.23		100%	0%
Combined Micro Credit (CMC)	141.68	166.68	166.68	57.99	74%	26%
4.2 Guarantees	23.03	27.10	27.10		100%	0%
4.3 Venture Capi- tal	235.49	277.05	277.05		100%	0%
Total OP 2007- 2013	2,579.00	3,034.12	670.69	2,363.43	22%	78%

Source: MA, weekly report about progress of FIs, January 2015, data includes operations contracted until Dec 31, 2014 (except for the total OP values, which is taken from the original OP documents back from 2007. We refer here to the official sources from 2007)

Notes:

 \ast Planned ERDF sources are calculated as 85% of the planned total sources, as 85% was the common co-financing rate in the EDOP

The Combined Microcredit was introduced in 2011. This scheme was officially run under EDOP 2.1.1. in the EDOP-2011-2.1.1/M call. It used the funds allocated at EDOP PA 4 for the repayable part and the funds of EDOP PA 2 for the non-repayable part. EUR 57.99 million refers to the non-repayable part.

1.2 Description of FIs

Loans

The first call (New Hungary Micro Credit⁴) was published in 2007 and the first transactions happened in the beginning of 2008 making Hungary one of the first countries launching these instruments.

³ Government decision No. 1577/2013 (VIII.27.) (source: AIR 2013)

⁴ The strategic framework document (the national development plan) for the 2007-2013 period was called the New Hungary Development Plan. The design of the JEREMIE-type instruments and more broadly of the

In 2009 the New Hungary Current Asset Credit and the New Hungary SME Credit Programme were launched as a response to the financial crisis. The New Hungary Current Asset Credit Programme was quite short-lived as it was closed in 2010 as "feedback received from intermediaries pointed out that the activity extension related requirements are hard to meet in the current recession period, and banks' monitoring obligation with regard to credit utilisation is also a hard-to-meet requirement" (EDOP AIR 2014, 142).

The New Széchenyi Credit Programme from 2011 was the extension of the first Micro Credit scheme. The New Széchenyi Credit Programme underwent significant modifications. It was launched as a loan scheme specifically targeted at micro enterprises and then the available loan size increased thereby attracting small and medium enterprises in the later phases as well.

The Combined Micro Credit was introduced in 2011 and was the best selling product of the OP: more than half of all transactions of PA 4 were Combined Micro Credit transactions by December 31, 2014. The scheme offered loan amounting up to max. EUR 64,437 (HUF 20 million) together with a non-repayable grant (max. EUR 32,219, HUF 10 million. This scheme provided support composed of 45% grant and 45% loan, and required at least 10% of own contribution. The planned funds (~EUR 200 million) were fully absorbed by the end of the period. This scheme met outstandingly high demand and has been re-opened later on.

Guarantees

The New Hungary Portfolio Guarantee Programme was the second in the line of the launched programmes in 2008. A revised new guarantee and a counter-guarantee scheme were launched in 2011.

In general, the guarantee schemes did not become very popular, as both the monitoring data shows and as was reassured by all of our interviewees who have been involved in the implementation of these schemes. In the case of guarantee schemes we can also observe loosening of entry requirements with respect to the beneficiaries (e.g. guarantee fee is reduced from 1 to 0.5%) as well as to the final recipients (e.g. maximum amount of loan is increased in Nov 2009 from EUR 322.19 thousand (HUF 100) to EUR 644.37 thousand (HUF 200 million), later – in 2013 – to EUR 1,610.93 thousand (HUF 500 million)). (For a detailed overview of the changes in the guarantee schemes as well as the loan and venture capital schemes, see Annex 7.6)

Venture Capital

In 2009 the first venture capital scheme was also introduced: the New Hungary Venture Capital Programme – Joint Fund. During the programming period several other schemes were launched and the already existing schemes were modified based on the

design of the EU co-funded operative programmes was in line with this development plan. After the change of government in 2010 a new development plan - called the New Széchenyi Plan- was prepared. The name of the different financial instruments under EDOP follows the "branding guideline" given in this new national plan. István Széchenyi is a famous political figure from the 19th century who largely contributed to economic and social reforms of his time in Hungary and was founder of several important financial and academic institutions (e.g. the Hungarian Academy of Sciences).

early experiences of the JEREMIE-type instruments and the changing economic environment.

Regarding the venture capital funds, two calls were opened in 2012 that both had a second round in 2013 (New Széchenyi Venture Capital – Joint Growth and Joint Seed). With progress in the programme implementation entry requirements (both for fund managers and for final recipients) were also relaxed.

For summaries of the chronological changes in the various schemes, see Table 7.6 in Annex A.6.Tables summarizing the changes in the FEI schemes of EDOP

Table 2: Key features of FIs under the OP 'Economic Development' (Data in the last four columns represent the stateof-play on Dec 31, 2014)

	Fund Name	Set- Fund F up Manager date		up Manager		OP contribution				
						Planned EUR mil- lion	Commit- ted EUR million	In- vested EUR mil- lion	No. of opera- tions	
	Loan programm	nes				l			•	
1	New Hungary Micro Credit	2007	Venture Finance Hungary Plc. (VFH Plc.)	To offer credit for SMEs who cannot have access to finance on the market due to economies of scale and information asymme- try, but who are other- wise creditworthy.	The programme was among the very first ones launched in the EU. Its main objective was to narrowly target on SMEs that have never had a loan before but are credit- worthy. Max. amount of loan was EUR 32,219 (HUF 10 million)	39.56	39.56	42.72	2339	
2	New Szé- chenyi Credit Programme*	2011	VFH Plc.	To offer credit for SMEs who cannot have access to finance on the market due to economies of scale and information asymme- try, but who are other- wise creditworthy.	This programme was practically the continuation of the Microcredit programme with looser condi- tions. Max. amount of loan was gradu- ally increased during the pro- gramming period reaching EUR 1.61 million (HUF 500 million) in 2013.	121.69	211.58	196.63	2795	
3	New Hungary Working Capi- tal Loan (or Current Asset Credit)	2009	VFH Plc.	To support SMEs facing a temporary lack of sources.	This programme departed from the original view to support in- vestment projects and supported specifically current asset loans as a response to the financial crisis. The scheme didn't become popu- lar. Amount of loan is EUR 322.19-	4.90	4.90	5.99	90	

	Fund Name	Set- up date	Fund Manager	Policy objectives	Description	OP contri	ibution		
						Planned	Commit-	In-	No. of
						EUR mil- lion	ted EUR million	vested EUR mil- lion	opera- tions
					644.37 thousand (HUF 1-200 mil- lion).				
4	New Hungary SME Credit Programme	2009	VFH Plc.	The aim of the product is to support the efficient distribution of EU sources to SMEs out of the Cen- tral Hungary region.	Part of government package tar- geted at alleviating credit crunch effects. Amount of loan is EUR 32.22-322.19 thousand (HUF 10- 100 million)	14.40	14.40	15.27	236
5	Combined Mi- cro Credit	2011	VFH Plc.	Make loans more attrac- tive by combining it with a non-refundable grant; Increase absorption	The programme was launched with the main purpose of increas- ing absorption rates. More than half of all the final recipients par- ticipated in this programme. Anecdotal evidence suggests that the sources were abused for buy- ing properties for personal use.	166.67	166.67	163.93	7969
	Guarantee prog	grammes	5						
6	New Szé- chenyi Credit Guarantee Programme	2011	VFH Plc.	To offer credit for SMEs who cannot have access to finance on the market due to economies of scale and information asymme- try, but who are other- wise creditworthy.	Max. amount guaranteed EUR 644.37 thousand (HUF 200 mil- lion). Max. % of guarantee as a share of loans is 80%.	9.67	9.67	9.02	620
7	New Szé- chenyi Counter- Guarantee	2011	VFH Plc.	Supporting SMEs that have growth potential in becoming more competi- tive and implementing technological and infra-	Continuation of the New Hungary Portfolio Guarantee product with an increased amount of credit: Max. amount guaranteed EUR 1.61 million (HUF 500 million).	13.34	13.34	4.25	272

	u		Fund Name Set up date		Fund Manager	Policy objectives	Description	OP contribution			
						Planned EUR mil- lion	Commit- ted EUR million	In- vested EUR mil- lion	No. of opera- tions		
	Programme			structural developments.	Max. % of guarantee as a share of loans is 85%. Underwent some modifications in 2013: The rate of counter- guarantee has increased from 85% to 100%						
8	New Hungary Portfolio Guarantee Programme	2008	VFH Plc.	To offer credit for SMEs who cannot have access to finance on the market due to economies of scale and information asymme- try, but who are other- wise creditworthy.	Max. amount guaranteed EUR 644.37 thousand (HUF 200 mil- lion). Max. % of guarantee as a share of loans is 80%.	4.09	4.06	4.00	248		
	Venture Capital	program	mmes	1							
9	New Hungary Venture Capi- tal Pro- gramme – Joint Fund	2009	VFH Plc.	Support innovative SMEs in their expansion phase; There are no other VC funds available for them.	60% of projects have to be inno- vative. In the summer of 2013 some modifications were intro- duced in the scheme: maximum amount that can be invested dur- ing a 12-month period increased from EUR 1.5 million to EUR 2.5 million; it become possible to buy existing shares; the sales limit for the beneficiary was increased from HUF 1.5 billion (EUR 5.357 million) to HUF 5 billion (EUR 17.857 million)	185.22	118.02	107.29	82		
10	New	2012	VFH Plc.	Support innovative SMEs	At least 20% of projects has to be	19.33	5.54	5.15	66		

	Fund Name Se up da		Fund Manager	Policy objectives	Description	OP contribution			
						Planned EUR mil- lion	Commit- ted EUR million	In- vested EUR mil- lion	No. of opera- tions
	Szechenyi Venture Capi- tal Pro- grammes - Joint Growth Fund Sub pro- gramme			in their expansion phase; There are no other VC funds available for them.	either innovative or in their early start-up phase				
1	New Szechenyi Venture Capi- tal Pro- grammes - Joint Seed Fund Sub pro- gramme	2012	VFH Plc.	Support innovative SMEs in their early start-up phase; There are no other VC funds available for them.	This capital programme focused on start-ups. At least 50% of projects has to be either innovative or in their early start-up phase	72.49	38.95	33.38	50
	TOTAL					670.69	626.68	587.63	14,767

Source: (EDOP AIR 2014; KPMG 2013)

* For the New Széchenyi Credit Programme an additional EUR 89.89 million (HUF 27.90 billion) was allocated as a so-called 'absorption budget'. This budget does not change the planned amount, only the committed and invested values.

1.3 Financial performance at the level of the OP and the funds

The total planned budget for PA4 was EUR 670.70 million (HUF billion 208.17) for the programme period, which includes the planned ERDF and the national contribution. The New Hungary Joint Fund (27.62 %), the Combined Microcredit (24.85%) and the New Széchenyi Loan (18.14) were the top three with the highest share of the allocated funds. In total EUR 235.49 million (HUF billion 85.99) was allocated to venture capital programmes in five calls in total. Seeds capital funds cover less than 8% of the overall funds allocated to the VC schemes – a figure far below the originally planned 20% (EUR 16.43 million, ca. HUF billion 6.00, source: interviews with MA representatives).

The share of actually invested funds compared to the amount of committed resources is above 90% in all cases, but the counter-guarantee programme (32%) and the two venture capital schemes (Venture Capital II – Joint Growth with 86% and New Hungary Venture Capital III with 37% investment rate). Compared to the allocated funds, 97% was spent in the case of loan, 64% in case of guarantees and 53% in case of the venture capital schemes.

The total value of loan, guarantee and VC contracts is EUR 782.98 million (HUF billion 243.02) which included the contribution from the beneficiaries and other non-JEREMIE sources. The actually invested amount from the JEREMIE sources was EUR 656.81 million (HUF billion 203.86) if we consider the total guaranteed amounts in case of guarantees and EUR 587.64 million (HUF billion 182.39) if we calculate with the 20% non-paying ratio according to EC accounting rules⁵ (interview with MA, in the Table below we only present the second, i.e. the accountable JEREMIE resources⁶).

	Planned volume of funds (1)	Committed funds dis- bursed to HF (2)	Actually in- vested at fund level - only JEREMIE sources (3)	Share of actually paid to al- located sources (3/1)	Actually in- vested at re- cipient level (4)
Loans	347.23	437.12	424.56	122.27%	464.74
Guarantees	27.10	27.08	17.30	63.83%	104.82
Venture Capital	277.05	162.50	145.78	52.62%	213.41
Total	670.70	626.69	587.64	87.62%	782.98

Table 3. Funds allocated, committed and actually paid by PA 4 sub-priorities(by 31 December 2014) (in EUR million)

Source: MA, weekly report about progress of FIs, January 2015, Data includes operations contracted until Dec 31, 2014

⁵ The difference between the two numbers is only due to the accountability rules of guarantees transactions. In the first case all the guaranteed amount is counted, although some share of the guaranteed amount might never actually get paid – if there is no problem with the repayment of the related loans. In the second case – in line with EC regulation – only 20% of the guaranteed amounts are counted as the expected value of actually paid contributions is counted based on a standard 20% non-payment ratio.

⁶ However, when we calculate the amount of beneficiary contributions we use the first approach.

Note: The main source of information is the weekly report of the MA (2015, first week) that is the basis for the status table in Annex 7.5. Column (1) includes the planned OP sources that include the ERDF sources and the 15% national contribution. Column (2) includes the OP sources that have been transferred to the programme account by December 31, 2014. These values do not correspond with data in the Annex tables where we make a difference between ERDF (columns 1-2) and other (public and private) funds (column 3).

All in all, while the credit schemes have over-performed in terms of financial targets, in the case of the guarantee and venture capital schemes we could observe a very slow take up and consequently, slower progress in the allocation of funds. Reasons for the differences in the financial performance indicators are manifold – partly institutional and regulative (e.g., time-consuming institutional set up process in the first half of the programming period and perception of regulatory burden in case of guarantee schemes) and partly, strategic (higher demand for credit schemes, especially for that combined with non-refundable grants – issues we will discuss in the next chapter in more details.

2 Goals and theory of change of FIs

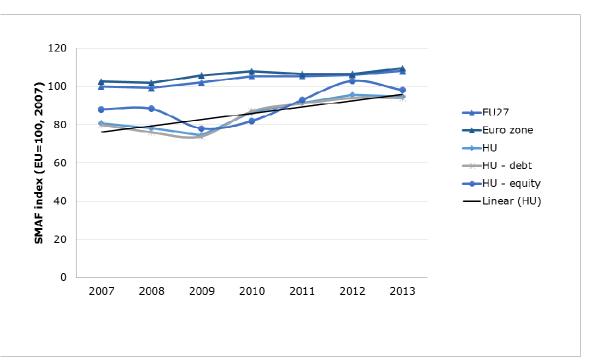
Key findings

- The FIs' key objectives were the 'provision of access to finance for those which have a viable business plan but cannot access external financial resources and to promote start-ups with innovation potential.' Furthermore, the intervention explicitly aimed at market making and market facilitation in little developed or nonexistent segments of the financial market.
- Longer-term targets are only vaguely defined in the OP documents but include growth promotion and job creation, without specifying the mechanism to achieve these goals.
- A comprehensive market gap analysis was undertaken in 2007. This guided the new FIs' design, if only qualitatively, since there was no quantification of the gaps.
- The MA's motivation shifted during the programming period. The planning process was driven by considerations on the efficiency of the support instruments in order to simplify market entry; promote new types of intermediaries; and foster competition in financial market segments. In the second half of the programming period, absorption pressure became more important.
- The 11 FI-products are clearly differentiated according to firm size and capital needs. There is minimal overlap between the products.
- Combining FIs with other forms of support has been institutionalised in Hungary within the combined micro credit scheme (CMC) which was very successful and boosted take up from the target group. Combinations with non-financial support were not developed at programme level but this practice is common with some fund managers, like local enterprise development agencies (LEDAs).

2.1 Overview on goals of the FEI schemes and the Theory of Change (ToC)

While in the 2000s there was a relatively high number (20) of state subsidised FEIs in Hungary and the volume of bank loans was in steady increase throughout the first half of the decade (EDOP Gap Analysis 2007, Kállay 2014, interviews), the country still lagged behind the European average in access to finance – especially in case of SME finance (see Figure 2 below).

Figure 2. Evolution of SMAF index



Source: SMAF Index 2014. http://ec.europa.eu/growth/tools-databases/smaf/index_en.htm

Compared to the EU average index in 2007 (baseline index), the access of Hungarian SMEs to debt finance was below this baseline still in 2013 with an even greater gap to the European benchmark in the post-crisis period (2009-2010). The sub-index of access to equity finance shows a bit more rapid convergence in the second half of the period, with a mid-term tipping point in 2012 when the Hungarian sub-index (SMAF equity) was above the baseline value (103).

Consequently, the key objectives of the new FEIs were

- to provide access to finance to SMEs which have viable business plan / feasible investment ideas but cannot get access to external financial sources (such as bank loans, equity finance), and
- to promote start-ups with innovative potentials.

There was no specific geographic and sectoral targeting. As stakeholders suggested in our interviews, this was justified by the intention of the programme designers to minimise the potential market distortion effects.

In addition to these SME policy objectives, the interventions aimed also explicitly at market making and market facilitation in segments of the financial market where SME financing was fairly underdeveloped (microcredit) or in effect non-existent (seed and venture capital).

The longer-term results to be achieved by the FIs are quite vaguely defined in the OP documents and basically just include promoting growth and job creation. The detailed mechanisms to achieve these goals are not specified. Throughout the programming period it turned out that the amount of funds allocated at the FIs is much larger than what can be spent by easily keeping the main focus of targeting SMEs that would otherwise not find financing options on the market. In 2010 only about 10% of the funds

was committed and there was an explicit and increasing pressure on the MA to increase absorption rates (source: interviews).

As a consequence, this absorption pressure dominated the second half of the programming period and resulted in slight changes in targeting (e.g. amendments to the credit schemes, relaxing the screening by allowing companies with track record of banking loans access to the funds).

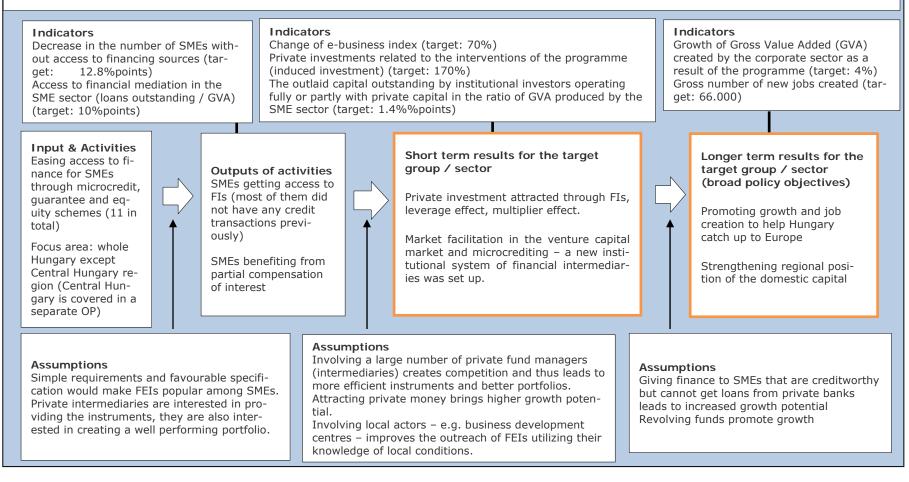
With regard to the third strategic objective the main idea of the programme designers was to invite a large number of financial intermediaries in order to generate competition and enhance operative efficiency. For examples, there was a set of financial intermediaries with long track record in providing enterprise support services and microcredits (and working capital loans), though not involved into the allocation of ERDF co-financed funds before 2007, the local enterprise development agencies (LEDAs). They are traditionally more embedded and experienced in small settlements and in less developed areas. LEDAs have been operating in every county of Hungary since early 1990s - with the main purpose of supporting SME development. The programme designers have also consulted with representatives of financial enterprises during the planning process, as well. Their motivation was to improve the outreach of the FIs by utilising the local networks (in case of LEDA) or the already existing agent networks (in case of financial enterprises) in the allocation of the JEREMIE-type funds.

The evolution of the programme verified this approach to some extent as the banks and saving cooperatives turned out to be less interested in the small-scale financial schemes in the first period, while the majority of operations were delivered by financial enterprises and LEDAs (for more details, see Chapter 3 and 4).

Figure 3: Stylised theory of change: FIs in the EDOP

Context: Credit supply targeted at SMEs had been drastically growing since 2000 both on the private market and through public schemes. However, Hungary still lagged behind Europe at the beginning of 2007-2013 in the extent of available financing opportunities for SMEs especially in the venture capital market – that virtually did not exists – and microcrediting. The publicly run programmes were not operating in an efficient way.

Needs: The development of a market for SME financing was needed in order to supply creditworthy SMEs that otherwise could not get loans with resources. It was also important to cover a wide range of financial instruments and to improve efficiency.



2.2 Market gap assessment in the context of the private market

In 2007 the Ministry of Economy and Transport (in charge of programming) prepared the market gap analysis. Later this report was also used as a source for a more detailed gap analysis prepared by the EIF.

In the market gap analysis the supply and demand side of the financial product markets are described for six subsectors: loans, leasing, factoring, equity, technology transfer and business angels. Based on the assessment of the supply and demand side, market failures are identified (EDOP Gap Analysis 2007). In addition, all the state subsidised financing programmes are listed and summarized briefly in the gap analysis for the 2000-2006 period. The conditions, the number of clients and the total amount of exposures by the products are described; however, no conclusions are drawn about the implementation of the specific products or about the overall effectiveness of those products.

