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Operations Evaluation

Evaluation of Activities under the Risk Sharing Finance Facility (RSFF)

EIB Operations Evaluation

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EVALUATION REPORT

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NOTICE

The EIB has an obligation of confidentiality to the owners and operators of the projects referred to in this report. Neither the EIB nor the consultants employed on these studies will disclose to a third party any information that might result in a breach of that obligation, and the EIB and the consultants will neither assume any obligation to disclose any further information nor seek consent from relevant sources to do so.

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GLOSSARY

GLOSSARY OF TERMS AND ABBREVIATIONS

CA	Capital Allocation
CRPGs	Credit Risk Policy Guidelines
EC	European Commission. The RSFF agreement was signed in 2007 on behalf of the European Community by the European Commission.
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EP	European Parliament
EV	Operations Evaluation
FI	Finance Directorate
FP7	Seventh Framework Program for Research and Technological Development
GIF	High Growth and Innovative SME Facility
GP	General Provisioning
i2i	Innovation 2000 Initiative (Innovation 2010 Initiative from March 2003)
ICT	Information and Communication Technology
IEG	The Independent Expert Group
IFI	International Financial Institution
IPR	Intellectual Property Rights
LGTT	Loan Guarantee Instrument for TENs Transport
PCR	Project Completion Report
PIK	Payment In Kind loan
Project	A clearly defined investment, typically in physical assets, e.g. a specific section of road, a bridge, etc.
R&D	Those activities which meet the accountancy/statistical definition of research and development, and which include much, but not all, of the innovation cycle
RDI	Research, development and innovation – used throughout this report to refer to the EIB lending priority It refers to the whole process of generating new knowledge and turning it into productive economic activity and is slightly wider definition than R&D
RSFF	Risk-Sharing Finance Facility
RTD	Research, Technological Development and/or Demonstration
SFF	Structured Finance Facility
SMEs	Small to Medium sized Enterprises
SPVs	Special Purpose Vehicles
TA	Technical Assistance
VC	Venture Capital

EXECUTIVE SUMMARY

Introduction

Private investment in research, development and innovation has been and still is below the level necessary to achieve the goals set by the Lisbon agenda. In addition to the lack of private investment, capital market finance is scarce due to the high risk and uncertainty associated with R&D investments. The financial crisis has further aggravated this situation. In order to foster private sector RDI investment the European Union, the European Commission and the European Investment Bank (EIB) established in 2007 a new financing instrument, the Risk-Sharing Finance Facility (RSFF), to improve access to loan finance (contribution being maximum EUR 1 bn each until 2013 – initially half has been committed). The RSFF is a debt-based finance facility to create additional financing capacity of up to EUR 10 bn in support of eligible RDI activities. The Commission contribution for RSFF comes from the EC 7th Framework Programme RTD.

This report, the first independent evaluation of this joint EC/EIB facility, covers the period until 31.12.2009. It provides a contribution and knowledge base to the work of the Independent Expert Group (IEG) in charge of the Mid-term review of the RSFF. The focus of the evaluation covers the project specific evaluation results, as well as an analysis of the entire portfolio of RSFF operations.

Three steps are key for this evaluation: a) portfolio review of all 137 projects divided into the i) "core" portfolio projects (62), allowing the analysis of the relevance and quality of the portfolio and the identification of systemic issues and developments over time; ii) "wider" portfolio projects (75 - under appraisal/cancelled) to review specific aspects. b) In-depth evaluation & phone interviews: from the core portfolio, EV has interviewed all project promoters (24) with disbursed RSFF loans. Seven projects were selected for a detailed project analysis, including site visits, while the others were contacted mainly through phone interviews. c) The synthesis report presents the findings from the strategy review and policy analysis as well as the individual project findings. It considers 100% of all RSFF operations.

Since its creation in June 2007 until the end of 2009, a total number of 137 RSFF operations have officially entered the EIB. A total amount of EUR 6.3 bn has been approved for projects in 20 countries (18 EU Member States and 2 Associated Countries). Three countries (Germany, Spain and Sweden) account for more than half of total RSFF approvals and two sectors (engineering/industry and life science) account for more than 60% of the portfolio.

Relevance and policy context

The overriding aim of the **EU** Seventh Framework Programme RTD "is to contribute to the Union becoming the world's leading research area. This requires the Framework Programme to be strongly focused on promoting and investing in world-class state-of-the-art research, based primarily upon the principle of excellence in research." The "FP 7 RTD" covers the following five priority areas: (i) Cooperation (EUR 32.4 bn), (ii) Ideas (EUR 7.5 bn), (iii) People (EUR 4.7 bn), (iv) Capacities (EUR 4.2 bn), (v) non-nuclear actions of the Joint Research Centres (JRC) (EUR 1.8 bn).

The RSFF concept itself was inspired from the internal discussions at both EC and EIB level. Responding to the Lisbon Agenda priorities, the **EIB** set up its own strategies i2i ("Innovation 2000/2010 Initiatives"), now followed up by the Knowledge Economy, as one of its core lending priorities.

All projects analysed in-depth were in full conformity with EU, EIB, country and RSFF objectives. Important effects on European co-operation, as well as technological, financial and economic spill over effects are noted. Certain imbalances at portfolio level are observed.

Programme performance

The start up and development of RSFF to date has been quick, both due to the fast roll-out of the new instrument and as a consequence of the financial crisis. Overall quantitative realisations in RSFF approvals mostly exceed initial targets, indicating a high demand for the instrument. The leverage achieved so far reached the factor 14 triggering some EUR 16.2 bn of investments in research. From the interviews as well as the analysis, it can be expected that the demand for RSFF continues at relatively high levels.
RSFF is a demand driven mechanism and as such there are no legally binding obligations for a balanced portfolio, neither by country, nor by sector or target group. A wide country diversification for RSFF loans was achieved, but a more active prioritisation on countries with lower or no RSFF

participation could be envisaged. The success of RSFF so far with a concentration on sectors the Bank is familiar with, proved a right choice. The RSFF sector focus could be enlarged at mid-term to include sectors which have not yet been considered and/or which have a relatively high RDI intensity and spending (for instance key enabling technologies, strategic energy technologies, knowledge intensive services etc). All initially envisaged target groups could receive RSFF funding, however to a varying degree, since large companies dominate the portfolio. Specific RSFF barriers have been encountered, in particular as regards SME financing, as well as for research infrastructures and universities. There is a considerable trade-off between loan quantity and complexity of an operation with consequent resource implications, which limits new product development. Even though awareness campaigns have already yielded positive results, efforts should be continued and widened.

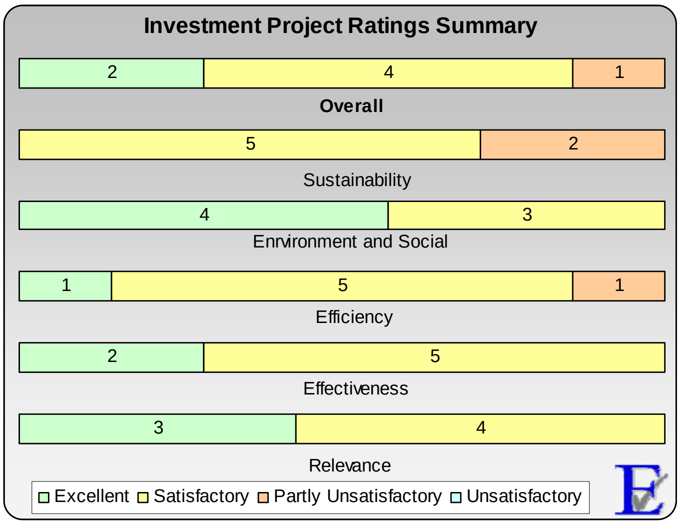
RSFF procedures are not fully established. While the RSFF agreement can be interpreted as providing a flexible framework, the motto “learning by doing” seems to be the rule. EV’s analysis has already triggered numerous discussions within the EIB and between the EC/EIB, contributing to some improvements, but more needs to be done. A RSFF signature is roughly twice as costly as the standard EIB signature for 2009 and RSFF does not fully cover its cost. The RSFF agreement could be reviewed in order to take into account the real cost coverage or a fee based approach (per operation).
Both risk sharing partners have committed resources as planned. The original intention of the RSFF was to provide the EIB with additional capital for more and riskier operations, in line with the Bank’s existing rules. The EU budgetary contribution helps to increase the EIB’s ability to support the higher risk inherent to these operations. This makes the available loan amount a multiple of the extra provisioning to be set aside. As a result of very high demand, EIB has increased its contribution up to EUR 772 m, but a number of projects could be converted, once additional EC resources are made available.

Although there is no equal risk sharing between both partners, since most of the ultimate financial risk is borne by the EIB, the inherent conflict between EIB banking prudency rules and EC disbursement considerations is manageable.

Looking at the future, it is likely that the EC contribution will not be fully consumed before 2013, therefore the question of revolving these funds should be addressed.

Project performance

Seven operations were evaluated on the basis of internationally accepted evaluation criteria of Relevance, Effectiveness, Efficiency and Sustainability. A summary of the ratings achieved is given beside, which includes a separate rating for Environment and Social, although this aspect is also considered under the four main evaluation criteria.



All projects evaluated in-depth were rated as Satisfactory or excellent for Effectiveness, indicating that they met their objectives and were well implemented. Considering the inherent higher risk profile of the operations and the difficult economic environment over recent years, the outcome both on efficiency and sustainability is rather positive. Two projects are rated partly unsatisfactory at this stage for sustainability, but both companies are showing signs of recovery. The findings for the environmental and social performance are also positive. A number of projects show positive direct and/or indirect environmental and social externalities.

The overall ratings confirm that the Bank’s financed RSFF operations are performing well (at this stage), considering in particular also the risk profile of the facility.

RSFF Contribution and project cycle management

In all projects the contribution was significant or high, which is a good result demonstrating the important contribution the RSFF and the EIB/EC has provided. In fact, the financial advantage of the loan, the long maturity or ability to match currency (and avoid exchange risk), the ability to diversify funding sources and the catalytic effect on the confidence of other financiers of seeing EIB involved came up repeatedly as drivers for taking EIB finance. The financial crisis had profound impacts on the structure of the European banking industry. The banking landscape and risk appetite has completely changed compared to when the facility was initially conceived and designed. The RSFF contribution in particular in a crisis context was particularly high.

The results for the project cycle management are good. Appraisal times have been reduced, but signature bunching observed in the last month of the year increases operational risk. Internal procedures of the RSFF agreement are complex and not always clear. The agreement and the EC eligibility check could be reviewed to clarify and streamline procedures.

The positive project results combined with the Bank's policy to apply best banking practice to reduce any potential losses may raise the question whether the risk appetite of the RSFF instrument is not too small. From an operational point of view, RSFF has started as "haute couture", requiring a significant input to identify, develop and complete innovative projects/products etc. and over time has become more "prêt à porter", i.e. roll-out through the Bank with a reduced operational role for the designated EIB service. The EIB has moved from a risk adverse approach into an institution accepting more risk in a controlled manner, but the Bank should further develop the instruments, contracts and staff to implement this consistently. There are clear resource implications from the shift to riskier operations.

EV's impact during the evaluation

The evaluation already had an impact on ongoing operations, since it triggered discussions between the services on certain procedural aspects. During the course of the evaluation, a number of recommendations and specific information was shared with the dedicated EIB RSFF team to improve ongoing performance. The definition of RSFF performance indicators were to be determined by the Steering Committee as soon as the data is available and no later than 31 December 2009. EV reminded the parties about this requirement of the Cooperation agreement and made concrete suggestions.

RSFF Steering Committee (EC/EIB)		RESPONSES FROM THE EIB SERVICES
1)	**RSFF Strategy (§§ 3.3 + 4.3)** **Recommendation:** An adaptation of the RSFF agreement could be envisaged to strengthen its strategic dimension, which should include a refocus and specification of its objectives (e.g. country, sector and counterparts). This could be done on the basis of a SWOT analysis to identify needs and main market failures to be addressed, leading to quantitative and qualitative targets. This seems required, notably when a further widening of RSFF might be requested.	Agreed - Such a strategic clarification should be supportive of a more focused and coordinated action, for a limited number of agreed basic principles. However, in practice the constantly evolving market situation and opportunities will always play a major role in the development of operations. Strategies will necessarily be defined ex ante, while the market over a 7 year period may undergo significant changes. Therefore a flexible approach is required and successfully implemented.
2)	**RSFF financial aspects (§ 5.2)** **Recommendation:** The RSFF agreement in its present form does not fully reflect real cost coverage. In view of the current discussions with the EC on a general agreement on EIB/EC partnerships, the RSFF agreement could be reviewed accordingly. The EC contribution could take different forms, including a fee based approach.	Agreed.
3)	**RSFF revolving nature (§7)** **Recommendation:** The EU budgetary contribution helps to increase EIB's ability to support inherently higher risk operations. This makes the available loan amount a multiple of the provisioning and to the extent operations are paid back, new operations can benefit from the amounts released. The revolving nature is not clearly established in the agreement.	Agreed. This idea of using the funds in a revolving manner has been the working assumption by the (EC/EIB) team on which the RSFF has been based. The RSFF Steering Committee should be, if possible, encouraged to come to a formal recommendation so that the EC can decide this issue as part of the MTR.
4)	**EC eligibility check (§ 9.2)** **Recommendation:** The eligibility check could be streamlined to one process once the Board report is finished. The EC would at this stage have the decision to accept or not. The final reservation and blocking of EC amounts (GP/CA) could be done at contract signature.	Agreed - it is necessary to streamline this part of the process, which however requires the renegotiation of the terms of the Agreement. ***All recommendations will be presented to and discussed with the RSFF Steering Committee.***

EIB		RESPONSES FROM THE EIB SERVICES
5)	**RSFF procedures (§ 9.2)** **Recommendation:** The RSFF agreement and its internal application should be reviewed and checked to see which procedures need to be clarified and/or streamlined. This could be done through an EIB working group between the parties concerned, supported by internal audit (IA). In complement it is probably appropriate to review and streamline reporting, monitoring and accounting principles, which could facilitate internal procedures and application.	Agreed, an internal audit should be done as soon as possible.
	RSFF institutional positioning, awareness and Information (§§ 5.3 + 9.1)	
6a)	**Internal** **Recommendation:** A coordinated and coherent client and project approach (incl. project screening) is required and should be ensured. The ownership and specific RSFF objectives between the relevant operational divisions need to be clarified, namely in "who does what, when and how" and what are the common priorities and objectives.	Agreed. Coordination and coherence may become a serious issue especially if RSFF is now considered a product for "roll out" to geographical divisions, which could possibly entail a shift in transaction work to the geographical teams for plain vanilla RSFFs. In the context of recent reorganisations and reallocation of tasks, this will be considered. The weekly RSFF meeting should be the forum to discuss all RSFF related issues (incl. pre-screening and ownership) and the RSFF procedures will be reviewed by the operational divisions and amended, if necessary.
6b)	**Recommendation:** Internal communication between services should be fostered throughout the project cycle (e.g. case study presentations, best practice workshops in CoE, wider dissemination of the projects entering the pipeline etc.).	Agreed. The Centre of Excellence (CoE) Knowledge Economy is the appropriate platform and will foster internal RSFF communication.
6c)	**External** **Recommendation:** A RSFF "Good Practice Brochure" for potential promoters could explain in detail the procedure and timelines for a RSFF due diligence. This would also ensure the transmission of coherent and standardised information between the promoters and the Bank. The brochure could facilitate promoters' contact with the EC for (loan/grant blending possibilities) and with technology platforms for information dissemination. To raise awareness, for each RSFF project a press release should be prepared.	Agreed. Existing information could be used to formulate the "Good Practice Brochure" and include specific centralised contact points in the EC. Press releases will be coordinated through the Bank's communication services at appraisal stage and the decision on any Press release should be determined between the communication and operational services and the client.

EIB		RESPONSES FROM THE EIB SERVICES
	Project cycle management (§§ 3.3+4.3+9.1)	
	Appraisal	
7a)	**Recommendation:** The RDI scale should be consistently applied for all RSFF projects. A fine tuning of the scale is required to avoid a too wide RDI range for certain projects.	Agreed. However, RDI is not sequential as implied by the scale, rather simultaneously covers several stages, hence the difficulty in narrowing the range. the services will draft a proposal to review and fine tune the scale.
7b)	**Recommendation:** Indirect effects (e.g. on SMEs, universities, externalities, economic and financial leverage effects) are important and should be more actively analysed and reported ex-ante.	The reporting on indirect effects should be encouraged, but will make the appraisal and monitoring process more cumbersome and might not be always possible.
	Signatures	
7c)	**Recommendation:** All available avenues should be explored to avoid year end congestion and ensure a better workload distribution.	Agreed, it is a high priority for the operational services that year end bunching is substantially reduced in 2010 and in future years.
7d)	**Recommendation:** Contractual requirements should be simplified to the extent possible in view of the risk profile and target group concerned.	In view of the specific and complex nature of RSFF operations and the characteristics of the RSFF clients, the scope for simplification and standardization of contractual arrangements is limited.
	Post-signature monitoring	
7e)	**Recommendation:** The official transfer procedure and division of labour for RSFF projects between the services of the Bank should be clarified and consistently applied. A recurrent finding from several evaluations in recent years is the need for *a better co-ordination* and more consistent/combined project (physical and financial) monitoring and completion reporting, which ideally should combine the views from the different services concerned.	Through the ongoing revision of loan monitoring procedures further clarity will be achieved in the area of responsibilities during the post signature phase and communication between the services.
	Data recording	
8)	**Recommendation:** Data recording for RSFF projects via the Bank's IT applications (i.e. Serapis) is particularly complex, requiring continuous updates. The regime of quality and integrity checks should be strengthened.	Agreed, but the tools and coordination function for RSFF projects should be strengthened, which should be also considered in the internal audit.

1 INTRODUCTION

Private investment in research, development and innovation has been and still is below the level necessary to achieve the goals set by the Lisbon agenda and the Barcelona objective (investment of 3% of GDP of the EU in research and development by the year 2010). In addition to the lack of private investment, capital market finance is scarce due to the high risk and uncertainty associated with R&D investments. The financial crisis has further aggravated this situation.

In order to foster private sector RDI investment the European Union, the European Commission and the European Investment Bank (EIB) established a new financing instrument, the Risk-Sharing Finance Facility (RSFF), to improve access to loan finance. The RSFF is a debt-based finance facility to create additional financing capacity of up to EUR 10 bn in support of eligible RDI activities. The RSFF was established on 5 June 2007 through the RSFF Co-operation Agreement between the European Community, represented by the European Commission (EC) and the EIB.

RDI – Research, Development and Innovation is used throughout the report to refer to the EIB lending priority i2i/Knowledge economy and refers to the whole process of generating new knowledge and is wider than the EC RTD definition.

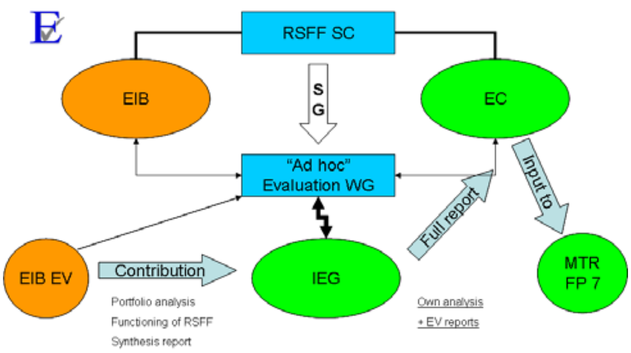
RTD – Research, technological development and/or demonstration activities. The EC contribution to RSFF may only be used to support activities which can be classified as "fundamental research", "industrial research" or experimental development". Prototypes and pilot projects, which are part of "experimental development", may be eligible if they fulfil certain conditions – see RSFF co-operation agreement.

R&D – accountancy/statistical definition of research and development, not covering the full innovation cycle.

This report provides an independent evaluation of the RSFF activities and covers the period since the set up of the facility until 31.12.2009. It is the first evaluation of this joint EC/EIB facility and follows on earlier evaluations of the Bank's i2i/Knowledge Economy policy[1].

1.1 EVALUATION MANDATE AND SCOPE

Annex II of the EC Seventh Framework Programme provides that it will contribute an amount of up to EUR 500 million to the RSFF until 2010. For the period 2010-2013, there will be the possibility to release up to an additional EUR 500 million following an evaluation to be conducted in 2010 by the European Parliament and the Council on the basis of a report by the Commission. This report will contain information on the participation of SMEs and universities, the fulfilment of the Seventh Framework Programme selection criteria, the kind of projects supported and the demand for the instrument concerned, the duration of the authorisation procedure, the project results, and the funding distribution. The RSFF mid-term evaluation shall be integrated within and contribute to the overall FP7 interim evaluation.



