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Operations Evaluation

EIF Venture Capital Operations: ETF and RCM Mandates

Synthesis Report

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This evaluation has been carried by Operations Evaluation, the Evaluation department of the EIB Group.

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List of Acronyms

ASAP	Amsterdam Special Action Programme
BMWA	German Federal Ministry of Economics and Labour
EC	European Commission
EIB	European Investment Bank
EIF	European Investment Fund
ETF	European Technology Fund
EU	European Union
EV	Operations Evaluation
EVCA	European Private Equity and Venture Capital Association
I2i	Innovation 2010 Initiative
IG	Investment Guidelines
IRR	Internal Rate of Return
PC	Portfolio Company
PE	Private Equity
RC	Risk Capital
RCM	Risk Capital Mandate
SME	Small and Medium Sized Enterprise
UK	United Kingdom
US	United States
VC	Venture Capital

Executive Summary

Introduction

This evaluation is the second evaluation performed by Operations Evaluation (EV) for the European Investment Fund (EIF)[1]. The objective of the evaluation is to provide an assessment of the European Investment Bank (EIB) venture capital mandates to the European Investment Fund (EIF)[2]. To date, the EIB has given the EIF three such mandates: the European Technology Facility Mandate (ETF, 1997), a follow-up mandate known as ETF-2 (1999) and the Risk Capital Mandate (RCM) signed in 2000 and which is committed through annual tranches. EIB Mandates included more than € 3 billion at the end of 2006, which represents about 80% of the EIF's activity in venture capital. The rest is fund through its own resources (9.5%) and through third party mandates. These include mandates from the European Commission (7%) and the German Federal Ministry of Economics and Labour (2.8%).

The evaluation focuses on the Relevance of the Mandates, which includes: the consistency of the Mandates with respect to the policy framework as well as the design of the mandates (their internal coherence and their relevance to the venture capital market in which they operate). A section on performance reflects the current status of Mandate implementation and concentrates on those aspects that complement and illustrate the analysis on Relevance. Likewise, the Role of the EIF as a fund of funds manager is reviewed where it complements and illustrates the analysis on Relevance. Due to the youth of the portfolio, the evaluation does not include in-depth evaluations of the individual operations.

Relevance and design of the Mandates

It is concluded that while ETF objectives are clearly aligned to the Amsterdam Resolution, the objectives of the RCM mandates could be better aligned to EU policies as the specific objective of the Mandate is announced as contributing to develop a venture capital market while the Council Resolutions calls the EIB for "*redirect funding towards support for business start-ups, high-tech firms and micro-enterprises...*" (§ 2.1)

The Mandate provides too many different policy objectives and does not prioritize among them. There are a series of objectives, targets and constraints. Some targets and constraints are even redundant, mix different conceptual levels or do not take sufficiently into account the characteristics of the market in which the Mandates operate. Even more important, it does not explicitly tackle the key issue of the equilibrium between policy and financial objectives even if this is a key element to define the investment strategy. (§ 2.2)

As a consequence, the Mandate leaves ample room for interpretation on the role to be played by the EIF as a public institution contributing to EU policies and thus on the implementation of the Mandate. In practice, today, it is the request for self-sustainability, and therefore for increased financial returns, that is mainly reflected in the investment strategy, resulting in a portfolio structure that is now closer to that of a private fund-of-funds than in the past.

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[1] This report has been prepared in consultation with the EIF services and the EIB services. In line with EV Terms of reference agreed with the EIF, the final report has been submitted to the EIF services which have added their response to the recommendations before the report is sent to the EIF Board of Directors for discussion; at this stage EIB services were not involved.

[2] Hereinafter referred to as the Mandates.

Performance: Mandate Implementation

It is concluded that there are two clearly distinct periods. Before 2003, policy targets were mostly taken into account and the financial return of the Mandates' portfolio was below all benchmarks. In 2003, the EIF proposed, and the Bank accepted, a change on the investment strategy aimed at achieving positive returns. It is still early to see the full effect of the "rebalancing" of the portfolio but there are already clear indications of the improvement of the financial return of the Mandates portfolio. This improvement has been achieved at the cost of reducing the extent to which policy objectives are achieved and in particular the focus on early stage, innovative SMEs, but has contributed to other Lisbon objectives. (§ 3)

Role of the EIF / EIF Contribution

Three aspects are analyzed: the role of the EIF in determining the investment strategy, its catalytic effect on the market and the support to first-time funds. It should be recalled that the analysis is restricted to the EIB Mandates and therefore does not take into consideration EIF's role or contribution under other mandates.

The EIF has played a **decisive role in determining the investment strategy** particularly since 2003 when it proposed the "rebalancing" of the portfolio. This aspect is also discussed under the analysis of the design of the mandates and their implementation. (§ 4.1)

It is assumed that the EIF could have achieved a catalytic effect through four channels: (i) a signalling effect on the expected returns, (ii) a signalling effect on the governance and the terms and conditions of the funds, (iii) a volume effect, and (iv) a counter-cyclical behaviour. It is concluded that **EIF's catalytic effect** has mainly been channelled through the signal it conveys to the market in terms of governance and terms and conditions. The signal in terms of expected returns is not strong enough as the results of the Mandates' portfolio are not superior to the market. Finally, within the limits imposed by the Mandates, the EIF has also had a positive contribution by increasing its share in investee funds in periods of tight market. (§ 4.2)

The **EIF has supported first-time teams** during the first part of the period but later on this support decreased significantly, following the portfolio "rebalancing" as well as a generalized market trend. The Mandates do not tackle the fact that the support to first-time funds can be consider as a contribution to the development of an European venture capital market but that this strategy presents a higher risk profile. (§ 4.3)