The gap analysis basically uses descriptive techniques of available statistical data and the relevant financing programmes. It lacks detailed arguments on the strategic weaknesses and quantification of market gaps. There is no in-depth ex-ante assessment on the potential demand of the JEREMIE-type products – except a quick estimation of the number of firms that could be identified as businesses with viable business plan but with no access to external financing (ca. 105,000 firms, EDOP Gap Analysis 2007, 7). The report is based on available macro- and microeconomic statistical databases (Central Statistical Office, Central Bank of Hungary) and on thematic surveys ran by the Ministry of Economy and Transport (business survey). For the quick assessment on the robustness and completeness of evidence used to prove the market gap, see table below.

Dimension	Assessment	Notes
Statistical data	$\checkmark\checkmark$	Data sources: CSO, CBH, EU Flash Barome- ter2005, national market databases (e.g. MISZ Innostart)
Feedback from local actors	$\checkmark\checkmark$	Business survey with high share of respon- dents
Quantification of the exist- ing market gap	*	Simple estimation on the number of busi- ness potentially interested in the (new) FIs, Lack of evidence-based estimation of mar- ket volume / demand of specific target groups (e.g. micro firms, self-employed, etc.)
Coherence of running FIs and consistency of planned, new FIs	0	Lack of comprehensive assessment of the potential overlaps with running FIs Missing consistency check

Table 4: Robustness and completeness of evidence used in market gap analysis

Legend: $\checkmark \checkmark \checkmark$ - very strong, $\checkmark \checkmark$ - good, \checkmark - partly good, * - partly missing, 0 - missing

SME financing have experienced a rapid growth period since the 2000s (see Figure 4), however, even with market expansion rate, Hungary lagged behind the EU average in terms of the amount of loans to SMEs. In 2007 the ratio of loans lent to non-financial companies to the GDP was 25.7% and has not changed much since 2000 when it was

24% - still far below the same ratio in the EU-15 (44.7%). (EDOP Gap Analysis 2007, 18, Eurostat, Hungarian National Bank).

Based on the 2005 Flashbarometer survey on enterprises' access to finance 14% of SMEs in the EU-15 marked "difficulties in access to finance" as the most serious barrier to their growth, while 24% of SMEs in the 10 new member states and 27% in Hungary picked it as the biggest challenge (Eurobarometer 2006). In Hungary only 54% of SMEs turn to banks in case they need resources for finance (vs. 79% in EU-10, Eurobarometer 2005).

During the 2000-2006 period there was a high number of financial products financed by public funds: various government agencies were managing around 20 programmes per year. There were many financial instruments in use with overlapping policy aims and scope but different conditions. Consequently, the state-subsidised programmes, especially the ones targeted at the development of small enterprises were competitors to each other. The large number of programmes and products also led to costly and inefficient delivery and confusion among potential clients over what offer to choose and what schemes to use.

Most of the FEIs during 2000-2006 targeted SMEs. There were many products that targeted specific sectors or groups of enterprises (e.g. sport associations, Hungarian firms with Italian relations, agriculture) leading to market distortions. Moreover, the targeting of financial products often wasn't based on the shortcomings of markets and thus led to distortions of already existing markets of financial products. The authors of the Gap Analysis (EDOP Gap Analysis 2007) claim that an SME development programme should offer neutral products with respect to their effects on competition and should rather have a horizontal approach. There were a few programmes in the period 2000-2006 that managed to reach a broader set of enterprises (Széchenyi Card, guarantees). The goal of the new set of financial products is to help create a stable, self-sustaining market for financial support of the SME sector.

The main market failures identified in the gap analysis are the lack of credits to SMEs offered by the commercial banks due to information asymmetry and economy of scale. (The relatively high transaction costs in case of SMEs and a relatively high risk potential of micro- and small firms due to lack of collateral and / or firm and sound financial track record).

In case of the equity market the authors find the lack of risk assessment knowledge the most striking problem - along with the fact, that start up financing is very weak in general. (The country has only one business angel network.)

The gap analysis identifies the following weaknesses and threats as relevant for the programme period (EDOP Gap Analysis 2007, 42):

- Lack or low level of own financial resources at potential final recipients (microand small firms),
- Limited availability of collaterals,
- Low share of business with the explicit need of equity finance,
- Increase of interest rates,
- Growth of external / contextual risks (due to macroeconomic uncertainties, increase of administrative and tax compliance burden), and

• Slow growth of demand side on the typical SME markets.

Compared to the EU-15 member states Hungary lags behind primarily in market figures for bank overdrafts, loans over 3-years length, development loans and venture capital. The assessment suggests that in 2000's the venture capital market in Hungary was virtually non-existent and the market segment of small loans was underdeveloped. Consequently, the report concludes that schemes providing microcredit, portfolio guarantees and venture capital (both for seed and start-up phase) would have the biggest added value in the Hungarian context. The gap analysis also stresses the importance of counselling services provided to SMEs to improve management and financial knowledge at micro (firm)-level.

The gap analysis from 2007 was relying on a wide variety of data sources (representative surveys launched by the ministry, specific-sectoral analysis of the Central Bank of Hungary and analytical papers by government and non-government experts). Although the existing market gap was not quantified in terms of missing volume of loans, guarantees or other financial instruments, but based on survey data (representative sample in terms of firm size and sectors) they run an estimation on the number of companies potentially interested in bank loans but having no access to finance in any form (105,000 companies EDOP Gap Analysis 2007).

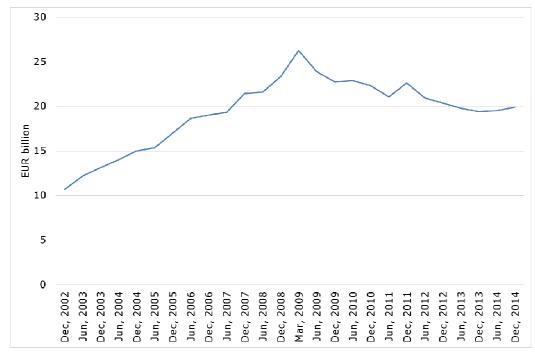


Figure 4: The total stock of loans for SMEs (EUR billion)

Source: (CHB 2015, appendix)

FI	Market problem identified	Source
Loans / Guaran- tees	Bank sector targets older potential cli- ents, banks do not offer micro credits – due to information asymmetry and economy of scale problems, relatively high transaction costs in case of SMEs	About theoretical demand: A calculation based on the estimations of EIF and some data of the Hungarian Statistical Office
	There are no specific market products targeted at start-ups (loans, guaran- tees are primarily provided to well- established firms)	
	Supply of credits lags behind theoreti- cal demand (only 18% of enterprises have credit)	
	Limited demand for bank loans due to lack of collaterals, firm and robust financial track record at firm-level	
Venture Capital	Financing gap is estimated to be around EUR 7 billion.	Gap analysis
	One exclusive business angel network	
	Lack of risk assessment knowledge	

Table 5: Summary table of market problems per FEI types

Source: EDOP Gap Analysis 2007

2.3 Contribution of FEI schemes to regional development goals of the OP

The overall objective of the EDOP is to promote permanent growth of the Hungarian economy by strengthening its production sector's competitiveness. The programme, especially the FEI schemes do not have any specific sectorial or geographic targeting, though the related instruments are primarily aimed to meet the investment (to a small extent the liquidity) needs of small and medium-sized enterprises. Priority 4 was planned to tackle the failures of financial markets in Hungary and to improve the access of small and medium-sized enterprises to a larger variety of financial instruments (EDOP AIR 2014).

The explicit investment strategy declared by the holding fund manager corresponds to the weaknesses and threats identified in the EDOP SWOT analysis (EDOP 2007), such as:

- Underdeveloped financial culture in the business sector,
- Low share of SMEs with great growth potential and
- Limited access to credit, capital and guarantee resources on the market.

As the EDOP document stresses, effective implementation shall also contribute to strengthening positions of the domestic capital in the Central and Eastern European region (a strategic opportunity as listed in the programme document).

The investment strategies of the various FEIs are consistently complying with the needs identified in the market gap assessment (see weaknesses and threats of gap

analysis in Chapter 2.2.) The main credit schemes have been designed with an eye on the specific segment of SMEs with low level of own resources and limited availability of collaterals. The venture capital schemes aimed at direct market making by inviting private fund managers to schemes with focus on start-ups – without any restriction or narrowed down focus on any specific sector or firm size. Generation of seed capital investments was an explicit goal due to the lack of any relevant market activity in this field.

While running interviews with government and non-government experts, it was confirmed that during the planning process the main implicit goal linked to the FEI schemes was to set up a new institutional framework that:

- performs better in terms of cost-efficiency than the grant schemes financed by national and EU funds in the previous period, and
- could reach out to a wider set of potential recipients, especially to micro- and small business (though without any further diversification in sectorial targeting - cf. conclusion on "neutral products" made by the 2007 gap analysis).

There was a double assumption: (i) a large number of private intermediaries shall enhance competition and thus lead to a more efficient fund allocation mechanism, and (ii) by increasing the number of intermediaries and broadening the set of available FEI schemes both firms and financial market actors will better benefit of economies of scale and scope. This "market facilitation" function was strongly but not exclusively connected to the venture capital schemes.

2.4 Motivation of the MA to set up FIs

While the planning process was mainly driven by efficiency goals (cf. simplifying market entry, promoting the emergence of new types of intermediaries, thereby fostering competition in the various segments of SME financing), after 2010 absorption pressure was the main push-factor which dominated the implementation in the second half of the programme period – see, justification of OP reallocations in the AIR documents (EDOP AIR 2014, 90) and explicit reference to absorption problems by all of our interviewees. This motivation coupled with concerns about de-commitment risks took over as the major drive in the second half of the programme period (2010-2013).

2.5 Division of labour between FIs

The FEI schemes used within the EDOP were planned with a great attention to maximizing consistency and minimising any overlaps and competition between them. The major target groups of the loan schemes were established and operated for micro and small firms in their early and middle stages of life cycle. Targeting of the two types of venture capital schemes was also differentiated along firm size and capital needs. Taking these specifications for granted, we may conclude that interaction and overlaps between the schemes are minimal.

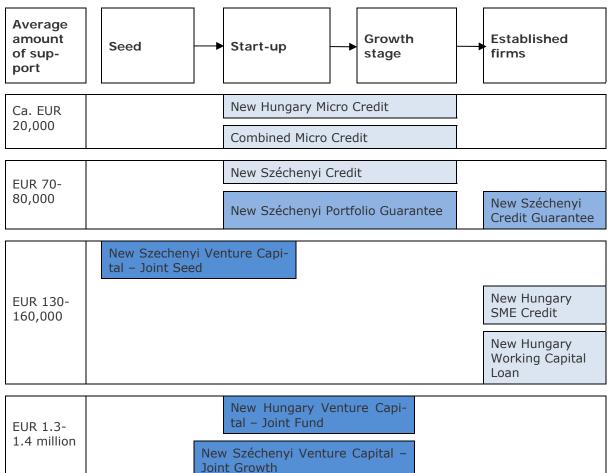


Figure 5: Stylised role of FIs in the business development cycle

Source: VFH Fontium (2015)

Note: On the vertical axis of the figure, the average amount of support for an individual recipient is included. In case of loans this is the amount of the loan. In case of guarantees this is the guaranteed amount of the loan. In case of venture capital schemes, this is the total amount invested in the final recipient from the fund including the 30% contribution from the fund manager. Due to lack of firm-level data, the Counter-Guarantee scheme is not depicted.

The programmes were organised into the different phases of the business cycle based on the scheme descriptions and the date of foundation data from the VFH Fontium database available for the final recipients.

In effect, the programme-monitoring database shows that the proportion of businesses benefiting of more than one FI scheme is very low (4%) and there are only 28 firms, which are registered as final recipients of three schemes (though in most cases not for the same period).

2.6 Fit of FIs set out in the OP with other OP instruments (grants, non-financial support) and similar non-Cohesion Policy instruments in the same area

The idea to combine repayable small loans with non-repayable grants (provided by the EDOP measure 2.1.1.) emerged in 2010, after both the Managing Authority and the Holding Fund Manager have realised that the microcredit schemes took up very slowly and significant share of the target group still misses the sufficient own capital to be able to opt for the credit schemes. Based on interviews, this diagnosis was set up in partnership with the programme design team in the Ministry of Economy.

The new so-called combined scheme was introduced in 2011 and it has considerably improved absorption as well as it could reach out to a much broader set of final beneficiaries. Based on recent monitoring data, half of the enterprises benefitting from the FEI schemes used this combined scheme; the number of operations is 7,969 out of the 13,429 operations until December 31, 2014.

Experts involved in the planning process stressed that back in 2007 there was also a push from the strategy designers to introduce schemes, which would combine "soft supports" with financial instruments. This initiative referred to services, like coaching, mentoring and special, tailor-made business advice services (partly also as a sort of conditional services provided before giving access to funds). Concerns however on the availability of high-quality service providers and especially on the lack of transparency in this market (lack of commonly used market qualifications and of ranking of the providers of such services, negative past experiences with subsidising such services) arose and the idea was put aside.

Box 1: Mentoring practice of a local enterprise development agency (LEDA)

Mentoring and coaching at a LEDA

In this Box we are summarising the approach of the LEDA that we interviewed towards clients and practices that the LEDA used to better assess the clients' ability to successfully run a business.

In the funding agreements there had been no requirement to offer non-monetary support for clients besides the FEI schemes; however our interviewee pointed out that a more complex approach towards recipients was also beneficial for the LEDA by assuring the health and success of supported projects.

The LEDA committed in counselling activities absolutely by their own decision. As our interviewee told us, she asked her colleagues one day if they are willing to spend some extra working hours in developing internal procedures for the assessment of applicants and counselling practices in order to ensure the health of the portfolio or not. They have all agreed on doing so and there was a wide consensus about the usefulness of such practices for the LEDA itself. By this they could reach out to more clients and could ensure the viability of the projects.

When an applicant arrived in the agency, the first thing to do was to assess the skills of them and make sure they have a viable business idea. Our interviewee told us it happened several times that the applicant at this point could not answer to such basic questions as 'How many balls of ice cream are you anticipating to sell in a month?' in case of an ice cream bar or 'What does it cost to you to obtain the equipment to repair a bike?' in case of a bike service. At this phase applicants got 'homework assignments' that helped them think over all the necessary steps of their business plan. The staff of the LEDA pointed out that in case of a bas business plan the applicants risk their own or their families' assets, which is a huge irresponsibility.

The approach of the LEDA was a complex approach not just focusing on some cornerstone number of a business plan, but focusing on understanding the whole background of an individual with all their difficulties. This approach was followed also during the repayment period. In case the clients had problems with the repayment, the staffs of the LEDA were there to help and find out a solution suitable for all actors in the operation. Mutual trust is an important element throughout the operations of the LEDA. Another key element is the widespread knowledge of local conditions and local people.

Source: Interview with a LEDA leader

3 Management and implementation of FIs

Key findings

- The governance structure of JEREMIE-type instruments in Hungary is based on national authorities and domestic financial intermediaries. The executive body is an HF, managed by VFH, a public sector company under the supervision of EDOP MA. VFH manages the allocation of the various funds via tenders, screening and selecting financial intermediaries, monitoring implementation and onsite audits
- During implementation, 137 financial intermediaries were assigned (through 306 standardised funding agreements) to offer at least one (out of the eleven) JEREMIE type products. The MA deliberately involved such a large number of intermediaries with the purpose of enlarging the market by promoting new entrants and improving competition within the regional financial market.
- There were five types of intermediaries: a guarantee institute Garantiqa Ltd, (exclusively offering the counter-guarantee scheme), credit institutions (banks and saving cooperatives), financial enterprises, LEDAs, and VC Funds. Funding agreements had different parameters for each of these groups, e.g. the refinancing rate and maximum amount of loans.
- The approaches of the various types of fund managers were quite different, with credit institutions showing little interest in the promotion of the support products, whereas many of the financial enterprises were founded with the purpose of acting as fund manager. These financial enterprises and LEDAs were particularly engaged in offering FIs across the whole country.
- The HF was established in the summer of 2007 and started work immediately. The various FI calls took from four weeks to four months to prepare for credit schemes and went up to $1\frac{1}{2}$ years for some VC schemes. Some loan and guarantee schemes were very quickly prepared, yet these were modified during implementation.
- The HF's management cost was on average EUR 1.47 million per year and totalled EUR 10.32 million at the end of 2013. The annual management fee for the intermediaries is fixed at 5% for all FIs in Hungary. How this compares to the actual (or planned) cost remains unknown, but it seems that these management fees are significantly above the market fees and are also among the highest reported in all case studies.
- The so-called 'partner limits' system provided an adequate incentive for the fund managers and simultaneously a risk management tool for the HF. Monitoring of the project portfolio of the fund managers is provided by an annual scoring system.
- Repayments under the loan schemes are up to 10 years, with the average between 7.5 and 8 years (with the exception of the New Hungary Asset Credit). The VCFs also have a lifespan of maximum 10 years.

3.1 Governance structure of FIs, role of MA

The governance structure of JEREMIE-type instruments is based on national authorities and domestic financial intermediaries – for the overview of the institutional system see Figure 6.

The Managing Authority of the EDOP was set up as a separate unit of the National Development Agency (NDA, *Nemzeti Fejlesztési Ügynökség*) in 2007. The National Development Agency was established as the central coordination office for the management of EU cohesion funds in the previous programming period. In January 2014 the NDA was dissolved and its units were integrated into the various ministries in charge of the specific policy areas. The EDOP MA was transferred to the portfolio of the Ministry of National Economy.

In accordance with the EU regulation (Article 60 of Council Regulation (EC) No 1083/2006), the MA is responsible for the management and implementation of the operational programme (OP) and serves as a coordination body under the monitoring of the Monitoring Committee. The MA also ensures that the implementation is in line with the European legislation. The EDOP MA took already an important role in the design phase of JEREMIE-type products by collaborating with the government experts of the Ministry of Economy and Transport in various working groups.

The executive body operating under the supervision of the MA is the Venture Finance Hungary Plc. (VFH) that was founded in 2007 with the sole purpose of managing and implementing the financial instruments introduced under the EDOP PA 4 (and the Central Hungary OP PA 1.3.) The VFH functions as a central holding fund by managing the allocation of the various funds via tenders, screening and selecting of the financial intermediaries, monitoring the implementation and running the on-site audits in collaboration with the MA.

VFH is responsible for announcing calls for potential financial intermediaries. The intermediaries had to meet the selection criteria regarding the technical and managerial specifications linked to the different financial instruments, however, they can flexibly calibrate the details of their own financial services within the given limitations and thresholds. The holding fund manager is member of the investment boards of the venture capital funds in supervisory function, but with no effective decision-making right on the final investment decisions.

Over the last 7 years 137 intermediaries offered at least one JEREMIE-type product. Although there is no monitoring data on the foundation date of the intermediaries, based on interviews many of the intermediaries were newly established (or 're-opened') due to the launch of the EDOP FIs. The operational framework of all the beneficiaries accredited to the specific FIs was standardised – that means, all intermediaries applying to participate in a call of the given scheme have signed the same template of funding agreement with VFH. In fact, these universal funding agreements specified the framework conditions and the specific loan / investment strategy of the given intermediary per each scheme – such as, e.g. the maximum amount of loans/ guarantees, the maximum length of repayment plan, the maximum interest rate and the required share of the own contributions from all the parties.

It was the deliberate choice of the programme designers to involve a large number of intermediaries in the delivery of the FI schemes. The following, specific expectations supported this approach:

- market making by allowing new entry (in terms of new intermediaries and of breaking previous local monopolies primarily of the local economic development agencies which provided SME supports with exclusive rights in the Hungarian micro regions prior to 2008,
- enhanced competition and thus more efficient delivery (source: interviews).

The governance structure of the Hungarian set up is hard to comply with the usually used hypothetical structure conceived in the EU regulations. This was also one of the biggest challenges to have a clear understanding and agreement on the definition of the key stakeholders in the delivery of EDOP FEIs – as several domestic interviewees from the central implementation authorities and from high-level steering positions pointed out.

The bottom line of the ongoing controversy was that the high number of financial intermediaries (in EC terminology: beneficiaries or fund managers) did not, in fact, mean a high number of financial instruments of different types. In total, the country has basically run 11 different FI schemes managed by one MA and by one central holding fund manager, which contracted out the effective job to 137 financial intermediaries. The schemes of a given FI type offered by the different intermediaries were however standardised.

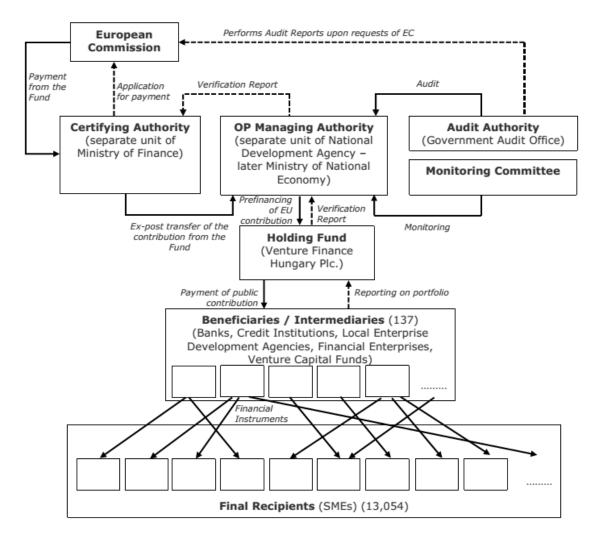


Figure 6: Governance structure of EDOP in Hungary

Source: EDOP programme description, interviews

3.2 Type and background of fund managers

In total 137 financial intermediaries (beneficiaries) (VFH Fontium, 2015) offered the JEREMIE-type products to the final recipients through 306 funding agreements (EDOP AIR, 2014), i.e. one intermediary was often contracted to sell several products. In total 378 intermediary applications were handed in to VFH (EDOP AIR, 2014). Six different types of financial intermediaries could offer financial products – as summarized in Table 6. In the following sessions we will group the financial intermediaries into 5 types – by merging banks and saving cooperatives – both under regulation of the Credit institution Act (Act CCXXXVII of 2013, previously: Act CXII of 1996) and referring to them as credit institutions.