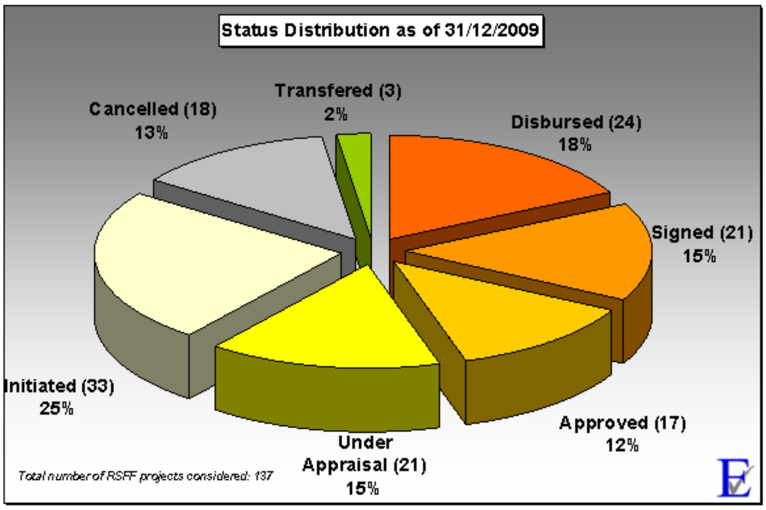
An Independent Expert Group (IEG), consisting of 6 experts, is in charge of conducting the interim evaluation. It has been agreed between the European Commission and the EIB that EV will contribute to the work of the IEG by providing the Group with an evaluation and thereby a knowledge base to support its work (see graph).

[1] Three evaluations have been prepared by Operations Evaluation in this policy area, namely - Evaluation of i2i Information and Communication Technology (ICT) projects, Evaluation of EIB i2i Research, Development and Innovation (RDI) projects and Evaluation of EIB Investments in Education and Training.

1.2 APPROACH

The following steps are key elements for this evaluation:

1) **Portfolio review**: includes a general review of the relevance and quality of the portfolio. This forms the basis for the structuring of questionnaires and agendas for the individual evaluation phase. The full portfolio review of all 137 RSFF projects in the EIB database was divided in two parts (see graph).



"Core" portfolio of approved, signed and disbursed projects (62) - an analysis of the relevance and quality of the portfolio with a detailed review of the types of projects, sectors, target groups as well as the financial products used, thereby allowing the identification of systemic issues and developments over time. For this analysis a RSFF specific database was established. Projects that were approved in 2006 under SFF prior to the official establishment of the RSFF and have subsequently been converted into an RSFF operation have been considered as a 2007 operation. The **"wider" portfolio of projects (75),** either under appraisal/initiated or cancelled, was used as appropriate to illustrate other issues.

2) **In-depth evaluation & phone interviews: EV has interviewed** all project promoters (24 - 100%) with disbursed RSFF loans. The table in annex 1 presents the list of disbursed projects (as of 31.12.2009).

a. Seven (29%) projects were selected for a detailed project analysis including site visits[2]. The projects covered several EU and associated countries and were selected considering a) their state of advancement, b) regional and sectoral representation, as well as c) loan amount and project size. Site visits included meetings with responsible company managers and counterparts. Individual evaluation reports were prepared and discussed with the operational staff associated with the project, and the main elements were provided to project promoters for their comments.
b. The other 17 (71%) promoters were contacted through phone interviews or directly to get further information on the relevance, awareness and contribution of the RSFF instrument, as well as the EC/EIB project cycle management. The interviews and site visits were conducted independently.

3) This **synthesis report** presents the findings from the RSFF/FP 7 strategy review, the individual evaluations as well as the wider RSFF programme analysis.

The evaluation was carried out by internal EV staff and the relevant departments were consulted at the various stages of the evaluation. Very good cooperation from all services concerned, including the EC, allowed the short evaluation timeframe.

The comparison of ex-post results with the expectations and objectives at appraisal is the main basis for the evaluation of the operations. In order to align the rating methodology with other members of the Evaluation Consultative Group (ECG), the denomination of the rating scales has been recently changed by EV. This is the first evaluation report in which the new rating is applied. In accordance with the Bank's evaluation procedures, individual projects were rated in four categories: "Excellent", "Satisfactory", "Partly Unsatisfactory" and "Unsatisfactory"[3].

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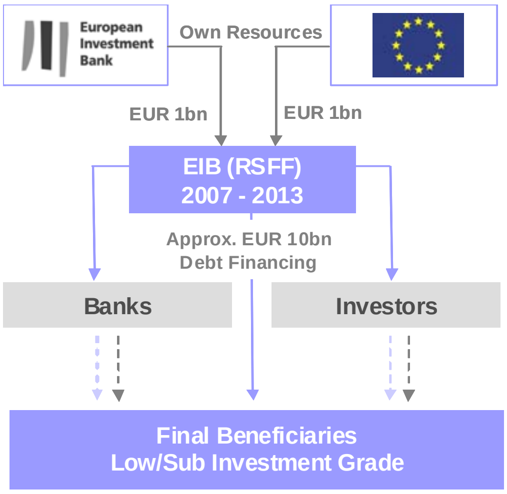
[2] None of the projects had a project completion report (as of 09.2009 - the start of the evaluation), the normal "triggering" point to consider a project 'mature' for evaluation.

[3] "High", "Significant", "Moderate" and "Low" for EIB contribution.

2 PRESENTATION OF THE RSFF

2.1 OVERVIEW



To foster private sector RDI investment in the EU, the EC and the EIB established the Risk-Sharing Finance Facility (RSFF). It is a debt-based finance facility, where the EC provides a contribution to the EIB to partly cover its risks when providing loans and/or guarantees for eligible RDI investments. The EC and the EIB are risk-sharing partners for the RSFF. There will be risk-sharing between the EC and the EIB under each RSFF operation for which the EC contribution shall be used. The level of total provisioning and capital allocation amounts of the EC contribution should not exceed 50% of the nominal loan or guarantee value.

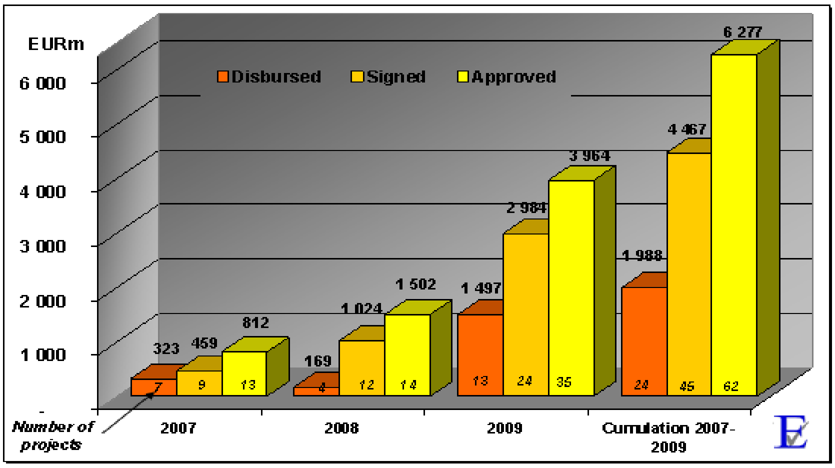
The RSFF is a demand driven instrument and the EIB uses the EC contribution on a "*first come, first served basis.*" Based on its financial evaluation, the EIB assesses the level of financial risks and decides the value of the provision and capital allocation (for expected and unexpected loss). The risk assessment and grading follows standard procedures of the Bank, under its Structured Finance Facility. They are not altered as a result of the EC contribution[4].

2.2 A FIRST SNAPSHOT OF THE RSFF PORTFOLIO

Since its creation in June 2007 until 31.12.2009, a total number of 137 RSFF operations have officially entered the EIB pipeline and were registered in the Bank's electronic database as RSFF operations. 62 operations have been approved at end 2009, of which 45 were signed and 24 were disbursed (see graph below). The review of the conversion rate of EIB Board RSSF approvals into contract signatures and disbursements reveals the following trends: 73% of projects approved were signed and 53% of projects signed were disbursed.

GRAPH: RSFF loan amount (in EUR m) and number of RSFF operations approved/signed/disbursed 2007 - 2009

A total amount of EUR 6.3 bn has been approved for projects in 20 countries (18 EU Member States and 2 Associated Countries). Three countries (Germany, Spain and Sweden) account for more than half of total RSFF approvals[5].



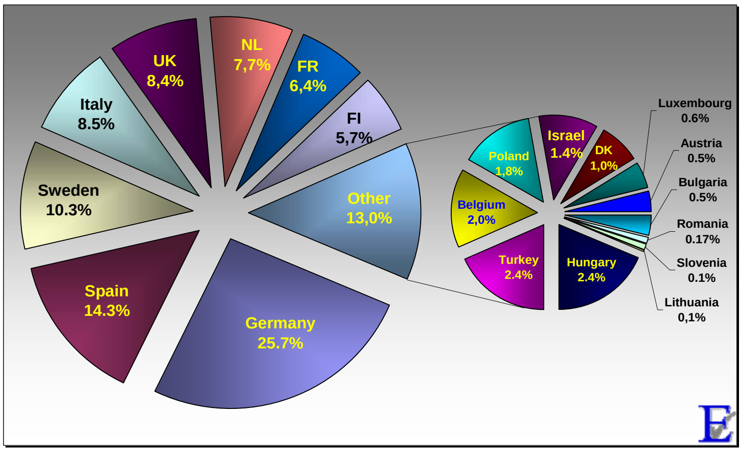
N.B. Certain operations, which were approved under RSFF but ultimately cancelled or signed as non RSFF loans, were not considered

4 See RSFF Co-operation Agreement between the EC and the EIB.

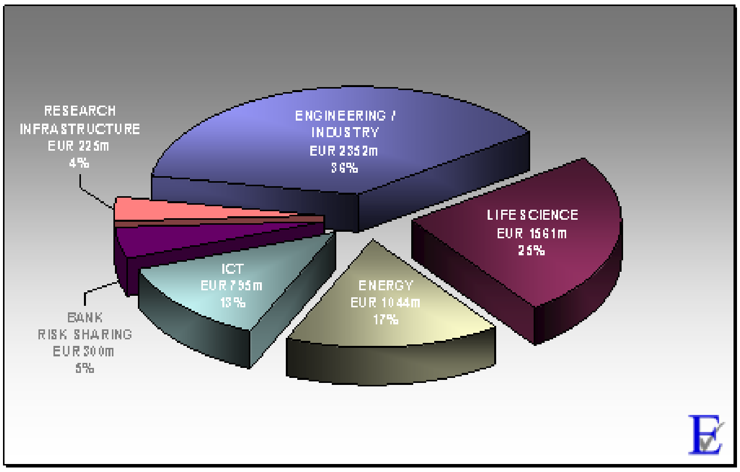
5 Considering all RSFF supported RDI expenditures, two more countries have benefited from indirect RSFF financing, namely Ireland and Slovakia.

GRAPH: Country distribution of 62 approved RSFF operations 2007 - 2009

The approved project portfolio is dominated by two sectors (engineering/industry and life science), which make up more than 60% of the portfolio.



GRAPH: Sectoral distribution of approved RSFF operations 2007- 2009



3 RELEVANCE

RSFF projects financed were coherent with FP 7 and EIB i2i/Knowledge Economy priorities, but certain imbalances of the portfolio are observed. The RDI scale analysis reveals that projects financed have moved over time from the innovation side more towards the development side. Efforts should continue to strengthen RSFF activities in these areas of the RDI cycle. All projects analysed in-depth were in full conformity with EU, EIB, country and RSFF objectives. Important effects on European co-operation, as well as technological, financial and economic spill over effects are noted.

3.1 EU AND EIB POLICY BACKGROUND FOR RSFF – EC 7TH FRAMEWORK PROGRAMME RTD AND EIB I2I / KNOWLEDGE ECONOMY[6]

The origins of the RSFF process were rooted in the discussions at the beginning of the 2000s with the Lisbon declaration. The "FP7 - RTD" was tabled in early 2006 as a result of several years of consultation with stakeholders from the research community.

The overriding aim of the **Seventh Framework Programme RTD** "*is to contribute to the Union becoming the world's leading research area. This requires the Framework Programme to be strongly focused on promoting and investing in world-class state-of-the-art research, based primarily upon the principle of excellence in research*." [7]

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6 The origins and development of EU, EIB and Members States policy and cooperation in research, development and innovation has been outlined in a recent RDI evaluation. See http://www.eib.org/projects/publications/evaluation-of-i2i-research-development-and-innovation projects.htm.

7 Decision No 1982/2006/EC of the European Parliament and of the Council of 18 December 2006 concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013).

The "FP 7 RTD" covers the following main priority areas:

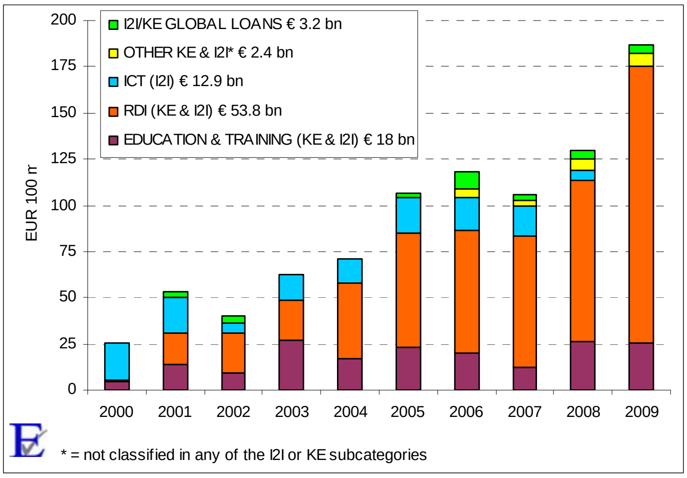
(i) <u>Cooperation (EUR 32.4 bn)</u>: supporting the whole range of research actions carried out in trans-national cooperation in ten cooperation themes or sectors (see also section 3.3)[8];

(ii) <u>Ideas (EUR 7.5 bn):</u> supporting 'investigator-driven' research;

(iii) <u>People (EUR 4.7 bn):</u> strengthening the human potential in research and technological development in Europe, as well as encouraging mobility;

(iv) <u>Capacities (EUR 4.2 bn):</u> supporting key aspects of European research and innovation capacities such as research infrastructures; regional research driven clusters; etc;

(v) <u>non-nuclear actions of the Joint Research Centres (JRC) (EUR 1.8 bn).</u>



The RSFF concept itself was inspired by the internal discussions at both EC and EIB level. Responding to the Lisbon Agenda priorities, the **<u>EIB</u>** set up its own strategies **<u>i2i ("Innovation 2000/2010 Initiatives")</u>**, now followed up by the **<u>Knowledge Economy</u>**, as one of its core lending priorities (see graph).

RSFF is only one of the instruments available to the **EIB** to finance the Knowledge Economy. The EIB's Knowledge Economy objective covers not only R&D, but also ICT investments and support for higher education institutions. Since the start of the EIB i2i programme (including Knowledge Economy) in 2000, a total of EUR 87.1 bn were signed under this objective.

The inter-institutional and political phase of RSFF conception

On 1 October **2003**, an EC/European Council communication on "A European initiative for growth investing in networks and knowledge for growth and employment" set the scene: "*Support from the EIB has been identified by several governments as a key factor in ensuring the financial viability of longer-horizon investments."* In 2004, a new joint EC-EIB mechanism was launched, which was initially baptised "SFF-RTD".

On 28 November **2005** the Competitiveness Council confirmed RSFF as an integral part of FP7 "*given the significant leverage effect and catalyzing role of RSFF, in particular for private R&D projects*", **.** This confirmation was rapidly followed by the December 2005 European Council which "*invites the Commission in cooperation with the European Investment Bank to examine the possibility of strengthening their support for Research and Development by up to a maximum of EUR 10 billion through a financing facility with risk-sharing components to foster additional investment in European research and development, particularly by the private sector".*
After some tripartite discussions including the European Parliament, on 7 February 2006 the Council concluded that "*it remains important that RSFF be financed as planned even if cuts to FP7 were required under a budgetary adjustment derived from the 2007-2013 financial perspectives",* which confirmed RSFF as a top priority of the EU's political agenda.

The final inter-institutional phase led to the Decision N°1982/2006 of the EP and of the Council of 18 December 2006 to contribute the funds from FP 7 to the RSFF. The RSFF was established on **5 June 2007** through the RSFF Co-operation Agreement between the European Community (EC) and the European Investment Bank (EIB).

8 10 cooperation themes: (a) Health (EUR 6.1 bn); (b) Food, Agriculture and Fisheries and Biotechnology (EUR 1.9 bn); (c) Information and Communication Technologies (EUR 9.1 bn); (d) Nano-sciences, Nano-technologies, Materials and New Production Technologies (EUR 3.5 bn); (e) Energy (EUR 2.3 bn); (f) Environment (including Climate Change) (EUR 1.8 bn); (g) Transport (including Aeronautics) (EUR 4.2 bn); (h) Socio-economic Sciences and Humanities (EUR 0.6 bn); (i) Space (EUR 1.4 bn); (j) Security (EUR 1.4 bn).

3.2 RATIONALE AND OBJECTIVES OF RSSF

There is often a link between risks, innovation costs and lack of appropriate financial resources for RDI projects. A double sided market failure was apparent: a) on the demand side, RDI projects' holders and promoters restrain themselves from looking for finance through loans and prefer public money or their own resources; b) on the supply side, banks and financial institutions are not keen on lending money to too risky/complex projects. The outcome was and continues to be that most RDI projects were not easily "bankable", but there are positive externalities potentially generated by RDI that justify public intervention.

The preamble of the Cooperation agreement on the Risk-Sharing Finance Facility between the EC and the EIB outlines the major objectives of the facility, namely:

- "*the EIB is setting up the RSFF, an instrument aimed at fostering investment for Europe in research, technological development and demonstration, as well as innovation, in particular in the private sector*"
- "*the EC financial contribution will allow for a larger volume of EIB lending and guarantees for a certain level of risk, and the financing of riskier European RTD Projects than would be possible without such Community support*"

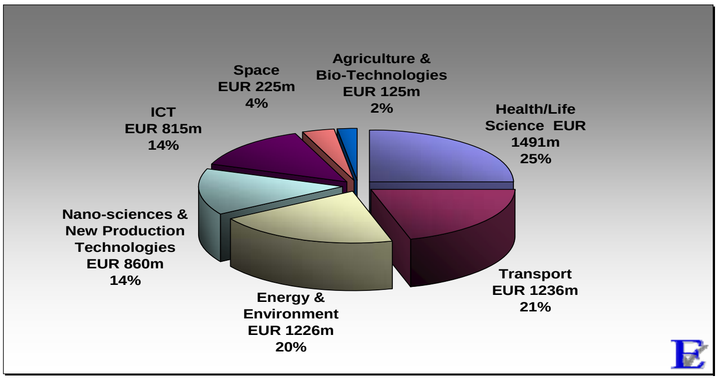
While this cooperation agreement is rather technical and short with regard to the specific scope and objectives, EV has analysed the main documents leading to the establishment of the RSFF to derive the main evaluation objectives and target groups.

The primary objectives of RSFF are to foster private investment in RDI in the EU Member States and associated countries through improved access to loan finance. This should be achieved through the financing of innovative companies of any size and ownership for RDI implementation in line with FP 7 objectives. Furthermore, RSFF access should be ensured in all Member States and Associated Countries and, in particular, the implementation of European projects (Joint Technology Initiatives, Eureka) and European Research Infrastructures should be supported. Ultimately, a leverage effect with the EC budget resources of the FP 7 should be achieved. In addition, a secondary set of aims can be derived with regard to the expected outcomes and these are analysed in the following chapter: a) promotion of RDI European cooperation, b) technological and financial demonstration effects, and c) economic leverage effects.