Table of recommendations

EV	Response from the EIF Services
R1 - Consider reformulating the key objective of the Mandate Currently the objective is stated as contributing to develop VC markets while the policy framework would call for an objective of supporting funding of innovative SMEs through the provision of venture capital.	*EIF services take note of this recommendation and will make proposals accordingly to the EIB. EIF services also suggest to consider in the reformulating of the mandate's key objectives the contribution Ms[2] transactions have on the "sustain economic growth" (cf. Lisbon's intermediate objectives), which were not considered by the council decision.*
R2 - Clarify the role to be played by financial performance vs. policy objectives This is a key element defining the investment strategy with clear consequences on the extent in which policy objectives can be implemented. The Bank and the EIF should make an explicit choice to settle on this trade-off. The result should ensure that the Mandate responds to the request of the Council while taking into consideration the dynamics of the market. Objectives should as possible be measurable and terms, such as for example "self-sustainability", should be clearly defined.	*EIF services take note of this recommendation and will make proposals accordingly to the EIB. However EIF services do not consider that there is a clear trade-off but that the policy objectives have to be defined with financial safeguards.* *So far RCM mandate self-sustainability has been set as a "shadow" financial objective. But further clarifications should be introduced to know whether sustainability should include inflation, treasury return, or a premium related to the private equity risk level, and finally take into account the management fees cost or not.*
R3 - Ensure Mandate coherence The mandate can gain in coherence and clarity by simplifying it. This should be done after a thorough discussion between the EIB and the EIF on the role of the EIF as a public institution contributing to EU policies. Adding changes to the Mandates without ensuring overall coherence should be avoided.	*EIF services take note of this recommendation. However, it has to be highlighted that due to the market evolutions regular changes are required in order to maintain the mandate efficiency and effectiveness.* *The board of EIB has already approved modifications to the terms of the original council decisions and we recommend that this approach be followed again, when the terms are agreed, to avoid the original Council decision to become outdated in relation to current economic, financial policy objectives.*
R4 - Reduce significantly the number of targets aimed at and conditions imposed If more than one target or condition is kept, there should be an explicit prioritization. Special care should be taken to avoid setting "higher level" objectives as a target for the Mandate (such as employment or regional cohesion) A simplified and clearer Mandate will help managers to monitor implementation, operators to execute it and external observers to understand the rationale behind the investment strategy.	*EIF services take note of this recommendation and will make proposals accordingly. A focus could be brought on the communication angle to improve the understanding of the mandates by beneficiaries and external observers.*

R5 - RECONSIDER CO-INVESTMENT Given the context of the Mandates and their implementation so far, the question of the need for co-investments should be reassessed.	*EIF services agree with this recommendation. As already mentioned in the past, for the reasons developed under 2.2.2.c) & 3.2.5. but also as the co-investment obligation precludes EIF from the standard market practice of adjusting and managing its portfolio (as a whole an important issue as it absorbs 50% of EIF's resources, increasing to EUR 500m) through new fund investments.*
R6 - CONSIDER THE DEVELOPMENT OF NEW FINANCIAL PRODUCTS TO EFFECTIVELY SUPPORT SMEs The "one size-fits-all" approach can aggravate the trade-off between policy and financial objectives while an approach allowing for a menu of different instruments that can be used in different market contexts may allow aligning them. Having different product (e.g. more later stage in less sophisticated VC markets) for different markets may better support SMEs development. This should be set taking into consideration the existence of other mandates and instruments managed by the EIF.	*EIF services take note of this recommendation and will make proposals accordingly to the EIB. Since the launch of RCM, EIF has taken under management instruments/mandates which can be better adapted to specific markets/objectives. For example:* *- with JEREMIE, a specific regional financial instrument, the regional focus of RCM may be relevant* *- with EC mandates, which have been changed in the past 5 years, the emerging teams focus of RCM may also be less relevant.*
R7 - CONSIDER CHANGING REPORTING SCHEMES a) The portfolio review has shown the interest of presenting portfolio results by periods rather than (only) over the whole period. This approach should be included in the periodic implementation reports. b) No report on employment should be requested as it is not a direct effect to be aimed at by the Mandate. One-off studies on overall effects on employment would be more appropriate.	*EIF services agree with this recommendation.*

EIF General comments

The EIF Board takes note of the EIF services general comments that, based on the remarks and recommendations outlined in this report, EIF services will prepare a report to detail a series of proposals. These proposals will be a basis for discussion of EIF Board after discussion with the EIB services, which after agreement would then be translated into practical measures and put in place in an agreed timeframe and keep the EIF board informed along the way.

1. Introduction

1.1. Purpose

This evaluation is the second evaluation performed by Operations Evaluation (EV) for the European Investment Fund (EIF). It follows the "Evaluation of EIF funding of Venture Capital Funds – EIB/ETF Mandate", completed in December 2006. In accordance with EV's Terms of Reference, the general objective of the evaluation is to provide an assessment of the European Investment Bank (EIB) mandates to the EIF[3]. The evaluation focuses on the Relevance of these Mandates, which includes: the consistency of the Mandates with respect to the policy framework as well as the design of the mandates: their internal coherence and their relevance to the venture capital market in which they operate. A section on performance reflects the current status of Mandate implementation and concentrates on those aspects that complement and illustrate the analysis on Relevance. Likewise, the Role of the EIF as a fund of funds manager is reviewed where it complements and illustrates the analysis on Relevance. The evaluation is primarily intended to assist the EIF and its governing bodies in the formulation of future policies and strategies.

1.2. Scope

EIF's venture capital (VC) operations are funded through its own resources (9.5% of total net approvals as per December 2006) and through third party mandates. These include mandates from the EIB (80.7%), the European Commission (EC) (7%) and the German Federal Ministry of Economics and Labour (BMWA) (2.8%).

Table 1 - EIF use of sources (million EUR)

Resources	Signatures	Disbursements
EIB	3176	1892
Legacy portfolio	826	755
ETF + ETF-2	*244*	*199*
RCM (All)	*2106*	*938*
EIF	352	206
Commission	265	123
BMWA	106	33
Total	**3899**	**2254**

While the first evaluation focused on the implementation of the ETF mandate, the present evaluation covers all VC mandates given to the EIF by the EIB excluding the Legacy Portfolio. The evaluation of the ETF mandate included the in-depth evaluation of a number of operations. Due to the youth of the portfolio under ETF-2 and RCM, the present evaluation does not include such in-depth evaluation and concentrates on the relevance of the mandates and the status of their implementation.

1.3. The mandates

To date, the EIB has given the EIF three venture capital mandates: the European Technology Facility Mandate (ETF, 1997), a follow-up mandate known as ETF-2 (1999) and the Risk Capital Mandate (RCM) signed in 2000. These Mandates include Investment Guidelines which provide for the rules of implementation of the agreement. In the case of the RCM, the Investment Guidelines have been adjusted four times, notably in November 2003, June 2004, April 2005 and March 2006[4]. There is no pre-defined trigger to modify the Investment Guidelines; changes have been driven mainly to adjust the agreement at the request of the parties. As shown below, these Investment Guidelines introduce

> The RCM mandate is committed by the EIB to the EIF through successive annual tranches of variable amounts known as RCM1, RCM2 … RCM6.

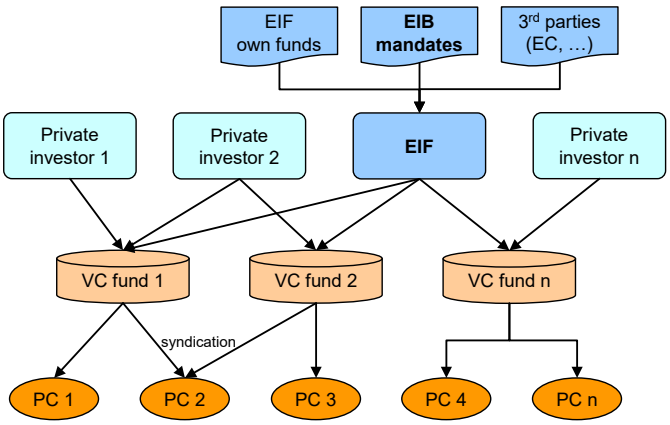
[3] Hereinafter referred to as the Mandates.