Corresponding to the highest share of both allocated funds and transactions, loans could be offered by three types of financial intermediaries (credit institutions, financial enterprises and local enterprise development agencies. Banks were the primary providers of guarantees and the counter-guarantee programme is exclusively offered by the public guarantee organisation (Garantiqa Ltd.). Companies registered as venture capital funds were invited to offer equity products.

Type of intermediary		Loans	Combined Micro Credit	Guarantees	Venture Capital
Guarantee institute (Garan- tiqa)				х	
Credit insti-	Banks	х		х	
tutions Savings operative	Savings co- operatives	х	х	х	
Financial enterprises (FEs)		х	х		
Local Enterprise Development Agencies (LEDAs)		х	х		
Venture Capital Funds (VCFs)					х

Table (. The	into uno o di o uio o		manian tuman	AF FFL	.
Table 6: The	intermediaries	or the	major types	OTFELS	schemes

Source: KPMG, 2013 – Table 2 (slightly modified)

Note: Financial enterprises are companies registered with a portfolio of financial services (even if with a limited number of services compared to banks) and operating under the regulation of credit institution act (CXII/1996 act on credit institutions and financial enterprises).

Loans

The Holding Fund contracted 104 intermediaries to offer ERDF co-funded (small) loans to final recipients. Financial enterprises and local enterprise development agencies were the most active with managing more than 80% of the total transactions (11,745 out of the total 13,429, see Table 7). The involvement of local development agencies with a good outreach to micro and small businesses and that of the financial enterprises with an extended network of local (sales) agents explains this high share and high number of final recipients.

Table 7: Mean and median	amount o	of loans	by types	of intermediaries (De	e-
cember 31, 2014)					

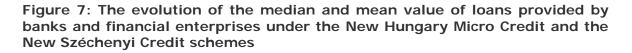
Type of Intermediary	Number of Interme- diaries	Number of Op- erations	Mean Loan Value EUR thou- sand	Median Loan Value EUR thousand	Max. Loan Value EUR thou- sand
Bank	20	676	83.67	42.17	1 610.9
Savings co-operatives (SC)	34	1,008	41.46	25.23	1 610.9
Financial Enterprise (FE)	34	5,191	46.02	26.75	161.1
Local Enterprise Develop- ment Agency (LEDA)	16	6,554	20.06	19.33	32.2
Total	104	13,429	34.90	22.55	

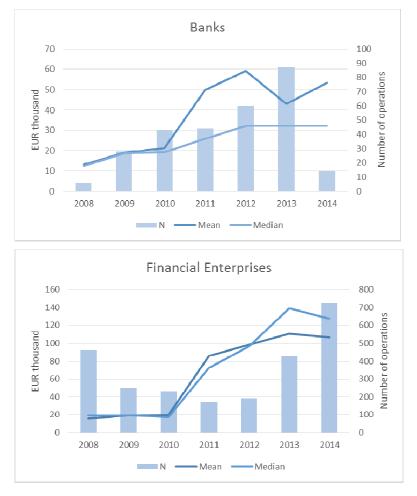
Source: VFH Fontium (2015)

The funding agreements vary in the refinancing rate and the maximum amount of loans - across time and type of intermediaries. For example, the refinancing rate was systematically lower and the maximum amount of loans was respectively higher in the case of credit institutions as compared to smaller intermediaries (see, LEDAs, financial enterprises).

The Micro Credit that was later continued as New Széchenyi Credit provides as a nice example. Initially the maximum amount of loans was EUR 32.22 thousand (HUF 10 million) for all intermediaries, however in the final years the limit on loan amount was substantially increased for banks and financial enterprises. Banks could lend max. EUR 1.6 million (HUF 500 million), while financial enterprises had a lending limit of EUR 161,090 (HUF 50 million) and local enterprise development agencies only of EUR 32,220 thousand (HUF 10 million). While the average (and also the median) amount of loans remained around EUR 20,000 (HUF 6 million) in case of LEDAs, the average loan amount of the financial enterprises increased from EUR 16,110 (HUF 5 million) in 2008 to EUR 109,540 (HUF 34 million) in 2013 (see also Figure 7).

The public co-financing rate was lower for credit institutions than for the other intermediaries: for example 50% and 80% in case of the Micro Credit programme (later increased to 75% and 90% respectively in 2009). After 2012 FEs and LEDAs benefited of full rate (100%) of co-financing for the New Széchenyi Credit.





Source: VFH Fontium (2015)

The various types of intermediaries have clearly had different approaches mainly due to their different motivations and objectives (KPMG 2013; EDIOP Gap Analysis 2014, interviews with MA, VFH and extra-governmental actors). These differences were further strengthened by the changes introduced in the schemes getting further and further away from the original micro crediting concept and opening up the resources for small and medium sized enterprises besides the micro enterprises. Commercial banks and saving co-operatives took a smaller role in lending, while LEDAs and financial enterprises were more active. This is clearly reflected in simply looking at the number of operations. The clients of commercial banks were larger, and the average and median amount of loans was higher (see Figure 7).

For commercial banks, it was really hard to fit the JEREMIE-type schemes into their general business operations and they did not show much interest in the JEREMIE sources. Our interviewee from VFH also emphasised that it was extremely hard to attract commercial banks to the programme. According to all stakeholders interviewed commercial banks have simply found that it is not profitable to enter the programme mostly due to their perceptions of high regulatory burden (need for compliance with EU regulations) and to their divergent preferences regarding representative clients

(firms with solid financial indicators, most preferably with long bank track record, source: interviews).

Regarding financial enterprises, most of them had been founded as a response to the EDOP FI calls and their main operations have been the distribution of JEREMIE-type products (KPMG, 2013 – p28). Financial enterprises operate through sales agent networks (source: interviews).

Both the interviews and the results of the mid-term evaluation report (KPMG 2013) suggested that some design elements of the JEREMIE-type guarantee scheme were effectively limiting the interest of credit institutions (esp. banks) in participating in the announced schemes – most importantly:

- the limitation to guarantee only investment loans (in compliance with the EU regulations),
- the low level of maximum loans to be guaranteed (the suggested threshold for higher interest among banks would be at a max. loan value EUR 1.6 million instead of the effective EUR 666,660),
- weak promotion of the available guarantee products by both the funding managers and by the holding fund manager (weak information on the advantages of guarantee schemes among companies and lack of "branding" by the managing banks and government agencies).

According to the monitoring database 14 out of all the contracted saving cooperatives (55) did not show any activity, i.e. although they have signed the funding agreement to offer JEREMIE-type products (effectively, no operations registered). Generally, even if they did have some JEREMIE-type clients, the percentage used up from the sources available to them is relatively low compared to e.g. LEDAs. On the contrary, we can hardly find a LEDA without any operations.

The interviews conducted with the product manager of a commercial bank (that was a relatively active player among banks) and the director of a LEDA highlighted the difference in their approach with the following examples. The banks used the JEREMIE funded products primarily to serve the needs of their already existing clients. Very often enterprises with a need for a loan amount up to EUR 644.37 thousand (HUF 200 million) are managed by the bank's retail branch (especially in cases of wellstandardised products). These transactions do not belong to departments engaged with the business sector. As to the contrary, the director of the LEDA interviewed emphasised, that although it was not mandatory, they were following a more holistic and user-friendly approach in case of the EDOP-funded micro credits – without getting any extra sources for these additional activities and services from the programme. The potential clients were offered counselling opportunities and the LEDA took an active part in planning the investments and helped the clients clarifying their business goals and plans. She pointed out that this approach was simply their own interest as this was an efficient way to ensure the viability of their loan operations and thus have a healthy and profitable portfolio.

Table 8: Summary table of the key differences in the approach of credit institutions and other type of intermediaries

Aspect	Credit institutions (banks, sav- ing cooperatives)	LEDAs and financial enter- prises
Risk management	More risk-averse	More risk-taking
Risk assessment	Robust risk assessment techniques (scoring) and models Requirement of collateral or other secured assets Less flexibility in adapting internal rules and procedures to JEREMIE- type credit schemes	Less robust risk assessment techniques (though more flexibil- ity and less time-consuming de- cisions) Collateral is preferred but not re- quired Educative and/ or benchmarking role of the JEREMIE-type FIs in improving the internal risk as-
		sessment rules and procedures
Portfolio	Sound and "bank-proof" busi- nesses	Micro and micro businesses with potentially higher operational risks and less chance to get bank loans (due to lack of own capital and/ or collateral)
Scope	Partial focus on ERDF co-funded FIs (broader loan portfolio going beyond EDOP schemes)	Almost exclusive focus on ERDF co-funded FIs as main scope of operation Some FEs set up directly to run the EDOP FIs
Main motivation	Profit-oriented, focus on profitable firms and investment projects with low costs	Divided focus on SMEs and on local development, eventually linking more personalised ser- vices, counselling financed by other sources (national funds), improvement of management skills and capacity assessment of local SMEs
Sales and communi- cation	No specific sales activity (JERE- MIE-type FIs are part of the broader branding and sales)	Specific and targeted sales and communication activities (based on local networks/LEDAs or on extended agent networks/FEs)
Typical clients	Clients who would get bank loans without funded FIs too, already existing clientele	More focus on clients who have hard time getting loans on the market
Main concerns (ex- pressed during im- plementation)	Low level of maximum loan amount (less important after 2012) High administrative burden due to	Low level of maximum loan amount (less important after 2011) Longer duration period in case of
	data / information reporting re- quirements	working capital loans Systematic link to non-financial,
	Lack of compatibility of the banks' IT systems / reporting modules (with the VFH's IT platform)	business support schemes (ex- pressed need of more complex support services)

Source: Interviews with stakeholders; KPMG 2013; EDIOP Gap Analysis 2014.

Guarantees

First, only credit institutions offered guarantee products. In the first guarantee call (the New Hungary Portfolio Guarantee) also financial enterprises were invited to participate, but according to the operation-level database of VFH (VFH Fontium, 2015) no guarantee operations were delivered by financial enterprises. In fact, 15 banks and 28 saving cooperatives delivered guarantee contracts.

In 2011 a counter-guarantee programme was launched. Within this scheme other intermediaries could apply for guarantee at the Garantiqa Ltd. that dealt with these transactions exclusively. Garantiqa Ltd. was founded in 1992 and had been offering guarantee ever since to support SMEs' access to finance. 272 of all the guarantee operations (1140) were counter-guarantees. Regarding the remaining intermediaries most of them had only a few transactions except for two: K&H bank (123) that mainly offered the New Hungary Portfolio guarantee and the Merkantil Bank that offered only the New Széchenyi Credit Guarantee (250). The value guaranteed did not vary a lot by type of intermediaries, the average was ca. EUR 77.20 thousand, though the majority of the transactions went below this value (see, the median value was around EUR 25.77 thousand.

Garantiqa Ltd. was contracted to sell counter-guarantees only relatively late within the programme period. According to our interviewee form Garantiqa the programme management did not allow them to apply for the tender previously. Their first operation occurred in December 2012. As Garantiqa had sufficient experience in guarantee schemes and offered several other guarantee products other than the ERDF funded one they made these guarantee schemes more attractive by a simplified application process. In this process, clients signed a declaration that if they are not eligible for ERDF funded guarantee schemes – for any reason – they will automatically receive guarantee from another scheme offered by Garantiqa (interview).

Type of Intermediary	Number of Interme- diaries	Number of Operations	Avg. value guaranteed EUR	Median value guar- anteed EUR
Banks	15	550	72,720	15,920
Savings co-operatives	28	318	84.90	48.75
Guarantee Institute (Garan- tiqa)	1	272	N.A.	N.A.
Total	44	1,140	77.20	25.77

Table 9: Mean and median guaranteed value by type of intermediaries (Guar-	
antees)	

Source: VFH Fontium (2015)

Venture Capital

By 2014 the Holding Fund contracted with 23 venture capital fund managers under EDOP PA 4.3. They invested in 198 projects. 4 out of the 23 funds are seed capital funds. The number of supported projects varies across the funds (from 2 to 19 projects per fund). All the venture capital fund managers are private companies. Some of the venture capital funds were set up directly as a response to the EDOP calls for venture capital funds (source: stakeholder interview). Due to lack of data on the age of

the venture capital funds in the database of VFH, this cannot be confirmed based on monitoring information.

During the tendering procedure the expertise, professional experience and track record of fund managers had been evaluated based on a detailed scoring table. Main selection criteria were: number of experts working full-time and part-time or on a contractual basis at the fund, number of realized investment projects per expert, all the details of these projects, the required fund management fee, the involvement of private investors, proportion of innovative or start-up projects, consistency of business plans and internal regulations⁷. All fund managers had to prove that they have the sufficient capacity in terms of staff member with professional background.

Fund Name	Number of final re- cipients	Avg. value (EUR thousand)	Median value (EUR thou- sand)	Standard de- viation of value (EUR thousand)
New Hungary Venture Capi- tal Programme – Joint Fund	82	1,438.83	1,288.74	997.96
New Széchenyi Venture Capital Programmes - Joint Growth Fund Subpro- gramme	66	1,375.85	1,320.96	773.31
New Széchenyi Venture Capital Programmes - Joint Seed Fund Subprogramme	50	155.34	148.21	37.47
Venture Capital pro- grammes - Total	198	1,093.73	966.56	952.31

Source: VFH Fontium (2015)

3.3 Key differences in the management of public and private sector FI schemes

As a matter of fact, all of the financial intermediaries but two (one providing the counter-guarantee scheme and the Hungarian Development Bank involved in the loan schemes) operate under private ownership, the comparison within the EDOP is therefore very limited.

As suggested by stakeholder interviews (primarily by final recipients) the big advantage of the microcredit schemes under EDOP was the simplicity of procedures and the really fast access to credits. As one of the final recipient interviewee explained, the parameters of the "available EDOP loan was much more favourable than that of private loans, that is why he could borrow double the amount he could have got from a private scheme".

⁷ Source: Scoring table downloaded from the website of VFH Plc. Link: http://www.mvzrt.hu/palyazati-felhivasok, last opened: May 26, 2015

In case of guarantee schemes, both representatives of the Holding Fund and market actors pointed to the higher level administrative burden levied and the complexity and time-consuming nature of the procedural rules applied by the publicly owned Garantiqa Ltd. as compared to the other intermediaries (banks and saving cooperatives) and their practices in the case of the portfolio guarantees of the first programme period.

Comparison of private intermediaries active under the EDOP and those not involved in the EDOP are not feasible in the case of venture capital, given the fact that all relevant market actors in this segment are also involved and contracted under the EDOP 4.3. schemes.

In Table 11 we compare the main features of the EDOP credit schemes with the Funding for Growth Scheme (FGS) of the Central Bank of Hungarian launched in 2013. The FGS also targets the SME sector, although there are a bunch of key differences between the two schemes. While over 93% of final recipients under EDOP are micro enterprises, they represent only 47% of the FGS clients. Banks are the main intermediaries in case of FGS and it covers a wider set of credit purposes – most importantly, not excluding debt-refinancing or real estate investments as opposed to the exclusive investment loan focus of the relevant EDOP measures.

A recent paper of the Central Bank of Hungary also points out that the final recipients of the FGS are typically firms that were already performing better than the average representative firm before application. The authors compare the average investment volume of participating firms with that of non-participating firms in 2013 and they show a large gap between the two groups: HUF 67.5 million for the former *versus* 4.5 million for the latter. This indicates a strong self-selection effect which should be controlled for if we want to assess the net economic effects of the given intervention. (Endresz, Harasztosi, and Lieli 2015).

It should be the subject of a counterfactual-based analysis to assess the significance of such self-selection effect in the case of the EDOP credit schemes. Such assessment would need historical performance data at the level of final recipients – an input which is not available within this evaluation project.

	Funding for Growth Scheme (FGS) managed by Central Bank of Hungary	Credit schemes under EDOP
Typical financial intermedi- aries	Banks	Financial enterprises LEDAs
Investment preferences (risk attitude)	Firms with robust invest- ment plans (mostly already existing bank clients) Max. interest rate: 2.5%	Smaller firms with potentially less robust investment plans Max. interest rate: 7.5-9% (re- flecting higher risks at firm level)
Requirements on collateral	Strong requirements	Easier to meet requirements on collateral (higher probability to be met by small start-ups)
Scope of credits	Eligible purposes: - Debt re-financing - Working capital - New Long-term In- vestment	Eligible purpose: - Investment With exclusion of: - Debt refinancing

	Funding for Growth Scheme (FGS) managed by Central Bank of Hungary	Credit schemes under EDOP
	 Leasing Real estate invest- ments Plus, companies from the agricultural sector also in- vited. 	(scope) Plus, firms from agriculture are explicitly excluded.
Average loan size	EUR 361,000	EUR 129,600 in SME loan scheme (EUR 34,000 – across all loan schemes)
Extent of interest rate sub- sidy	High	Low

Source: EDIOP Gap Analysis 2014, Endresz, Harasztosi, and Lieli 2015

With regard to the interest rates used by private schemes, it should be noted that the EDOP credit schemes have had far more favourable interest rates than those offered by private schemes. In 2008 the average interest rate for SME loans on the private market was around 8-10% plus the 3-month BUBOR in case of HUF loans and 4-6% plus the EURIBOR in case of EUR loans (Central Bank of Hungary 2013, 9, Figure 4). In contrast, the maximum interest rate for the Microcredit Scheme was the EURIBOR + 2% initially. The interest rate conditions have remained similar after 2010 too when an absolute maximum of 9% was fixed for the loan schemes of EDOP 4 (see A.6.Tables summarizing the changes in the FEI schemes of EDOP). At the same time, the private credit institutions offered loans at BUBOR + 8-10% interest rate (Central Bank of Hungary 2013, 9, Figure 4).

3.4 Performance and success indicators for fund management; incentives linked to performance

Performance assessment of the fund managers was regulated by the funding agreements and was based on the regular reporting obligations levied on these intermediaries. Performance data was required in relation to their portfolio in a comprehensive way and in addition the MA and VFH officials collected also further information during the on-site visits (*helyszíni ellenőrzések*).

The MA and the holding fund manager used a sort of "step-by-step" performancebased incentive in allocating the EU contributions to the financial intermediaries. The HF transferred the (ERDF plus national) contributions to the individual intermediaries in sequential steps in dependence of their past financial performance. These monetary incentives worked through so-called "partner limits" that specified the maximum contracted amount of loans, guarantees or venture capital for each fund manager.

Reporting obligations for the financial intermediaries are specified in detail in the funding agreements and basically follow the same structure for all actors. Data obligations are specified for different time spans (daily, monthly, quarterly and yearly basis). The fund managers input the monitoring data into an online system (called *Fontium*), which was developed specifically for this programme and meets all the data collection requirements fixed by the EU and national regulations (for more details on monitoring obligations, see Chapter 4.2). First, the most efficient incentives for the fund managers are the potential profits they can gain from these interventions and the partner limits applied to them based on past performance (interview with VFH). As our interviewees suggested, the JEREMIE-type FEIs brought a fair chance especially for financial enterprises and LEDAs to make considerable profits. With a 0.5% refinancing interest rate they could lend loans with a maximum of 9% interest rate, resulting in an interest rate margin considerably high - even after reduction of their overall operational costs (estimated to 3-5% of the total funds).

Second, financial intermediaries put some amount of own contributions to the total funds. In case of venture capital this was a standard 30%. In case of credit schemes it was 20% for financial enterprises and LEDAs, 50% for credit institutions in the first Micro Credit scheme. In the second half of the programme period the prescribed amount of own contribution from beneficiaries became less and less important as the absorption motivation started to dominate efficiency-driven considerations. Thirdly, based on internal regulations of the VFH so-called 'partner limits' were set for each of the fund managers. This meant that the value of their actual outstanding loans could not be higher than this limit. Partner limits were revised on a yearly basis in accordance with the internal scoring system of the VFH and were changed based on the past performance of the given fund manager. To our inquiry about what exacts criteria were built in the scoring system, the VFH refused to give us details.

Third, on the one hand the 'partner limit' system motivated the financial intermediaries to set up healthy portfolios so as to lend to even more final recipients. On the other hand, the limits have also had the controversial effect that in case of a relatively low performing portfolio, the fund manager was constrained to improve the portfolio by diversifying it and assessing the risks of the potential investment projects in a more rigorous way (KPMG, 2013). During our interviews market stakeholders also confirmed that the application of partner limits in case of the venture capital funds tended to push the fund managers towards less risky investment projects (i.e., towards firms of larger size and in growth rather than seed and start up phase).

3.5 Preparation time and costs to set-up FEIs

The Holding Fund was established by the Hungarian Economic Development Centre Plc. (HEDC) (Magyar Gazdaságfejlesztési Központ Zrt. MAG Zrt) in the summer of 2007 with 7 employees and it started its operations without any delay. The initial capital stock was EUR 3.22 million (HUF 1 billion).