3.3 CORE PORTFOLIO ANALYSIS (62 PROJECTS) - COHERENCE WITH FP 7 AND EIB OBJECTIVES

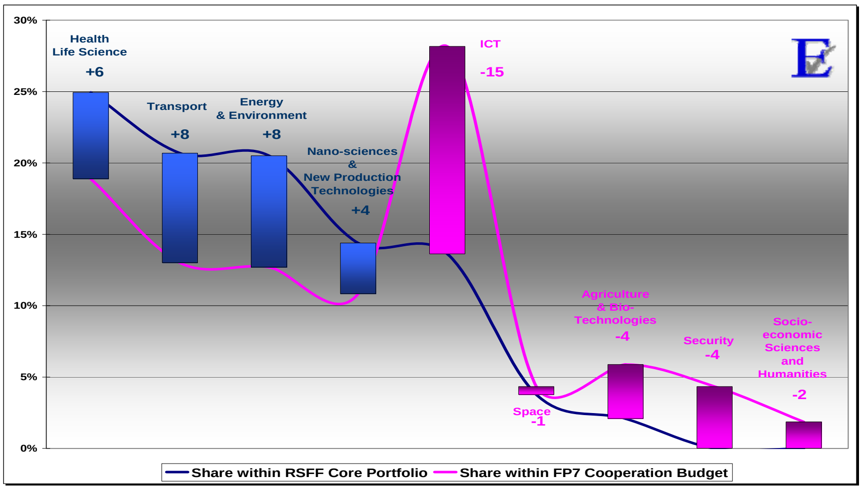
In order to analyse whether RSFF objectives are pertinent and coherent with the FP7 objectives, a mapping of the RSFF core portfolio (62 projects) with regard to the ten **FP 7 cooperation themes** has been made. All projects approved under the RSFF (both EC and EIB window) can be allocated under at least one of the cooperation areas of the FP 7, except for the bank intermediated operations given their very nature. Two thirds of all projects can be attributed to health/life science, transport and energy & environment. This is more or less in line with the sector distribution presented in chapter 2.2, with the notable exception that a large number of engineering/industry projects are contributing specifically to the transport and energy & environmental objectives of FP7.

GRAPH: Approved RSFF operations 2007-2009 (w/o lines of credit) mapped against FP 7 'Cooperation' thematic areas.



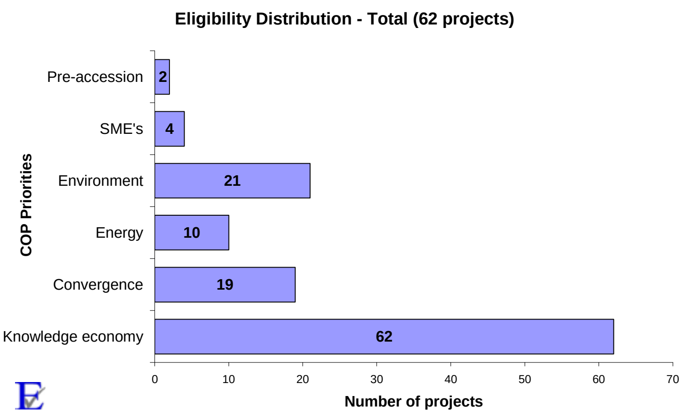
With an approved loan amount of EUR 6.0 bn[9] a total of EUR 16.2 bn of RDI investments have been indirectly supported through RSFF funding as at the end of 2009.

A mapping approach has been used in order to establish the similarities and differences of sector coverage within the FP7 programme and the RSFF loan distribution. The analysis reveals that four sector priorities of the FP 7 programme have a larger share in RSFF when compared to their relative weight within the FP 7, while five sectors, and in particular ICT, are below the proportion of the FP 7 share. However, it is to be noted that the Bank's non-RSFF lending to the ICT sector has amounted to EUR 12.9 bn since 2000 (see chapter 3.1).



Given this context, a more balanced approached towards ICT and/or other not yet highly represented sectors could be discussed.

When analysing the underlying specific FP 7 cooperation themes for the different sectors supported, the following observations can be made: For both health/life science and ICT, there is a wide spread of interventions covering most of the different FP7 activities under this heading. Energy interventions are predominantly focussed around renewable energy production and energy efficiency. Transport activities focus mainly on support for sustainable surface transport and new production technologies were of predominant importance for a number of industrial projects.



A similar analysis of all approved projects has been performed to establish the pertinence and coherence of RSFF objectives with the **EIB i2i Knowledge Economy priority.**

Besides their Knowledge Economy/i2i eligibility, many of the projects also address other priority lending areas at the same time[10], namely regional development /convergence, environment and energy, as well as SMEs and pre-accession.

Two specific indicators were used to assess the "*process of transforming increases in human knowledge into innovation, and subsequently into total factor productivity and competitiveness gains*[11]*:*

9 This does not consider lines of credit.

10 In a number of projects, the eligibility put in the Board report and the ones recorded in Serapis differ with the latter including more. For this analysis, the Serapis information been retained.

11 This phrase was incorporated in the launch of the Bank's Innovation 2010 Initiative in June 2003.

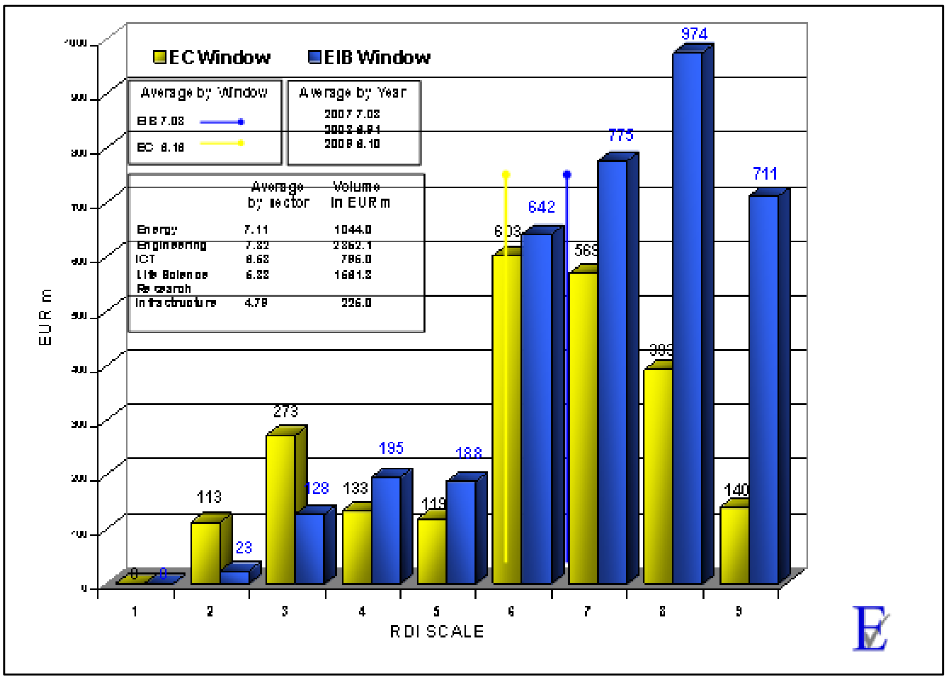
- The proportion of the project investment related to RDI
For 82% of all projects, the RDI component represented 100% of total project cost (EUR 16.2 bn). The average was 90% when adjusting for two very large projects with lower RDI shares, which distorts the overall picture.

- The support mechanism employed (whether the project directly contributed to the creation of knowledge or whether it provided indirect support, through for example the provision of infrastructure). This knowledge creation effect was measured through the **RDI scale** (see box).

The core project portfolio[12] has been analysed, based on an in depth study of the related internal documents and expert interviews, where necessary, to locate and cluster the different projects (for both the EIB and the EC window) with regard to their location on the RDI scale.

Innovation Cycle	RDI Scale	
	Stage	Description
Research	1	Intellectually-driven investigation with no foreseeable economic application.
	2	Investigation within established disciplines/technologies.
	3	Applied research within existing technology boundary with practical applications in mind.
Development	4	Technology 'start-up' to develop practical applications for research ideas.
	5	Collaborative development within existing industries to produce new or next generation technology.
	6	Technical development of products following a defined longer-term technology 'roadmap'.
Innovation	7	Development of 'new generation' products involving substantial modification/innovation.
	8	Process/product innovation designed to modify/improve/differentiate existing products.
	9	Process innovation designed to reduce cost or extend life of existing product range.
Not RDI	10	Investment in maintenance or expansion of existing production.

Graph: RDI Scale of approved RSFF projects



a) Since 2007, the average RDI scale has shifted from the innovation towards the development side (from 7.03 to 6.10 on the RDI scale).
b) While the average RDI scale under the EIB window is 7.03, thereby falling more towards the innovation side of the RDI scale, the EC average is 6.16 – on the development side of the RDI scale. The EC definition of RTD includes "demonstration" specifically, but this term does not explicitly figure in the RDI scale and could be located almost at any point between 4 and 8. One project (4), which was allocated under the EC window, was specifically allocated under the demonstration aspects, but considers an RDI scale of 6-8. This partially explains the portion of RSFF loans on the innovation side of the EIB RDI scale.

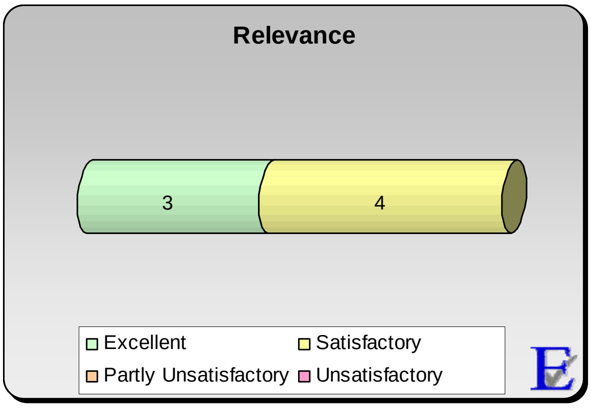
[12] 62, without considering the bank intermediated RDI loans.

The sectoral distribution shows that research infrastructure and life science projects on average are concentrated around the development part of the RDI scale, while ICT, energy and engineering projects are further up the RDI scale on the innovation side.
RSFF intervention was more orientated towards projects, which are at the innovation end of the RDI scale. This is particularly the case for operations under the EIB window, but also observable for operations under the EC window. Consequently, the Bank should endeavour to strengthen its RSFF activities in areas of the innovation cycle and with counterparts, where it is currently underrepresented.

Project 15: While this operation carries a significant risk profile (equity type) in line with RSFF objectives, the innovative portfolio funding approach together with the various structured repayment mechanisms are original.
It is a flagship equity type project, which is highly relevant and consistent with the major objectives of the RSFF programme. The operation concerns the financing of RDI activities in the field of medical devices and technologies incurred in one associated country and in 8 EU Member States. It concerns a high risk project, which was initially non-bankable, with highly innovative end products, providing a strong European multi country dimension based on SME-driven RDI; it covers all parts of the RDI scale from basic and applied research to product and process (technology) development. Furthermore, positive social impacts are likely once the products and processes achieve increased market penetration.

3.4 RELEVANCE ANALYSIS FOR THE DISBURSED PROJECT PORTFOLIO

The portfolio analysis was completed by a more detailed analysis of all 24 disbursed projects, both through field missions (7) as well as through phone interviews (17).



All seven projects evaluated in depth were in full conformity with EIB, EU and country objectives and all complied with the major objectives of the RSFF. What differentiated the project rating was their flagship character for the sector (project 2) and/or the RSFF objectives (projects 5 and 15) as well as the consideration of other EIB eligibilities (such as convergence for projects 2 and 5).
Even when there was no particularly strong match with clear RSFF objectives, such as international cooperation or demonstration effects, (project 1) or the significant innovative character of the project might have been debatable (project 14), the projects were in line with the wider objectives and therefore rated satisfactory.

In order to deepen the analysis, all other promoters with disbursed RSFF amounts have been interviewed. Four specific elements have been analysed in this context: RDI cooperation, technological as well as financial demonstration effects and economic leverage effects; these are discussed below.

a) Promotion of European RDI cooperation
- *Cooperation:* Most of the promoters actively cooperated on research and development on a Pan-European basis. This ranged from direct multi country partnership and cooperation with research institutes and universities in several countries, in many cases for basic research, to active collaboration with suppliers and other companies of different sizes, including SMEs. One of the limiting factors of further intensified cooperation with SMEs is often linked to confidentiality. 50% of the projects had single country investment projects (often linked to specific special purpose vehicles or investment programmes) and overall also 83% of total RDI cost was located in one single country.
- *Dissemination of RDI results to other European countries:* varies and is often restricted by confidentiality and Intellectual Property Rights (IPR) considerations. Most of the companies do participate at sector specific conferences and events; the life science companies are particularly

involved in dissemination activities. With notable exceptions, ICT and automotive companies often restrict their collaboration to "in-house" companies.

b) Technological demonstration effects

Spill-over to other partners in the research community is varied and multiple. It ranges from very limited effects through in-house dissemination with reduced external publicity (projects 12, 14, 16, 21), up to very important spill-over effects due to partnerships with universities, research centres and suppliers (projects 2, 4, 5, 9, 18). Promoters are often actively promoting dissemination, while clearly consideration is given to intellectual property right (IPR) protection. In particular, companies in the biomedical sector are participating in international symposia/working groups to share information in the RDI community and to present the results of their RDI and clinical trials; they also disseminate through congresses and publications. In various projects, these companies have also established close collaboration with other companies (mainly SMEs), as well as with national and international universities, which in the life science sector is key for the conduction of the clinical trials.

c) Financial demonstration effect

Almost 80% of the promoters interviewed indicated that the RSFF loan was a catalyst for opening up the private loan market, even though private banks usually did not specifically provide dedicated RDI loans. The vast majority of these companies mentioned that the EIB's RSFF loan indicated a certain signalling effect either to other banks or to facilitate grant financing. In one project, EIB with the RSFF product was the cornerstone investor and other banks and financers would not have been part of the deal without EIB involvement.

d) Economic leverage effect

For green field energy projects, positive direct and indirect employment effects could be reported. For most of other companies, the financial crisis would have taken its toll without the RSFF loan, since it provided a stabilising employment factor and avoided a brain drain of highly qualified persons. Indirectly, due to the dependence on related research institutes, the RSFF loans provided stability. Only one company, which was in the midst of a major restructuring, reported significant employment reduction, although this was already anticipated at appraisal (project 14).

4 EFFECTIVENESS

The start up and development of RSFF has been very steep. After long discussions to bring the facility to life, it received a quick start through the conversion of already approved operations into RSFF and the initiation of more operations. As a consequence of the financial crisis, 2009 saw a significant increase in RSFF activity, which seemed more "volume" than "innovative/quality" driven. Overall quantitative realisations in RSFF approvals, including the expected leverage effect, mostly exceeded initial targets, indicating a high demand for the instrument. From the interviews as well as the analysis, it can be expected that the demand for RSFF continues at relatively high levels.

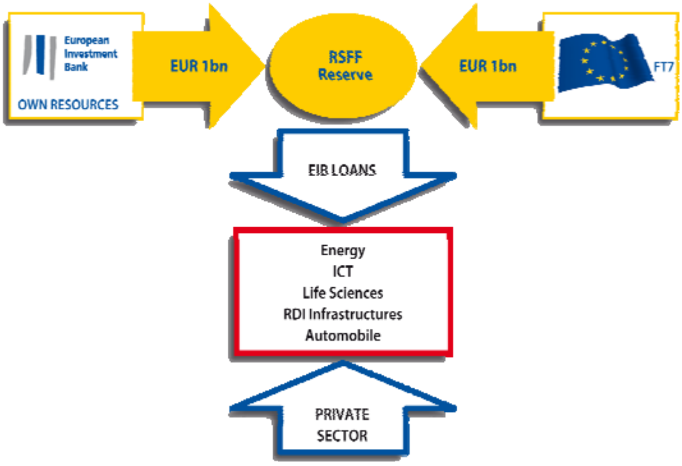
RSFF is a demand driven mechanism on a "first come, first serve basis" and as such there are no legally binding obligations to produce a fully balanced portfolio, neither by country, nor by sector. A wide country diversification for RSFF loans was achieved, but a more active prioritisation on countries with so far lower or no RSFF participation could be envisaged. The success of RSFF so far with a concentration on sectors, in which the Bank had significant activities, proved the right choice for a fast deal flow. At the same time, the RSFF sector focus could be enlarged at mid-term to include sectors which have not yet been considered and/or which have a relatively high RDI intensity and spending (for instance key enabling technologies, strategic energy technologies, knowledge intensive services etc).

All envisaged target groups could receive RSFF funding, however to a varying degree, since large companies dominate the portfolio (in volume terms). Specific RSFF barriers are evident, in particular as regards SME financing either directly or through bank risk-sharing formulae, as well as for research infrastructures and universities. There is a distinct trade-off between loan quantity and complexity of an operation with subsequent resource implications, which restricts the new product development.

All projects evaluated in-depth were rated as satisfactory or excellent, indicating that they met their objectives to a reasonable degree and were well implemented
From an operational point of view, RSFF has started as "haute couture", requiring a significant input to identify, develop and complete innovative projects/products etc. and over time has become more "prêt à porter", i.e. roll-out through the Bank with a reduced operational role for the designated EIB service.

4.1 RSFF OBJECTIVES AND THEIR ACHIEVEMENT

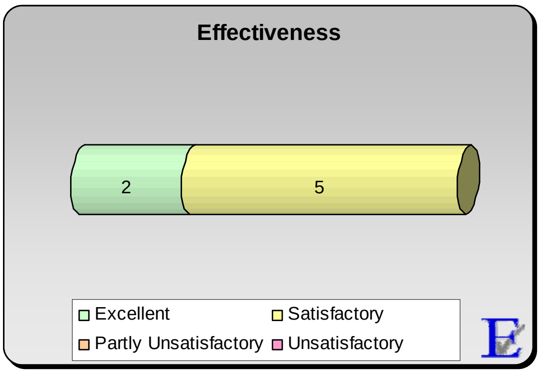
The objectives of RSFF to foster private investment in RDI should be achieved through the financing of innovative companies of any size and ownership. As a demand driven facility it should ensure access in all Member States and Associated Countries. In particular the implementation of European projects (Joint Technology Initiatives, Eureka) and European Research Infrastructures should be supported. Ultimately, a leverage effect with the EC budget resources of the FP 7 should be achieved.



In addition, a secondary set of aims can be derived, which have been already considered in the relevance analysis.
The main target groups for RSFF financing were a) mid-sized and large companies; b) SMEs; c) Research Institutes; d) Special purpose companies; e) promoters of research infrastructures, particularly of European interest. RSFF products could ultimately comprise all forms (senior, junior debt, guaranteed, project finance, mezzanine finance, risk sharing with banks) with the exception of equity. While the FP 7 sector distribution was wider, the Bank chose to focus on five core sectors at the start of RSFF (see graph). These were chosen based on the sector's scope, EU policy dimension, RDI trends, EIB track record and based on the RSFF implementation strategy.

4.2 RESULTS OF PROJECT EVALUATION (7 PROJECTS)

Project effectiveness rates the extent to which the project objectives have been achieved. For RDI projects, changes in project scope can be both expected and are often readily justified. Besides the achievement of objectives, the evaluation looks at (a) implementation: coherence with technical description, budget and programme, (b) operational management, organisation and employment effects. Given the relative immaturity of some of the projects, the ratings are given "at this stage".



All projects were rated as satisfactory or excellent, indicating that they met their objectives to a reasonable degree and were well implemented. Two (projects 5 and 15) were rated as excellent and exceeded original expectations. Project 5 was a particularly good example of a project exceeding original expectations as an improvement in market conditions and the increased availability of grants allowed the promoter to accelerate the RDI programme.

Ex-ante project implementation times for most of the projects were kept, with two projects delayed by about one year. One PF operation (project 2) experienced a late start up, while financial closure for project 15 was delayed. So far, project costs have been in line with initial assumptions, except for two projects. In project 5, RDI expenditures have significantly exceeded the appraisal forecast.

The main reasons were a faster than expected growth of certain business areas and new grants obtained to allow the development of new RDI projects. Thus, these higher costs are not due to a lack of control or underperforming productivity. In project 8, overall RDI expenditures were lower than anticipated (reprioritisation of process development over basic research, in particular at times of budget restriction).

The corporates benefiting from the RSFF loans continue to have sound RDI management practices for the selection and benchmarking their R&D processes. Overall employment impacts for the projects evaluated varied. On an aggregated level it can assumed that some 300-400 new jobs have been created and some 500 jobs have been safeguarded in the RDI area, while overall employment levels in most companies have been reduced (in particular project 14).

4.3 RSFF PROGRAMME EFFECTIVENESS

When looking at the implementation of the RSFF programme to date, a number of observations can be made:

1) Approvals, signatures and disbursements have more than tripled since 2007, reaching a total of EUR 6.3 bn (approvals), EUR 4.5 bn (signatures) and EUR 2.0 bn (disbursements) (see chapter 2).
2) The average signed RSFF loan has increased over the years from EUR 51 m in 2007, EUR 87.5 m in 2008 to reach EUR 129.5 m in 2009. For RSFF promoters, the RSFF share is increasing from 43% (RSFF share on total EIB loans for EIB RSFF clients) in 2007 and to 91% in 2009.
3) The comparison of the initial internal RSFF targets of "RSFF production of operations" defined at RSFF inception with the realisation, show positive results:

RSFF *ex ante targets* / <u>ex post realisation</u> "production of operations"	**2007**	**2008**	**2009**
Number of operations	*13* / <u>13</u>	*30* / <u>14</u>	*62* / <u>35</u>
RSFF amount approved	*580* / <u>812</u>	*1320* / <u>1502</u>	*2720* / <u>3984</u>

Overall quantitative realisations in RSFF approvals exceed initial previsions, but total number of projects (both for individual operations as well as for Global Loans) are lower than forecast, reflecting an increase in the average loan size.