[4] Through this report the different versions of the Investment Guidelines will be referred to as RCM/IG-2000, RCM/IG-2003, RCM/IG-2004, RCM/IG-2005 and RCM/IG-2006.

significant changes to the extent that for the purpose of the evaluation they can be considered as if they were different mandates.

All mandates are designed to allow the EIF to invest in venture capital funds that will in turn invest in SMEs[5]. EIF investments in venture capital funds are made *pari passu* with private investors, which should represent at least 50% of the funds – following the Mandates' rules as well as Community regulation on state aid. Figure 1 illustrates some major relationships of the relevant parties involved in the EIF's venture capital activity.

Fig 1 - Major relationships in VC activity



Note: PC stands for Portfolio Company

While the aim of private investors is to achieve the highest possible financial return, **EIF investments aim to achieve policy objectives that are defined in the Mandates**. The Mandates also define numerous rules of functioning such as the type of SMEs or the stage targeted, the geographical focus, the definition of the SME, the authorized size and nature of the operations, etc. The relevance and coherence of the objectives and rules of functioning of the Mandates are assessed in Section 2.

1.4. The European venture capital industry[6]

Since the late 90's, the European venture capital markets have gone through three distinct periods: Between **1998 and 2000** the venture capital market had a boom period. In 2000, € 22 billion were raised, more than a three-fold increased with respect to the € 6.7 billion raised in 1998. In the meanwhile, buyout funds managed to raise € 24 billion, a two-fold increase with respect to 1998.

The period between **2001 and 2003** has been called the "nuclear winter of venture capital". In 2003, at the bottom of the cycle, only € 5.7 billion were raised. As consequence, capital available to finance early stage and expansion companies was significantly reduced from € 20 billion in 2000 to € 8 billion in 2003. The crisis had a more limited effect on buyout funds: In 2003, these funds raised € 21 billion and invested € 18 billion, up from € 14 billion in 2000.

Three distinct periods for the European venture capital industry

1998-2000
The booming of VC with a three-fold increase of funds raised and funds invested. A five-fold increase of funds raised for early stage.

2001-2003
The collapse of VC with funds raised at one quarter of the level of 2000. One fifth for early stage.

2004-2006
The fragile recovery of VC and the boom of buyout.

This report will often refer to those 3 periods for a better understanding of the results and of the evaluation.

Since 2004, the venture capital industry is slowly recovering. In 2006, € 17.5 billion were raised for venture capital funds; still lower than the amount raised in 2000 but already three times more than the funds raised in 2003. At the same

5 RCM refers to "risk capital structures". Since 2003, it was allowed to invest also in funds-of-funds.
6 A more detailed account of the European VC industry is presented in Annex 3.

time, fundraising for the buyout segment has grown exponentially. The amount raised per year has more than quadrupled to € 85 billion in 2006.

The **early stage segment of VC** led the boom period but during the crisis, it suffered more than the expansion segment and has been slower to recover. Buyout, compared to venture capital, was slower during the boom, suffered less during the crisis and has soared in the last two years.

It should also be noted that current growth in the early stage segment is concentrated in a small number of management companies (around 30-50 out of some 300-350) and in one country (the UK attracted two thirds of the funds raised for early stage in 2006). These, combined with the significant gap in terms of returns observed between the European and the US industries (pooled IRR for the early stage industry in the US in 2006 is 19.5% while for the European industry it is -0.1%, see also Annex 3), have lead experts to conclude that the recovery of the venture capital industry in Europe is still fragile.

2. Policies and strategies - Relevance

This section assesses the extent to which the Mandates are relevant to the European policies to which they are requested to contribute. It focuses on the Mandates' objectives and on their internal design, taking appropriate account of the dynamics of the venture capital (VC) markets in which the Mandates operate.

> *"Relevance is the extent to which the objectives of a project are consistent with EU policies, as defined by the Treaty, Directives, Council Decisions, Mandates, etc., the decisions of the EIB Governors, as well as the beneficiaries' requirements, country needs, global priorities and partners' policies."*
>
> *EV Procedures Manual*

It is concluded that while ETF objectives are clearly aligned to the Amsterdam Resolution, the objectives of the RCM mandates could be better aligned to EU policies as the specific objective of the Mandate is announced as contributing to develop a venture capital market while the Council Resolutions calls the EIB for "*redirect funding towards support for business start-ups, high-tech firms and micro-enterprises...*" (§ 2.1)

Further, the Mandate provides too many different policy objectives and does not prioritize among them. Even more important, it does not tackle the issue of the equilibrium between policy and financial objectives. (§ 2.2)

As a consequence, the Mandates leaves ample room for interpretation on the role to be played by the EIF as a public institution contributing to EU policies and thus on the implementation of the Mandate. In practice, today, it is the request for self-sustainability, and therefore for increased financial returns, that is mainly reflected in the investment strategy, resulting in a portfolio structure that now is closer to that of a private fund-of-funds than in the past.

2.1. Relevance to EU / EIB policies

2.1.1. Policy references

Since the late 1990s, public authorities in Europe have set the objective of contributing to develop the venture capital industry. Different initiatives have been taken at European, national and regional levels. Outside Europe, also many countries have set programmes to promote their VC industries[7]. For the ETF Mandates, the main policy references at EU level are the EU Council resolutions of Amsterdam (Resolution on Growth and Employment, 1997), Vienna (1998) and Cologne (1999). For the RCM, the Lisbon Council Resolution (2000), which defines the Lisbon agenda, is also a key policy reference. At EIB level the main references are the Amsterdam Special Action Programme (1997) for all Mandates together with the Innovation 2000 Initiative (2000) and the Initiative 2010 (2003) in the case of the RCM mandate.

> **Lisbon Resolution**
>
> The strategic goal was defined as: *"to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth and better jobs and greater social cohesion"*
>
> An overall strategy was designed around three dimensions:
>
> - Prepare the transition towards a knowledge-based economy;
> - Sustaining a healthy economic outlook and growth prospect; and
> - Modernising the European social model

[7] Examples of public initiatives in the EU are: the Risk Capital Action Plan set in 1998 by the European Commission (EC) and member states, the Working group set between the US Department of Commerce and the EC, the Entrepreneurship and Innovation Programme (part of the Competitiveness and Innovation Framework Programme of the EC). Outside the EU one can mention the Small Business Investment Corporation (SBIC) in the USA or the Yozma programme in Israel.

The **Amsterdam Resolution on Growth and Employment** requested the EIB to examine the establishment of a facility for the financing of high-technology projects of small and medium-sized enterprises (SME) in co-operation with the EIF. Following the Amsterdam Resolution, the Bank elaborated the **Amsterdam Special Action Programme** (ASAP, June 1997) which included interventions in SME financing as well as in other sectors. The ASAP created a special window to employ part of the annual surplus of the Bank to provide support for different types of instruments, including venture capital. Based on this decision, the EIB and the EIF agreed on the first ETF mandate in 1997, followed by the ETF-2 in 1999.