The time needed to prepare the various FEI calls differs to some extent: with credit schemes on low end (3-4 weeks to 3-4 months) and the venture capital schemes on the high end (1.5 years) of the time scale.

The microcredit and small loan schemes were the programme pioneers with calls announced by the VFH already in October 2007 and the first contracts with final recipients signed in February, 2008 (VFH database and interview with MA). The set-up time of these schemes took around 3-4 months. The initial call was followed by a series of mostly minor modifications in the credit schemes throughout 2009-2010 that mainly built on the early experiences of running the schemes. In 2011 the integration of these schemes into one single scheme (New Széchenyi Credit) occurred. Key stakeholders claimed that the preparation time of all these schemes have substantially shortened during the programme period due to the accumulation of implementation experiences and the good working relation between the holding fund manager and the various intermediaries. The short-lived SME Credit and New Hungary Working Capital schemes were designed as a response to the financial crisis in the fall of 2008. According to the MA there was a high pressure on them to come up with new products suited for this situation. After a 3-4-week period of intense work of drafting the calls in collaboration with the Hungarian Development Bank the calls were launched. Within half year after the calls had been announced the VFH had already contracted 20 financial intermediaries, which have immediately started these schemes (The high demand for working capital /liquidity-financing loans explains the slow progress of these schemes rather than the speed of institutional set up, KPMG 2012).

The guarantee schemes (especially the Portfolio Guarantee) was quickly prepared and the first call was announced in November, 2007. Similarly, to the first credit schemes the Portfolio Guarantee also underwent some modifications (four times until 2009). Realizing the low absorption rates in the guarantee schemes the VFH started a consultation procedure with the Hungarian Banking Association (HBA) and commercial banks that lasted for 9 months in 2009 and resulted in the last modification of the Portfolio Guarantee Scheme. The Counter Guarantee Scheme came out in March 2011 and the New Széchenyi Guarantee scheme came out only in June 2012.

According to the MA, the set-up of the venture capital schemes took the longest time. The first call was announced in July 2009 after a 1.5 years designing phase. On the other hand, the task was the toughest in case of the venture capital schemes as previously there had been literally no market for venture capital in Hungary.

3.6 Management costs and fees for sound fund management

As Article 43/4 of Commission Regulation No 1828/2006 of December 8, 2006 clarifies, the management cost may not exceed on a yearly average 2% of the capital contributed from the operational programme to the holding fund. By planning the management costs the MA presumed that all the planned budgets will be spent. In the official monitoring database, called the Standardised Monitoring Information System (SMIS, *Egységes Monitoring Információs Rendszer*, see referred to as *EMIR*) a virtual PA (PA 4.4) was created to account for the management costs emerging under this priority axis. Until the end of 2013, EUR 10.32 million was spent on the operating costs of the VFH. The average yearly cost was thus EUR 1.47 million.

The annual management fee for the intermediaries was 5% in case of all FEIs in Hungary, however the evaluators have no access to any data about the exact operative costs of the fund managers, since it is not collected systematically.

The transparency of management costs and fees is highly critical in case of all the FI schemes. There is no publicly available data on the specific costs incurred by the various financial intermediaries and our data requests were repelled with the argument that information on operational costs of the financial intermediaries (esp. those of the credit institutions) belong to business secrets and cannot be monitored or analysed. Representatives of both the MA and the HF emphasised that the programme monitoring has not been focusing on this issue since this belongs to internal policies of the private fund managers.

Our interview experiences and recent market analysis suggest that the standard market fees for example in case of VCs lie below the fees set in the funding agreements (usually around 2% compared to 5% as fixed in the programme agreements, HCB 2014).

3.7 Capacity to attract firms for FIs compared to other forms of support

At first glance, we might see some overlaps in targeting of the FEIs co-funded by the EDOP when compared with that of other interventions provided by the same programme (R&D and innovation, SMEs with growth potential, same convergence regions). Nevertheless, the average amount of funding is lower in the case of the JERE-MIE-type small loans (ca. EUR 35,000) than in the case of productivity-enhancing grants aimed at SMEs (EUR 64.000) and this difference is even bigger if we check the average loan size backed by JEREMIE-guarantees (EUR 10,280).

While the first Priority Axis launched primarily for promoting R&D and innovation projects run in collaboration of business and academic actors and/ or by innovative companies (with a proven track record in these activities), the venture capital funds of EDOP PA4 are primarily focusing on innovative start-ups.

With regard to transactions costs (and the administrative burden) levied on potential final recipients, the figures vary also across the JEREMIE-type FIs. Government stake-holders during the interviews suggested, that loan schemes were designed to keep transaction (and administrative) costs at a very low level, while this intention can be challenged in the case of guarantee and venture capital schemes (source: interviews). The allocation of small investment grants (managed under EDOP PA2) is based on highly standardised procedural rules and documentation requirements designed and launched to minimise the administrative costs of the potential final recipients. It is to future assessment to quantify these costs and to compare them on a quantitative basis – an assessment exercise, which is not done, yet could be run by using standard methodology (e.g. standard cost model) for assessing these costs.

The obvious advantage of non-repayable SME supports to the JEREMIE-type FEIs is that grants can be used to a certain limit for additional business support services (usually 10% threshold for costs to be (cross-) financed and eligible under European Social Fund-type supports, such as HR development, training and any other type of "soft" business support).

Aspects	FIs offered	d by the OP	Grants offered by the OP		
Target group	SMEs – all sectors except agricul- ture		PA 1- R&D, innovations		
			PA 2 – SMEs, large enter- prises,		
			PA 3 – micro regio tlements in the mi included		
Target area	Whole Hungary e Hungary region	except Central	Whole Hungary except Cen- tral Hungary region		
Average amount of funding	EDOP 4.1 34,890		EDOP PA 1	352,370	
	EDOP 4.2	10,280	EDOP PA 2	63,790	
	EDOP 4.3 1093,720		EDOP PA 3	264,840	
	EDOP 4.1-4.3 47,910		EDOP PA 1-3	104,710	
Transaction costs for enter- prises	Low costs in case small loans	of microcredits /	Very low costs in o standardised gran investment grants	ts (small	

Table 12:	Comparison	of support	provided	by FIs	and grants
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Aspects	FIs offered by the OP	Grants offered by the OP
	Relatively high administrative burden in case of guarantees and venture capital schemes	2)
Non-financial support	Prohibition on double financing, lack of linking to non-financial supports	Some linking with other sup- ports, esp. under PA 2 and PA 4 (10% threshold to ESF- type supports, e.g. develop- ment of HR capacities, busi- ness support services)

Source: Interview with MA

3.8 Implementation challenges

The main challenges in the institutional set up process were:

- Defining the role of funding managers and the role and responsibility of the HF,
- understanding and assessing the relevance of the prohibition of double financing rules – for example, in the simultaneous use of credit schemes and guarantee schemes by final recipients for the same transaction,
- testing and managing the supporting IT system set up to track and monitor the allocation of funds as well as the financial performance of the selected intermediaries,
- adjusting the monitoring framework (especially the result indicators) to the changing preferences and needs expressed by the EC (DG REGIO).

There were fewer uncertainties related to eligibility rules and to state aid regulations. One of the reasons, as stressed by several stakeholders interviewed, is that the MA and the VFH complemented each other capacities and human resources skills in many aspects, but especially in acknowledging and complying with EC regulations (MA's comparative advantage) and at the same time, understanding the nature and logic of financial intermediation (stronger competences in VFH).

3.9 Comparison of costs and implementation issues of FIs with private and other public financial support

Our interviewees from the bank sector claimed that banks usually do not calculate costs per specific credit products but assess the unit cost of comprehensive packages of financial services offered to business clients such as, costs of providing current accounts, overdrafts, credit lines, leasing services, etc. on a consolidated basis. Financial market experts also stressed that business-as-usual costs rate are estimated at 2-3% of the indicative interest rates, but they may highly vary depending to what extent the given financial service can be standardised (effectively, whether ordinary bank staff members in branch offices can sell and manage the given credit product – low unit cost) or specialised product managers (customer-service officers) need to deal with the management of the given credit line. The more complex the credit product is, the higher are the management costs per client.

As was mentioned above (chapter 3.6), the benchmark rates for managers of venture capital funds are around 2%.

3.10 Success factors for sound administration and management of FIs

Aspects of sound administration and management	Success factors
Governance structure	Clear roles and responsibilities, division of la- bour between the MA and the holding fund management
	Levelling the playing field for the various type of financial intermediaries
Type of Fund manager	Heterogeneity of the beneficiaries (financial intermediaries) so as to assure the best out-reach to the widest set of final recipients
Capacity of fund managers	Good specification of the necessary skills and experiences
	Time-consistency in the specification of calls (retrospective amendments if it is justified so as not to put intermediaries entering the pro- gramme in an earlier phase into competitive disadvantage)
Set up of FIs	Ongoing planning of FIs and flexible adjust- ments to changing context
Management costs	Using standard market benchmarks

Table 13: Overview on success factors

3.11 Capacity of MA and fund managers to successfully run FIs; capacity building

The management and implementation of JEREMIE-type instruments required a special combination of skills and expertise covering both financial and banking knowledge and knowledge about and familiarity with EU legislation. The representative of VFH claimed that there are no experts in Hungary who are familiar with both areas so it was and still is a challenge to find the right people for the management of these instruments. According to his view, the most important criteria for personnel selection is to have a deep motivation to become familiar with the other field irrespective of whether we consider someone with a commercial banking background or an international lawyer dealing with EU sources.

Before 2010, there were 14-16 employees at VFH that was enough considering the lower number of contracted loans. After 2010, however, a new wave of recruiting started when the VFH increased its efforts to involve new intermediaries. Later on the number of employees increased to above 30. According to our interviewee the number of employees was just enough to keep up with the various tasks related to the JERE-MIE funded instruments. The fluctuation of workforce was negligible, amounting to about 1 person yearly.

Regarding the development of skills there had been no special trainings for the staff of VFH mainly due to financial constraints and the overload of the workforce. Skill development was mainly done through informal communication between staff member regarding specific topics and attendance of related conferences. The executive manager of VFH reported that he mostly did not face any objections in case he indicated the need for staff expansion.

According to all the central actors taking part in the implementation of JEREMIE-type FIs (i.e. the MA, VFH and external experts) the implementation was a learning-bydoing process due to the novelty of the repayable support schemes on EU-level.

The most important tasks of VFH according to the interview were:

- acquisition: searching for new partners,
- risk management: assessment of partner limits,
- monitoring: quality assessment of portfolios, individual projects, on-site visits
- IT development: building up and maintain a system for data collection.

The acquisition process began with a review of existing financial intermediaries based on the database of the Hungarian Financial Supervisory Authority. Then, the financial instruments were introduced to the potential intermediaries that were followed by a meeting with the executive managers of intermediaries upon interest and tackled the details of the constructions. About 8 out of 10 potential intermediaries did not show any interest in the JEREMIE-type FI programme. Those who did show interest started to work on the actual constructions they would like to offer, that took around 2-3 months. Technical assistance and guidance was offered by the VFH.

Risk management mainly took place through 'partner limits' that required continuous monitoring of intermediaries. Limits for partners could be extended in case the VFH found that the quality of operations was satisfactory. Monitoring was done through reporting obligations for FIs and on-site visits of the members of the MA and VFH at the financial intermediaries (more details in Chapter 3.13).

3.12 Status and health of projects in the FI portfolio

Financial intermediaries have to report monthly on the status and health of the projects they support. Basic characteristics of the final recipients are also available. All of this information is collected in the Fontium database of the VFH (see details of reporting provisions in Chapter 4.2).

The different approach to risk of the different types of intermediaries is reflected in the quality of their portfolio. LEDAs and financial enterprises have the lowest share of A-type loans (89%), while savings cooperatives have somewhat higher share (93%), with banks holding the highest share (96%). However, based on these numbers it cannot be differentiated whether the LEDA and financial enterprise portfolios are worse due to a higher risk-taking attitude and remain closer to the original scope of lending money to micro-enterprises that have difficulties in getting loans in the private market, or due to their lack of knowledge and experience with FIs.

Assessed quality	А	В	С	D	Е
Banks	95.75%	1.56%	0.34%	0.78%	1.56%
Financial Enterprises	89.38%	1.90%	1.00%	2.60%	5.12%
Saving Co-operatives	93.30%	1.10%	0.55%	3.00%	2.05%
LEDAs	89.06%	3.34%	1.34%	2.32%	3.94%
Total	90.20%	2.44%	1.06%	2.34%	3.96%

Table 14: Proportion of different quality loans by types of intermediaries

Source: VFH Fontium (2015)

Note: The New Hungary SME Credit and the Working Capital Loan schemes is not included in the table as there was no data provision requirement about the quality of loans in case of these schemes.

Meanings (source: funding agreements):

- A. Without any problems (at most 30 days delay of payment)
- B. Needs special attention (31-60 days delay of payment AND/OR estimated expected 0-10% loss at the time of credit assessment AND/OR changes are made in the loan contract)
- C. Below average (61-90 days delay of payment AND/OR higher risk than usual AND/OR estimated expected 11-30% loss at the time of credit assessment)
- D. Uncertain (estimated expected 31-70% loss at the time of credit assessment AND/OR persistent delay and over 90 days)
- E. Bad (estimated expected loss at the time of credit assessment is >70% AND/OR winding-up process started)

In Figure 8, the distribution by quality of operations for the different loan and guarantee schemes is summarised. The SME Loan and the Working Capital Loan is left out from this figure as there were not any data provision requirement about the quality of the operations under these FEs. The highest proportion of the worst quality category can be seen in the case of New Hungary Microcredit programme – the scheme that was launched the earliest –, where 20.4% of the fall under the worst category (E), while only 66.9% is 'A'-quality. The second highest share of E-category loans is observed with the New Hungary Portfolio Guarantee scheme that was also among the earliest programmes launched. However, it is well possible that the schemes that were launched later will face the challenge of problematic operations later in time.

Noteworthy is that although the New Hungary Microcredit and the Portfolio Guarantee Schemes were virtually launched at the same time at the end of 2007, the E-category contracts in case of the previous (19.62%) is more than twice as large as in case of the Portfolio Guarantee scheme (7.66%). This difference might reflect the difference in the risk taking of the typical microcredit providers (LEDAs and financial enterprises) and the typical guarantee provider banks.

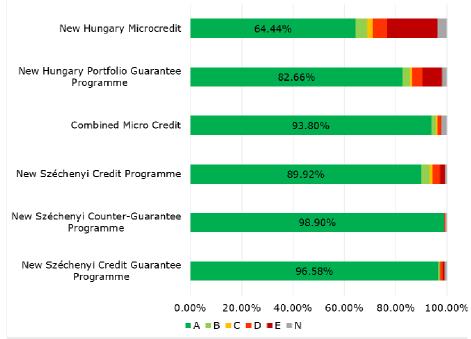


Figure 8: Decomposition of portfolio quality per FEI schemes

Source: VFH Fontium (2015)

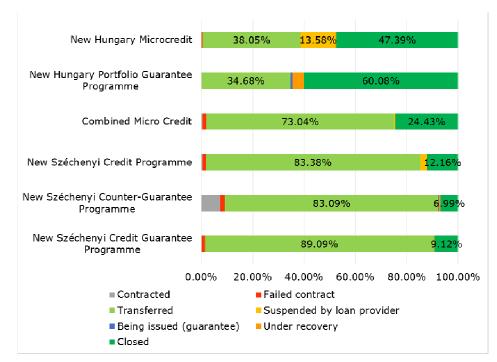
Note: The New Hungary SME Credit and the Working Capital Loan schemes is not included in the figure as there was no data provision requirement about the quality of loans in case of these schemes.

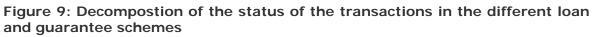
The FEIs are shown in chronological order based on the launching date of the given schemes.

Meanings of A, B, C, D, E categories explained in the notes given by Financial intermediaries have to report monthly on the status and health of the projects they support. Basic characteristics of the final recipients are also available. All of this information is collected in the Fontium database of the VFH (see details of reporting provisions in Chapter 4.2).

The different approach to risk of the different types of intermediaries is reflected in the quality of their portfolio. LEDAs and financial enterprises have the lowest share of A-type loans (89%), while savings cooperatives have somewhat higher share (93%), with banks holding the highest share (96%). However, based on these numbers it cannot be differentiated whether the LEDA and financial enterprise portfolios are worse due to a higher risk-taking attitude and remain closer to the original scope of lending money to micro-enterprises that have difficulties in getting loans in the private market, or due to their lack of knowledge and experience with FIs.

Figure 9 shows the proportion of the transactions in the various stages for the loan and guarantee schemes. The distribution based on status reflects the order of launching the programmes, i.e. the highest ratio of closed contracts can be seen in case of the Microcredit and the Portfolio Guarantee schemes, which were both among the first schemes launched in 2008. 13.58% of Microcredit loans are under recovery now.





Source: VFH Fontium (2015)

3.13 Approach to risk management

Risk management at HF (priority) level

Risk management at the central level involved mainly three layers:

- the initial design of the constructions,
- the 'partner limit' system and
- the continuous monitoring of intermediaries.

Involving the LEDAs in the delivery of the instruments had both its advantages and disadvantages. The main motivation to include them was to utilize their local knowledge and thus improve the outreach of the programme. On the other hand, they bring a higher risk at the OP level due to their different methods and approach (KPMG, 2013). LEDAs do not fall under the scope of Act CXII of 1996 about credit institutions and financial enterprises (replaced by Act CCXXXVII of 2013 on January 1, 2014) so they do not have to meet the criteria that are defined for credit institutions and financial enterprises (e.g. they do not need to have required minimum reserves, they have easier capital adequacy requirements). The higher risks related to LEDAs appeared in the programme in the lower loan thresholds for LEDAs. While the maximum amount

for LEDAs remained EUR19,330 (HUF 6 million), this threshold has increased for other intermediaries during 2007-2010.

The VFH assessed the performance of all the intermediaries based on its own scoring system on a yearly basis. These assessments helped them to assign the revised value of 'partner limit' for each intermediary. The value of their actual outstanding loans could not be higher than this limit. In practice, only the amount of the 'partner limit' was transferred to the intermediaries' accounts so they practically did not have the possibility to lend more OP fund. Besides the regular assessments and reviews, they also had special reviews once or twice in a year when some special circumstance made it necessary to check on some intermediaries (e.g. recently, a brokerage house had gone bankrupt, so some related intermediaries were visited).

In the last 2-3 years the regular reports have been supplemented by on-site visits to monitor the intermediaries. On the on-site visits, both MA and VFH staff members are present. Each intermediary was visited after their first few contracts with final recipients. According to interviews with the MA and HF representatives, this was a preventive step in order to detect any signs of potential risky operation before the given intermediary has a large number of operations. Our interviewees also confirmed that these on-site visits were very useful to check whether the necessary conditions for business operations are fulfilled. Since 2013, the MA is running on-site visits at the location of the final recipients, too.

Risk management at the level of fund managers

Experience from the 2007-2014 period shows that commercial banks were much less risk-taking than financial enterprises and LEDAs (EDIOP Gap Analysis 2014), while financial enterprises and LEDAs had much more operations. Due to the differences in risk-management approaches, LEDAs and financial enterprises had more operations from the 'problematic' category. The required approach of the ERDF co-funded programme – i.e. to offer loans to micro enterprises that have never ever had loans before – was less compatible with the credit institutions' business practices.

FI name	Policy objective	Risk level (actual / on FM level)
Loan funds (private and public funds)	Mostly working capital loans and small, firm-level in- vestments (capacity- building by buying basic physical asset)	Low to medium (Control for failure rates, strong links to other business support services in case of business with higher operational risks)
Risk capital funds – growth funds (private funds)	Early phases to set up hi- tech firms (primarily in sec- tors, like telecommunica- tion, IT and software devel- opment)	High (though screening of busi- nesses with rapid growth poten- tial)
Risk capital funds – seed capital funds (private funds)	Early phases to set up small firms (though, shifting pri- orities towards specific sec- tors, such as telecommuni- cation, IT and software de- velopment)	Very high

3.14 Key features of the repayment structure for loans / exit strategy for equity and venture capital

The specifications published by the VFH set out some framework criteria for each scheme, e.g. the maximum amount of loans, the maximum interest rate, and the max. repayment period. Contracted intermediaries had to keep themselves to these criteria, but they had freedom to come up with their own product specifications within the boundaries of the framework criteria defined in the funding agreements. Table 16 below shows the framework criteria in one column, while the next column includes information about what we see in practice.

Except for the Working Capital Loan, the maximum repayment period was 120 months in all loan programmes. The average length of the repayment period regarding the total number of operations (13,429) was 2,835 days, i.e. 93.12 months or 7.76 years. However there are significant differences among the types of intermediaries. In general, banks had a lower average repayment period: 2,345 days⁸ (vs. ca. 2,900 days in case of the other types of intermediaries). By looking at the distribution of repayment periods, it can be seen that in the case of banks the highest peak appears at 5 yearperiod. This is followed by the 3-year and 10-year schemes. On the contrary, in the case of savings cooperatives, financial enterprises and LEDAs, the highest peak appears at the 10-year repayment period.

In case of venture capital funds, the funding agreements did not specify the details of exit. Regarding the practices followed by the Venture Capital Fund managers we do not know too much by now, as the number of exits is still below 5. According to (Papp 2012, 24) in case of the JEREMIE VC investments management buyout (MBO) and Initial Public Offering (IPO) or Sale of quoted equity are not realistic option to exit as due to the too small size of the clients to get on the stock exchange and the owners' lack of capital.