4) There were no specific RSFF targets fixed at COP level, but common targets for the Structured Finance Facility (SFF)/RSFF/Loan Guarantee Instrument for Trans-European Transport (LGTT)[13] have been set. Considering these combined targets as benchmark, RSFF could already, in 2007, contribute to the common COP target of EUR 1.5 bn - some 31% in signatures. In 2009, RSFF contributed 86% to the specific COP target (EUR 3.0 bn signatures).

RSFF – COP targets	**2007**	**2008**	**2009**	**2007-09**
COP signature targets for SFF/RSFF/LGTT* (EUR m)	1500	3000	3500	8000
RSFF contribution Signatures (EUR m + % of target)	459 (31%)	1024 (34%)	2984 (86%)	4467 (56%)

* Signatures in Co-Operation with Commission and use of special financial instruments in EU and Pre-Accession countries.

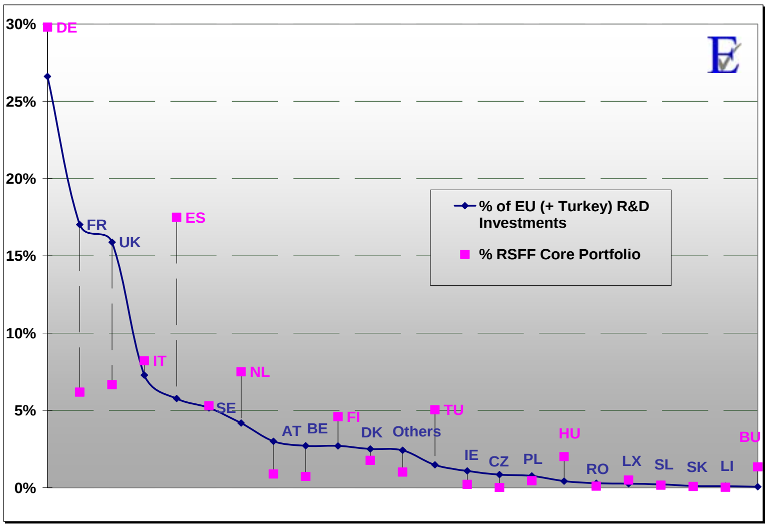
4.3.1 RSFF country distribution

RSFF is a demand driven mechanism and as such there are no legally binding obligations to produce a fully balanced portfolio, neither by country, nor by sector. As outlined before, RSFF loans have been approved for operations in 20 countries (18 Member States and 2 associated countries). Since the beginning of the RSFF, Germany and Spain are the most important

13 These activities were grouped due to their similar nature and also reflecting that RSFF and LGTT were only recently launched.

counterparts. A diversification can be observed over time, with more countries receiving RSFF loans and a strong increase in RSFF loans in other EU countries, thereby reflecting the Bank's desire to diversify the lending structure.

Given the fact that RSFF loans are to be provided on a 'first come first serve' basis, the question could be raised whether a more active (re-)prioritisation of countries towards countries with lower representation, could be made. At the same time, RSFF lending targets are ambitious and demand for these products is not evenly distributed throughout the EU.



In order to estimate the demand/supply potential and the indirect contribution of RSFF, a specific indicator was developed. The individual country share on the RDI cost of the RSFF core portfolio (EUR 16.2 bn) is compared with the share for the same countries on the overall private and public R&D expenditures (EUR 229 bn in 2007 - source Eurostat 09.2009, see blue curve)[14]. The difference represents a rough, but useful, indicator for the relative performance of the RSFF instrument in each country. If it is positive, more than the "national potential" was mobilized; if it is negative, it expresses a gap between the national potential and the current RSFF situation. Some countries are overtaking their national RSFF potential (e.g. Spain, Turkey, Germany etc.) and the RSFF RDI contribution is above the "national" performance, while certain countries are around or slightly below their national RSFF potential (.e.g. Italy, Sweden, Czech Republic). In France and the UK, the difference is negative, indicating that RSFF potential could not be fully mobilised. However, a definitive statement would require a much deeper analysis of the specific RDI financing systems to explain the deviation, i.e. other financing means or institutions (through both private as well as public and paragovernmental RDI support schemes).
Country diversification for RSFF loans is considered satisfactory, but a more active prioritisation on countries with so far lower or no RSFF participation could be envisaged, subject to the industrial structure and R&D intensiveness and innovation performance of countries.

4.3.2 RSFF sector distribution

In line with the initial sector orientation, RSFF loan approvals centred around five main sectors, namely engineering/industry (37%), Life science (25%), Energy (17%), ICT (13%), Research Infrastructure (4%) and risk sharing with banks (4%) (see chapter 2.2). As a direct response to the difficult market conditions and the effect of the credit crunch, RSFF loans became particular attractive for industrial/engineering and life science companies. RSFF approvals for ICT projects reached EUR 565 in 2009. First approvals have been recorded for research infrastructures in 2009 which, due to their inherent nature, take longer to get off the ground. Bank risk sharing operations are only of minor importance in the overall approvals (see chapter 4.3.3).

This raises the question of whether the RSFF sector orientation was and continues to be rightly targeted. The success of RSFF so far, with a concentration on sectors the Bank was familiar with, proved to be the right choice (see chapter 2). For these projects, a fast and sufficient deal flow could be almost guaranteed. At the same time, the RSFF sector focus could be enlarged at mid-term to include other sectors that have not yet been considered and/or that have a relatively high RDI intensity and spending.

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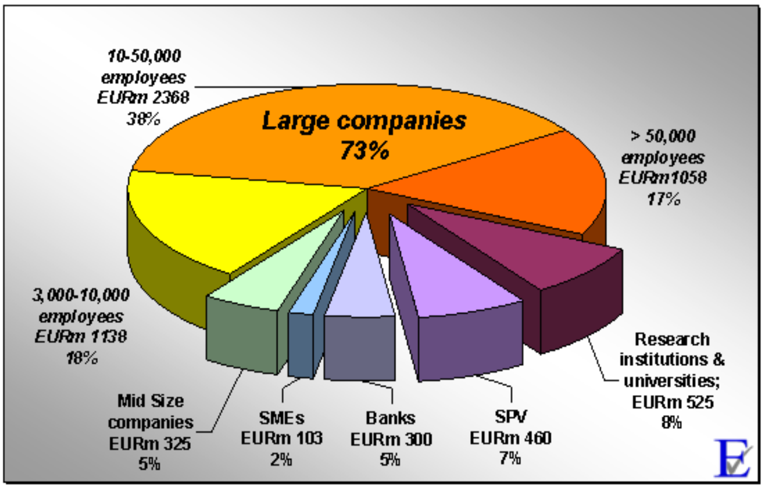
[14] Germany: 27% of EUR 229 bn and 30% of EUR 16.2 bn= +3%.

4.3.3 RSFF target group distribution

Given its objectives, an important analysis refers to the customers of RSFF loans. The vast majority of companies benefiting from RSFF approval were first time clients for the EIB. The main target groups for RSFF financing have been defined as: a) Mid-sized and large companies, b) SMEs, c) Research Institutes, d) Special purpose vehicles, e) Promoters of research infrastructures, particularly of European interest. No specific distribution between the target groups was fixed at the beginning of RSFF.

Graph: RSFF approved loan amounts – distribution by target groups (total)



By project number, the respective shares are 63% for large companies, 13% for mid size companies and 24% for others.

NB. Applying the EC definition with regard to employment levels (at appraisal) – SME < 250 employees, Mid Size Company 250 – 3000 employees, large company > 3000 employees.

Conclusions:
All envisaged target groups could be addressed, but with distinct variations:

a. 73% of all RSFF loans are made to large companies. Both their absolute (see above) as well as their relative importance (from 57% in 2007 to 76% in 2009) have increased over time.
b. Mid-size (mid-cap) companies account for 5% of the total portfolio, while the share for SMEs is 2%.
c. Special purpose vehicles, such as specific project finance deals, in particular in the renewable energy sector, account for some 7% of the total portfolio.
d. Research institutes and universities have gained in importance only in 2009.
e. Risk sharing partnerships with banks have declined in relative importance for reasons outlined below.

From the above a number of reflections can be made, which go to the heart of RSFF target groups and the discussion since the inception of RSFF.

Mid-sized/large companies and SPVs: A number of enterprises have been first time clients with the Bank and this target group accounts for the lion's share of RSFF financing. In most cases they have well established processes to deal with national and international banks. For an RDI facility like RSFF, large companies, as key drivers for RDI development in Europe, can not be ignored. They are not only eligible under the FP 7 for grant finance, but have also been approved as eligible counterparts under the EC window.
Looking at the RSFF portfolio, there is a growing number of loans to large companies, which as a result of the crisis have become sub-investment grade. These companies would normally not have become clients of the RSFF in a non-crisis context. In the aftermath of the crisis, they might consider refinancing the deals and in more general terms, these counterparts might no longer be RSFF customers.

SME financing: There are significant difficulties with the direct financing of SMEs under the RSFF and the question of replicability of this type of operations arises. Without a full and genuine commitment on both sides, the legal and administrative requirements are in many cases too heavy and not appropriate for SME lending (see box). This message has also been voiced by a number of larger companies. In addition, a further complication is often that SME type promoters are relatively small and not used to providing information amendable to conventional financial due diligence. There is a clear trade-off between volume and SME financing with significant resource implications. RSFF does not seem to be the right instrument to address SMEs directly, but other EIB facilities exist for SMEs[15]. A dedicated brochure presenting the different SME products and contact persons from the EIB group could better promote the EIB overall activity in the SME sector.

SME financing under the RSFF – a case study

EIB's role in project 15 has been crucial since the project's financial structure was rather complex, which necessitated lengthy discussions and negotiations, delaying the complete financial close. Initially regarded by the lead arranger as one of the "more junior" financing partners, the EIB has become an important cornerstone investor and stabilising factor in the project's setup. According to the promoter, the deal would not have happened without the EIB - in particular in a financial crisis context. In fact, all of the lead arranger's counterparts have changed during recent years and the EIB has provided the stabilising role. However, the balance between the time spent by the appraisal team and the limited amount of the loan is questionable, even though, according to all participants, it has been highly worthwhile.

One recommendation would be to reduce to the strict minimum the list of approvals and control items, with special attention on their real value for the lenders and with a view to limit clauses only to major decisions. It might also be possible for the EIB to act on lead approval, where other banks could give delegation of authority.

The possibility to extend or adapt this "model" for more numerous cases has also been envisaged, for instance through a cross-guarantee system among innovators/founders of different entities with controlling shares to be pledged towards the lenders. A more in-depth analysis would be necessary to assess the feasibility of such a model.

Nevertheless, the project raises some issues: The replicability of such a model case appears so far more limited than expected. Especially where SPVs and SMEs are concerned, the involvement of all EIB services should be effective as early in the process as possible (during the pre-appraisal phase where possible) in order to benefit from constructive advice regarding the structure and set up of the project in a timely manner.

The project is a showcase underlining that RSFF mechanisms and the EIB are able to handle SMEs directly, but only with extraordinary commitment and resource inputs.

Risk-sharing partnerships with banks: Even though the EIB has a large and established network, as well as long standing relationships with many partner banks in EU Member States and Associated Countries, so far the efforts using intermediated loans to provide RDI finance to smaller projects has been largely unsuccessful. The formula foresees that the Bank fully delegates the due diligence to its partner banks. However, to protect itself (and the RSFF portfolio) from an "adverse selection" of riskier projects and ensure both the EIB and the counterpart bank assume similar risks, the EIB requires extensive disclosure of its counterpart's risk assessment procedures, which has generally proved difficult to accept by the banks so far. Two out of the three signed risk sharing partnerships with banks have been cancelled. One signed bank intermediated operation is still under negotiation and it is hoped that in the course of 2010 the first disbursements can be made. Most of the other risk sharing operations with banks, which have been initiated by the end of 2009 are either on hold or will not go ahead. Several reasons have been observed explaining this trend:

a) as a result of the recent crisis many of the target companies have cut their RDI expenditures, which makes it more difficult to find appropriate projects and interested partners.

b) the crisis has reduced the creditworthiness of companies, increasing the risk to the extent that the risk appetite of the partner banks has vanished.

c) these operations are relatively complicated and some banks are more interested in less complex and risky operations.

Research infrastructures and universities: Some recent projects for research infrastructures have been approved and signed. However, certain obstacles exist (e.g. loan finance is not foreseen in their statute, limited revenue generation for loan repayment), which restrict the possibilities to structure a bankable project. RSFF loan finance is also in principle available for universities and research institutes, but in many cases the universities cannot borrow or as public entities have access to normal and potentially cheaper EIB loan products. This is demonstrated by the significant (non RSFF) lending portfolio to education (amounting to EUR 18.0 bn for the period 2000-2009 and EUR 2.5 bn in 2009).

Research infrastructures have very long gestation periods, which are resource intensive for the EIB to follow and do not quickly result in loan approvals. A conscious decision has to be taken for these projects at early stages to decide whether and how these can be pursued.

[15] For the complementarity with other EIB Group instruments (see annex 3).

Even though direct RSFF lending to universities and research institutes has yet to materialise and the exposure to SMEs might be smaller than anticipated at the beginning, indirect exposure to these target groups through loans with larger companies is important. Many corporate promoters have established very close relationships both with universities and SMEs through joint research collaboration and/or very close supplier linkages, often with smaller companies. These indirect effects have often not been investigated and/or reported at appraisal stage. More scrutiny of these indirect effects on SMEs and universities could further improve the information basis for these target groups. Certain key indicators could be integrated in the appraisal process to allow more detailed reporting.

Product development: The RSFF agreement and the instrument itself provide a flexible range of various products to cater for several target groups. However, as a consequence of the distribution of RSFF loans between the various target groups, the main loan products utilised were senior corporate loans and project finance (limited/non recourse) for SPVs. A consequence of the significantly growing volume seems to be a trend for RSFF, rather than being used as a "new" product, is gradually oriented towards a more standard product with high(er) risk features. Nevertheless, a number of innovative approaches and new product developments are to be noted (i.e. portfolio approach for early stage companies for risk diversification combined with the use of PIK loans in one project, open innovation approach addressing clusters of SMEs in another).

There is a distinct trade-off between loan quantity and complexity of an operation with subsequent resource implications, which restricts the new product development. Even within the EIB, the risk appetite is diverse and the application of the CRPGs (Credit Risk Policy Guidelines) can limit to a certain extent the possibility for new product development.

4.3.4 RSFF leverage effect

The EU budgetary contribution allowed the EIB to increase its support to inherently higher risk RDI operations. This makes the available loan amount a multiple of the extra provisioning to be set aside. As a result of very high demand, EIB has increased its contribution up to EUR 772 m, but a number of projects could be converted towards the EC window, once additional EC resources are made available.
In order to assess whether the RSFF has achieved its goal of making available more funding for RDI investments through leveraging Community funding (EC Contribution) in the magnitude estimated, the ex-ante assumptions were compared with the realised leverage effect as of 31.12.2009. The outcome is presented in the table (see also annex 2).

amounts (in EUR bn)	Expected 2007-2010	Achieved 2007 – 2009
FP 7	**0.5**	**0.390**
EIB	**0.5**	**0.772**
Total Contributions	**1.0**	**1.162**
EIB Loans and guarantees	**4-6 (average 5)**	**6.3**
Additional investments in RDI	**8-24 (average 15)**	**16.2**

In quantitative terms, this supports the view that all the initial targets have been met and mostly even surpassed. The last three years have had an extraordinary impact on the entire banking sector, including the Bank, which has increased its overall lending activity dramatically in recent times. The RSFF was conceived under a "normal" business environment and the initially set targets can be considered as rather ambitious. The quantitative achievements are significant, which also has to be seen in the context of the EIB's high growth over recent years as a response to the financial crisis. This was reinforced by the worsening financial situation of companies, since many former counterparts of the EIB were downgraded and thereby reached sub-investment grade – territory.

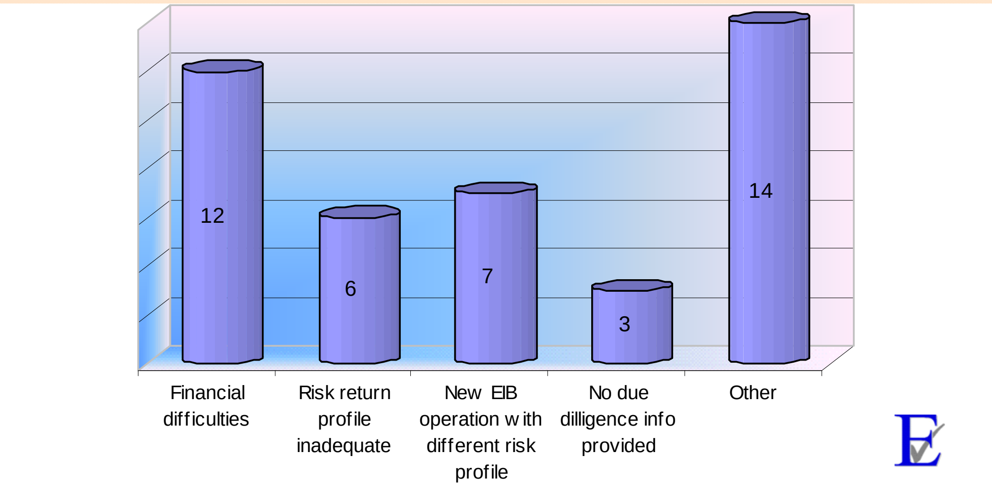
The questions arises whether these quantitative targets alone are sufficient to judge on the efficacy of the programme, hence the need to take a closer look at the respective impact and contribution of the RSFF loans over the last years (see chapter 7).

The issue of additionality was raised both during the site visits and the phone interviews. Compared to other evaluations, the results of the RSFF evaluation are positive, since 1/3 of the promoters mentioned that there was a significant to high additionality to the projects, which in certain cases would have stopped, delayed or dramatically reduced the RDI expenditures. This was particularly important during the recent financial crisis. In one case, the project would not have gone ahead without EIB financing. For the other promoters the projects would have probably gone ahead without EIB financing, however at more expensive terms and without other positive non-financial effects of EIB lending (see chapter 8).

Box: Analysis of the underlying reasons for a RSFF operation not going ahead.

The full RSFF portfolio of 137 projects was analysed to establish the exact situation in the project cycle of each project and examine the underlying reasons for certain projects either being on hold or not going ahead at all.
All disbursed project promoters were interviewed during the evaluation. For all 'recent' projects, i.e. created, approved or signed after 1.10.2009, it was assumed that they would go ahead at this stage. For all other projects (72), the responsible EIB project officers have been interviewed to a) verify the status of the projects and b) in case they are on hold or (likely to be) cancelled, what were the underlying reasons for this. A summary of the reasons for these projects not going ahead is presented in the graph.

Graph: Reasons for RSFF operations (42) not going ahead



In line with good banking practice, it is not surprising that projects which had financial difficulties, an inadequate risk return profile or did not provide appropriate due diligence information, were not pursued. Six projects went ahead as EIB Non - RSFF operations. Different reasons were given for this change, e.g. such as no/lower R&D content; RSFF loan too expensive compared to alternative finance (including EIB loans). For one third of all projects other reasons were presented, such as unclear shareholder structure or business cases, company reorganisation and licensing issues, R&D programme too small or taking place mainly outside the EU, banks risk sharing (see before) etc.