In the same spirit as the Amsterdam Resolution, in March 2000, the European Council adopted the **Lisbon agenda** as the new European development programme with the specific objective of making the EU ***"the most competitive and dynamic knowledge-based economy in the world"***. Figure 2 in next page shows the intervention logic of the Lisbon strategy based on the Presidency Conclusions of the European Council. This schematic representation highlights the requested contribution of the EIB in relation to venture capital markets while aspects of the programme that do not directly relate to the EIB mandate with respect to venture capital are presented in dotted boxes. The scheme also includes the objectives of the EIB-EIF Risk Capital Mandate (see § 2.1.3).

> ***Intervention logic*** *is a systematic and reasoned description of the casual links between activities and the different levels of objectives. It is a powerful management tool which can be used since the inception of a project or programme. In evaluation, it can also be elaborated ex-post to test the causal links between a project or programme and the objectives to which it contributes.*

As a follow-up of the Lisbon European Council, the Bank elaborated the Innovation 2000 Initiative (i2i, June 2000) and later on the **Innovation 2010 Initiative** (i2i, March 2003) which translate the contribution of the Bank to the Lisbon Agenda. As the ASAP, the i2i covers different sectors including support to SME and spells out the Bank's contribution in terms of VC operations. The RCM mandate was signed on the basis of the policy objectives of the Amsterdam and Lisbon Resolutions while the ASAP continues to provide the authorization to use the Bank's excess reserves for VC operations. An important difference between the ETF and the RCM is that the RCM comprised the transfer of the EIB portfolio of venture capital operations to the EIF. This portfolio is referred to as the Legacy portfolio.

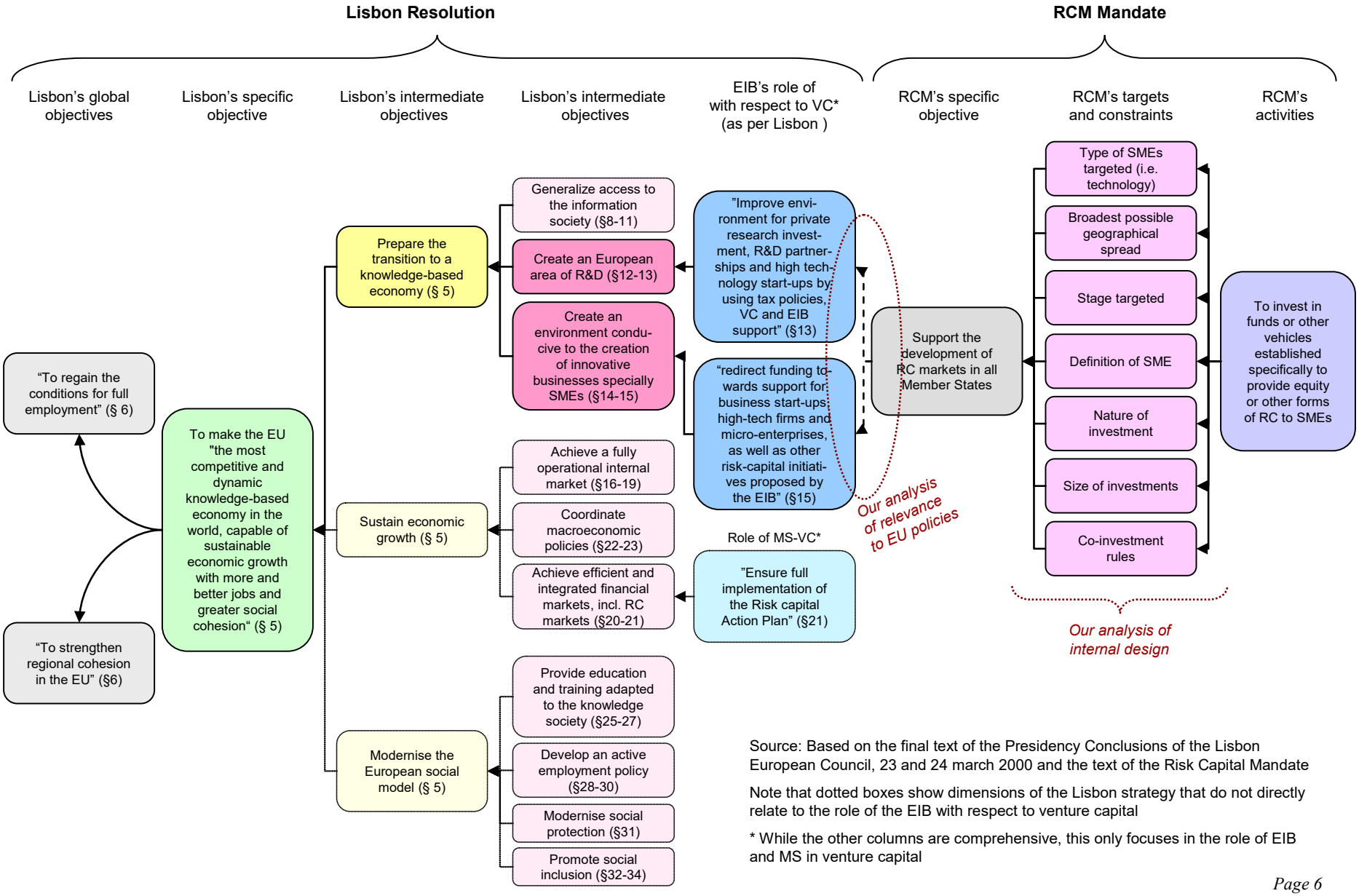
2.1.2. The mandates' stated objectives

The ETF mandate states explicitly the higher level objectives (policy objectives) to which it will contribute. In the first paragraph of its Investment Guidelines, it states that by facilitating investment in specialized VC fund, the ETF aims at supporting the creation and development of high growth and technology oriented SMEs which in turns contributes to improve their competitiveness and ultimately contributes to increase their capacity to create jobs.

> For ETF-2 and RCM, the key objective is **to support the development of VC markets in Europe**.
> For ETF-1 is to **facilitate investments** in specialised funds.

The ETF-2 keeps the same higher level objectives and adds one layer by stating a **specific objective** to the mandate: *"To achieve these aims, a key objective of ETF-2 consists in* ***supporting the development of venture capital markets*** *in all Member States and particularly in the relatively less developed markets"*. It adds an additional layer as it states two objectives that should feed into the previous one: (i) to achieve as broad as possible a geographical spread of investments and (ii) to contribute to the development of VC know-how. ETF-2 is therefore more explicit in terms of its "key objective" and the ways in which it should be reached.