⁸ Not counting the Working Capital Loan Programme here

Table 16: Length of repayment period (loans) and exit strategies (venture capital funds) in the funding agreements and in practice

Financial instrument	Length of repayment pe- riod/exit strategies in JEREMIE funded calls (Framework conditions)	Length of repayment pe- riod/exit strategies (In practice)
Loans		
New Hungary Micro Credit New Széchenyi Credit Programme	maximum 10 years (in case of operating loans: 3 years)	Avg. repayment period is 7.46 years
New Hungary SME Credit Programme Combined Micro Credit	maximum 10 years	Avg. repayment period is 7.96 years
New Hungary Current As- set Credit (or New Hun- gary Working Capital Loan)	1-2 years	In about 2/3 of the cases the repayment period was 1 year long, while in the rest of the cases it was 2 years
Venture Capital Funds		
New Hungary Venture Capital Programme – Joint Fund	maximum 10 years lifetime for the fund	The first exit occurred in 2012 through buyout by a profes- sional investor (EDOP AIR 2014). According to interviews, other successful exits happened in 2013-14.
New Szechenyi Venture Capital Programmmes - Joint Growth Fund Sub- programme	maximum 10 years lifetime for the fund	1 exit until Dec 31, 2014
New Szechenyi Venture Capital Programmmes - Joint Seed Fund Subpro- gramme	maximum 10 years lifetime for the fund	1 exit until Dec 31, 2014

Source: funding agreements, VFH Fontium (2015), EDOP AIR (2014)

4 Monitoring and evaluation of FIs

Key findings

- The IT system for collecting and monitoring data supplied by the financial intermediaries according to funding agreements renders an up-to-date database of all operations by the fund managers. Collection of performance data at the level of final recipients is less comprehensive.
- Programme- and priority-level indicators in the EDOP programme documents are poorly designed for almost all types of monitoring.
- There have been no evaluations that could inform policy regarding JEREMIEtype instruments. Existing evaluations were predominantly descriptive, used qualitative methods or covered only small parts of the JEREMIE instruments.

4.1 Characteristics and completeness of the indicator system

Programme- and priority-level indicators used in EDOP programme documents are poorly designed with regard to almost all types of monitoring and strategic indicators. The publication of the actual values of the indicators is missing in several AIRs for several indicators (e.g. the AIR of 2011 or the values of 'Access of financial mediation in the SME sector' for 2007 and 2008) and there is no methodological guide on the meaning and interpretation of the presented values. During the interviews confusion on the part of MA and fund managers was tangible with regard to the rationale and understanding of the used indicators and consequently, the narrative on their current values.

It was obvious to see that there are severe capacity problems in the MA and the Holding Fund in this field and they miss internal skills and time on running specific, policyoriented analysis and/or on developing the strategic indicators of their own. Our interviewees also pointed out that the indicators to be collected were not well defined, and there was no detailed methodological guideline on the measurement of the key strategic indicators.

According to the AIR of 2013 (EDOP AIR, 2014, 152) the first priority-level indicator shows the 'ratio change of enterprises without credit/loan compared with the 2004 base figures' (EDOP AIR, 2014, 152). The implementation report suggests that the 2009 value of the indicator was calculated based on a survey ("Economic crisis - micro and small enterprises") conducted by the Ministry of National Development and Economy. There are no details published in the document about the structure of this survey and how the values of the indicator were calculated for the other years, it is only stated that the data are calculated from National Tax and Customs Administration of Hungary (NTCA) database. Similarly, in case of the other two priority-specific indicators, only the databases used to calculate the indicators were named, but the exact methodology is not specified.

Among the three priority-level indicators two have not improved since 2007, however the AIR of 2013 interpreted these trends as due to the impact of the financial crisis. The report claims the situation would have been even worse without the JEREMIE-financed FIs.

	Target value OP (2010)	Target value OP (2015)	Ad- justed target value (2010)	Ad- justed target value (2015)	Actual values (2010)	Actual values (2013)
Result indicators (EDOP level)						
Growth of Gross Value Added (GVA) created by the corporate sector as a result of the pro- gramme	5%	4%	No change	No change	0	N.A*
Gross number of new jobs cre- ated	24,000	80,000	10,000	66,000	216	61,896
Change of e-business index (per- centage value of best scoring EU member state)	64%	70%	No change	No change	66%	52%
Private investments related to the interventions of the programme (induced investment)	170%	200%	140%	170%	143%	144%
Result indicators (EDOP PA 4 level)						
The decrease of the number of micro, small and medium sized enterprises without access to fi- nancing resources (loan) as a re- sult of Priority 4	4.3 %points	12.8 %points	No change	No change	0	5.8 %points* *
Access of financial mediation in the SME sector (loans out-standing/GVA)	4 %points	10 %points	No change	No change	+8.9 %points	+4.2 %points
The outlaid capital outstanding by institutional investors operating fully or partly with private capital in the ratio of GVA produced by the SME sector	0.4 %points	1.4 %points	No change	No change	-0.3 %points*	-0.4 %points*

Table 17: Output and result indicators, target and actual values by 2013

Source: EDOP programme description, AIR 2013

* No available data

** Data is for 2012.

The table above was taken from the AIR of 2013 with indicator names and baseline and target values exactly as referred by the official document. The names of the indicators are quite misleading as, for example, the "decrease in the number of SMEs without access to finance actually covers the share of such SMEs among all. That is why the reported data of %point changes might seem to be confusing.

	Specific	Measurable	Attainable	Relevant	Time- bound
Result indicators (EDOP level)					
Growth of Gross Value Added (GVA) created by the corporate sector as a result of the pro- gramme	~	?	-	-	? (Specifica- tion time horizon missing)
Gross number of new jobs cre- ated	✓	✓	(many missing data in the Fontium)	-	✓
Change of e-business index (per- centage value of best scoring EU member state)	✓	✓	✓(with some delay)	?	✓
Private investments related to the interventions of the programme (induced investment)	? (which level?)	✓	✓	\checkmark	~
Result indicators (EDOP PA 4 level)					
The decrease of the number of micro, small and medium sized enterprises without access to fi- nancing resources (loan) as a re- sult of Priority 4	✓	V	✓	~	~
Access of financial mediation in the SME sector (loans out-standing/GVA)	✓	?	?	?	✓
The outlaid capital outstanding by institutional investors operating fully or partly with private capital in the ratio of GVA produced by the SME sector	✓	?	?	?	~

Table 18: Quick assessment of the EDOP result indicators (SMART criteria)

Legend: ✓/yes, -/no, ? – questionable

4.2 Reporting provisions for fund managers to the MA and reliability of reported data to various stakeholders

Reporting obligations for FI managers are specified in detail in the funding agreements and basically follow the same structure in case of all FEI schemes. An IT system – called Fontium – was developed to serve as a central system for collecting and monitoring all kinds of data from the FI managers. Data obligations are specified for different timespans, there are daily, monthly, quarterly and yearly reporting obligations. Fund managers have to register their operations in Fontium immediately after they have signed a contract assuring that the MA and the holding fund has an up-to-date database of all operations. Indicators about the status and quality of each operation have to be updated at least monthly. A quarterly report that summarises the status of their portfolio has to be submitted by each fund manager. The opinions about Fontium – the data management IT system for the JEREMIE funded financial instruments – varied a lot among our interviewees. The MA representatives are satisfied with the IT system after a continuous development process and a complete re-design in 2012. This main re-development was induced by user feedbacks coming from the holding fund staff members as well as from the financial intermediaries. It took for example several hours to get specific information, the development focused extensively on improvement of the search and filter functions.

On the other hand, there are some signs that data provision to the IT system still levies an excessive burden to the intermediaries. Main concerns about the Fontium database came from operators in the guarantee scheme and in venture capital funds. Most LEDAs used a system called Creditinfo to collect and submit data to the VFH (KPMG 2013). Creditinfo was developed by the LEDA of Székesfehérvár (administrative centre in the Central Transdanubia region) and was harmonised with the Fontium system in order to enhance convertibility of the two monitoring systems.

Loans and guarantees

With regard to loans and guarantee information about the final recipients, for example:

- (a) name;
- (b) tax number;
- (c) location;
- (d) sector; size;
- (e) turnover;
- (f) balance sheet indicators; and

basic information about the specifications of their contracts, for example:

- (a) length of repayment period;
- (b) interest rate;
- (c) loan amount; own contribution; purpose of the loan;

had to be reported immediately.

In the monthly report, the required indicators dealt with the health and status of projects (e.g. the amount of outstanding loans, late repayments, probability of bankruptcy).

The yearly report of the intermediaries also had to be submitted to the VFH. This report is the usual year-end report that the intermediaries have to deliver to comply with Hungarian business regulations in any case.

 The MA had very similar data requirements on loan guarantee schemes – a regulation leading to some difficulties in the case of the guarantees. The interviewees reported that it was not easy to figure out how data about guarantee operations should be entered in the database when the structure that was primarily followed was a loan scheme-based approach.

Venture Capital

In the case of venture capital funds, the reporting structure was similar, since indicators were differentiated based on whether they had to be reported on a daily (later monthly), quarterly or yearly basis. For VC operations, the VFH required more detailed information about each project, than for loans and guarantees. The information was required to be supplied in an MS Excel sheet.

For the first venture capital programme – the Joint Fund – reporting decisions about new contracts and exits had to take place daily. In the later VC schemes, this kind of information was required monthly. In fact, the following information had to be reported:

- information about the supported enterprise (name, location, firm ID, capital stock, profile, ownership structure, financial indicators);
- introduction of the project both through data and text (innovative / earlystage, business plan, location of investment, progress of project, expected outcomes, expected impact on employment and regional economic trends, risks of the project);
- investment structure (type of financing equity or loan, total amount of investment, planned yearly return, timeline of payments and repayments, details of loan contract – if relevant);
- exit (date, form of exit stock exchange, management buyout, merger, details of buyers, price).

In the quarterly report, the funds' investment policy and the quality and progress of the portfolio has to be summarised. The report should include:

- details about the investment projects;
- the funds'activities conducted to find new projects;
- the quality of the portfolio and the individual projects;
- the identification of risky projects;
- the progress of project plans;
- divergence from plans; and
- reasoning for this diversion.

The quarterly reports are not public and the data request for these reports was beyond the deadline and capacity constraints of this evaluation project. The yearly reports of the fund managers contain similar information for the period of the full financial year – again beyond the scope of this evaluation project.

According to the VCF manager interviewed, the reporting provisions for individual projects did not mean additional burdens to them. They could hand in the exact same package of information to the VFH that they would have put together as their normal business practice. In contrast, the reporting obligations for the whole portfolio were more burdensome. They had also been problems with Fontium, which was not flexible enough to handle some special, unexpected cases.

4.3 Evaluations carried out to date or planned

According to the interviewees from the MA and the VFH, there had been no capacity to do evaluations to be used to form the policy directions regarding JEREMIE-type instruments. An extensive mid-term evaluation was conducted by KPMG (2013), however, this evaluation is mostly descriptive and focuses on monitoring data and the progress in terms of absorption, but does not say much about the efficiency and the

effects of the instruments. A similar, although much shorter evaluation was done by Hétfa Research Institute (Balás and Borbás 2012) but this short paper also does not have a lot of real evaluative claims. Regarding internal evaluations, we have found one reference in the ex-ante gap analysis of the 2014-2020 programming period (Economic Development and Innovation Operational Programme, EDIOP) that was made to the VFH and is about the effects of 'problematic' outstanding loans on the financial intermediaries of the JEREMIE-type instruments (Századvég Gazdaságkutató Zrt. 2014), although we do not have the document.

In the coming paragraphs, we give a short introduction of the content of the related evaluations. In Table 19, we give a short assessment of the evaluation studies to illustrate what kind of information is covered by these papers.

According to the KPMG (2013) mid-term evaluation the most important pre-conditions for the successful running of FIs are the following:

- *Entrepreneurial and management knowledge:* Most potential FI recipients lack the knowledge to develop a viable business plan even if they have a good business idea.
- *Clear mechanism for the monitoring of intermediaries:* The current mechanism of restraining refinancing can easily lead to situations where an intermediary has no chance to improve its portfolio and thus has to stop participating in the programme.
- *Stability in the programme setup*: The frequent changes that lacked transparency caused substantial instability that was the greatest hampering factor for the operation of banks and other intermediaries.

The KPMG (2013) evaluation states that the programme could offer financial resources to segments that would not have been able to get financial support without the programme. It is hard to assess this conclusion due to lack of convincing, counter-factual based evidence. On the other hand, banks – as opposed to other intermediary actors, e.g. saving cooperatives, local enterprise development centres – had a minor role as financial intermediaries in the programme. As interviews and the mid-term evaluation suggest, the main reason for banks' resistance is due to the fact that they normally use a strict credit rationing methodology that is not entirely compatible with the risk assessment guidelines shared by EDOP management. Banks also usually prefer already existing clients (or clients of other banks) in their loan portfolio.

As the HVCA (Széles, Széles, and Miszori 2011a) study describes, in the years following the crisis, the CEE (Central Eastern European) countries' prospects for the Venture Capital and Private Equity markets were promising, their market share was expected to grow (potential reasons: generous tax systems, strong stock market in Poland, rising entrepreneurial culture, ongoing privatisation projects, etc.). However, as opposed to the growing CEE VC markets, the Hungarian market was following a rather deteriorating trend in the second half of the 2000's mostly due to the poor macroeconomic performance of the country.

Prior to the 2000's, the dominant player in the VC market was the state-owned Hungarian Development Bank the investment policy of which was entirely independent of political influences. In 2000's, the volume of the venture capital-like investments was negligible and the institutional framework was obscure. Széles et al. (2011a) study analyses the basic characteristics of the venture capital market and especially the market segment of JEREMIE-type funds launched in 2010. Although public data on the VCPE (Venture Capital and Private Equity) activities is very limited, the authors conclude the share of venture capital market in Hungary is very small and the amount of allocated funds planned to be invested in the 2010-2013 period is relatively large compared to the targeting focus of the ERDF co-financed EDOP priority axis (see its special emphasis on early-phase capital investments). The authors warn of misallocation of the funds and biased targeting towards large investments in the next period, due to increased absorption pressures – a scenario which should be avoided within the framework of the JEREMIE-type funds.

Assessment criteria	Széles et al., 2011	Kállay 2014	EC and T33, 2015	KPMG 2013	Hétfa, 2012
Use of primary data (e.g. survey)	No	No	No	No	No
Use of secondary data	Yes	Yes	No	Yes	Yes
Identification of market failure(s) in SME finance	To some degree	Yes	No	Yes	Yes
Analysis of the relevance of any publicly funded FI w.r.t. market failure(s) identified	No	No	No	Some- what	No
Analysis of coherence of public in- terventions with private sector FIs	No	Yes	To some degree	Some- what	No
Analysis of implementation risks and deficits	To some degree	Yes	Yes	Yes	Some- what
Analysis of the efficiency of any publicly funded FIs	To a very lit- tle de- gree	Yes (in a general sense)	Yes	No	No
Analysis of the effectiveness / im- pact of any publicly funded FIs	No	Yes (in a general sense)	To some degree	Some- what	No
Description and analysis of channels of the impacts	No	Yes	To some degree	No	No

Table 19: Summary	assessment of	evaluations o	f JEREMIE-type instruments	5
In Hungary				

Kállay (2014) describes that in general, it is difficult to provide a comprehensive picture about the state subsidies provided to businesses in Hungary due to quality and accessibility limitations of the data. The author states that in Hungary between 2004-2011 state support provided to businesses in terms of GDP in the industry and services sector has been exceptionally high, almost threefold the share provided on average in the EU-27. Kállay sets the share of state support provided for businesses against macroeconomic developments such as GDP growth, employment level, private investment level and competitiveness and finds that the outstandingly high level of state support was not followed by improved economic indicators in Hungary (as opposed to other countries in the region, which had experienced a much stronger economic upturn).

The study goes on by assessing the possible reasons for the limited success of state support provided for businesses. The allocation of the different forms of financial support (non-refundable cash incentives, tax allowances, financial instruments, credit guarantee and venture capital) is similar to the shares in other EU Member States. Allocating substantial amounts of financial support due to the strong absorption pressure was at the expense of efficiency. In the abundance of instruments, 'bad type', low-efficiency instruments tend to crowd out the 'good type', efficient instruments. In addition, it is likely that these instruments have acted as a counterbalance to the otherwise unfavourable business environment, which in the long run also results in inefficiencies. Two empirical studies evaluated the effectiveness of non-refundable cash incentives, which have the largest share in state financial support provided to businesses. Both studies showed that the efficiency of these investments was questionable, they have not reached their target group and the supported investments cost more than similar, unsupported investments. The authors conclude that without improving the efficiency of state support, it is questionable whether maintaining or further increasing the volume of financial support provided for businesses in Hungary would lead to positive outcomes in the future. For the 2014-2020 programming period they suggest focusing on innovation-enhancing interventions, allocating funds to a few pre-determined priority-areas and improving the economic conditions of businesses.

The EC & T33 (2015) case study assesses the planning and the implementation of the "New Széchenyi" Combined Micro Credit and Grant (CMCG), mostly financed by the ERDF. The description of the instrument is made more understandable through the case study of a recipient business (a Hungarian plant-incubator owner). The case study describes the institutional details (highlights the well-functioning cooperation between the involved private and public actors and the 'one-stop-shop' nature of the provision), financing structure of the implementation of the instrument as well as the strategy of disbursement, the selection of financial intermediaries. Though it was stressed that it is still too early to draw conclusions on the performance of this FEI, financial intermediaries involved in managing these instruments reported that the CMCG has been one of the most successful instruments for SMEs. The study suggests using such combination of instruments in the 2014-2020 programming period as well.

During our interviews the MA and the holding fund manager acknowledged the major messages and recommendations provided by the available evaluation studies and were prone to develop the regulatory, monitoring and performance framework – though with an eye and with standard reference to the effective EU regulations.

Table 20: List of evaluations on FIs carried out in the 2007-2013 programme period

Author, Date, Title (original/ English trans- lation)	Type of fi- nancial in- strument discussed	Method of analysis	Web-link
Miszori, Széles, Széles (2011): How does the JEREMIE Pro- gram Affect the Hungarian Ven- ture Capital Market?	Venture capital and private eq- uity	Observations based on very basic statistical figures	http://www.hvca.hu/wp- content/uploads/2011/12/How- does-the-JEREMIE-program- affect-the-Hungarian-Venture- Capital-Market.pdf
Kállay, 2014: State Support and Economic Performance - Support- Overdose in the Hungarian Case of Boosting Growth?	All JERE- MIE-type FIs	Statistical and descrip- tive analysis	http://epa.oszk.hu/00000/00017 /00212/pdf/EPA00017_kozgazda sagi_szemle_2014_03_279- 298.pdf
T33 (2015): Combined Micro Credit and Grant Scheme Case Study.	"New Szé- chenyi" CMCG	Descriptive analysis	http://www.fi- compass.eu/content/combined- micro-credit-and-grant-scheme
KPMG (2013): Monitoring of the Financial In- struments of the Economic Devel- opment Opera- tive Programme, EDOP	All JERE- MIE-type FIs	Document analysis, descriptive data analysis, in-depth in- terviews, question- naire for final recipi- ents of EDOP FIs	http://palyazat.gov.hu/download /48260/P%C3%A9nz%C3%BCgy i_eszk%C3%B6z%C3%B6k_%C 3%89rt%C3%A9kel%C3%A9si_j elent%C3%A9s.pdf
Hétfa (2012):	All JERE- MIE-type FIs	Descriptive review of FIs	http://ec.europa.eu/regional_poli cy/sources/docgener/evaluation/ pdf/eval2007/expert_innovation/ 2012_synt_rep_hu.pdf

5 Outcomes of FI implementation

Key findings

- Financial sources levered in by the EU funds did not exceed the minimum amount of own contributions. It was slightly above the required 30% for VCFs (leverage factor 1.55) and just 1.3 for loan schemes. Private co-investment was less than from other public (national) sources.
- Repayments from final recipients are paid to the HF where they are kept as a separate reserve fund until the 'audit-risk' can be better assessed. Repayments from the loan schemes at the end of 2014 were EUR 119 million; some 15% of the money disbursed to the funds.
- By the end of 2014, the FIs had 13,055 final recipients under PA 4 with almost 14,000 transactions. The vast majority of the recipients have made use of the loan schemes, whereas there were 900 operations under the guarantee schemes and 200 for the VC schemes.
- Targets for SMEs were met for the size of firms and their lack of prior bank loan track record, albeit to an extent decreasing over time. Some 96% of loan recipients were micro-enterprises; the average loan recipient had been in business for 3.8 years and the average loan was around EUR 20,000.
- Recipients under the loan schemes were from a wide spread of sectors, although there was a concentration on wholesale and retail, professional, scientific and technical services, manufacturing, real estate activities and construction (in descending order). For the VC schemes and the guarantee schemes no comparable figures are available

5.1 Private money levered in at the various levels of the implementation chain (leverage effect according to EC definition)

The total leverage effect in EDOP PA 4 was 142.9%, i.e. the actually spent ERDF sources (EUR 499.49 million) in the OP generated EUR 713.79 million total value of financing including public and private sources (see Table 21 and Table 22). The leverage effect is highest in case of guarantee schemes, which inherently follows from the structure of guarantee schemes: only 20% of the actual value of guaranteed loan amount could be counted as JEREMIE source. This leverage effect includes the 15% national co-financing and the beneficiaries' contributions. In case of the New Hungary Working Capital Loan and the New Hungary SME Loan programmes the contribution of the Hungarian Development Bank (HDB) should also be accounted for as the financing of these schemes was shared 50-50% between VFH and HDB. We consider the HDB contribution as public contribution. Apart from that, if we consider only private sources we see a 125.26% leverage effect for the whole priority axis.