5 EFFICIENCY

*The specific **handling of RSFF operations** is still not fully established. While the RSFF agreement can be interpreted as providing a flexible framework, the motto "learning by doing" seems to be the rule, rather than the exception. EV's analysis has already triggered numerous discussions within the EIB and between the EC/EIB, contributing to some improvements, but more needs to be done.*

RSFF is covering direct and indirect cost, but does not fully cover the cost for corporate support provided by the EIB. The RSFF agreement is based on a specific definition of cost coverage. In view of the current discussions with the EC on a general agreement on EIB/EC partnerships, the RSFF agreement could be reviewed in order to better reflect the real cost structure. For example and similar to the concept for other facilities, a fee-based *approach (per operation) could be envisaged. A RSFF signature (EUR per m loan signed) is roughly twice as costly as the standard EIB signature for 2009.*

*Both in terms of number of projects as well as regards the RSFF amount, 71% of all projects approved, signed and/or disbursed were in the D- /E1+ loan grading category. The lowest **risk categories** (equity type operations - ETP/ETI) have not been allocated under the EC window. Most of the ultimate financial risk is borne by the EIB and there is the inherent conflict between banking prudence ("EIB takes more risk, but in a controlled manner") and EC budgetary considerations ("aiming at maximising grant disbursements").*

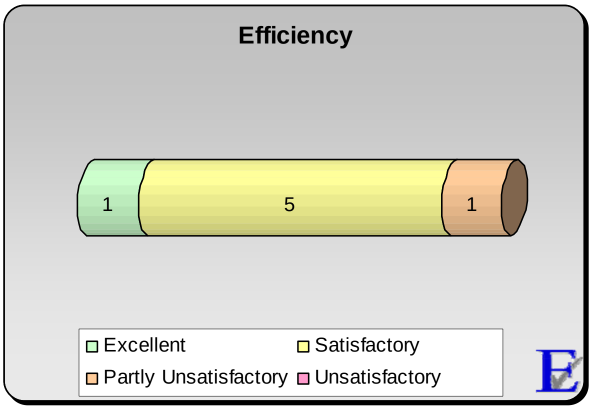
*Both **risk sharing partners have committed** their resources as planned, but as a result of very high demand, the EIB in particular has stepped up its contribution to the RSFF to satisfy the demand. A number of projects could be converted quickly to the EC window once additional resources are made available, allowing further increases in RSFF volumes.*

***Awareness campaigns** have already yielded positive results, but still more needs to be done to fully complement the increasing financing under RSFF and to reach even more companies, in particular new counterparts.*

The in-depth project analysis shows that all but one project, which was particularly hard hit by the effects of the economic crisis in its target markets, were rated satisfactory or excellent. One project was rated excellent, since it also improved its position in major target markets.

Two layers are differentiated for the efficiency analysis, with the results of the in-depth project evaluation as the first layer and the wider RSFF programme efficiency as the second.

5.1 RESULTS FROM PROJECT EVALUATION



Project efficiency measures the extent to which the project's benefits are commensurate with the resources/inputs required to implement it. Efficiency is also one of the main considerations for the allocation of scarce resources. All but one project, which was particularly hard hit by the economic crisis in its target markets, were rated satisfactory or excellent. One project was rated excellent, since it also improved its position in major target markets.
Evaluating the efficiency of RDI projects can pose particular challenges depending upon their position along the RDI ratings scale. Whilst most RDI investment is ultimately targeted towards the creation of a tangible outcome (with the exception of fundamental research which seeks solely to improve the knowledge base), this outcome may not be realised for some years and for riskier ventures might not be realised at all. Such a failure does not automatically signal inefficiency. Any research project can fail, and the likelihood is increased the more distant from the market launch a product is when the research commences. Nevertheless, the research could still be considered worthwhile in view of the potential benefits and it increases the overall stock of knowledge.

In this evaluation three main elements have been assessed in rating efficiency: (a) market and demand: even if the project is such that the development of the market over the life of the project, and the position of the promoter in that market, cannot be correlated with the RSFF investments (it is more a result of past efforts from the promoter) it gives an indication of the likelihood that the RDI will one day yield positive results; (b) operation: the efficiency with which RDI activity is selected, focussed on those activities with the highest benefits and/or chances of success and kept within affordable limits; and (c) financial and economic impact: the financial performance of the promoter taking into account the RDI expenditure and, where appropriate, the effects that the outcome of the RDI had on this performance. As mentioned before, most of the projects visited have been evaluated at a relatively early stage and have been therefore all rated "at this stage".

Although there are variations depending on the stage of the project in the innovation cycle, as well as the project's nature, the following main characteristics can be identified, which are consistent with earlier findings from a recent EV study[16].

Five corporate RDI loans and two project finance operations with clearly defined asset structures and cost/revenues streams have been evaluated. All but one of the **corporate RDI projects** were rated satisfactory or excellent, which is a reflection of the adequate implementation of the investment programme (up to now) and in most cases a stringent quality assurance and implementation policy for research activity. For a number of companies there were unavoidable differences between their plans ex-ante and the realisation ex-post due to the unexpected evolution of the markets and the demand for newer products. Overall, in most cases the company's position has remained stable or has weakened slightly, even during recent difficult times. Only one project (rated partly unsatisfactory at this stage) was particularly hard hit due to plummeting sales in all their major markets, with subsequent negative impacts on the company's competitive position.
One corporate project was a notable exception (project 5, rated excellent) where not only was the research and development programme implemented beyond ex-ante expectations, but also the company's competitive position in several markets improved significantly.
One of the unexpected effects of project 15 – that is already visible **-** is its impact on the structure of the market: innovative projects can be a powerful means of counterbalancing monopolistic or oligopolistic situations by opening up markets. In a way, these kinds of projects are therefore a very efficient way of supporting the regulating function of the European single market.

For the two **project finance** operations (both in the field of renewable energy) the comparison of ex-ante predictions with the results achieved at this stage is clearly satisfactory, but the very high energy generation costs imply that, from a more sectoral perspective, certain reservations on the long term feasibility of the technology remain.

5.2 RSFF PROGRAMME EFFICIENCY

5.2.1 Administration and organisation of RSFF

The RSFF Steering Committee oversees and supervises the implementation of the RSFF, which consists of at least four members each from both the EC and the EIB.
The Steering Committee a) monitors regularly (normally twice a year) the progress of the RSFF and the fulfilment of its objectives and makes recommendations on further measures to achieve these, b) proposes amendments to the RSFF Co-operation Agreement, if necessary, c) is consulted and reviews any specific RSFF related arrangement and issue, d) prepares and implements decisions taken by the EC and EIB on RSFF matters.

The agreement foresees detailed reporting from the EIB to the EC on: i) operations and administrative costs; and ii) assets in the EC RSFF account. The division of labour of both parties, the EC and the EIB, under the RSFF agreement is clear. The EC has to ensure that its contribution (coming from FP7) is only used to support eligible RDI investments and is politically responsible for the RSFF and monitors its implementation by the EIB. The EIB is directly responsible for the selection of bankable projects and contacts with promoters. In this respect, the EIB is in charge of all direct promoter contacts and evaluates and ultimately selects potential RSFF projects with regards to their creditworthiness, risk profile, technological, economic and environmental viability. The final decision on loan approval lies with the EIB.

The above-mentioned division of labour is mirrored both from an organisational point of view and in the established set-up. Both institutions have established designated services for the management

16 Evaluation of i2i Research, Development and Innovation (RDI) Projects, November 2007.

of RSFF operations, with the EC designated RSFF service in charge of the eligibility approval process and all other EC related tasks.

In the EIB a matrix organisation was established, whereby the EIB designated division[17] (consisting of 12 staff) under the lending directorate for Europe covers all tasks with regard to the formal requirements of the cooperation agreement, as well as the implementation of particularly difficult, innovative operations. In order to facilitate operational coordination, there is: a) a centre of expertise for the EIB's Knowledge Economy lending objective; b) RSFF coordinators are designated to ensure proper flow of information within the lending divisions; and c) to smoothen the coordination and selection of projects, the "RSFF weekly meetings" were created. At the same time, the regional lending departments continue to remain with their operational freedom and responsibility to also "generate" and implement RSFF projects. In addition, a number of other EIB directorates are directly implied by RSFF operations with partly specific procedures.

5.2.2 Financial considerations[18]

In the following chapter, the cost effectiveness of the RSFF is reviewed and in particular the following questions are addressed: a) To what extent are the intended effects achieved at a reasonable cost? b) To what extent are the costs of managing the instrument in line with expectations? c) What are the costs per RSFF loan disbursed/signed? The cost-effectiveness of the instruments for partners and target groups (including fees) is discussed in chapter 7.

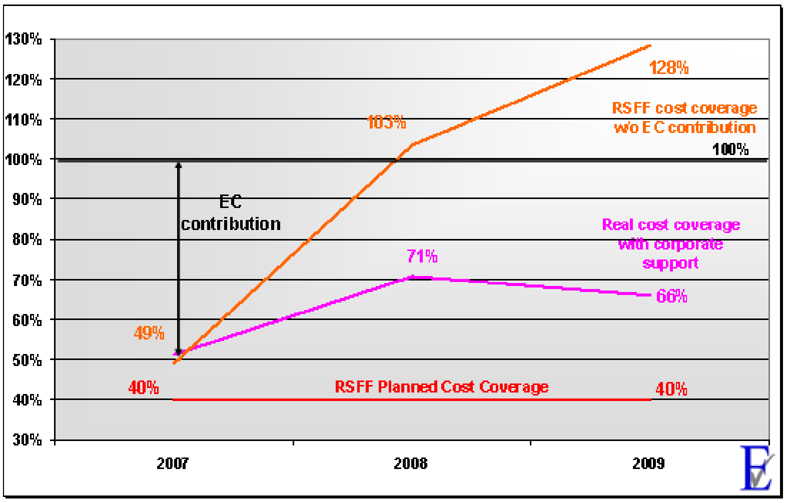
A general issue to be considered is the confidential nature of underlying data promoters provide, which limits detailed reporting and only general trends are presented without indicating necessarily the details of the underlying operations. Furthermore, a general trend within the EIB is the often not fully detailed time recording for specific instruments, which might induce a certain underestimation of the time spent on certain operations.

The RSFF agreement has specific terms for the remuneration of the RSFF Bank's management.

<u>**EIB perspective**</u>

a) Cost coverage over time

Looking at the overall cost coverage for the RSFF, two distinct points of view have to be distinguished: a) "Real" cost coverage as reported in the Bank's books; and b) "RSFF" cost coverage as defined and agreed in the RSFF cooperation agreement. The results are depicted in the graph below.



RSFF cost coverage reached full cost recovery already in 2008, while EIB cost coverage is above the initial plan, but below full cost recovery.

When compared to the "real" cost incurred by RSFF, costs as reported to the Commission are underestimated (non-inclusion of support functions, lower consideration of indirect time consumption).

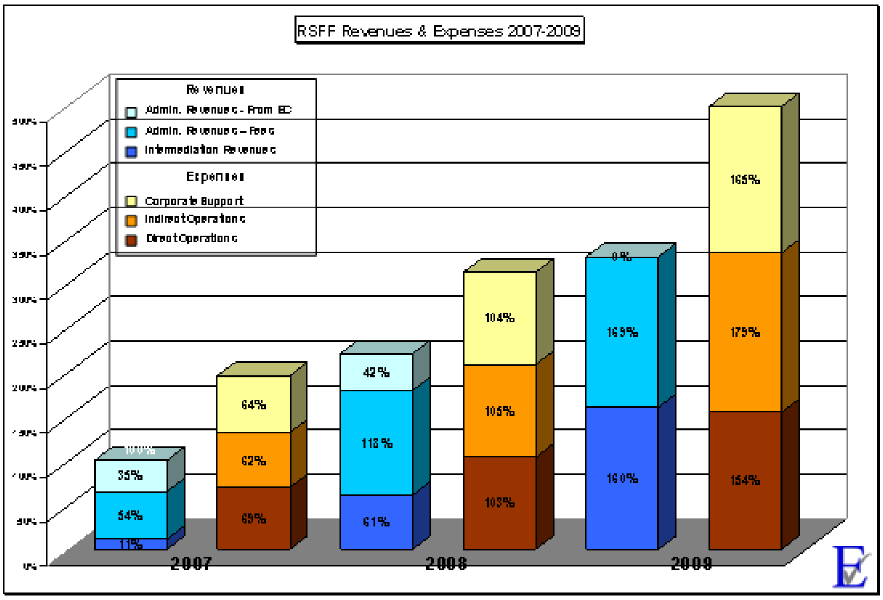
[17] A reorganisation is currently ongoing.

[18] The asset management side of the funds under the EC window was outside the scope of this evaluation.

The RSFF-specific cost accounting increases internal administration significantly.

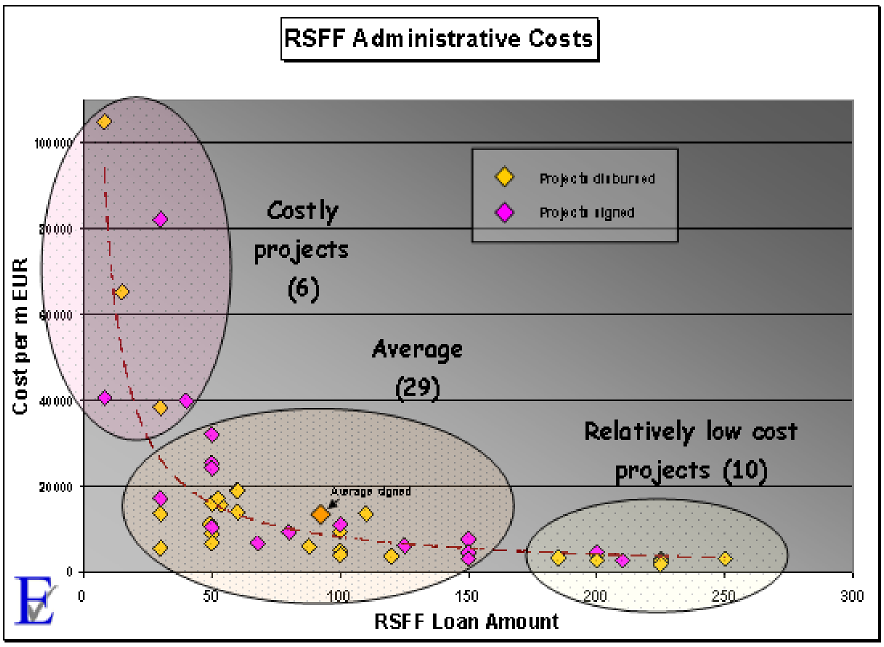
b) Revenue and cost development over time

The different revenue and cost developments over time can be presented only in percentage terms due to confidentiality reasons. The development and split is presented in the graph beside and is normalised considering total revenues in 2007 as the basis (100%)[19]. RSFF is covering direct and indirect cost, but does not fully cover corporate support. The relative importance of fee income is increasing significantly (54% of total revenues in 2007 – 118% in 2008, 169% in 2009).



N.B. direct cost: lending departments indirect cost: other operational departments to support lending function

c) cost of the operation per EUR million signed/disbursed



This graph presents the cost per m RSFF loan signed/disbursed for 45 projects, which range between 1,832 to 105,003 EUR. Notably the two most expensive projects signed/disbursed relate to two projects with SMEs. For the cluster "average", a RSFF signature (EUR per m loan signed) is roughly twice as costly as the standard EIB signature for 2009. When considering all the RSFF projects, this figure increases 3.5 times.

d) future orientations

The RSFF agreement in its present form does not fully reflect real cost coverage. In view of the current discussions with the EC on a general agreement on EIB/EC partnerships, the RSFF agreement could be reviewed accordingly. The EC contribution could take different forms, including a fee based approach, which could facilitate the internal management of the facility.

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19 Revenues do not consider risk premium for UEL and EL.

5.2.3 Risk Management/Risk Sharing nature of the instrument

5.2.3.1 Overview

Moody's	S&P and Fitch
...	...
A1	A+
A2	A
A3	A-
Baa1	BBB+
Baa2	BBB
Baa3	BBB-
Ba1	BB+
Ba2	BB
Ba3	BB-
B1	B+
B2	B
B3	B-

RSFF risk coverage range has been split into four categories for loan type operations (D-, E1+, E2+, E3+) and two for equity type operations (ETI, ETP)

RSFF Risk Coverage Range

The RSFF is a debt based instrument and as such does not involve a subsidy component. The facility does not concern risk capital, such as venture capital, but concerns companies or projects mature enough to demonstrate debt repayment capacity based on a credible business plan. An external rating is not required, since this will be done internally by the Bank's services[20]. The target risk categories for RSFF are presented in the graphs.

The RSFF co-operation agreement is clear with regard to the application of standard good banking practice for RSFF operations. Article 1.3 stipulates that "*the EIB shall manage the RSFF, in accordance with its own rules, policies and procedures, including its own CPRG ('Credit Risk Policy Guidelines') as applied on a consistent basis*". Hence, standard procedures for any debt instrument, in an FP 7 country in which the Bank operates, for Loan Grades of D- and below, apply.

In order to explain the risk sharing nature of the RSFF, the following two aspects are analysed:

a) risk distribution between the two partner institutions

i. overall development of the loan grading and hence the underlying project risk for the RSFF core portfolio
ii. distribution of LG between the institutions.
iii. fictitious project example, which will be used to illustrate the functioning of the risk sharing nature of the instrument.
iv. analysis of the overall financial risk distribution for both institutions.

b) contribution of risk-sharing partners (EIB/EC)

i. contribution of both partners and their development.
ii. are there any imbalances and, in affirmative, what are the reasons for these?

5.2.3.2 Risk distribution between the two partner institutions

<u>Development of the loan grading for the Core RSFF portfolio (62 projects)</u>

Both in terms of number of projects as well as regards the RSFF amount, 71% of all projects approved, signed and/or disbursed were in the D- /E1+ loan grading category.
General provisions for expected loss and capital allocation for unexpected loss depend on the credit risk evaluation of the EIB carried out in accordance with the CRPG (for both the EC and the EIB window). The agreement stipulates that: "*In no case shall the total of the EC Provision and EC Capital Allocation exceed 50% of the initial nominal loan or guarantee value under an EC RSFF Operation*" (Art. 1 point 4), which restricts the use of the EC window for certain risk categories, in particular equity type operations. The RSFF provisioning level of 18.5 % (for general provisioning (GP)/capital allocation (CA)) is in line with the initial assumptions (around 20% - see annex 2).

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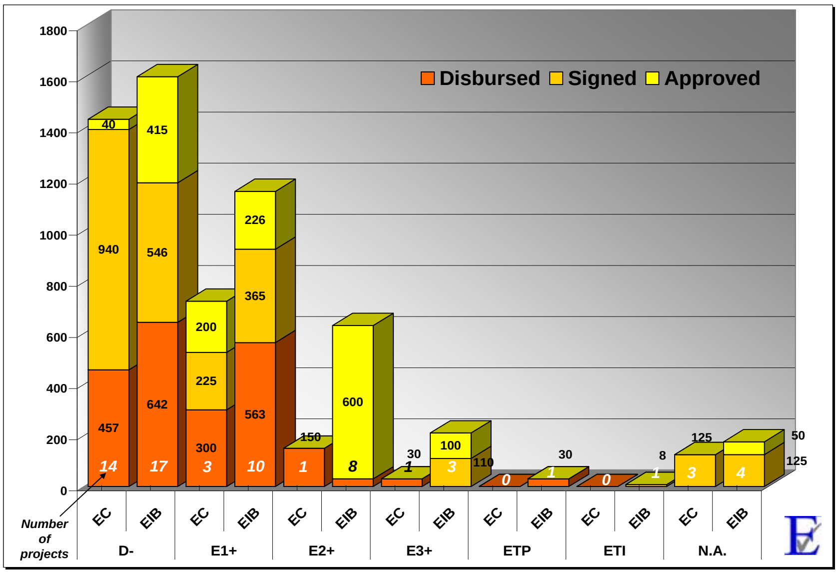
[20] For the EIB credit risk officers, the underlying loan and security structure of the deal is important, whether is under the EC or the EIB window is not relevant.

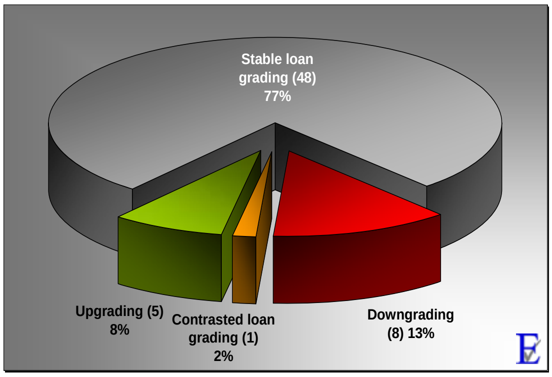
Furthermore, Art. 1 also emphasises that "*EIB shall apply professional standards and practices for EC operations not less favourable than those used for EIB RSFF operations*."



As a consequence of the increased overall risk exposure of the Bank, in 2009 the Bank's services, including its top management, developed a more prudent risk approach when it comes to accepting E2/3+ or lower loan grading categories.

N.B. four projects are allocated under both windows; N/A bank risk sharing operations

Looking at the loan grading development since approval, this did not change for more than three quarters of all projects (see graph). Four projects experienced an LG upgrade within RSFF territory (i.e. E1+ to D-), but one was upgraded from D- into "non RSFF" territory under the EC window. Contrasting this development with the projects' amounts, it appears that in particular projects with "smaller" loans have been downgraded as a consequence of worsening financial conditions.



The **New Statute of the Bank**, which came into force with the Lisbon Treaty, allows the Bank, as well as its customary loans and guarantees, to be able to take equity participations more easily. However, limitations are placed on the use of equity, including the requirement for the terms and conditions for such operations to be approved by a qualified majority of the members of the Bank's Board of Directors. The Statute also states that equity would normally be provided "as a complement to a loan or a guarantee, in so far as this is required to finance an investment or a programme." In addition, the new Statute contains a special clause to cover more risky operations deemed to be a "special activity", roughly corresponding to the Bank's existing infrastructure fund, venture capital fund and structured finance operations.