Figure 2 - Intervention Logic



Source: Based on the final text of the Presidency Conclusions of the Lisbon European Council, 23 and 24 march 2000 and the text of the Risk Capital Mandate

Note that dotted boxes show dimensions of the Lisbon strategy that do not directly relate to the role of the EIB with respect to venture capital

* While the other columns are comprehensive, this only focuses in the role of EIB and MS in venture capital

The RCM, on the other hand, does not make explicit reference to the higher level objectives to which it will contribute although it mentions in the preamble the Amsterdam, Cologne and Lisbon Council Resolutions as its policy framework. The RCM states only a specific objective, similar to the one of ETF-2: *"the key objective of RCM is to* ***contribute to develop risk capital markets*** *in all EU"*. As in the case of the by ETF-2 mandate, it also states that the key objective is to be reached by:

(i) having as broad as possible a geographical spread of RC investments;
(ii) by contributing to the development of risk capital know how; and
(iii) by improving the availability of new financial products for SMEs.

Figure 2 shows this chain of objectives and links it to the objectives of the Lisbon Council Resolution.

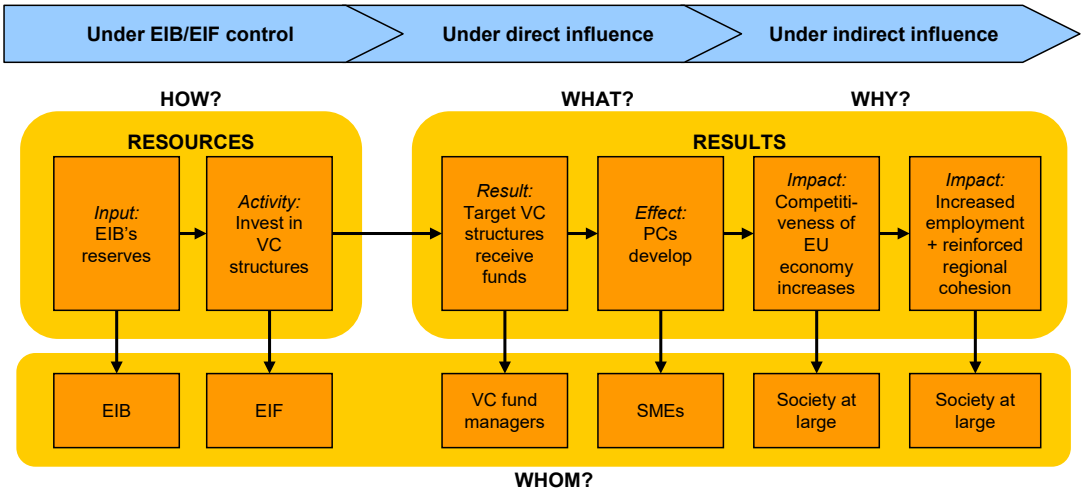
2.1.3. Conclusion on Relevance to EU/EIB policies

For the ETF-1, the mandate's specific objective is clearly linked with the objectives of the Amsterdam Resolution and the different levels of objectives are well established: The EIF invests in specialized VC funds => VC funds invest in high growth and technology oriented SMEs => these SMEs improve their competitiveness and ultimately their capacity to create jobs.

This is not the case for ETF-2 and RCM mandates for which the objective is defined as **contributing to develop a venture or risk capital market**. Even more than for ETF-1, one could have expected an objective closer to the Lisbon strategy such as "*redirect funding towards support for business start-ups, high-tech firms and micro-enterprises..."* (paragraph 15 of the Lisbon Resolution) or even more generally in terms of support to SMEs. Moreover, the Mandates do not explain <u>through which mechanisms</u> the development of VC markets will contribute to the "knowledge-based economy". It is true that it is widely accepted that a sustainable and efficient VC market can contribute to increase the competitiveness of the economy and therefore that it can indirectly contribute to increase growth rates and employment levels. It is further accepted that public authorities may play an important role to promote the development of VC markets. Yet, the exact form of public intervention is still subject to debate - as in many other areas of public support to private sector development. **This results in an uncertain interpretation of the role to be played by the EIF as a public institution contributing to EU policies and leaves a too large scope of interpretation to define the implementation of the Mandate.**

A particular illustration of this confusion is **the objective of increased employment**. Employment is often interpreted as a direct objective of the Mandates and thus employment statistics and a special report in employment are requested to the EIF. Figure 2 (first column) shows that employment can only be an **indirect effect** to be reached by making Europe "the most competitive and dynamic economy in the world" and not a result to be reached by the RCM. The Amsterdam Resolution, before Lisbon, was clear in this regards; it recognized the role of the EIB Group *"in creating employment <u>through investment opportunities</u> in Europe"* (our underlined). In terms of employment, only the ETF mandates were clear by stating that *"Through these investments, the aim is to help improve the competitiveness and the capacity to innovate of eligible SMEs across the European Union and <u>thereby</u> their ability to create jobs"* (our underlined).

The following simplified scheme helps to understand which effects can be under EIB/EIF's direct or indirect control or influence:



2.2. Design of the Mandates

The architecture of the Mandates determines the way they can be implemented and therefore the possibilities offered to the EIF to reach the objectives set by the Mandates. This section analyzes the relevance of the design of the Mandates with respect to their objectives as per the official texts. An illustration of the way the Mandates have evolved is presented in Annex 1.

Three aspects are analyzed: **targets, constraints** and the hidden issue of the **role of the expected financial performance** of the Mandates. We have classified as "**targets**" those rules of the Mandates that state the type of operation that is a priority for the mandate and as "**constraints**" those than can be better defined as conditions that must be respected. Three types of targets (type of SMEs, stage focus and geographical focus) and three types of constraints (definition of the SME, nature and size of the investments and co-investment rules) have been identified.

2.2.1. Analysis of the mandates' targets

a) Types of SMEs targeted through investee funds

The mandates have become increasingly complex in terms of the types of SMEs targeted through investee funds: ETF had only **one type** of target, RCM had initially **four types** of targets and now it has **six types** of targets (see Box below). There is no orientation with regards to the priority among these simultaneous targets.

> Over time more and more targets have been added to the Mandates. Under RCM, innovative, technology oriented SMEs are no longer the focal point, which was the case under ETF.
> RCM has many different targets; some are redundant, contradictory or confusing.

Sector focus on innovative, technology oriented SMEs has diluted over time. This focus was the priority of ETF-1 but is only one among many other targets in the following Mandates (see also the analysis of the portfolio in § 3.2). **This evolution is at odds with the policy framework**. While the Lisbon Agenda and i2i do not exclude supporting SMEs in other sectors, the main focus is expected to be in innovative SMEs.

Further, many of these **targets are redundant, mix different conceptual levels or do not take sufficiently into account the characteristics of the market in which the Mandates operate**. This multitude of targets has contributed to make the Mandates unclear, subject to personal

interpretation and, above all, sub-optimal with respect to the main aim of the Mandate as these different targets results in such a broad type of investments that almost any deal can be said to respect at least one of the targets.