The leverage effects of the FEIs reveal that the outside sources levered in by the EU funds did not exceed the amount that follows from the prescribed minimum amount of own contributions. The contribution of fund managers in venture capital funds was just slightly above the required 30% that generated a 154% leverage effect for the private sources levered in and a 172% leverage effect if we consider public and private funds too (see Table 21). In case of loan schemes the leverage effect is even lower when considering the private parts only: 111% for all loan schemes. Unsurprisingly, the highest is the leverage effect of private sources among the loan schemes is in the case of the Micro Credit programme (117%): this was the first loan scheme launched and

the own contribution requirement for intermediaries was the highest in this scheme. Afterwards, own contribution requirements were gradually decreased.

Name of the Fund	Total public (EU, national) and private financing at various levels of the implemen- tation chain	EU funds (ERDF)	Leverage Ef- fect	Leverage Ef- fect (only private sources)		
	1	2	3=1/2	4		
New Hungary Micro Credit	48.92	36.31	134.75%	117.10%		
New Széchenyi Credit Pro- gramme*	201.79	167.14	120.73%	103.08%		
New Hungary Working Capital Loan	14.42	5.09	283.18%	100.00%		
New Hungary SME Credit Pro- gramme	30.56	12.99	235.29%	100.00%		
Combined Micro Credit	169.05	139.35	121.32%	103.67%		
Sub-total: Loans	464.74	360.87	128.78%	111.13%		
New Hungary Portfolio Guaran- tee Programme	9.82	3.40	288.57%	270.92%		
New Széchenyi Credit Guarantee Programme	21.27	7.68	276.98%	259.33%		
New Széchenyi Counter- Guarantee Programme	4.55	3.62	125.59%	107.94%		
Sub-total: Guarantees	35.64	14.70	242.39%	224.74%		
New Hungary Venture Capital Programme – Joint Fund	158.15	91.18	173.44%	155.80%		
New Szechenyi Venture Capital Programmmes - Joint Growth Fund Subprogramme	47.90	28.36 168.900		151.26%		
New Szechenyi Venture Capital Programmmes - Joint Seed Fund Subprogramme	7.36	4.37	168.40%	150.75%		
Sub-total: Venture Capitals	213.41	123.91	172.23%	154.58%		
Total	713.79	499.49	142.90%	125.26%		

Table 21: Overview leverage effect, status December 31, 2014 (in million EUR)

Source: MA weekly report (first week, 2015)

Note: data in column 1 comes from column 7 of the Annex table in Annex A5, data in column 2 comes from column 5 in the Annex table in Annex A5. In the column 4, leverage effect is calculated only for private sources, i.e. as (column 5 + column 10) / column 5 of Annex A5. In case of guarantees the 2^{nd} column shows the guaranteed amounts, while the 3^{rd} column shows the amount of ERDF sources that finance the only 20% of the guaranteed loan amounts.

5.2 Financial sustainability of FIs

The value of repayments from the financial intermediaries to the VFH Plc. for the loan schemes is summarised in Table 22. Comprehensive assessment of the value of losses is still missing – given the fact that most of the transactions under the loan and guarantee schemes are still in progress and the investment period for the venture capital schemes closes by the end of 2015.

There is one scheme – the New Hungary Working Capital Loan – where all the sources have been repaid already. The programme offered working capital loans with a 1-2 year repayment period between 2009 and 2011, so all the contracts have ended by now and the figure show that there had been no losses in the scheme. Although the New Hungary Micro Credit was launched the earliest, the repaid amount of sources is highest in case of the New Hungary SME Credit Programme.

The official programme documents share information only regarding the New Széchenyi Credit scheme (EDOP AIR, 2014). According to the AIR of 2013, final recipients repaid an amount of HUF 1.0-1.5 billion (EUR 3.571 million-EUR 5.357 million) each month to the accounts of financial intermediaries, and the financial intermediaries transfer the repaid amounts to the central account managed by EDOP MA once a month. The total volume of repayments approached HUF 20.1 billion (EUR 71.785 million) by the end of 2013. The repaid amount reported in the AIR of 2013, however, is different from the data we have been given by the VFH.

During interviews with the MA representatives, they stressed the point that repaid amounts are kept on a separate programme account and they do want to revolve the repayments as far as the total amount of primary resources (planned funds) is not committed. They prefer to keep these funds as so-called "puffer" or "safety funds" to be able to cover expenses due to failing compliance with EU audit requirements. This conservative attitude explains, that they are rather cautious about the re-using the revolving funds early on – before it is evidenced that audit risks are not significant and rather low.

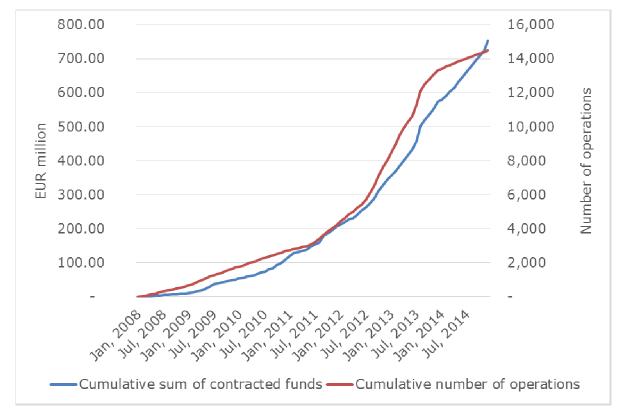
Instrument	Original fund size in EUR million	Repayments to HF in EUR million	Scale of losses		
New Hungary Micro Credit	39.56	22.99			
New Hungary Working Capital Loan	4.90	4.90			
New Hungary SME Credit Programme	14.40	10.22	No data		
New Széchenyi Credit Programme	121.68	26.26			
Combined Micro Credit	166.67	54.87			

Table 22.	Denavments	and lossos	reported	status 2014
Table ZZ.	Repayments	and iosses	reporteu,	Sialus 2014

5.3 Actual, expected and unexpected outcomes (output and results, wider effects) for each FI implemented, concrete examples of outcomes

The absorption of EDOP sources was largely accelerated in the second half of the programme period. Until the end of 2011, only 27.91% of the sources had been spent to final recipients. On Figure 10 the absorption is plotted in terms of the number of operations and the amount actually paid to final recipients. Both curves show an exponential growth curve.





Source: VFH Fontium (2015)

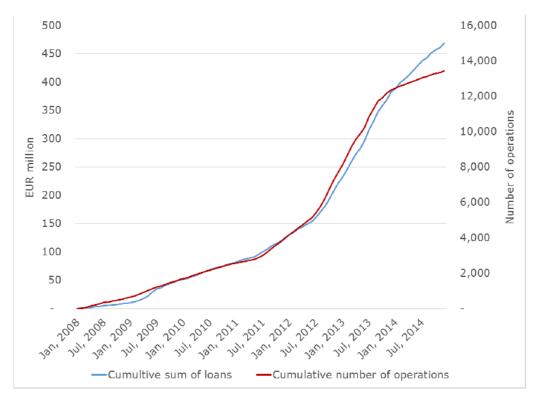
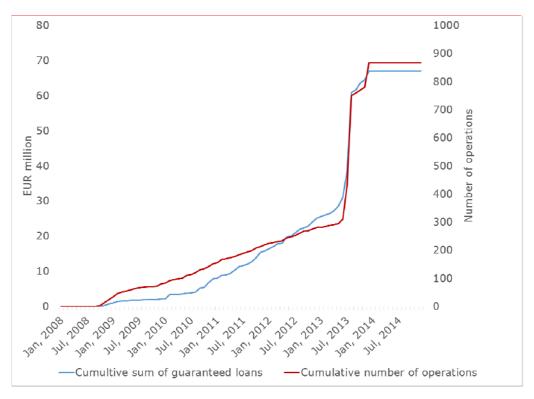


Figure 11: Loan schemes. Cumulative sum of loans and number of operations

Figure 12: Guarantee schemes: Cumulative sum of guaranteed loans and the number of operations



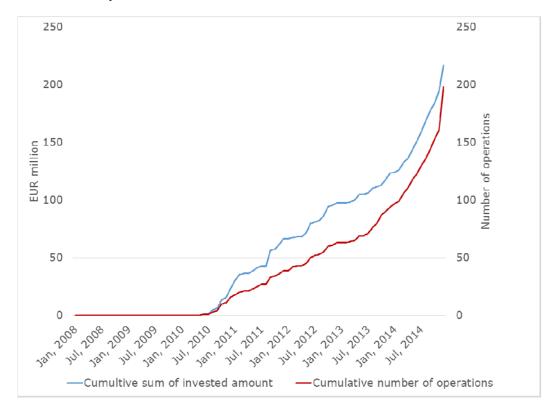


Figure 13: Venture capital schemes: Cumulative value of investments and the number of operations

To decide whether the EDOP FIs have succeeded in reaching the enterprises that are the most 'in need' for external support is quite a complex task. It goes beyond the scope of this analysis to confirm without any concern whether the actual final recipients of the schemes would have had access to finance. However, descriptive statistics on the final recipient suggest that the majority of the companies participating in the schemes as final recipients are those in the greatest need of external support.

The originally targeted 'market gap' included micro-enterprises that have never had loans before. If we look at Figure 14 and Figure 15, we can see that the share of recipients without any credit history was 97% and the share of micro-enterprises was 99% in 2008, when only the New Hungary Micro Credit Programme and the New Hungary Portfolio Guarantees had been in operation. Both proportions have been falling since 2008. More and more recipients appeared that have already had a credit history and that are of larger size and with a need for larger volumes of debt/ equity finance. This tendency shows that the programme started to depart from the originally narrow targeting – a development recognised and acknowledged by all the stakeholders. All of our interviewees have explained this shift by the operative need of minimising absorption risks.

Changes in the conditions of the instruments are justified as the following in the AIR of 2013: "The main objective in 2013 that the still available resources in the 2007-2013 programming period could be used as efficiently as possible, in accordance with the strategy defined in the New Széchenyi Plan. The programmes were modified and new calls were launched accordingly." (EDOP AIR 2014, 139)

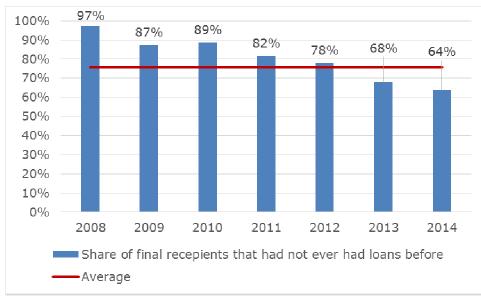
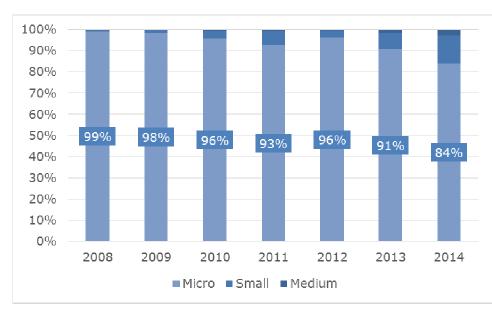
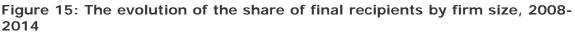


Figure 14: The share of final recipients that had not ever had bank loans before, 2008-2014

Source: VFH Fontium (2015)

Note: The data only includes the final recipients of loan and guarantee schemes.





Source: VFH Fontium (2015), including all types of FIs (though with some missing values, esp. in case of guarantees/ credits).

Note: The SME classification follows the classification of the Hungarian legislation (§ 3 of Act XXXIV of 2004) that is the same as the one recommended by the European Commission in their Commission Recommendation 2003/361/EC.

SME = <250 employees, yearly net turnover max. EUR million 50 or balance sheet max. EUR million 43, small enterprise = <50 employees, yearly net turnover or balance sheet max. EUR million 10,

micro enterprise = <10 employees, yearly net turnover or balance sheet max. EUR million 2.

Note: Out of the total number of operations (14,767) we have information of the SME classification in case of 12,893 operations.

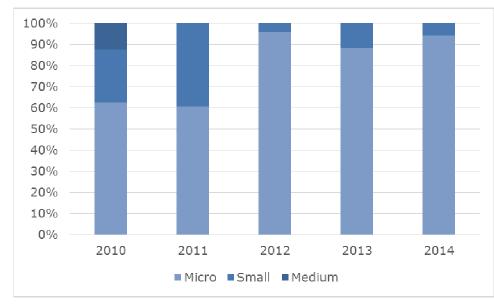


Figure 16: The evolution of the share of final recipients by firm size for venture capital projects, 2010-2014

Note: Among the 198 venture capital final recipients the data about SME category is missing for 100 cases.

The regional distribution of the number of operations and the amount of funds is fairly balanced (see Figure 17, Figure 18 for all the operations and Figure 19 and Figure 20 for venture capital clients). The existing regional differences do not appear in the allocation of JEREMIE sources.

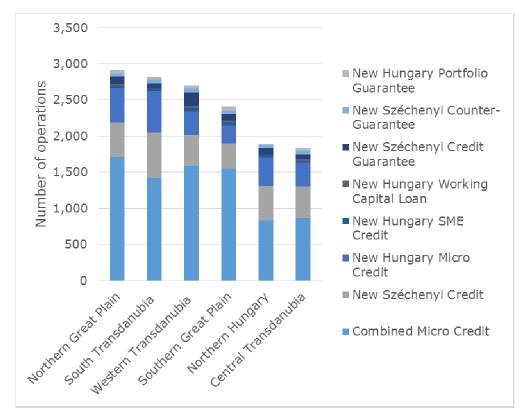


Figure 17: Regional distribution of the number of operations under the different FEI schemes of EDOP (31 December 2014)

Source: VFH Fontium (2015)

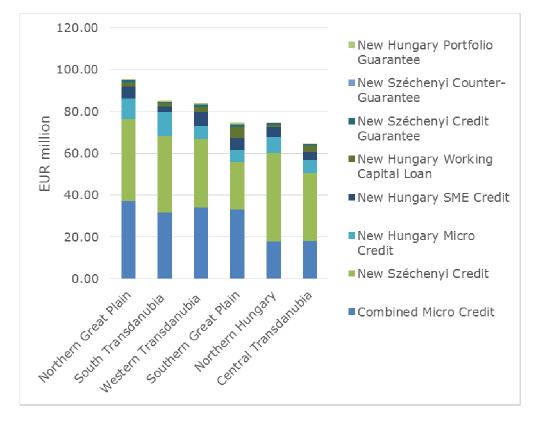
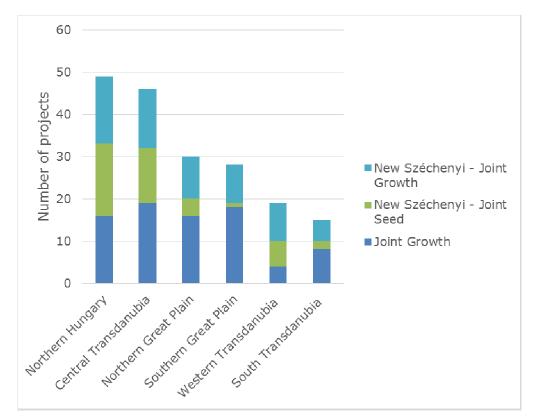
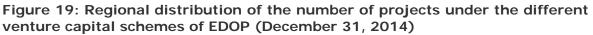


Figure 18: Regional distribution of the amount of funds paid under the different FEI schemes of EDOP (December 31, 2014)

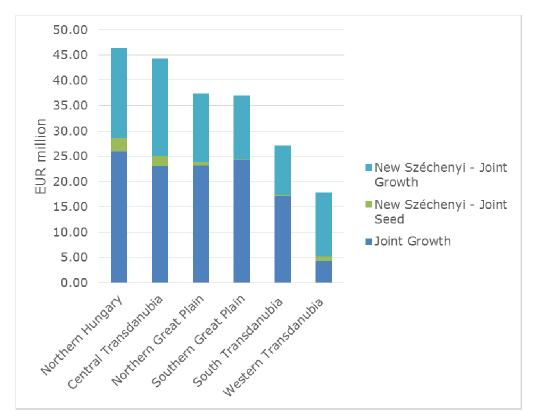
Source: VFH Fontium (2015)

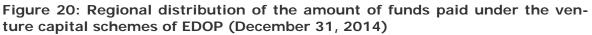
Note: The amount of guarantees under the Counter Guarantee schemes is not available.





Source: VFH Fontium (2015)



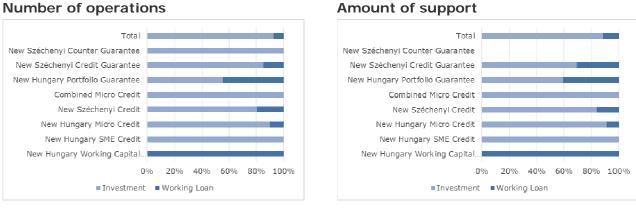


The general scope of the FEI schemes was to induce investment activity, although working capital loans were also available under some schemes. Figure 20 shows that investment purposes dominated the allocations even if financing the liquidity needs of SMEs have also absorbed some proportion of the allocations under the various schemes (for example, it reached to 40% of all the transactions in the case of portfolio guarantees – we assume though it was not confirmed by the MA one of the reasons why this scheme was phased out by 2013).

All in all, 92.5% of the projects were investment projects (VFH Fontium, 2015). In Figure 21, the share of investment and working capital loans are depicted for each FEI scheme. The New Hungary Working Capital Loan (NHWCL) was specifically opened in 2009 to provide working capital loans, but in terms of the total number of operations this scheme has not played a significant role (90 operations, VFH Fontium, 2015). The share of operations for working capital purpose is highest in the case of the New Hungary Portfolio Guarantee scheme if the NHWCL programme is not considered.

Source: VFH Fontium (2015)

Figure 21: Distribution of the operations under different FEI schemes by the aim of the operation (based on the number of operations and the amount of support provided)



Number of operations

Source: VFH Fontium (2015)

Note: The amount of guarantees under the Counter Guarantee schemes is not available.

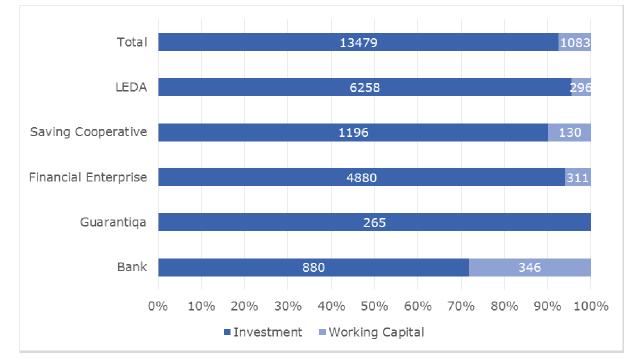


Figure 22: Distribution by the aim of the operation by type of intermediaries

Source: VFH Fontium (2015)

Achievements of strategic goals

Among all the indicators collected for EDOP's Priority 4, none concern the effects that the schemes had on the final recipients. Data about the enterprises' turnover and capital had to be entered into the Fontium database when contracts were signed; however, this information is only available sporadically with a lot of missing values in the dataset from the VFH. Even if this data were complete, the information would be needed at the end of the project period and preferably later to assess the impact of the FIs on the enterprises.

EDOP PA 4's objective was to support micro, small and medium-sized enterprises that had no credit by improving the accessibility of credit and guarantee schemes and by motivating private investors to invest into smaller firms with non-proportional costs and yields (EDOP AIR 2014, 138).

Based on official monitoring data, two out of the three priority-level indicators have improved since 2007 (see a detailed overview about the indicators and the methodology to calculate them in Chapter 4.1).

- The 'number of micro, small and medium sized enterprises without access to financing resources (esp. loans '- indicator 1) has increased from 76.8% to 82.6%. According to the interpretation of the AIR of 2013 this figure shows that without the FIs of EDOP the situation would be even worse (EDOP AIR 2014, 152).
- The 'access to financial mediation in the SME sector (loans outstanding / GVA' indicator 2) has increased from 25.7% to 29.9% (EDOP AIR 2014, 152).

There had been no improvement in indicator 3 ('outlaid capital outstanding by institutional investors operating fully or partly with private capital in the ratio of GVA produced by the SME sector'). The comparison of the most recent values of these indicators to the baseline values is important to assess any potential programme impact. Nevertheless, there is a need for counterfactual-based methods to assess the particular impact of the FIs introduced – an assessment, which should be conducted after the programme closure and net settlement of all the running FI schemes (by 2016 the earliest).

All of the MA, VFH and the ex-government member interviewees agreed that a primary achievement of EDOP PA 4 was the setup of a new viable financial intermediary system. As the interviewees claimed, this effect is clearest in the case of the venture capital market that previously hardly existed. Another clear gain from the FIs is the awareness raised about the potential usefulness of FIs, both for intermediaries and final recipients.

The AIR 2013 deals with horizontal objectives (equal opportinities, environmental sustainability) with regard to EDOP PA 4 in only one sentence claiming that 'during the selection of intermediaries financed from EDOP Priority 4 budget and in the case of EDOP Priority 4 applications, horizontal aspects cannot particularly be enforced'(EDOP AIR 2014, 157).