One concrete project example showed that a downgrading of the loan results in higher risks for both parties (EC/EIB), but the provisioning (GP/CA) for the increased risk remains unchanged for the EC, whilst the EIB assumes the additional risk within its overall project portfolio. Should the company's risk profile further deteriorate, the capital allocation from the EC window would need to be paid and further special provisioning for the loan would be provided by the EIB. In the case where the full loan amount could be recovered, the EC CA would probably need to be reimbursed to the EC account. This however is not entirely clear from the RSFF agreement, which is also the case for partial loan recovery and upward modulation for instance. The ultimate financial risk would not be equally shared between both partners (EC/EIB). Should the project fail completely and no funds could be recuperated, the EC would loose its CA and GP (13% of the total RSFF loan), while the remaining losses of 87% would have to be supported by the EIB.

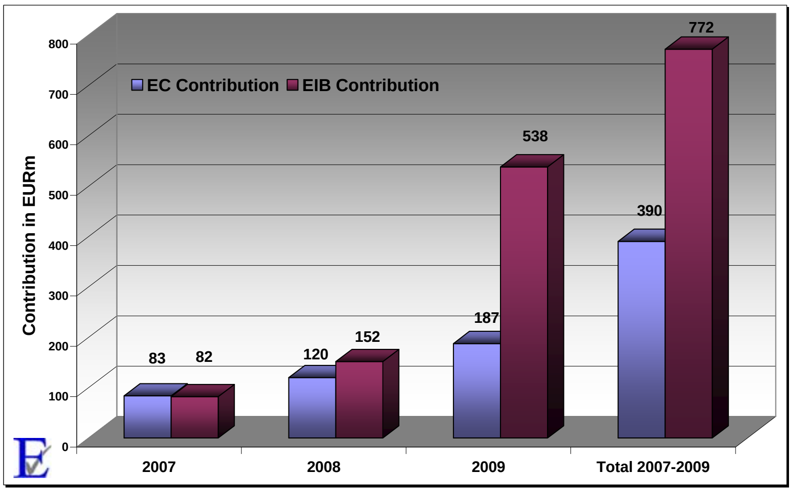
The inherent conflict between banking prudence ("EIB takes more risk, but in a controlled manner") and EC budgetary considerations ("aiming at maximising grant disbursements for good targeted projects") is visible at portfolio level. Should future losses be below expectations, the undisbursed amount under the EC window would increase, while should losses be above expectations, then the EIB would support a higher shares of these. It is likely that a (sizeable) part of the EC contribution will be available for future operations. This revolving nature of the RSFF is not clearly established in the agreement.

The specific handling of RSFF operations is still not fully established. While the RSFF agreement can be interpreted as providing a flexible framework, the motto "learning by doing" seems to be the rule rather than the exception. EV's analysis has triggered some discussions within the EIB and between the EC/EIB, contributing to some improvements but more needs to be done.

5.2.3.3 Contribution of risk-sharing partners

The following section analysed whether both partners have made their contribution as foreseen and in case there are imbalances, what are the reasons for them. The RSFF Co-operation agreement stipulates that for the period 2007-2013 the EC "*may provide up to EUR 1000 million to the EIB for the RSFF, drawn from - Cooperation up to EUR 800 million; and Capacities up to EUR 200 million*." This would be matched by EUR 1000 million from the EIB.

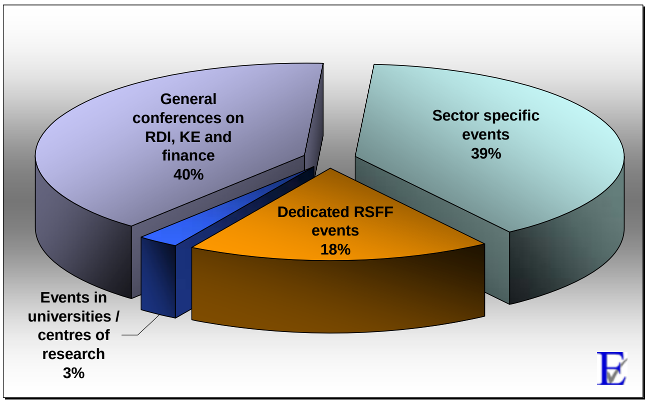
Graph: Take up of the EC and EIB contribution for approved RSFF loans 2007-2009



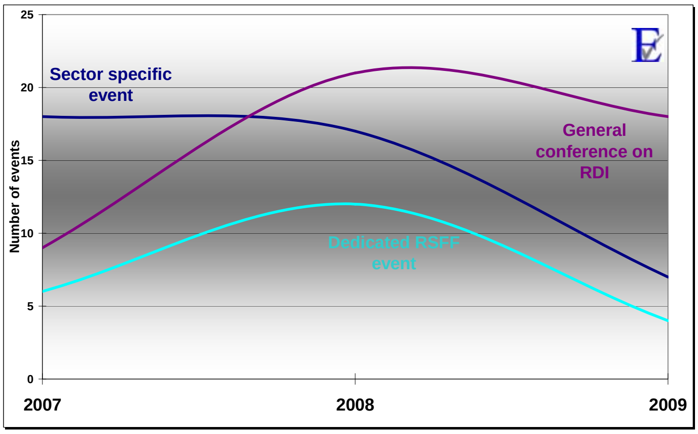
At 31.12.2009, EUR 433 m (EUR 359 m from Cooperation, EUR 74 m from Capacities) were transferred from the EC, which is fully in line with initial assumptions, as well as the subsequent second amendment of the RSFF Co-operation Agreement. This graph presents the development of the take up of funds from the EC and EIB window contributions. At 31.12.2009, out of EUR 433 m totally available EC contribution, EUR 390 m (90%) has been committed. While for the EIB window, in 2009 alone more than the initially envisaged contribution was transferred, reaching a cumulated amount of EUR 772 m for the three years. In 2007 and 2008, the take up of contribution under both windows was more or less balanced. However, the significant demand increase for RSFF in 2009 as a response to the economic crisis has led to a contribution take up shift towards the EIB window (76% versus 24% under the EC window).
In total, 8 projects with a total RSFF loan amount of EUR 188 m were put under the EIB window, even though they received full confirmation from the EC. Fully denominated foreign currency loans (projects 7, 10) as well as performance related margins increase the internal handling complexity enormously and consequently these are no longer allocated to the EC window, which limits its applicability. For some other projects, at the time of signature no further funds under the window were available. For 7 projects, (EUR 88 m), the first confirmation was received, but then ultimately put under the EIB window.

A number of potentially eligible projects under the EC window, which have received the eligibility clearing from the EC, had to be allocated under the EIB window, but might be converted in case additional amounts become available, allowing further volumes of RSFF operations.

5.3 RSFF AWARENESS RAISING – DISSEMINATION EFFICIENCY OF BOTH EU AND EIB



Awareness raising support to the RSFF instrument has been developed continuously since 2007 by four different means, ranging from the least to the most interactive: internal communication actions (presentations to staff and external offices), specific brochures and web pages, conferences and road shows targeted towards a specific audience, as well as specific RSFF workshops. The performance of these tools can be assessed by analysing their two likely effects: A direct effect, which concerns a short term consequence of an event, i.e. its immediate capacity to attract new projects and promoters, and an indirect effect, which consists in the creation of permanent communication flow spread in order to improve the understanding of the instrument and maintain the mutual relations of the actors involved. Mainly addressed through the first two categories of tools mentioned above, it would only be visible in the longer run.



Between 2007 - 2009, a total of 112 "RSFF events"[21] have taken place. The trend has slightly decreased from 35 events in 2007 to 28 in 2009. 20 events were fully dedicated for RSFF (18%), while the RSFF instrument has been mostly introduced at either a general conference on RDI, Knowledge Economy and finance or during a sector specific event (8 out of 10). A limited number of events have taken place within universities or centres of research (but of course representatives of each of these two institutions attended other events). A maximum of dedicated events took place in 2008, at a time when it was especially useful to raise awareness, with a total of 12 events, which corresponds to an occurrence of once a month.

An important proportion of events have been organised either by the EC, the EIB or by both jointly (43%), while the events managed by professional associations represent more than one third and are now as important as the first category .

When focusing on the 24 core portfolio projects that have been covered by site visits and phone interviews, many projects were initiated by a bank or a financial intermediate or through a previous relation between the promoter and the EIB (see chapter 8). Seven companies (29%) stated that they had a good overall awareness of RSFF instrument, 12 said that their knowledge of the instrument was limited ex-ante, while 21% of our sample didn't know anything about RSFF, which is not very surprising considering that at the time of their appraisal the awareness campaign was still at a very early stage.

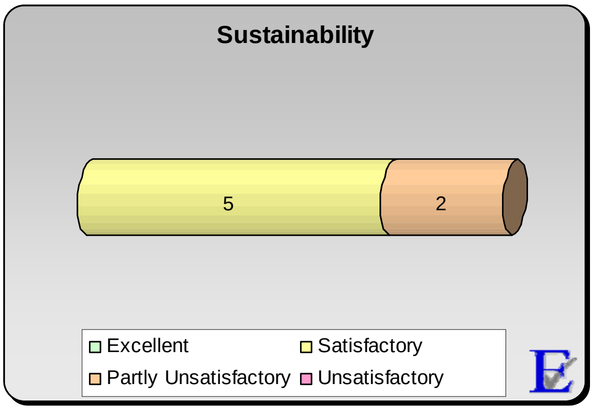
Awareness campaigns have already yielded positive results, but still more needs to be done to fully complement the increasing financing under RSFF and to reach even more companies, in particular new counterparts. Press releases for each RSFF project could usefully support this.

21 «Awareness events » are defined as any kind of occasion where the RSFF instrument was presented to an external public audience and which have been officially recorded. Besides these events there have been numerous more informal discussions and presentations about the RSFF at working level (also including contacts with the EC RTD), which have not been considered as official awareness raising events.

6 SUSTAINABILITY, ENVIRONMENTAL AND SOCIAL PERFORMANCE

Considering the inherent higher risk profile of the operations and the difficult economic environment over recent years, the outcome for sustainability is positive, since only two projects were rated partly unsatisfactory at this stage and both companies are showing signs of recovery. Given this outcome, one of the questions that arises is whether the RSFF risk profile, in particular under the EC window, might not be too risk averse?
The findings for the environmental and social performance are also positive. All projects were rated satisfactory or excellent, which is a reflection that i) they were in line with EU and/or national guidelines and ii) in addition to appropriate mitigation measures to minimise any residual negative impacts, a number show positive direct and indirect environmental externalities (for instance in the fields of renewable energy & energy efficiency, biofuels, waste management, reduced atmospheric emissions..).

6.1 SUSTAINABILITY



The early evidence of the impact and usefulness of the RSFF, in particular in light of recent difficult market conditions, its success factors and problem areas, are discussed in different parts of this report (in particular Relevance, Effectiveness, Contribution etc).

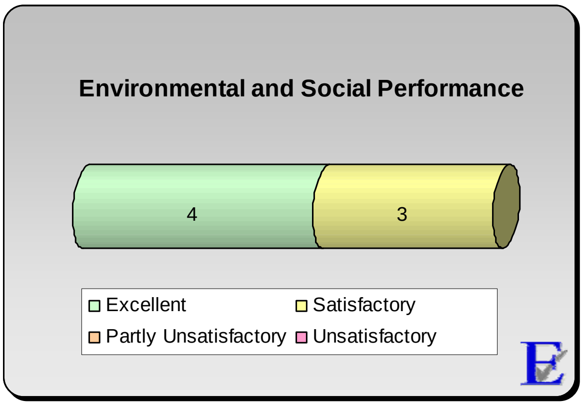
The sustainability criterion looks at the probability that the resources available will be sufficient to maintain the outcome achieved by the project over the economic life of that project, as well as the financial sustainability of the promoters based on their track record to date and their apparent prospects. The outcome is positive since only two projects were rated partly unsatisfactory at this stage and both companies are showing signs of recovery.

The physical or operational sustainability has not been called into question for any of the projects. Two project finance operations have an ensured financial viability through preferential tariff agreements (project 2 and 4). In many cases there were signs of significant improvements to the ways in which the companies were run, which promised to improve their chances of survival, even though one is particularly constrained by high levels of debt (project 5). The portfolio operation with a number of SMEs (15) lowers the overall risk profile of a set of equity type financings at the level of the diversified companies having low correlation between them. The success of one single project among the portfolio of companies appears to be sufficient to ensure the overall success of this inherently risky operation.

There were two projects (projects 1 and 8) where the financial sustainability was considered partly unsatisfactory at this stage. In both cases this was because the results in the immediate past had been poor; for project 8 as a result of a severe effect of the global financial crisis on their key markets, and for project 1 as a combination of unfavourable exchange rate fluctuations in key markets and some inefficiency in operation. Even though both companies show signs of recovery; no clear bill of health can be given at this time, hence the partly unsatisfactory rating.

Nevertheless, the economic outlook will remain highly uncertain and fragile. The consensus view remains that the recovery will be drawn out and U-shaped rather than sharp and V-shaped. The key drivers of the apparent bottoming out of the recession are temporary in character, including, most notably, government stimulus packages and restocking in some sectors. Whether these temporary factors translate into a sustained increase in private demand and world trade remains unclear.

6.2 ENVIRONMENTAL AND SOCIAL PERFORMANCE



Beyond the traditional evaluation criteria for Project Performance, EV systematically highlights and rates the Environmental and Social Performance of the projects under evaluation. It specifically considers two categories: (a) compliance with guidelines, including EU and/or national, as well as Bank guidelines at the time of project appraisal; and (b) environmental and social performance, including the relationship between ex-ante expectations and ex-post findings and the extent to which residual impacts are broadly similar, better or worse than anticipated.

The findings for the environmental and social performance are positive. All projects were rated satisfactory or excellent, which is a reflection that i) they were in line with EU and/or national guidelines and ii) beyond appropriate mitigation measures to minimise any residual negative impacts, a number show positive direct and indirect environmental or social externalities. With the exception of the solar power generation projects, all other projects did not require a specific <u>environmental impact assessment procedure</u>. The RDI projects were mainly carried out in existing laboratories and workshops, as well as at the existing plants. Where new construction has been involved, such as the implementation of a pilot plant, permitting procedures were carried out in compliance with EU, national and regional legislation and procedures. For the solar power projects, a full EIA was conducted in line with EU and national legislation. It is to be noted that the projects in the medical sector are strictly regulated and the activities (development, clinical trials and production) are submitted to very specific requirement of the EU and US registration offices.
Some promoters (projects 4 and 5) have also reinforced their environmental management systems through (ISO 14001) certification and their corporate environmental and social standard are detailed in a Corporate Responsibility Report.

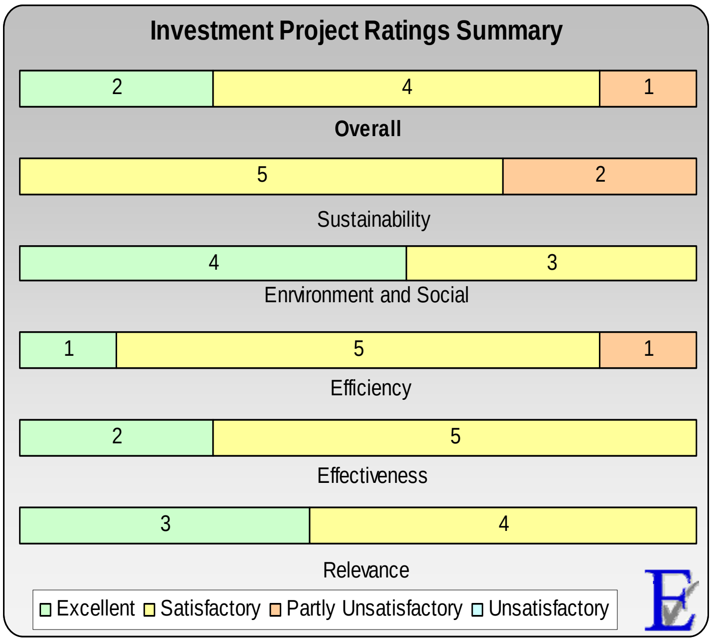
The projects' <u>environmental and social performance to date</u> is satisfactory, since where necessary appropriate mitigation measures to minimise any residual negative impacts were implemented. Even though for project 14 the environmental reporting and monitoring was not very diligent, no significant impacts have occurred.
A number of projects show wider positive direct and indirect environmental externalities (for instance in the fields of renewable energy & energy efficiency, bio-fuels, waste management, reduced atmospheric emissions). In the life science/health sector, positive social externalities were important. In fact, the improvement of medical technologies and medicines developed in the framework of the projects could generate considerable benefits for social welfare with direct positive impacts on patient quality of life. Some projects contribute significantly to the stock of knowledge on medical technology and health care provision for worldwide public health. In a wider context, the social impacts could possibly further reduce social and individual healthcare costs, therefore avoiding expenses upstream.

7 OVERALL PROJECT RESULTS

The overall ratings confirm that Bank-financed RSFF operations are performing well (at this stage), also considering in particular the risk profile of the facility.

In this context some questions arise:

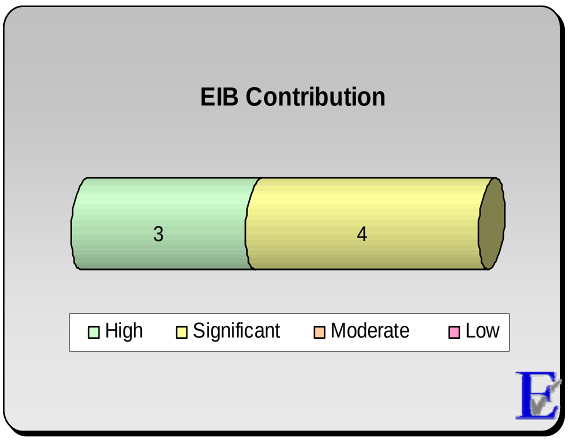
a. *What will happen to the amounts available after the end of the RSFF period in 2013?*
b. *Can the EC's RSFF contribution be returned if the RSFF ceases to exist?*



The operations were evaluated on the basis of the internationally accepted evaluation criteria of Relevance, Efficacy, Efficiency and Sustainability (see graph below). These individual ratings are considered together to produce an overall rating for the project. This is not an arithmetical exercise, and reflects the extent to which individual aspects contribute to the whole on a case by case basis. The overall ratings confirm that the performance of the Bank financed RSFF operations are performing well (at this stage), also considering in particular the risk profile of the facility. Only one operation is rated overall as partly unsatisfactory, with relative deficiencies in particular with regard to the financial sustainability.

The EU budgetary contribution helps to increase the EIB's ability to support the higher risk inherent to these operations. This makes the available loan amount a multiple of the extra provisioning to be set aside, as demonstrated before. A second implication is that this provisioning is not necessarily "spent" or consumed: to the extent that the loan operations are paid back, new operations can benefit from the amounts released. Hence, the facility could be considered revolving, which is not yet fully established in the agreement.

8 RSFF AND EIB/EU CONTRIBUTION



All EIB projects are assessed ex-ante for the contribution that the EIB involvement brings, and this contribution is evaluated ex-post to see whether the earlier assessments were accurate. Three elements are evaluated for the RSFF at this particular point in time:

- *The contribution from the RSFF loan,*
- *The additional contribution related to the RDI focus and EU partnership aspects of the RSFF,*
- *The particular value of such funding being available in a time of a financial crisis affecting the availability of credit.*

In all of the seven projects chosen for detailed evaluation the overall contribution was rated as significant or high, which is a good result demonstrating the contribution RSFF and the EIB/EC have made for these projects. In four cases, the EIB involvement and RSFF contribution were considered absolutely critical and provided several secondary benefits.
This was also confirmed by the other 17 promoters. In fact, the financial advantage of the loan, the long maturity or ability to match currency (and avoid exchange risk), the ability to diversify funding sources and the catalytic effect on the confidence of other funders seeing EIB involvement came up repeatedly as drivers for taking EIB finance. The financial crisis

had profound impacts on the structure of the European banking industry. The banking landscape and risk appetite has completely changed since the facility was initially conceived and designed. The RSFF contribution, in particular in a crisis context, was particularly high.

For the EV assessment of the EIB contribution, the new method of ex-ante appraisal for added value (introduced in 2010) was already considered, though clearly for the projects evaluated this was not the method adopted at the time of appraisal. Nevertheless it is instructive to see how these projects would be rated under the new framework, which includes the following elements – all of which are assigned a score ex-ante giving a total score out of 200 for "pillar 3" of value added:

EIB Institutional and Technical Contribution

Influence of EIB TA or advice
Improvements to procurement, environmental or social aspects
Project facilitation – would it have happened otherwise?