Targets/Objectives of the Risk Capital Mandate

"The Investments should provide added value to SMEs and be made in favour of one or more of the following objectives ("the Objectives"): "

1) *"Technology and industrial innovation through early stage, development and expansion capital"* is a properly defined target for the mandate, yet

2) *"Higher economic growth and job creation"*, is a higher level objective, that is to be achieved only indirectly through the programme, as shown in § 2.1 and Figure 2.

3) *"The transfer of new technologies to, and their adoption by, more traditional SMEs; the objective being to contribute to the diffusion of innovation throughout the Eligible Geography's economy at large"* is redundant with No 1.

4) *"Investments with a regional development focus, the goal being to reinforce the balanced development among the Eligible Geography's regions"* is indeed an objective of the European Union and has been stated in the Lisbon Agenda as one of the two overarching objectives (see Intervention Logic in Figure 2). Yet, this objective is probably best dealt with by other instruments and not by a venture capital mandate. There is no request by the European Council to the EIB Group to contribute in this area through venture capital investments and, indeed, it would be difficult to find such deals. The same applies to the objective of supporting *"projects designed to fight social exclusion"* which was included in the first version of the Investment Guidelines (December 2000) but was subsequently removed.

5) *"Contributing to the establishment of efficient Risk Capital markets in the Eligible Geography"*. Such task is the responsibility of the regulatory authorities at national or European level. The EIF can and does indeed contribute to this effort by participating to the discussions with VC actors and the regulatory authorities (active participation to conferences, working groups, etc). However, as important as this might be, in the present setting of the Mandate this is a secondary objective and thus not to be stated at the same level that the, for instance, focus on innovative SMEs.

6) *"EIF investments may support SMEs in their later stages of development that otherwise meet one or more of the Objectives"*. This "objective" is an opening that neutralises one of the main aims of the Mandates, namely investing in early stage SMEs, in particular if it does not limit these further investments to the expansion stage. Indeed, this clause has allowed the investment in buyouts as part of the rebalancing of the portfolio (see § 4.1)

Source: Investment Guidelines of the Risk Capital Mandate (March 2006)

b) Stage targeted

Unlike the ETF, which focused on early stage SMEs, RCM's Investment Guidelines allows since 2003 to invest in later stages.

Investments under ETF-1 and ETF-2 were aimed uppermost at **early stage SMEs**. RCM does not mention a specific target stage; it only mentions the use of "early, development and expansion capital as appropriate". However, as indicated above, investments in later stages are allowed by the Board (since RCM/IG-2003) if they also met some other objective. Further, from 2004, buy-outs and investments in mid-caps of up to 3,000 employees were allowed[8]. As a consequence, and as confirmed in the analysis of the portfolio (§ 3.2), **investments show a clear trend towards later stages, and departures from the original request of the Council Resolutions and thus the original aim of the Mandate** (see paragraph 13 of the Lisbon resolution, quoted above). This trend is part of the so-called "portfolio rebalancing" (§ 4.1).

c) Geographical coverage

[8] Under ETF-1, ETF-2 and RCM/IG-2000, priority was given to SMEs of up to 250 employees.

> The Mandate is not unequivocal with respect to the aimed geographical coverage. There is no orientation on how to combine it with other type of targets.

When analyzing the first article of the Investment Guidelines, it can be concluded that **ETF-2 and RCM are *more* constraining** in terms of geographical coverage as they present their key objective as the support of the development of RC markets in all eligible countries and request an effort to achieve as broad as possible a geographical spread of RC investments, which was not the case of ETF-1. Moreover, ETF-2 has a special focus on the so-called less developed markets of Spain, Portugal, Greece and Ireland.

However, when analyzing the "Geographical Coverage" section of the Investment Guidelines, it can be concluded that **the mandates have become *less* stringent** from ETF to RCM: (i) the definition of "EU funds" has loosen, (ii) both ETF agreements included quantitative targets that disappeared under the RCM, (iii) both ETF agreements included the mention that investments "will seek to ensure the widest possible coverage" which also disappeared in the RCM.

ETF-1
- "Investments will only be made in venture capital funds operating in the EU"
- At least 85% of onward investments made by the individual funds should be in the EU

ETF-2
- "Investments will only be made in venture capital funds operating mainly in the EU"
- At least 85% of aggregate ETF-2 investments should be in the EU
- No individual fund can invest more than 35% of its committed capital outside the Union
- At least 20% of the total ETF funds had to be invested in Spain, Portugal, Greece and Ireland

RCM
- "Investments will be made in RC structures whose focus is in operations in the EU"
- No quantitative geographical targets
- Accession countries are included in the geographical coverage

In summary, the Mandates encourage a wide geographical coverage but without providing quantitative targets or orientation, in particular, on two important conceptual issues: **First, on how to manage the trade-off between higher risk and wider geographical coverage** (see Annex 2) and **second, on why it is appropriate to have a single type of instrument for markets that are at very different stages of development**, especially if other policy targets (stage, sector) are defined. This **lack of orientation** makes the investment strategy difficult and subject to interpretation and to pressures to invest in certain areas.

2.2.2. Analysis of the mandates' constraints

a) Definition of the SME

Initially, the definition used by the EIB was transposed to the Mandates. SMEs were defined as firms having up to 500 employees and up to € 75 million of net assets. In addition, from RCM/IG-2000 it was also stipulated that a maximum of one third of the shareholders could be non-SME (25% since RCM/IG-2003). From 2006 and to comply with an EC recommendation[9], the definition of SME was changed as firms with: (i) maximum 250 employees, (ii) maximum turnover of € 50 million or maximum balance sheet of € 43 million and (iii) maximum 25% of non-SME shareholders.

[9] Official Journal of the European Union, L124/36, 20 May 2003.

The change in the definition has, in terms of employment, met the priority given under ETF-1, ETF-2 and RCM/IG-2000 to smaller SMEs of up to 250 employees. Yet, from RCM/IG-2004 it has been possible to **invest in mid-caps of up to 3,000 employees**. Although there may indeed be a financing gap for mid-caps, this change in the mandate – additional to the authorization to invest in firms in later stages of development and in buyouts – **is a further deviation from the original request of the Council Resolutions** (see paragraphs 13, 14, 15 of the Lisbon Resolution) and thus the original aim of the Mandates, namely investing in early stage SMEs.

> Until 2005, SMEs were defined as firms having up to 500 employees. With this definition and until 2003, priority was given to smaller firms of up to 250 employees.
> Since 2004, it is possible to invest in mid-caps of up to 3,000 employees.

b) Nature and size of the investments

According to all Mandates alike, the EIF is to invest in funds or similar vehicles established to provide risk capital to SMEs. These investments are restricted to closed end vehicles of maximum duration of 15-20 years, with no direct investments and limited investments in semi-captive funds. Different criteria have been used to restrict the size of the investments (see Annex 1). Finally, it is stipulated that investments ought to be made *pari passu* with the other LPs.