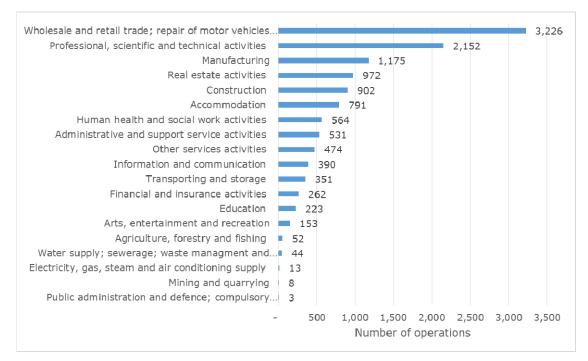
Table 23: Overview on characteristics of enterprises receiving support per FI

FI product	Characteristics of the enterprises receiving support, their typical size and the sectors of activity in which they operate
Loans	The median loan value of all loan programmes was EUR 22,550 (HUF 7 mil- lion). However, there is a considerable variance depending on which scheme is considered. In the case of the Microcredit scheme and the Combined Micro- credit scheme the median loan value is around EUR 19,330 to 20,940 (HUF 6-6.5 million), whereas the New Széchenyi Credit typically offered higher amounts of credit. The highest loan amounts were observed in the case of the Working Capital Loan and the SME Loan.
	All in all, 95.76% of loan recipients were micro-enterprises. This value is smallest in the case of the New Széchenyi Loan (82.32%), where 14.70% of recipients were small enterprises and 2.97% of the recipients were medium enterprises.
	Regarding age, the SME Loan and the Working Capital Loan had the oldest recipients with an average of around 10 to 11 years. Regarding all the loan schemes, the median age was 3.84 years. The youngest firms were served by the New Hungary Micro Credit scheme.
Guarantees	The amounts guaranteed in the Counter-Guarantee Programme could not be observed. In the Portfolio Guarantee (later New Széchenyi Credit Guarantee) scheme, the guaranteed loan amount was around EUR 75 000 to EUR 80 000. Guarantee schemes typically targeted bigger enterprises than the loan schemes. Only 59 % of recipients were micro enterprises and the share of medium enterprises was the highest here among the three types of FIs (6.3%).
	The final recipients of the Portfolio Guarantee were slightly younger than the recipients of the other two FIs (7.57 years old on average). The recipients of the other two guarantee schemes were both above 9 years old on average.
Venture Capital	The average amount of investments was around EUR 1.4 million in the case of the Joint Fund and the Joint Growth programmes, whereas the average amount was around one tenth of this in the case of the Seed Capital programme.
	In the Seed Capital programme, only micro enterprises participated, whereas the share of microenterprises was 90% in the case of the Joint Growth Fund and 76.39% in the case of the Joint Fund.
	The average age of the supported firms was below 1 year. Unsurprisingly the youngest final beneficiaries were among the recipients of the Seed Capital programme.

Source: VFH Fontium (2015)

Note: see more details in the table in Annex 7.7 "Descriptive statistics of final recipients by scheme"

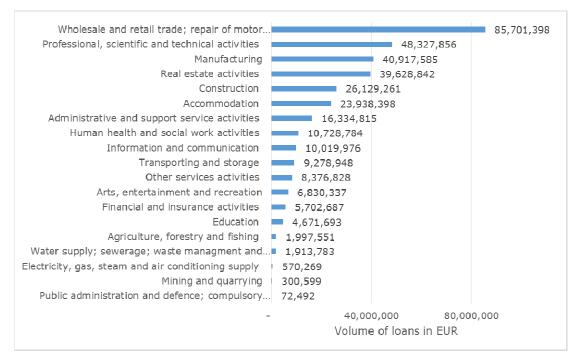
Figure 23: Distribution of final recipients by sector



Source: VFH Fontium (2015)

Note: Only in case of 12,286 final recipients data on sectorial background is available. Missing values on sectorial breakdown are overrepresented in guarantee schemes (in case of 300 out of 1040 transactions).

Figure 24: Distribution of the volume of loans by sector (in EUR)



Source: VFH Fontium (2015)

Note: Only in case of 12,286 final recipients data on sectorial background is available. Missing values on sectorial breakdown are overrepresented in guarantee schemes (in case of 300 out of 1040 transactions).

Almost two-thirds of the final recipients (63%) of the JEREMIE-type instruments concentrate in four sectors: wholesale and retail, professional, scientific and technical activities (cf. classical R&D and innovation), manufacturing, and real estates. The sectorial distribution of final recipients under the credit schemes differs only in the lower rank of the sub-group in professional, scientific and technical activities.

Although sectorial information in the actual monitoring database received from the holding fund manager is very poor in the case of recipients of the venture capital funds (missing sectorial data for all VC operations), the mid-term evaluation report shows that close to 25% of the final recipients are enlisted as companies with a main profile in professional, scientific and technical activities and further 46% of the client firms operate in the financial and insurance sector, in the IT & communication or in the trade sectors (KPMG 2013, 53).

Box 2: Concrete example of recipient of Combined Micro Credit

Equipment procurement at Laturex Bt

Laturex Bt. is a corporation operating since 1995, with the main activity of metal machining. Under Combined Micro Credit scheme the company purchased an OKUMA Genos L200E-M turning center. The new equipment is the most up-to-date CNC turner, enabling more precise, faster work, thus the company is able to fulfil its increased amount of orders in excellent quality.

The CNC technology enables the company to work in large series, therefore, they can undertake continuous orders for large number of items.

The final recipient submitted its application on 21 June 2012 within the frames of the Combined Micro Credit. With the help of the scheme the enterprise could apply for a non-repayable assistance of HUF 10,000,000 (EUR 35,714) and a credit with favourable conditions in the amount of HUF 10,000,000 (EUR 35,714) being a really big step forward in the life of the enterprise. The company provided HUF 3,193,300 (EUR 11,405) own contribution.

As a result of the investment the company has been using the new turning centre from September 2012, and this has already been reflected in their increased sales.

Source: EDOP AIR (2014, 159)

Box 3: Concrete example of venture capital project

Cryo Innovations (project of Portfolion Venture Capital Fund)

Cryo Innovations is a biotechnology firm that received funding from the Joint Fund programme in 2010 through the Portfolion VC Fund – a contracted intermediary of the New Hungary VC Joint Fund programme. The project was among the very first investments of the JEREMIE-funded venture capital schemes, the first investment of Portfolion and had made the first successful exit of the JEREMIE-funded VC programmes during the Spring of 2012.

The innovation idea came from the PhD thesis of Csaba Pribenszky from the early-2000s. Initially, his focus was on assisted reproductive techniques for animals; however, later the scope of the technology was shifted towards human infertility treatment. As a side branch of the research Pribenszky had developed a time-lapse microscope (Primo Vision) that enables researchers to observe the evolution of embryos in their first few days, thereby largely increasing the chances of successful fertilisation. Originally, the firm had three main branches of research, but since 2010 the primary focus was on this microscope.

After generating significant interest in the prestigious annual conference of the European Society of Human Reproduction and Embryology (ESHRE), the firm increased its efforts to find financing partners to further develop their innovation and begin the large-scale marketing and sales activities of their products. Between 2008 and 2010, they contacted a few investors, but could not agree with any of them. They first got into contact with Portfolion VC Fund in March 2010. After eight or nine months of consultations, they reached an agreement on the investment project. Portfolion invested EUR 708,810 (HUF 220 million) in the project and later also gave a loan of EUR 96,660 (HUF 30 million).

The exit took place very shortly after the investment was launched due to an unexpected acquisition offer. In the beginning of 2012 the Swedish company Vitrolife – a significant actor in the field – contacted Cryo and expressed their interest in buying the firm. The decision was made very shortly after the first contact due to the time pressure coming from the yearly ESHRE conference – the most important platform for international networking – that takes place in June every year. A contract was signed with a total potential price of EUR 9 million: the fixed part of the price was EUR 5 million, while the additional EUR 4 million is dependent on the achievements of the firms in relation to pre-set goals in development and sales for the years 2013 to 2015.

Since 2010, the number of employees grew from 7 to 35 and the demand for the microscopes showed unexpected increase. Although, the interviewee stated that they are still before the 'big boom', only about 10% of the potential market uses their products.

According to our interviewee the boom of VC funds was clearly visible from their perspective in the beginning of 2010, when the first JEREMIE VC fund was launched in Hungary. The investment of Portfolion brought business expertise that Cryo lacked before 2010 which clearly helped to develop their business. The investment director at Portfolion was in daily communication with Cryo and all the significant decisions were made in cooperation.

Source: interview with executive manager

6 Conclusions on the effectiveness and added value of FIs

Key findings

- Implementation of PA 4 followed strategic and operational objectives, even if some instruments had to be adjusted in order to increase take-up. The decrease in the number of SMEs without access to financing resources, and the access to finance for SMEs has been significant, even if still behind their targets.
- The most interesting result of PA 4 implementation FIs is the increased economies of scale and scope in SME financing, i.e. increased number of more heterogeneous financial intermediaries and new types of FIs such as seed capital or small loans combined with grants.
- Long-term results such as increased Gross Value Added in the business sector or job creation (target: 66,000) have not yet been assessed and do not seem to be realistically achievable.
- Both government and market stakeholders emphasise the significantly expanded market generated by the VC funds and the success of the SME microcredit.
- The FIs' cost-effectiveness, measured by the co-investment, is higher for FIs than for grants under other PAs.
- The optimum fund size of Hungarian FIs, with their particular delivery structure, is even harder to assess than usual. Dividing the OP allocation (EUR 757 million) by the 360 funding agreements, gives an average fund size of roughly EUR 2 million, which is in line with other countries. However, the size of the individual FI products were continuously adapted to market and implementation needs, thus approaching an 'optimum' through a trial and error process.
- The added value of FI implementation in Hungary is clearly reflected in the quick revival of the Hungarian VC market after the 2008 financial crisis. Without the EDOP measures, the market would be much more limited.

6.1 Consistency of implementation and practice with statement of goals and Theory of Change

The EDOP aimed at encouraging sustainable growth in the Hungarian economy. The FIs were designed and launched under the OP PA 4 to overcome the limited access of SMEs to external financial resources. This double mission was consequently followed throughout the implementation period.

Improving market context – moderate demand for external finance though the growing willingness of banks to provide loans:

Most segments of the SME-financing market improved in spite of the credit crunch after the 2008 economic crisis when loans allocated to SMEs dropped by 30%. From 2010, there was a steady increase of SME loans, with a peak in late 2011 (CBH 2014).

After 2010, the macroeconomic and financial market conditions improved with falling interest rates, relaxing credit conditions of the various national credit schemes such as loans subsidised by national funds. Some experts even stress that there might be an

oversupply of subsidised loans, especially for SME small loans and loans to SMEs with growth potential, for example with a strong export orientation⁹.

Overall assessment of the EDOP FI's role in financing SMEs is still limited (5% out of total funds (CBH 2014), but complementary to some of the alternative national FIs in terms of:

- providing guarantees schemes linked to the parallel credit instruments; or
- targeting types of SMEs excluded from EDOP financing, e.g. agriculture firms, firms with bank loans even if underperforming.

The launch of a new national credit scheme managed by the Central Bank of Hungary generated explicit demand for more credit guarantees and diversified the supply side. This included segmentation in the NHP target group: primarily agricultural firms together with a combination of investment loans and liquidity loans, a lower interest rate threshold but with stronger collateral requirements. The exclusive intermediaries were banks.

Consistency in targeting with a moderate up scaling towards final recipients of larger size and/or with larger financial needs:

In the programming documents, the main target groups of the planned FIs were:

- **credit schemes**: Companies with valid financial needs though without access to 'business-as-usual' financial products such as investment loans and guarantees. The programme management was very persistent in selecting companies without parallel debt lines. Even though the share of such companies decreased in the programme period, it was still close to 80%. The target was kept as narrow as possible until severe absorption pressures arose towards the middle of the implementation period. As a consequence, conditions in the existing credit schemes were relaxed and the programme management in partnership with a new ministerial team after the general elections in 2010 re-designed the credit schemes. This included the introduction of new credit schemes, such as the combined scheme, consolidating investment loan products first in late 2010 and then in 2012.
- VC schemes: The original plan was to commit some 20% of the total PA 4 funds to the VC scheme. Again, by 2010 commitment rates were very low, but especially low in the case of seed capital. Amendments of the tenders in the later phase by VFH indicate shifts in operating priorities towards larger startups and less risky investment perspectives, thereby also significantly increasing the share of venture capital funds.
- **guarantee schemes:** The original targets and the allocation of available funds were not changed in the programming period. The only significant change was related to the institutional framework changing the 'open-to-entry' approach to bilateral agreements made between the holding fund manager and the dominant (*quango*) market actor (Garantiqa Ltd.) in the sector.

⁹ CBH's Growth Credit line, Eximbank export credits, HDB co-financed overdrafts – Kállay 2015 Ludányi et al 2012, interviews

On the way to meet performance targets:

By the end of 2014, the ERDF co-financed credit schemes contributed EUR 424.5 million (HUF 132 billion) to SME credits in Hungary. This involved some 13 500 transactions or 10% of the total number of credit transactions in this segment of the market, but only a tiny share (2%) in terms of credit volume¹⁰. The relatively high share and dominant role of microcredits and small loans explains this difference. Notably, this was a highly ambitious outcome in the programme documents.

All of the FI schemes had extremely slow progress in the first period, but the credit instruments were taken up very quickly from 2011 onwards, reaching 95% of the total planned/allocated funds by the end of 2014. The allocation of both the guarantee and the venture capital funds lagged behind (63% and 52% respectively in 2014).

The representative SME (median client) across all the credit schemes is a micro company with just one employee, 6.5 years old with a loan of HUF 7 million. Certainly, the different credit schemes vary significantly in all of these attributes. The median value of loans within the New Hungary SME Credit Programme is EUR 97,000 (HUF 30 million) reaching EUR 187 000 (HUF 58 million) and that of the NH Working Capital scheme is EUR 81 000 (HUF 25 million) up to EUR 271,000 (HUF 84 million) for some medium size companies.

The FIs are relatively evenly distributed across the six cohesion regions in Hungary with only one quasi outlier, the South Transdanubian region. Remarkably, this region was already lagging behind in the previous programme period with the absorption of the grant schemes, which can be explained by the relatively high proportion of small municipalities with populations below 5000 and with population densities below 100 persons/km2. Companies from these settlements have to apply for assistance in the framework of a different operational programme that specialises in rural development.

It is hard to assess the effectiveness of the interventions in terms of result indicators since all the FI schemes are still in progress and there was no exact information available on the measurement of those indicators. Meanwhile targets for the following result indicators planned in 2007 seem to be ambitious in comparison to the recent values in the monitoring documents (for more details, see AIR 2013):

- The decrease in the number of micro, small and medium-sized enterprises without access to financing resources (loans) as result of PA 4 (target value: 12.8 %-points, 2013 value: 5.8%-points).
- Access to financial mediation in the SME sector (target value: 10%-points, 2013 value: 4.2%-points).

Looking at the SME Access to Finance (SMAF) Index for Hungary between 2007 and 2014, it can be seen that Hungary's score has improved, rising from 81 to 95 (with the debt sub-index, from 80 to 94. The country is still underperforming as compared to the EU-27 average in 2014 (and also the baseline index, the EU average from 2007). However, the improvement of both the credit and equity financing indicators is proof of some sort of market expansion. Counterfactual-based impact assessment methods should further investigate the effective contribution of the EDOP FIs to this

¹⁰ VFH 2014, CHB 2014

development, both at the enterprise-level and the national level. In the interviews, both government and market stakeholders emphasized the significant increase in the market for venture capital funds.

6.2 Achievement of FI <u>strategic</u> and <u>operational</u> objectives in the context of OP objectives, as defined in the ToC

Table 24: Effectiveness in achieving strategic and operational objectives and assumptions of the funds

The intended change which should be	Experts FIs supp					n of	Justification
achieved by the spe- cific measure at end of the programme period	don´t know	very low low		me- dium	high	very high	
(2015)		1	2	3	4	5	
Operational objective	s	-					
Number of FEI schemes available to the target group in- creased					x		There was a considerable gain from learning by doing in the fi- nancial market (esp. in case of LEDAs and Financial enterprises) The adjustments to the first set of FEI schemes launched in 2008-2009 in accordance with feedbacks from final recipients and with changing market con- text.
Volume of total funds allocated / invested to SMEs with no access to bank loans (no track record of bank loans)				x			Monitoring data confirms target- ing of SMEs with no bank loans – even if their share decreases throughout the period Numerous training and demon- stration activities were intro- duced by Holding Fund (targeted on LEDAs and FEs, dealing with the highest share of the target group SMEs)
Increasing share of SMEs benefiting from partial compensation of interest rates / guaran- tees / venture capital				x			The EDOP FIs may have contrib- uted to the market expansion and closing the financial gap – but hard evidence is missing due to lack of counterfactual-based impact assessment. In the case of loan schemes the max. 9% interest rate threshold is far below the benchmark mar- ket rate (15-20% in dependence of the scope of loans).
Proper selection of new, innovative start- ups and companies – in case of venture capi- tal funds					x		The due diligence is strict, in- vestment strategies are in line with the overall strategic frame- work

The intended change which should be	Experts FIs supp						Justification
achieved by the spe- cific measure at end of the programme period	don´t know	very low	low	me- high ver dium hig			
(2015)		1	2	3	4	5	
Strategic objectives							
Induced investment volume				х			Good progress in leveraging pri- vate money – even if lower lev- erage effect than planned
Improving access to equity finance					x		Both market data and interviews confirm the increased interest of financing actors in equity finance
There is a market mak- ing for private invest- ments in the mid run					х		Increased number of VC funds in the programme period
There is a market mak- ing for private invest- ments in the long run	Х						No evidence available
Strengthening regional position of the domes- tic capital	х						No evidence available
It is assumed that some of the exits are successful in economic terms and the risk capital funds are re- volving and can be used multiply to sup- port growth and job creation in the long run	Х						Too early for a final answer
Broad policy objec- tives: Boosting growth and job creation to help Hungary catch up with Europe (overall strategic goal)	x						Unclear how to assess that goal in relation to FIs.

6.3 Cost effectiveness of different types of FIs and grant schemes

There are no official cost effectiveness measures about the different type of FEIs and grant schemes. However, we have made a simple cost effectiveness calculation based on the available data for EDOP PA 4 vs. the other PA-s of EDOP and especially EDOP 2.1.1 that offered SME development grants (Table 25). We have a quite comprehensive picture about the costs of the schemes, while we lack data on the benefits of the schemes.

The calculated costs cover the setup and management costs of the Intermediary Bodies, the management fee of the beneficiaries and the scale of losses based on the latest figures (in case of FIs), and the amounts paid to final recipients (in case of grants). On the benefit side, the only element we have data on is the induced investment that is calculated as the own contribution paid by the final recipients of FIs and grants. About the changes in economic performance of the final recipients we cannot observe any data, so the benefit side of the calculation is probably underestimated. For details and sources of the steps of calculation see the notes under Table 25.

Based on our calculation every EUR spent on the JEREMIE-type loans under EDOP 4.1 generated a net benefit of 1.29. At the same time the non-repayable schemes running under PA 1, 2 and 3 of EDOP (offering a wider range of grants aimed at economic development, e.g. grants for universities to promote research and development, supports to business networks) produced only 0.44 EUR by each EUR spent on managing these measures. The SME grants offered under PA 2.1.1 were even less effective with a 1.25 benefit-cost ratio.

		а	b	С					
		EDOP PA 4.1	EDOP PA 1, 2 & 3	EDOP PA 2.1.1					
		Costs							
1	Setup cost of Intermediary Body (Own capital invested in VFH Plc.)	3,221,857	-	-					
2	Operating cost of Intermediary Body	11,467,449	57,349,056	19,398,622					
3	Management fee for beneficiaries (PA 4)	31,334,642	-	-					
4	Amounts paid to final recepients	-	5,790,840,000	537,963,320					
5	Losses due to failure in repayment	20,039,951	-	-					
6	TOTAL COSTS	66,063,899	5,848,189,056	557,361,942					
			Benefits						
7	Induced investment	85,386,850	2,547,969,600	85,690,625.89					
8	TOTAL BENEFITS	85,386,850	2,547,969,600	85,690,626					
9	NET BENEFIT (Total benefits -	19,322,951	-3,300,219,456	-471,671,316					
	Total costs)								
10	-BENEFIT TO COST RATIO	1.29	0.44	0.15					
	(Total benefits / Total costs) General notes: Amounts are in 2014 EUR value. HUF ar Dec, 2014 published by the Central Ban	nounts are converte k of Hungary: 310.3	ed using the official avera 38 HUF/EUR						
	General notes: Amounts are in 2014 EUR value. HUF ar	mounts are converte k of Hungary: 310.3 tikai-adatok-informa	ed using the official avera 38 HUF/EUR aciok/adatok-idosorok)						
2 3 4	General notes: Amounts are in 2014 EUR value. HUF ar Dec, 2014 published by the Central Ban (http://www.mnb.hu/Statisztika/statiszt	mounts are converte k of Hungary: 310.3 tikai-adatok-informa n schemes of EDOP hediary Body (HEDC VFH Plc. (Nov 9, 20 ent paid by the MA 1 , p 161), PA 5 "Tech 0% of total costs is of of PA 2.1.1 final co ant for other PA-s paid. t received from the	ed using the official avera 38 HUF/EUR aciok/adatok-idosorok) PA 4.1 Plc.) was not newly set (111) to the VFH Plc. For years anical Assistance" counted as overhead (fix ntracts in the total numb	up. Source: 2007-2013 cost), the rest of er of final contracts					

Table 25: Simple cost effectiveness calculation and comparison for EDOP PA 4.1., EDOP PA 1-2-3 and EDOP 2.1.1

of EDOP 2.1.1

6.4 Optimum scale of FEI schemes

It is not easy to assess the optimum scale of public-private co-financed funds in the case of non-existing or emerging markets and financial services. In Hungary, market gaps were shown for capital funds, especially seed capital as well as for guarantee products. By looking at the financial performance of the various FI schemes and the reallocation decisions, planned figures for both the FI types seem to be too ambitious. While the funds for the guarantee schemes were cut during the implementation phase and the VC funds gained in planned amount, the progress of both types of FIs is slower than it was planned at the start of EDOP.