EIB Financial Contribution:

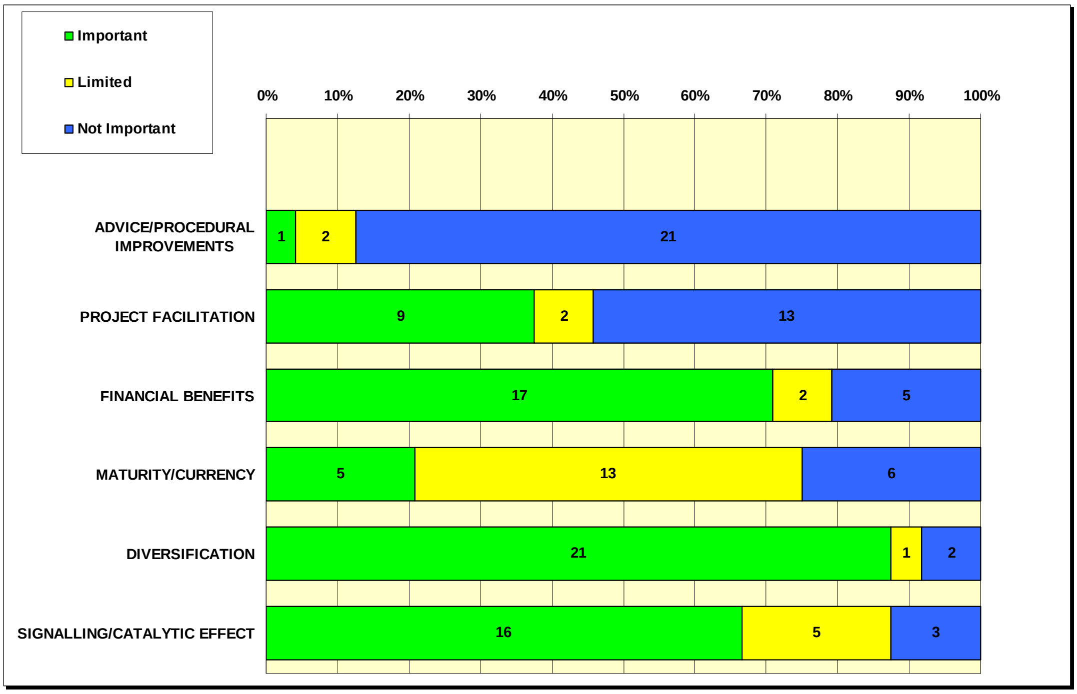
Financial benefit (pricing advantage over alternatives)
Longer maturity/grace period and choice of currency

EIB Financial Facilitation

Diversification of funding
Financial structuring and advice
Complementarity to EC or other IFI funds
Signalling effect promoting other comparable projects
Catalytic effect on other financiers

8.1 EIB CONTRIBUTION

The responses from the evaluations and phone interviews[22] (24 projects in all) on the relative importance of the different aspects of the EIB contribution are summarised in the diagram below.



22 As a general remark, the phone interviews were appreciated by many promoters as an important feedback mechanism.

The financial advantage of the loan, the long maturity or ability to match currency (and avoid exchange risk), the ability to diversify funding sources and the catalytic effect on the confidence of other funders seeing EIB involvement came up repeatedly as drivers for taking EIB finance. Indeed, various promoters reported a very high financial benefit when compared to alternatives; the EIB loan was critical for project facilitation in 11 out of the 24 cases.

Project 20: The RSFF operation was the second EIB operation with the promoter. While the first RDI operation of similar orientation was to be guaranteed by more than 40 banks, the second operation (project 20) was done as a direct RSFF operation.

Less importance was attributed to EIB's financial advice in structuring the deal or the signalling effect on similar projects. Although the professionalism of the EIB approach is appreciated it is not what draws in potential borrowers, who are much more focussed on the financial parameters listed above. In line with similar findings from evaluations within the EU, no significant contribution in terms of advice, technical assistance or improvements in practices as a result of EIB involvement have been reported (however see section 8.2 below for the effect of specific due diligence on their RDI practices).

8.2 Specific RSFF contribution

A number of aspects have already been reported in chapter 3.4. All promoters were asked whether the RSFF loan finance has been used for demonstration projects exploiting RDI results which had received FP grant funding for RDI at their earlier stage. Half of the all project promoters interviewed (12) benefited from (certain) initial grant funding from the framework programme for the projects, while the other half did not and the responses suggest that their may be barriers to achieving a larger grant share.

A number of promoters were unaware or had no specific experience in accessing the available international/EU support schemes. While acknowledging that some of the highly sensitive research activity might not be subject to any grant applications, due to confidentiality issues, a suggestion for the EIB was raised to provide, as the EU house bank, more information and possibly contacts on specific EU/EIB loan/grant blending possibilities.

Several respondents said they avoided the FP grant programmes because the administrative burden was too high for the small amounts on offer and the obligations for sharing information with the EC and other partners raised confidentiality concerns. Some of those who did pursue such grants also indicated that the amounts available would not in themselves justify the workload of the application process, but they pursued the grants in order to get together with research partners. A few seemed to see public grant money as linked to and appropriate for fundamental research, whereas the RSFF was more suited to larger downstream research programmes. Getting promoters to use the two together may prove to be a challenge.

Another question put to promoters was whether they viewed the RSFF as a new product on the market. The answer depended in part on that company's past experience with the EIB and other banks. Those who had acquired corporate loans in the past from commercial banks did not view the RSFF as new to the market, but rather as a new product for the EIB. They tended to compare RSFF terms with those of alternative corporate loans and make their decisions based on rates and maturity, though they appreciated the fact that the EIB had moved away from guarantees and intermediated loans – in essence welcoming the introduction of the RSFF. Others considered a facility specifically aimed at RDI as innovative and reacted positively to its existence.

Project 8: The RSFF loan provided by the Bank was the "right product at the right time". It ideally fitted with the investment needs and profile of the promoter. The promoter's funding was only short term debt financed and no specific R&D financing window was available to them. The RSFF product was considered both as new and innovative for this mid-cap company. It provided stability to its R&D funding and a clear and focussed dedication of the promoter towards the R&D projects. The significant amount provided a highly appreciated long term funding diversification to the promoter. The entrance of a large EU bank into the funding structure of a mid-sized company provided a stamp of approval to the promoter and gave comfort to the partner banks (at the time of appraisal).

The EIB technical due diligence expressly includes a detailed examination of their RDI activity. For those who view the RSFF as an alternative to a corporate loan with a commercial bank, this is seen as an additional burden (as the commercial banks look merely at the corporate finances) and some expressed frustration that these additional due diligence requirements were not made sufficiently clear at the outset. Those who viewed the RSFF as an innovative RDI facility were more accepting (although they still complained about the approval process, they seemed to accept it as part of the deal for getting finance for an inherently risky activity) and even cited as a benefit of EIB finance that the financial departments and RDI departments had to work together on a proposal for the first time to the benefit of both.

8.3 Effect of the financial crisis on the value of the RSFF Contribution

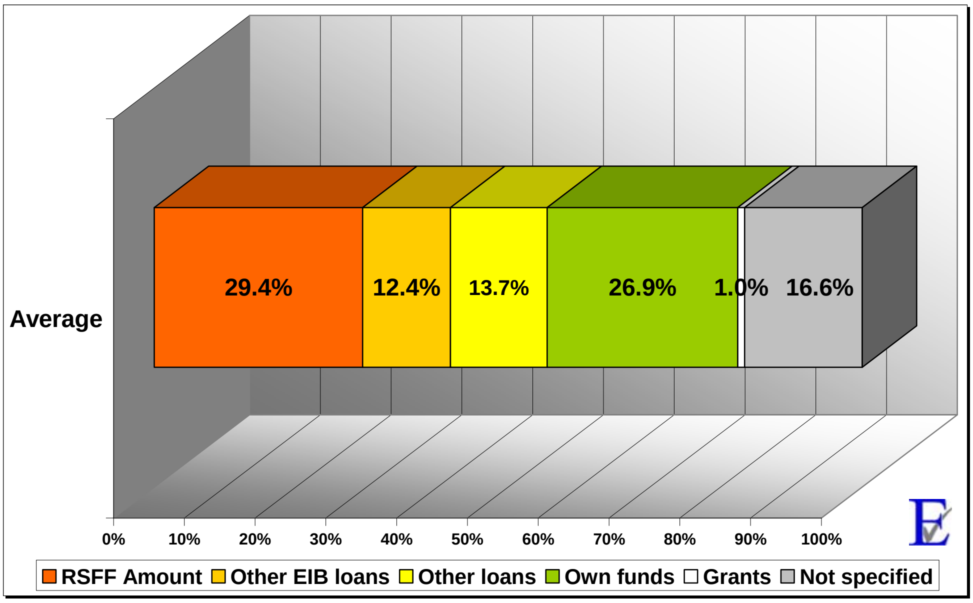
The historic financial crisis had profound impacts on the structure of the European banking industry, changing completely the framework and formerly existing "rules of the game". In fact, the banking landscape and risk appetite has completely changed since the facility was initially conceived and designed. The RSFF contribution, in particular in a crisis context, was particularly high.

Many of the projects in the RSFF portfolio were negotiated and signed in the period 2008 to 2009, a time when the volume of credit available was shrinking, the availability of long term debt was very low and the risk premium on lending was rising rapidly. As a result the premiums, maturities and loan amounts available under the RSFF became particularly favourable in comparison to the market (part of the reason why, in 9 out of the 24 projects, the promoter considers that the project might not have happened without the EIB loan). Once in contact with the EIB, many of the promoters interviewed voiced their appreciation that such a facility is available at times of financial crisis. Diversity of funding sources was cited by many as a key advantage, as their exposures to their "normal" banks was increasing and the premiums quoted for extending these facilities was beginning to look unaffordable. There is clear evidence therefore that the ability of the EIB to step in at this time was viewed very favourably. It also suggests that in future, when things recover, premiums, maturity and loan size may need to be pitched to the market rates to maintain the RSFF take up, even though for some clients, the combination of tenor and pricing offered by EIB may always be advantageous.

The analysis of the instruments' cost effectiveness for the RSFF counterparts can not be measured analytically and was therefore evaluated for the disbursed portfolio. The vast majority of promoters (87%) highly valued the RSFF loan as a cost effective instrument for their company, in particular at times of financial crisis. It can not be excluded that several promoters might consider refinancing options in the years to come, when general funding terms might have improved. A number of promoters reported that cost effectiveness was not the main driver of the RSFF loan, and that other aspects (such as funding diversification, signalling etc) were at least equally important. None of the promoters mentioned that fees incurred with the loan agreement were excessive, most of them considered these to be in line with standard market practice.

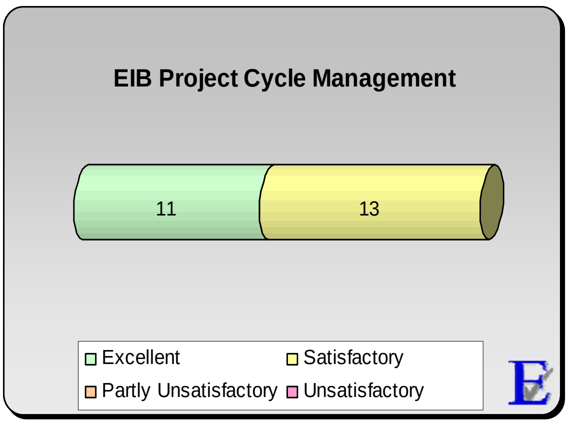
Snapshot on the <u>catalytic effect</u> of RSFF finance at portfolio level (62 projects)

The impacts and triggering effects of RSFF loans on the overall portfolio has already been discussed. One further important aspect for the overall RSFF contribution is the catalytic effect of RSFF loans, i.e. the extent and which sources of funding were chosen to complete the financial closure of the projects. This has been analysed both on the basis of the available internal project reports as well as the internal database for all approved projects. The results are presented in the graph below.



In the overall financing plan of the projects, RSFF loan amounts ranged from 27% to 34% over the years and averaged 29%. Total EIB loans amounted on average to 41%. Promoter's own funds represented around one quarter of the financing for the cumulated approved projects, while grants only have a relatively small share of around 1%. One important caveat is to be noted, since due to the non availability of specific data for a number of projects the detailed breakdown could not be established and hence a relatively important part (17%) could not be specified.

9 MANAGEMENT OF THE PROJECT CYCLE (24 PROJECTS ASSESSED)



The results for the project cycle management are good. All, except one, have already negotiated a follow-up deal or would be interested in other operations.

Appraisal times have been reduced, but signature crunch in the last month of the year increases operational risk. Internal procedures for the RSFF agreement are complex and not always clear. The agreement and the EC eligibility check should be reviewed to clarify and streamline procedures.

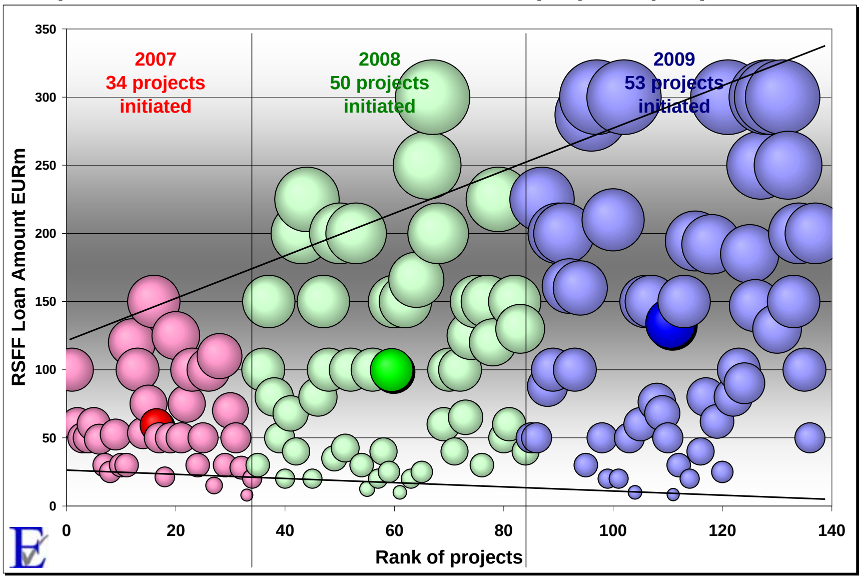
The EIB has been transformed from an extremely risk averse bank into an institution accepting more risk in a controlled manner, but the Bank should further develop the instruments (incl. IT systems), contracts and staff resources to implement this *consistently. There are clear resource implications from the shift to riskier operations. A different approach is required for RSFF operations (e.g. stricter reporting conditions in the contract and consequently enhanced monitoring) when compared to what is appropriate and feasible for standard loan products, and even more resources to monitor, both physically but in particular financially, are needed.*

So far, the RSFF has provided very good quantitative and qualitative results and has been given close attention by the services. Under a growth or stabilisation scenario at high level, every loan officer has lending targets and has to make a choice between a complex and possibly small RSFF project or the larger non RSFF one. At the same time, even though RSFF operations are often more difficult to establish, there could be a tendency that an RSFF loan is rated highly internally, but a comparable operation with a better rated company, contributing at least similarly or even more to the achievement of the Lisbon agenda, is considered as "sub-standard" or not as interesting.

From a more general perspective, the Bank might need to reflect on the set-up of its partnerships with external institutions, and in particular with the Commission. All of them have their specific requirements, which seem to differ substantially from one facility to the other. Even though this mid-term evaluation looked only at one specific facility, it seems appropriate to review and streamline, reporting, monitoring and accounting principles to the extent possible, in particular for the Commission partnerships.

The next graph shows the development and general trend of RSFF loan amounts over the years for the entire portfolio of 137 projects, illustrating increased initiation and average RSFF loan amounts. Both the scope and the width of distribution ("reverse funnel effect") have widened. The distribution ranged (in EUR m) from 8 to 150 in 2007 and from 8 to 300 in 2009. Along these lines, while the average size of RSFF projects is growing over time, the smallest projects do not disappear at all.

Graph: Initiation and size trends of RSFF projects (137) since 2007

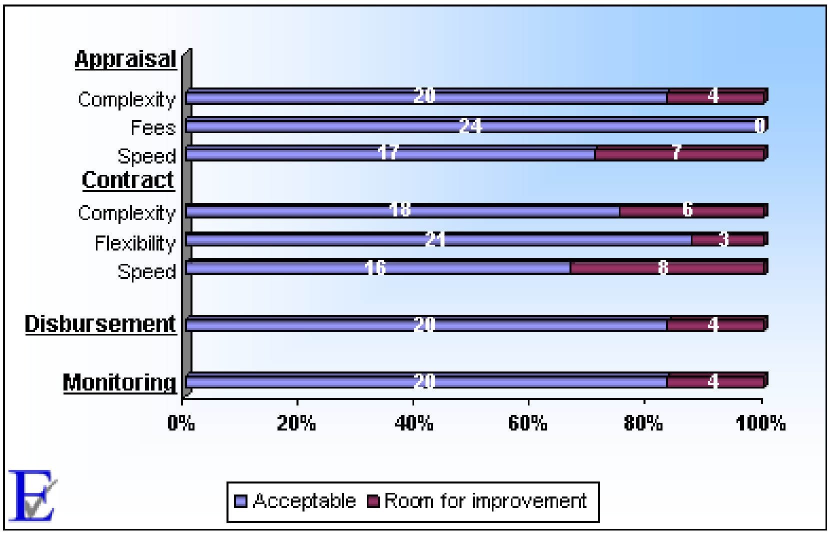


9.1 RSFF PROJECT CYCLE MANAGEMENT – A CLIENT PERSPECTIVE

The 24 promoters with disbursed RSFF loans have been contacted to examine the Bank's RSFF loan performance from a client point of view. The interviews were structured to inquire about the general level of satisfaction with the EIB project cycle management and whether a possible follow-up project was in the pipeline, which can be seen as an indicator for client satisfaction. Specific questions were asked regarding the different phases of the project cycle. A general open question was included to assess any further suggestions.

Almost half of the promoters considered the EIB project cycle management as excellent and all others as satisfactory. This is in line with the findings from the in-depth evaluations. All, except one, have already negotiated a follow-up deal or would be interested in further operations. Several promoters would have taken a bigger loan had it been available and requested that the limit be reviewed. This would probably not deter borrowers from future operations, but a number commented that they would not have pursued the process for lesser amounts.

RSFF project screening is an important early stage task in the project cycle. Discussions have revealed that only 20-25% of all potential RSFF operations were officially introduced into the pipeline. There might be a risk that projects with a high value added for the RSFF are refused due to time, resources and/or complexity considerations. Consequently, a coordinated and coherent client and project approach is required. All potential RSFF operations identified by any of the Bank's services should be reported to allow screening, prioritisation and attribution of resources. The "ownership" of the programme and the sometimes even contradictory objectives of the Bank's lending departments should be improved and clarified, namely "*who does what, when, how and with whom*". New customers were identified either through the active EIB approach (33%), as a follow up (17%) of organised seminars and quotes in publications, Eureka contacts or "word of mouth effect" from an RSFF customer. 42% of all projects entered the EIB pipeline through established contacts with the promoters or banks acting as lead arranger for certain deals.



For the majority of promoters, the **appraisal** process was acceptable and in line with the complexity of the projects and requirements from other banks, albeit notable differences in the depth of analysis can be observed. Fees directly related to the due diligence were considered to be in line with standard market prices.

More ex-ante due diligence information was requested by a number of promoters. A RSFF "Good Practice Brochure" could explain in detail the procedure and timelines for RSFF due diligence. This would also ensure the transmission of coherent and standardised information to the promoters. The brochure could also facilitate promoter contact with the EC (loan/grant blending possibilities) and with technology platforms for information dissemination.

Eligible investments for RSFF loan finance:

a) Tangible assets – buildings, equipments, etc.
b) Intangible assets – research staff costs, incremental working capital requirements, Intellectual Property Rights Acquisition.

The Bank's usual sector exclusions apply and normally the R&D budget for corporate deals to be considered is **3-4 years.** This, together with the RDI scale, should be consistently applied for all RSFF projects. A fine tuning of the scale is required to avoid a too wide RDI range for certain projects.

A similar picture could be observed for the **contracting** phase with the majority of promoters finding it acceptable, but one third considered the process to be lengthy. A number of companies claimed that the documentation requirements during negotiations were different to and greater than those for other banks (probably not a specific RSFF issue) and that the finance contract was non-standard and was adhered to too rigidly in the negotiations. This is particularly important for non repeat customers.

40% of the total amount signed under RSFF so far, or 15 out of all 45 RSFF projects, were signed in December 2009. This concentration trend, which is observable not only for RSFF projects, might have significant potential consequences with increased operational risk through pressure and congestion for inherently riskier projects. All possibilities should be explored to avoid congestions towards the year end and to ensure a better distribution of the workload.