These characteristics have not changed in any significant way and have not induced any particular implementation problem or contradiction with other characteristics of the Mandates, aside for the above-mentioned problem of SME vs. mid-caps. Yet, an important issue is **whether only investments under *pari passu* conditions should be allowed.** In fact, it is not possible to assess whether this is the only or the most appropriated instrument as long as the role played by the EIF as a public institution is not clarified (see § 2.1.3).

c) Co-investment rules

Co-investment rules have become more stringent over time: Under the ETF mandates, co-investment of EIF own resources was encouraged but not mandatory. RCM/IG-2000 and 2003 required a co-investment (of any amount) in at least 80% of the operations. From RCM/IG-2005, co-investment was mandatory in all operations with a minimum of 5% of the RCM investment or at least € 1 million. Section 4 on the Role of the EIF analyses how co-investment rules have been applied.

A commitment of the general partner is indeed customary in private equity (PE) and venture capital (VC) in order to maximize the alignment of interests with limited partners. **Yet, in the case of the Mandates, the relevance of the co-investment rule is questionable**. While in PE and VC the amount "co-invested" should represent a significant share of the general partners' wealth in order to be effective (often called "hurt money"), in the case of Mandates, the amounts co-invested are the EIF's shareholders money, where the EIB is the majority shareholder.

2.2.3. Financial returns: a hidden issue

One of the most surprising aspects of the first version of the RCM is that there was no mention of the expected role to be played by the financial performance of the RCM portfolio. Yet, this is a key element to define the investment strategy. In particular, there was no orientation on the priority to be given to the different policy objectives with respect to financial performance even if it is commonly accepted that investing in a start-up managed by a first time team located in a

less developed market will most probably have a different return than a follow-on buyout based in London.[10]

Disappointing financial returns until 2003 pushed the EIF to propose an investment strategy designed to achieve better returns. This strategy is referred to as **the "rebalancing" of the portfolio because it implied to move away from early stage funds towards "later stage" funds including buyouts**.

The Bank accepted this "rebalancing" strategy and this was acted through few modifications of the Mandate. A Portfolio Management Guidelines was appended in which investments were made dependent of the operation's Risk Grade (§ 4.1). It also stated that *"the mechanics (...) shall ensure that risk capital investments can continue over the medium to long term on a self-sustainable basis."* The Investment Guidelines, on the other hand, allowed investments in later stage funds as well as investing in mid-cap companies of up to 3,000 employees (§ 2.2.2).

Different elements justify the need for positive financial returns for a public investment institution from the basic need to attract private investor as limited partners to the equally important need to avoid spoiling the market by supporting sub-standard teams. **The question is to what extent financial performance should prevail over policy objectives.** As shown in the next section, **the "rebalancing" strategy has achieved its objective of improving financial performance but at the cost of sacrificing the extent to which policy objectives are achieved.**

Whether there is a trade-off between financial and policy objectives depends partly on the objectives of the Mandate. If the objective of the Mandate is to support early stage innovative SMEs (which is the request of the European Council), yes, there will most probably be a trade-off and the Bank and the EIF have to decide how to tackle it (greater selectivity and smaller mandate, for instance). If the objective is to contribute to develop VC markets (as it is stated in the RCM), the answer is not clear. Some experts would even argue that the main way in which a public investment institution such as the EIF can contribute to develop a VC market is by acting as the most performing private investor, that is, by seeking the highest possible return and thus increasing the attractiveness of the market. Of course, this argument would hold only as far as there is a financing gap. Again, it is up to the Bank and the EIF to clarify this point.

2.2.4. Conclusion on the Design of the Mandates

There is no apparent rationale for the evolution of the Mandates; they have most probably evolved following changes in the market and the evolution of the portfolio performance. **By introducing ad-hoc changes without reviewing the whole rationale of the Mandate, the text has now become too complex**. Two main sources of weakness have been identified: First, the Mandates have too many simultaneous targets without providing guidance as to the priorities among them. Moreover, some of the targets are redundant or mix different conceptual levels. Second, the equilibrium between policy and financial objectives, which is a classical problem of many public programmes supporting the development of the private sector, is not dealt with.

These two elements make implementation difficult and dependent of individuals. The lack of prioritization among objectives results in an implementation strategy that is sub-optimal for many or all of the stated targets. It also results in ambiguous signals to the market. Indeed, private investors, with which the EIF invests on *pari passu* conditions, cannot know which of the targets is the EIF pursuing.

[10] Annex 2 shows some evidence of the correlation between policy objectives and financial return.

Finally, the Mandates do not define ways to measure expected results. Without indicators and target values set ex-ante, it is more difficult for the operators to decide on the best implementation strategy while managers (and evaluators) lack an agreed frame to asses whether expected results have been achieved.

3. Performance – Status of Mandate Implementation

This section reviews EIF's portfolio of investments in venture capital (VC) and private equity (PE) fund vehicles funded through the ETF and RCM mandates and mandate "tranches" (see Box on § 1.3). It is composed of three sub-sections: an overview of the portfolio, an analysis of implementation in terms of the conditions imposed in the Mandates and an analysis of the interim financial performance.

As shown on Table 2, the rate of disbursement varies across the different Mandates and tranches. The analysis will therefore not benchmark the most recent Mandates tranches. Further, it only considers the ETF and RCM Mandates and do not includes the Legacy Portfolio. Finally, unless otherwise stated in the text, all data presented are sourced EIF for the EIB mandates, EIF, EVCA-Thomson Financial-PricewaterhouseCoopers for activity figures on Europe, and EVCA-Thomson Financial for performance figures on Europe. EIF data reflects the status of the EIF's VC/PE portfolio at 31 December 2006, converting non-EUR currencies into EUR at the exchange rate prevailing at that date.