While the loan schemes performed better in terms of allocated and invested funds, it is important to note that there is a strong trade-off in keeping the narrow-focus of planned targeting, i.e. SMEs that would otherwise not find financing options on the market and timely absorption of funds.

Both government and market stakeholders stressed the importance of severe bottlenecks on the demand side of the financial market, i.e. lack of knowledge on the advantages of guarantee schemes among companies and loan agents, perception of high administrative burden in the case of guarantee schemes by banks, low number/ proportion of start-ups with viable business plans and innovative ideas. These demandside challenges are hard to solve by market making and by improving the accessibility of FIs. There is a strong need of providing soft business supports (in line with or even as a pre-condition to taking JEREMIE-type loans) and thereby improving the nonfinancial characteristics of the main target groups – micro- and small firms, innovative start-ups.

6.5 Improved market making for equity/venture capital funds

The relevant EDOP measures have substantially contributed to the development of the private equity market in Hungary. The number of private fund managers involved in the EDOP programme was 23 by the end of 2014 – with a strong profile in start-up and early stage finance (19 fund managers). Market experts explain the lower than expected number of new seed capital fund managers (4) as due to the low level of maximum value of allowed investments (EUR 150,000) and the moderate risk-attitude of the potential investors (EDIOP gap analysis 2014, MNB 2015). Lessons from our stakeholder interviews also show that the 30% co-financing rate was a good trigger in the case of equity financing start-ups and companies in the early / growth stage, but less attractive in the case of seed capital when company-related risks can be higher.

In comparison to the baseline scenario in 2007, the private equity markets still show severe bottlenecks in the seed capital segment and experts suggest better linking of the available VC instruments with seed capital schemes. There might be a financial gap for firms between the seed and start-up phase, i.e. for firms not eligible for seed capital, e.g. with an annual turnover over EUR 645,000 but with a need for equity finance less than the market average of start-up investments, i.e. around EUR 1 million. (HCB 2015).

6.6 Added value of ERDF vs. private equity/venture capital funds

The added value of the ERDF contributions is clearly reflected in the fact that the Hungarian VC market has revived very quickly after the depression years following the 2008 economic crisis. Although proper counterfactuals are missing, the market indexes (see the SMAF sub-index for equity finance converging to the EU average and the market value assessments) show steady growth in the market volume and in the number of fund managers after 2011. The experts interviewed have also confirmed that without the push factors provided by the EDOP measures, e.g., 70% co-financing rate, asymmetric revenue/loss-sharing agreements, the demand side would most probably be much more limited.

6.7 Elements of good practice from the case study

Table	26:	Good	practice	aspects
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FIs	Good practice aspects						
All FIs	Strong orientation of the FIs towards regional development goals is demonstrated by the strict target territory and actual job creation in economically weaker regions and border areas						
Loan funds	Combination of grants and small loans ("hit product")						
	Proper performance incentives to increase absorption (though meeting strategic goals has to be further analysed based on evidence-based counterfactual analysis)						
Risk capital funds	Strong involvement of and good cooperation with new fund managers						
	Very cooperative relation of fund managers to the holding fund manager						
Seed capital fund	Mobilisation of start-ups through new seed capital funds – focus on firms in biotechnology, IT and communication						

6.8 Problems and solutions in carrying out the case study

We have faced the following challenges and problems.

- A lack of good quality and reliable data on the economic (and overall financial) performance of companies participating in EDOP PA 4 (missing data and false data values in the database received from the holding fund manager)
 - Solution: several round of consultations with the government stakeholders in charge of data collections and monitoring
- A lack of linking programme-monitoring data to other, existing government databases with full-fledged company-level information and performance data (see the company database owned by the National Tax Authority covering business and financial data based on official annual reports).
 - Solution: recommendations prepared on the improvement of data collection and on automatically linking the firm-level monitoring data to alternative datasets (instead of relying on self-reported performance information).
- Slow progress in reaching out to the obligatory set of interviewers due to unfavourable timing of the first round of inquiries (end of April and first half of May 2015, with several bank holidays and stakeholders on annual leave).
 - Solution: running simultaneous, common interviews with HF management representatives and MA representatives.
- Uncertainty about the exact meaning of some required data, e.g. leverage effect, multiplier effect, committed, invested and actually paid amounts.

- Solution: more detailed guidelines about definitions and/or more frequent communication between project leader and country experts to clarify the meaning of ambiguous concepts.

7 Annex 1

7.1 A1. Data sources

- SMAF. 2014. SME Access to Finance Index, download at 20 May 2015 from http://ec.europa.eu/enterprise/policies/finance/data/enterprise-financeindex/index_en.htm
- VFH Fontium. 2015. Dataset of all operations collected by Venture Finance Hungary Plc. (closing date: December 31, 2014)

MA weekly report. 2015. (first week)

7.2 A2. References, with bibliographical details

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- Papp, Gábor. 2012. "Kockázati Tőke Magyarországon. Innovatív Vállalatok Kockázati Tőke Alapú Finanszírozása a JEREMIE Programon Keresztül [Venture Capital in Hungary. Financing Innovative Enterprises Throught the JEREMIE Venture Capital Schemes]." Budapesti Értéktőzsde [Budapest Stock Exchange].
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7.3 A3. List of interviews (Name, Organisation)

Conducted interviews by types of stakeholder:

- ex-government stakeholders, with previous responsibilities in programme planning and design (2)
- representatives of the Managing Authority (2),
- representatives of Venture Finance Hungary Plc. (the Holding Fund, 2)
- External advisor to the MA (1)
- Interviews with beneficiaries (intermediaries / fund managers, 5):
 - Venture Capital Fund Manager (1)
 - Local Enterprise Development Agency (1)
 - Bank (2)
 - Guarantee Fund Manager (1)
- Interviews with final recipients (3): one from each types of the FIs
 - Loan (1)
 - Guarantee (1)
 - Venture Capital (1)

7.4 A4. Confidential documents which were provided by the MA for the case study purpose only and need to be kept strictly confidential

Preliminary version of Annual Implementation Report of EDOP for the year 2014.

Reimbursement of the costs of VFH Plc. for years 2007-2013

7.5 A5. Tables

Table 27: Status	December	2014,	€ million
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Name of the fund	Planning				Implemer	Implementation									
	Planned ERDF OP	ERDF commit- ted in funding agree- ment	Public and Private co- financ- ing com- mitted in fund- ing agree ment*	Vol- ume of funds* *	ERDF effec- tively paid to FI	Public and Pri- vate co- financ- ing ef- fectively paid to the FI	Volume of funds: Amounts of OP contribu- tions paid/commit ted to the fund***	Total loan amount committed in contracts signed with final recipi- ents****	OP contri- butions invested in final recipients	Private funds raised** **	Total invest- ment volume	Total number of final recipi- ents sup- ported (multi- ple count- ing)	Planned ERDF commit- ted to final recipi- ents	Actual vol- ume of funds in rela- tion to plann ed vol- ume	Share of OP con- tribution invested
	1	2	3	4=2+3	5	6	7=5+6	8	9	10	11=10+ 9 (=7)	12	13=5/1	14=7/ 4	15=9/7
New Hun- gary Micro Credit	33.64	33.64	12.15	45.79	36.31	12.62	48.92	48.92	42.71	6.21	48.92	2 482	1.08	1.00	1.08
New Szé- chenyi Credit Pro- gramme*	103.43	179.83	36.88	216.72	167.14	34.64	201.79	201.79	196.64	5.15	201.79	2 751	1.62	1.74	0.93
New Hun- gary Current Asset Credit (or New Hungary Working Capital Loan)	4.17	4.17	9.16	13.33	5.09	9.33	14.42	14.42	5.99	-	5.99	90	1.22	1.00	1.22
New Hun- gary SME Credit Pro- gramme	12.23	12.23	17.44	29.67	12.99	17.57	30.56	30.56	15.28	-	15.28	236	1.06	1.00	1.06
Combined Micro Credit	141.68	141.68	30.12	171.79	139.35	29.71	169.05	169.05	163.94	5.12	169.05	7 868	0.98	1.00	0.98
Sub-total: Loans	295.14	371.55	105.75	477.30	360.87	103.87	464.74	464.74	424.56	40.18	464.74	13 427	1.22	1.26	0.97
New Hun- gary Portfo- lio Guaran- tee Pro- gramme	3.48	3.46	6.43	9.89	3.40	6.42	9.82	25.83	4.00	5.82	9.82	248	0.98	1.00	0.98
New Szé- chenyi	8.22	8.22	13.69	21.90	7.68	13.59	21.27	57.41	9.04	12.24	21.27	606	0.93	1.00	0.93

Name of the fund	Planning				Implementation										
	Planned ERDF OP	ERDF commit- ted in funding agree- ment	Public and Private co- financ- ing com- mitted in fund- ing agree ment*	Vol- ume of funds* *	ERDF effec- tively paid to FI	Public and Pri- vate co- financ- ing ef- fectively paid to the FI	Volume of funds: Amounts of OP contribu- tions paid/commit ted to the fund***	Total loan amount committed in contracts signed with final recipi- ents****	OP contri- butions invested in final recipients	Private funds raised** **	Total invest- ment volume	Total number of final recipi- ents sup- ported (multi- ple count- ing)	Planned ERDF commit- ted to final recipi- ents	Actual vol- ume of funds in rela- tion to plann ed vol- ume	Share of OP con- tribution invested
Credit Guar- antee Pro- gramme															
New Szé- chenyi Counter- Guarantee Programme	11.34	11.34	2.29	13.63	3.62	0.93	4.55	21.58	4.26	0.29	4.55	274	0.32	1.00	0.32
Sub-total: Guaran- tees	23.03	23.02	22.40	45.42	14.70	20.93	35.64	104.82	17.30	18.34	35.64	1 128	0.64	1.00	0.64
New Hun- gary Ven- ture Capital Programme – Joint Fund	157.44	100.30	68.58	168.88	91.18	66.97	158.15	158.15	107.27	50.88	158.15	115	0.58	0.64	0.91
New Szechenyi Venture Capital Pro- grammmes - Joint Growth Fund Sub- programme	61.62	33.10	20.38	53.48	28.36	19.54	47.90	47.90	33.36	14.54	47.90	33	0.46	0.54	0.86
New Szechenyi Venture Capital Pro- grammes - Joint Seed Fund Sub- programme	16.43	4.72	3.05	7.77	4.37	2.99	7.36	7.36	5.14	2.22	7.36	49	0.27	0.29	0.93
Sub-total: Venture Capitals	235.49	138.12	92.01	230.13	123.91	89.50	213.41	213.41	145.78	67.63	213.41	197	0.53	0.59	0.90

Name of the fund	Planning			Impleme	ntation										
	Planned ERDF OP	ERDF commit- ted in funding agree- ment	Public and Private co- financ- ing com- mitted in fund- ing agree ment*	Vol- ume of funds* *	ERDF effec- tively paid to FI	Public and Pri- vate co- financ- ing ef- fectively paid to the FI	Volume of funds: Amounts of OP contribu- tions paid/commit ted to the fund***	Total loan amount committed in contracts signed with final recipi- ents****	OP contri- butions invested in final recipients	Private funds raised** **	Total invest- ment volume	Total number of final recipi- ents sup- ported (multi- ple count- ing)	Planned ERDF commit- ted to final recipi- ents	Actual vol- ume of funds in rela- tion to plann ed vol- ume	Share of OP con- tribution invested
Reserve	16.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	570.10	532.69	220.16	752.85	499.49	214.30	713.79	782.98	587.64	126.15	713.79	14 752	0.88	0.93	0.94

Source: MA weekly report, first week of 2015

Notes:

* This amount is calculated from the contracted loans, guarantees or venture capital. The 15% co-financing by the Hungarian state is also included.

** Sum of column 2 and 3

*** In this column, not only the OP contribution is included, but all OP, public and private sources.

**** In case of SME loan and Working Capital Loan we do not know exactly the amount of private funds, but the most of the sources additional to JEREMIE sources are from MFB, so we had rather left the whole private plus public amount out of this calculation.

***** In case of guarantees the total guaranteed amount is included here, although only 20% of this amount could be accounted as JEREMIE sources

7.6 A.6.Tables summarizing the changes in the FEI schemes of EDOP

Table 28: Summary table of the changes in the New Hungary Micro Credit - New Széchenyi Credit FEIs

		April, 2008	October, 2008	February, 2009	April, 2010	February, 2011	May, 2012	January, 2013	October, 2013		
Name		New Hunga	New Hungary Micro Credit				New Széchenyi Credit				
Target group		Micro enter	orises		Micro and s	mall enterprises	5	Micro enter SMEs	prises and		
Definencian	B&SC	50%		75%		1000/	75%				
Refinancing	FE&LEDA	80%		90%		- 100%	100%				
Refinancing fee		0.50%				0.40%					
	B&SC				50	50		200	500		
Max. amount of loan (HUF million)	FE	6	IL: 10 WCL: 6		IL: 10	- 50		50	50		
	LEDA		WCL. U		WCL: 6	IL: 10, WCL:	6				
	B&SC	EU refer-		0.3*BUBOR+6%					6.5%		
Max. interest rate	FE&LEDA	ence In- terest rate + 2%	-	-		9%			6.5%		
Own contribution		20%			IL: 20% WCL: 0%	20%		10%			
	IL.	5	10								
ment period (years)	WCL	1		3							
VFH guarantee for loans		Yes		·		No					

Else	• Max. HUF 200 million yearly turnover deleted.	 Partner limit system introduced Distribu- tion of losses in- troduced. 		In case of loans over value of HUF 100 mil- lion (EUR 357,143), compulsory on the spot control
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Source: Table 12 of KPMG (2013) and own contribution

Note: IL = investment loan, WCL = working capital loan / B: bank, SC: saving cooperative, FE: financial enterprise, LEDA: local enterprise development agency

Table 29: Summary table of the changes in the Combined Micro Credit

		January, 2011	June, 2011	January, 2012
Target group		Micro Enterprises		
Intermediaries		FE, LEDA		SC, FE, LEDA
	SC			75%
Refinancing	FE, LEDA	100%	100%	
Refinancing fee		0.40%		
Amount of loop (IIIIE million)	SE, FE	1-8		20
Amount of loan (HUF million)	LEDA			10
Amount of non-repayable part		1-4		10
Max. interest rate		9%		
Own contribution		10%		
Max. length of repayment period		10		

(years)			
Else	• Distribution of losses	 Early repayment fee is introduced Within 30 days from decision con- tract has to be signed 	 Max. HUF 200 million yearly turn- over deleted. Bigger invest- ment projects can be also financed Obligatory credit protection deleted

Source: Table 14 of KPMG (2013) and own contribution

Legend: B: bank, SC: saving cooperative, FE: financial enterprise, LEDA: local enterprise development agency

Table 30: Summary table of the changes in the Portfolio Guarantee (later New Széchenyi Credit Guarantee) scheme

	April, 2008	Nov, 2009	June, 2012	2013	
Name	Portfolio Guarantee		New Széchenyi Credit Guarantee		
Target group	SMEs				
Refinancing	Max. 80%				
Guarantee fee	1%			0.50%	
Max. amount of loan – EUR thousand (HUF million)	100 200			500	
Max. length of repayment pe- riod (years)	10		15		
Own contribution	20%			10%	

Else	• Grace period was deleted	• The circle of in- termediaries was extended also for financial enter- prises with a ma- jority ownership by the state or lo- cal governments
		(i.e. Garantiqa)

Source: Table 18 of KPMG (2013) and own contribution

Table 31: Description of main conditions of the Joint Fund VC scheme

Joint Fund					
Time	2009	October, 2013			
Fund	EDOP-2009-4.3/2	EDOP-2009-4.3/2 - modification of int. contract			
Target group	seed, start-up or growth phase, at most 5-year-old SMEs, turnover below HUF 1.5 billion	turnover limit increased to yearly HUF 5 billion			
Refinancing	70%, HUF 700 million - 5 billion				
Max. amount invested in one recepient	EUR 1.5 million for any 12- month period	EUR 2.5 million for any 12- month period (into a single beneficiary at most HUF 7 mil- lion in total)			
Max. amount of loans		d from the Joint Seed Fund; in total loans pro- nanager at most 25% of the amount invested			
Max. lifetime of fund	10 years				
Management cost	max. 5% of invested amount from	m Joint Seed Fund			

Joint Fund		
Fund Management Fee	3%, transferred twice in a year	
Else		became possible for final recipi- ents to use funds to buy existing shares

Source: own compilation

Table 32: Description of main conditions of the Joint Seed VC scheme

Joint Seed	
Time	June, 2012
Fund	EDOP-2012-4.3/A
Target group	seed or start-up phase, max. 3-year-old SMEs with innovative ideas, turnover below HUF 200 million
Refinancing	70%, at most HUF 1.5 billion
Max. amount invested in one recepient	EUR 150,000 for any 12-month period
Max. amount of loans	the amount invested from the Joint Seed Fund
Max. lifetime of fund	10 years
Management cost	max. 5% of invested amount from Joint Seed Fund

Source: own compilation

Table 33: Main conditions for the Joint Development VC scheme

Joint Development							
Time	June, 2012	April, 2013	June, 2013				
Fund	EDOP-2012-4.3/B	EDOP-2013-4.3/B	EDOP-2013-4.3/B-2				
Target group	seed, start-up or growth phase, max. 5-year-old SMEs, turnover below HUF 5 billion						
Refinancing	70%, HUF 3 or 4.5 billion 70%, max. HUF 3 billion 70%, max. HUF 3 bi						
Max. amount invested in one recepient	EUR 2.5 million for any 12-month period						
Max. amount of loans		e Joint Seed Fund; in total loa e amount invested from Joint S					
Max. lifetime of fund	10 years						
Management cost	max. 5% of invested amount from Joint Seed Fund						
Else	Innovative and/or start-up in	nvestments has to be at least 2	20% of all investments				

Source: own compilation

Loan programmes										
Fund Name	Number of final re- cipients	Micro %	Small %	Medium %	Avg. value (EUR thou- sand)	Median value (EUR thousand)	S.D. of value (EUR thousand)	Avg. age (years)	Median age (years)	S.D. of age (years)
New Hungary Microcredit	2,339	99.00%	0.96%	0.04%	19.76	19.33	12.41	4.70	2.13	5.33
New Széchenyi Credit Pro- gramme	2,795	82.32%	14.70%	2.97%	73.62	32.22	74.22	5.72	3.80	5.57
New Hungary Working Capital Loan	90	97.78%	2.22%	0.00%	160.18	80.55	190.35	10.78	11.31	5.77
New Hungary SME Credit Programme	236	98.31%	1.27%	0.42%	129.50	96.66	91.45	10.60	11.03	5.68
Combined Micro Credit	7,969	99.25%	0.73%	0.01%	21.55	20.90	10.78	5.98	3.95	5.53
Loan programmes - Total	13,429	95.76%	3.61%	0.62%	34.90	22.55	48.46	5.87	3.84	5.60
Guarantee programmes (Values are the amount of lo	oans guarante	ed)								
Fund Name	# of final recepients	Micro %	Small %	Medium %	Avg. value (EUR thou- sand)	Median value (EUR thousand)	S.D. of value (EUR thousand)	Avg. age (years)	Median age (years)	S.D. of age (years)
New Széchenyi Credit Guarantee Programme	620	54.50%	38.67%	6.67%	75.63	19.83	163.91	9.28	9.25	5.97
New Széchenyi Counter- Guarantee Programme	272	71.43%	7.14%	21.43%	N.A.	N.A.	N.A.	9.74	9.32	5.49
New Hungary Portfolio Guarantee Programme	248	68.16%	28.16%	3.67%	81.06	36.41	111.93	7.57	6.99	5.59
Guarantee programmes - Total	1,140	58.88%	34.71%	6.30%	77.18	25.77	150.85	8.99	8.44	5.83
Venture Capital program (Value is the total amount o		ent project in	cluding equ	ity and loa	ns)					

7.7 A.7. Descriptive statistics of final recipients

Loan programmes										
Fund Name	# of final recepients	Micro %	Small %	Medium %	Avg. value (EUR thou- sand)	Median value (EUR thousand)	S.D. of value (EUR thousand)	Avg. age (years)	Median age (years)	S.D. of age (years)
New Hungary Venture Capital Programme – Joint Fund	82	76.39%	20.83%	2.78%	1438.83	1288.74	997.96	0.55	0.11	0.98
New Szechenyi Venture Capital Programmmes - Joint Growth Fund Sub- programme	66	90.00%	10.00%	0.00%	1375.85	1320.96	773.31	0.69	0.10	1.26
New Szechenyi Venture Capital Programmmes - Joint Seed Fund Subpro- gramme	50	100.00%	0.00%	0.00%	155.34	148.21	37.47	0.12	-	0.42
Venture Capital pro- grammes - Total	198	80.61%	17.35%	2.04%	1093.73	966.56	952.31	0.51	0.06	1.02
Total	14,767	93.33%	5.67%	0.99%				6.04	4.02	5.68

Source: VFH Fontium 2015