Most promoters were satisfied with the **disbursement** process; 17% of all promoters recommended certain improvements in the draw down/interest rate quotation mechanism.

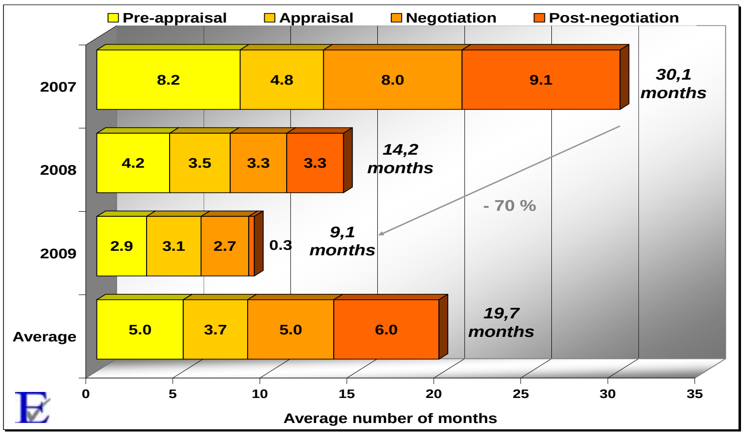
Post signature **monitoring** was acceptable for the vast majority of promoters, although the internal handling of processes by the Bank's services when certain covenant breaches and/or financial difficulties occurred was criticised by 17% of the promoters.

There is a natural misalignment of interest between a bank and a promoter in case of a deteriorating risk profile, which ultimately might involve all possible channels to gain continued support from the bank. Although there are compelling arguments for the treatment of such requests by an independent team, it does run the risk that this disconnection between the original client contacts will negatively impact on the client relationship. This handover has to be handled carefully, possibly using the current client relationship managers as the front line team in the negotiations with the client to show consistency of approach.

RSFF monitoring within the Bank has dispersed amongst various organisational units. A recurrent finding from several evaluations in recent years is the need for *better co-ordination* and more consistent/combined project monitoring and completion reporting. This should provide a comprehensive view of the Bank's services on the past and current technical, operational, financial and economic performance of the project/promoter until the time of the PCR. Financial monitoring has to be carried out through the loan lifetime until final maturity, which may be considerably longer. Continued involvement of the technical departments after PCR might be required, to deal with potential risk issues occurring post PCR. This is particularly important for projects where the EIB takes direct risk, as well as at times of a downturn.

BOX – RSFF – Time to approval/signature/disbursement and procedural aspects

A reduction is notable over time (N.B. number of projects initiated in 2007 and before: 20; 25 projects in 2008 and 17 projects in 2009).



The issues of the size and complexity of documentation, the administrative burden of the loan, flexibility on standard clauses etc. have particular relevance for smaller companies and it is proving to be a challenge to target SMEs with the RSFF as desired.

There are clear resource implications from the shift to more risky operations. What might have been appropriate and feasible with standard loan products, where the Bank had some inherent risk aversion and all partners applied a certain performance code of conduct (in fact, system relevant banks have been safeguarded in the EU during the crisis), has changed with the RSFF; RSFF operations require a different approach (e.g. stricter reporting conditions in the contract and consequently enhanced monitoring) and more resources to monitor, both physically and financially, the performance of non-repeat borrowers. In particular, the orientation towards more SME/Mid-cap companies requires follow up, since contrary to their traditional house banks, the EIB is often too remote from their day to day business activities. At the same time, the internal learning curve for these sub-investment grade operations has been very significant.

9.2 COOPERATION WITH EU COMMISSION/MEMBER STATES AND ELIGIBILITY CHECK

The complementarity of grant and loan financing has been previously discussed. Coordination and approval procedures with Member States for RDI projects have changed over time. Governmental approval in the early days of the RSFF was required only when 10% or more of the project was realised in a given country. This is now required even for marginal shares, thereby increasing the administrative burden significantly for multi-country projects (all RDI projects – RSFF and non-RSFF).

Ensuring compliance with the eligibility criteria set for RSFF projects to be supported under the EC window?

On a general tone, the parties interviewed in the context of the evaluation have confirmed that there is an atmosphere of trust and good cooperation between the EC's and the EIB's designated services, which has increased over time.

The RSFF agreement foresees that for certain RSFF operations the EC RSFF designated Services have to confirm their eligibility to the EIB with regard to using the EC contribution. An EC eligibility committee (at least 3 members) acts by consensus on approval/refusal or postponement of proposals. The eligibility checklist is prepared by the EIB and the EC should react within 20 business days. Should there be any specific question the EC would revert to the Bank's services. This 20 days approval deadline is considered rather exceptional for the Commission. Once the Board report is available, the request for final confirmation is sent to the EC again and final confirmation is to be received within 14 business days, otherwise it is considered to be approved.

Even though a notable learning process could be observed and the information input has improved, from an administrative perspective this process is still relatively heavy and could probably be streamlined:

a) For RSFF customers, it is irrelevant whether the amount comes from the EC or EIB window. Information at early stages of the appraisal cycle, in particular for corporate RDI programmes, is usually not that detailed. The process foresees different steps (first reaction and final confirmation) of interaction with the EC, which seems to be duplicating efforts.
b) Earmarking and blocking of EC allocations could be improved, as amounts are often blocked too early and are no longer available.

The EC RSFF specific approval process could be streamlined by reducing the eligibility check to one operation, to be done once the Board report is finished and all information is available. The EC would at this stage have the decision to accept or not. The final reservation and blocking of EC amounts (GP and CA) for project under the EC window should be done at a later stage, i.e. at signature, which would give more flexibility. It has to be ensured that the check lists are consistently fulfilled and verified.

The length of the eligibility check for the EU Commission has been verified using both EIB and EC sources. The eligibility check time is in line with the initial agreements, even though there are important differences between the average time from EIB sources and from EC sources (11 days). This indicates some discrepancies as regards the respective accounting systems. The share of projects that have needed additional information is one out of three on average, while this proportion has slightly decreased since 2007, despite an important increase in 2008.

RSFF procedural aspects
While the RSFF agreement provides a flexible framework, it should be reviewed together with its internal application and checked in order to clarify and streamline procedures. This could be done through an EIB working group between the parties concerned, supported by internal audit.

ANNEX 1: LIST OF DISBURSED PROJECTS (AS OF 31.12.2009)

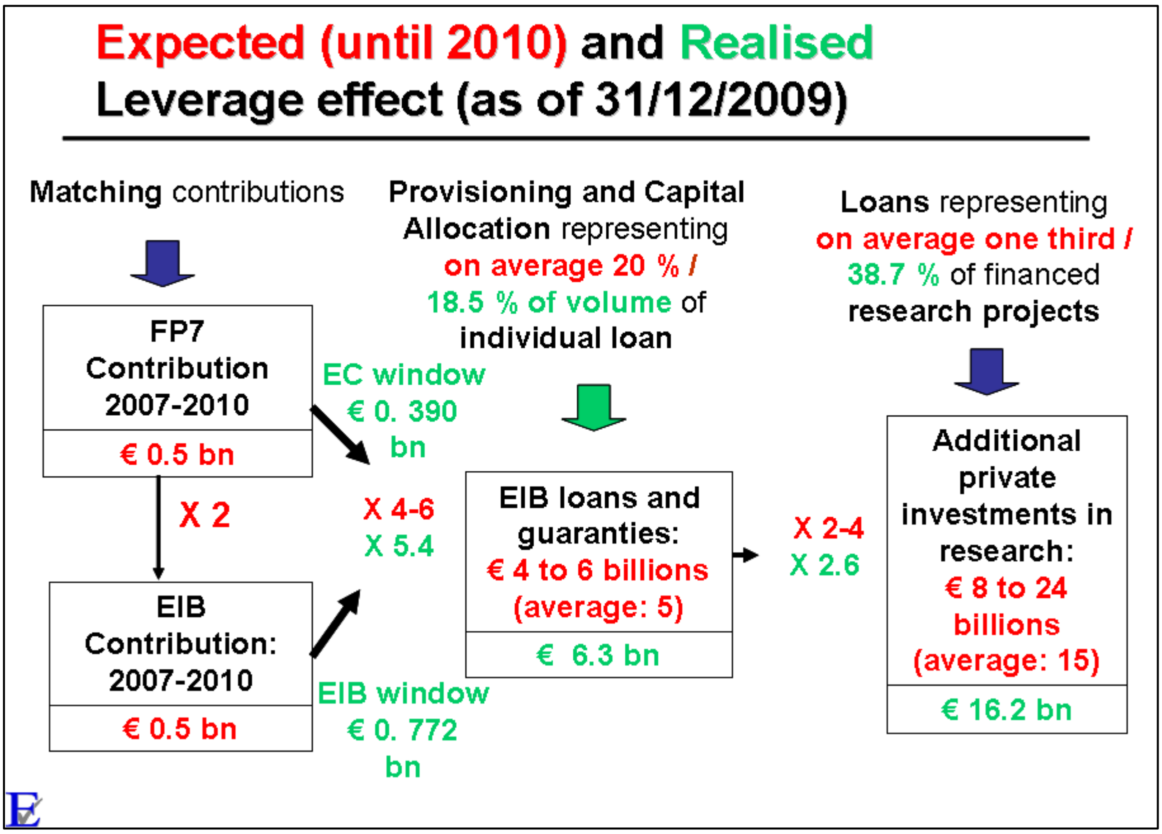
PROJECT NUMBER	SECTOR	PROJECT SIZE* (EUR M)	RSFF LOAN SIZE** (EUR M)	WINDOW
1	Life Science	Medium	Medium	EIB
2	Energy	Large	Medium	EIB
3	Energy	Medium	Medium	EIB
4	Energy	Medium	Medium	EC
5	Energy	Medium	Small	EC/EIB
6	Life Science	Medium	Small	EC
7	Industry	Medium	Medium	EIB
8	Industry	Medium	Small	EC
9	Industry	Medium	Small	EC
10	Life Science	Medium	Medium	EIB
11	Life Science	Large	Medium	EC
12	Industry	Large	Medium	EIB
13	Energy	Large	Large	EIB
14	ICT	Medium	Small	EIB
15	Life Science	Medium	Small	EIB
16	Industry	Medium	Medium	EIB
17	Industry	Small	Small	EC
18	Industry	Large	Large	EIB
19	Life Science	Medium	Medium	EIB
20	Energy	Large	Large	EIB
21	ICT	Large	Large	EIB
22	Life Science	Large	Large	EC
23	Industry	Large	Large	EC
24	Industry	Large	Small	EIB

Project 1, 2, 4,5,8,14,15 have been evaluated in depth, for all others phone interviews were conducted

* Project size – small < 100, medium 100 – 300, large > 300.

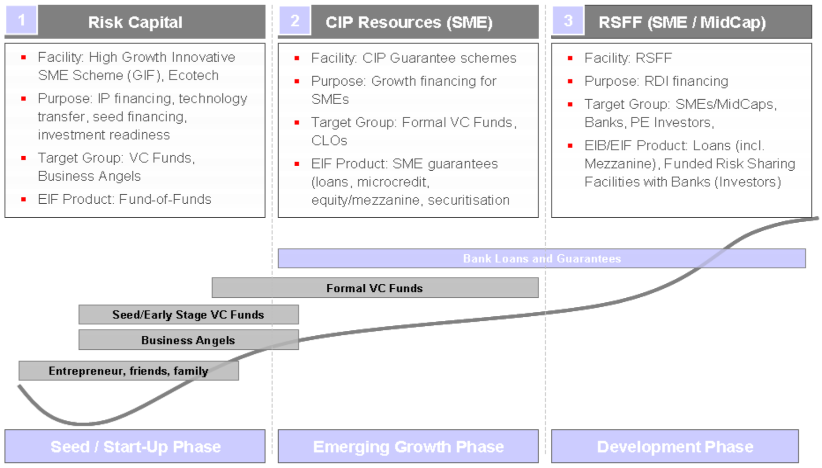
** RSFF loan size – small < 50, medium 50 – 100, large > 100

ANNEX 2: LEVERAGE EFFECT 31.12.2009

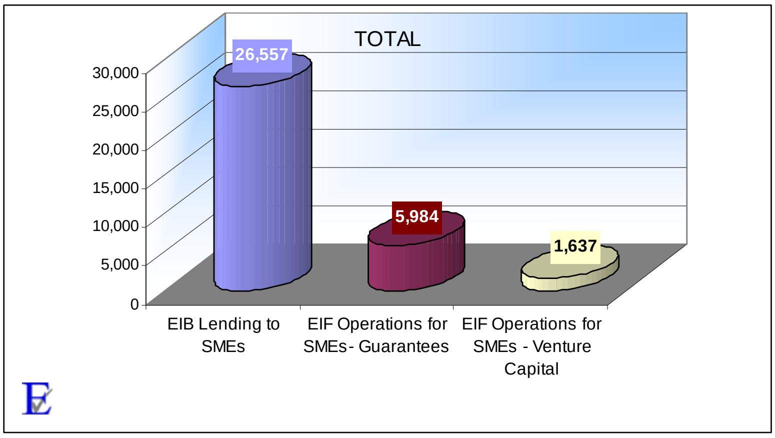


ANNEX 3: COMPLEMENTARITY AND SYNERGIES OF SME FINANCE WITH OTHER EIB GROUP INSTRUMENTS

Under the High Growth and Innovative SME Facility (GIF), the **EIF** invests in funds, which provide venture capital for SME financing. The GIF is funded by the European Community under the Competitiveness and Innovation Framework Programme 2007-13 (CIP). The EIF manages the GIF on behalf of the European Commission. The GIF's objective is to improve access to finance for the start-up and growth of SMEs, and investment in innovation activities, including eco-innovation. The GIF aims to achieve this objective by: a) contributing to the establishment and financing of SMEs and the reduction of the equity and risk capital market gap which prevents SMEs from exploiting their growth potential, with a view to improving the European venture capital market, b) supporting innovative SMEs with high growth potential, in particular those undertaking research, development and other innovation.

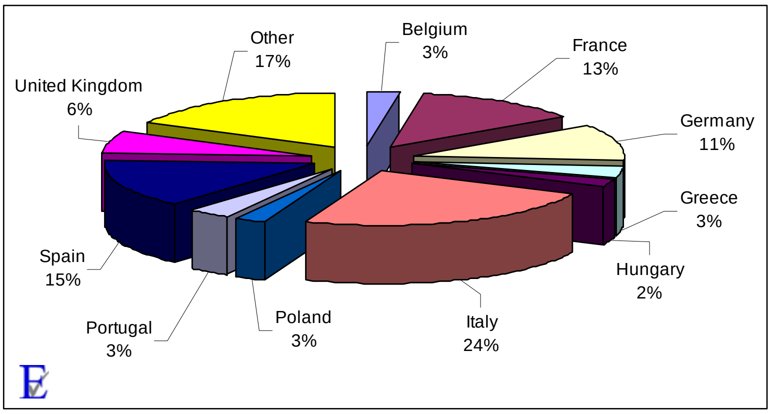


Graph: EIB Group Financing for SMEs 2007-2009



Total lending for SMEs over the last three years amounted to EUR 34.1 bn. EIB lending for SMEs amounted to EUR 26.5 bn (77.7%), to which another EUR 7.6 bn was contributed through EIF resources (6.0 bn guarantees; 1.6 bn 4.8% VC). The cumulative financing of the EIB group in favour of SMEs as well as the geographical distribution is depicted in the graphs. No specific information on the share of RDI financing for SMEs is available. The leverage effect of the financing for SMEs is significant not only with respect to the lines of credit, but in particular for venture capital operations, whereby the leverage effect amounts to at least 5.

Graph: Geographical distribution of the EIB Group Financing for SME's 2007-2009



The EIB Group has a number of financial products available to support SME's, however whether a RSFF loan is the right product for an SME requiring more equity type finance remains an open question.

EUROPEAN INVESTMENT BANK
OPERATIONS EVALUATION (EV)

In 1995, Operations Evaluation (EV) was established with the aim of undertaking ex-post evaluations both inside and outside the Union.

Within EV, evaluation is carried out according to established international practice, and takes account of the generally accepted criteria of relevance, efficacy, efficiency and sustainability. EV makes recommendations based on its findings from ex-post evaluation. The lessons learned should improve operational performance, accountability and transparency.

Each evaluation involves an in-depth evaluation of selected investments, the findings of which are then summarized in a synthesis report.
The following thematic ex-post evaluations are published on the EIB Website:

1. Performance of a Sample of Nine Sewage Treatment Plants in European Union Member Countries (1996 - available in English, French and German)
2. Evaluation of 10 Operations in the Telecommunications Sector in EU Member States (1998 - available in English, French and German)
3. Contribution of Large Rail and Road Infrastructure to Regional Development (1998 - available in English, French and German)
4. Evaluation of Industrial Projects Financed by the European Investment Bank under the Objective of Regional Development (1998 - available in English, French and German)
5. An Evaluation Study of 17 Water Projects located around the Mediterranean (1999 - available in English, French, German, Italian and Spanish).
6. The impact of EIB Borrowing Operations on the Integration of New Capital Markets. (1999 – available in English, French and German).
7. EIB Contribution to Regional Development A synthesis report on the regional development impact of EIB funding on 17 projects in Portugal and Italy (2001 – available in English (original version), French, German, Italian and Portuguese (translations from the original version)).
8. Evaluation of the risk capital operations carried out by the EIB in four ACP countries 1989-1999 (2001 - available in English (original version), French and German (translations from the original version)).
9. EIB financing of energy projects in the European Union and Central and Eastern Europe (2001- available in English (original version), French and German (translations from the original version))
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12. Evaluation of the impact of EIB financing on Regional Development in Greece (2003 – available in English (original version) and French (translation from the original version)).
13. Evaluation of Transport Projects in Central and Eastern Europe (2003 – available in English (original version).
14. EIB Financing of Urban Development Projects in the EU (2003 – available in English (original version), French and German (translations from the original version)).
15. Evaluation of the Projects Financed by the EIB under the Asia and Latin America Mandates (2004 – available in English (original version), French, German and Spanish).
16. Evaluation of EIB Financing of Airlines (2004 – available in English (original version) French and German)
17. Evaluation of EIB Financing of Air Infrastructure (2005 - available in English (original version) German and French)
18. EIB financing with own resources through global loans under Mediterranean mandates (2005 - available in English (original version) German and French.)
19. Evaluation of EIB Financing of Railway Projects in the European Union (2005 - available in English (original version) German and French.)
20. Evaluation of PPP projects financed by the EIB (2005 - available in English (original version) German and French).

21. Evaluation of SME Global Loans in the Enlarged Union (2005 - available in English (original version) and German and French.)
22. EIB financing with own resources through individual loans under Mediterranean mandates (2005 - available in English (original version) and German and French.)
23. Evaluation of EIB financing through individual loans under the Lomé IV Convention (2006 - available in English (original version) German and French.)
24. Evaluation of EIB financing through global loans under the Lomé IV Convention (2006 - available in English (original version) German and French.)
25. Evaluation of EIB Investments in Education and Training (2006 - available in English (original version) German and French.)
26. Evaluation of Cross-border TEN projects (2006 - available in English (original version) German and French).
27. FEMIP Trust Fund (2006 - available in English.)
28. Evaluation of Borrowing and Lending in Rand (2007 - available in English (original version) German and French).
29. Evaluation of EIB Financing of Health Projects (2007 - available in English (original version) German and French).
30. Economic and Social Cohesion - EIB financing of operations in Objective 1 and Objective 2 areas in Germany, Ireland and Spain (2007 - available in English. (original version) German and French)
31. Evaluation of EIB i2i Research, Development and Innovation (RDI) projects (2007 - available in English) (original version) German and French).
32. FEMIP Trust Fund - Evaluation of Activities at 30.09.2007 (2007 - available in English.)
33. Evaluation of Renewable Energy Projects in Europe (2008 - available in English (original version) German and French).
34. Evaluation of EIF funding of Venture Capital Funds – EIB/ETF Mandate (2008 - available in English.)
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40. Evaluation of EIB Financing in Candidate and Potential Candidate Countries between 2000 and 2008 (2009 – available in English (original version) and French).
41.)
42. Evaluation of Operations Financed by the EIB in Asia and Latin America 2000 and 2008 (2009 – available in English (original version) Spanish and French).
43. Evaluation of Operations Financed by the EIB in Neighbourhood and Partnership Countries between 2000 and 2008 (2009 – available in English).
44. Evaluation of Special Dedicated Global Loans in the European Union between 2005 and 2007 (2009- available in English).
45. Evaluation of i2i Information and Communication Technology (ICT) projects (2009- available in English).
46. Evaluation of Activities under the Risk Sharing Finance Facility (RSFF) (2010- available in English).

These reports are available from the EIB website:
http://www.eib.org/projects/evaluation/reports/operations/index.htm

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