Table 2 - Operations under EIB Mandates
From inception to 31 December 2006
All figures in EUR (exchange rates prevailing at 31 December 2006)

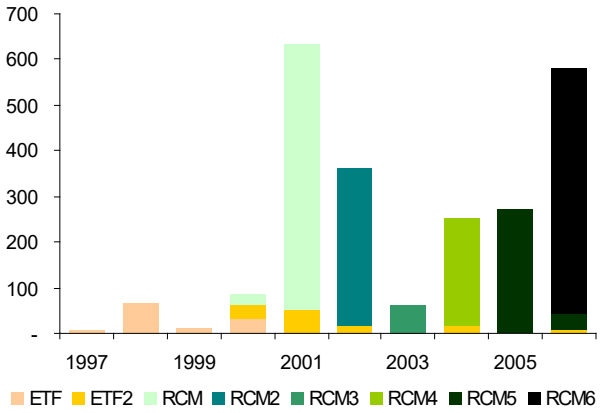
Facility	Approvals	Signatures	Disburse-ments	% Disbursed
	A	B	C	D = C/B
ETF	124.70	117.14	111.76	95%
ETF2	132.50	125.30	84.54	67%
RCM	737.77	605.31	426.58	70%
RCM2	375.29	343.49	238.34	69%
RCM3	73.15	63.16	35.98	57%
RCM4	247.01	235.00	119.73	51%
RCM5	344.15	307.33	79.57	26%
RCM6	615.45	539.78	37.29	7%
RCM7	45.00	0.00	0.00	0%
Total	**2695.02**	**2336.51**	**1133.79**	**49%**
EIB Legacy	*928.17*	*820.05*	*751.96*	*92%*
Incl Legacy	*3623.19*	*3156.56*	*1885.75*	*60%*

It is concluded that there are two clearly distinct periods. Before 2003, policy targets were mostly taken into account and the financial return of the Mandates' portfolio was below the benchmarks. In 2003, the EIF proposed, and the Bank accepted, a change on the investment strategy aimed at achieving better returns. It is still early to see the full effect of the "rebalancing" of the portfolio but there are already clear indications of the improvement of the financial return of the Mandates portfolio. This improvement has been achieved at the cost of reducing the extent to which policy objectives are achieved and in particular the focus on early stage, innovative SMEs.

3.1. Portfolio overview

More than € 2.3 billion have been committed by the EIF since 1997 under the different EIB mandates. The amounts signed have greatly varied over time. RCM and RCM2 were characterized by a high level of signatures (€ 605 million and € 343 million), while RCM3 in 2003 had a particularly low level (€ 63 million). Signatures have concentrated in the years 2001 and 2006. The availability of resources and the market appetite for VC investments provide the two main explanatory factors for this variability.

Fig 3 - Amounts signed
(EUR million)

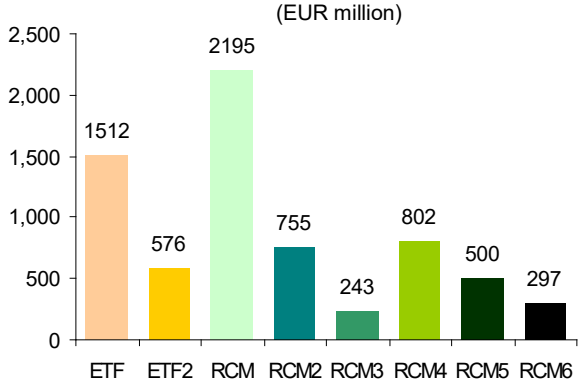


These investments correspond to 156 positions[11] and 153 unique VC/PE vehicles as three VC funds have received funding through two different EIB mandates. As in the case of the amounts invested, there is a high degree of variability over time. In 2001, 46 signatures were made and only 5 in 2003.

In terms of underlying portfolio companies (PCs), as of 31 December 2006, over 2,000 investments in PCs have been made under the Mandates, which translate into 1,719 unique PCs. Indeed, it is possible for a PC to have received monies from multiple funds; this process is common in the industry and is referred to as "syndication". 175 PCs have received funding through a syndication process by two or more VC/PE funds. Some of these funds were financed through different EIB mandates.

It is through ETF, RCM and RCM2 that the vast majority of PCs have received support so far, although it is too early to draw any conclusions from RCM4, 5 and 6. The reduction of activity under RCM3 is mainly explained by the market crisis; in 2003 the cycle reached its lowest level.

Fig 4 - Amount invested in underlying PCs
(EUR million)



When comparing by mandate the amounts signed at fund level and the amounts invested in underlying PCs, it can be observed that the average amount invested in the underlying PCs has increased over time. The average for ETF and ETF-2 was € 3.4 million while the average for all the RCM tranches is € 5.2 million and for RCM6 is € 8.5 million. This reflects an evolution of the VC industry after the crisis of early 2000's, combined with the fact that buyout funds have been progressively included in the portfolio.

[11] "Position" here refers to a direct EIF investment in a VC/PE fund by sources of funds, e.g. if an individual VC/PE fund was offered € 10m in commitments, sourced through RCM-3 and ETF-2, this will count as two positions. Because the EIF often funds an investment from multiple sources the total number of positions will be higher than the total number of investments.

3.2. Implementation as per the Mandate

As presented in the previous section, the Mandates define three types of targets (stage, sector and geographical coverage) and three types of constraints (SME definition, nature of investments and co-investment rules). This section reviews the status of implementation by these elements. It is observed that **stage and sector focus has diminished over time, mainly due to the "rebalancing" strategy aimed at improving financial performance. Geographical coverage has not significantly evolved and is concentrated in few countries** – except if investments are measured relative to the size of the local VC markets. **Constrains regarding SME definition and co-investment rules are roughly respected by the Mandates**, although the only information available for SME definition is employment data for about half the firms. It should be recalled that the analysis is only based on the EIB Mandates portfolio and thus does not include operations funded through other mandates. Any further work on EIB Mandates' objectives and/or targets should take into account potential synergies and conflicts with the objectives of other mandates. Reciprocally, the acceptance by the EIF of new mandates should include an analysis of potential synergies and conflicts with the EIB mandates.

3.2.1. By stage

The Mandates target, although to different degrees, the earlier stages of the market. Over the whole period, 48% of the funds under the Mandates are in either the seed or start-up category. However, **a decreasing trend appears as 69% of funds were seed or start-up during the period 1997-2000 and only 33% during the period 2004-2006**. It can also be observed that the category **buy-out has grown considerably from 0% to 42% of funds in the last period**. This trend reflects the "rebalancing" strategy implemented since 2003.

Table 3 - Investments per stage and group of signature year

Stage	Number of investments				Percentage			
	1997 2000	2001 2003	2004 2006	Total	1997 2000	2001 2003	2004 2006	Total
Seed	1	3	1	**5**	3.4%	3.9%	2.1%	**3.3%**
Start-Up	19	34	15	**68**	**65.5%**	**44.7%**	**31.3%**	**44.4%**
Expansion	4	23	3	**30**	13.8%	30.3%	6.3%	**19.6%**
Balanced	4	8	6	**18**	13.8%	10.5%	12.5%	**11.8%**
Buyout	0	5	20	**25**	**0.0%**	**6.6%**	**41.7%**	**16.3%**
Fund of funds	1	3	3	**7**	3.4%	3.9%	6.3%	**4.6%**
Total	**29**	**76**	**48**	**153**	**100%**	**100%**	**100%**	**100%**

Note that the stage classification used internally at the EIF at the time of this evaluation includes five categories: (1) Seed, (2) start-up, (3) expansion, (4) buy-out and (5) generalist. For purposes of the evaluation, and to allow for a meaningful benchmark against industry standards and performance, the portfolio has been re-classified.

This information is confirmed by the number of portfolio companies funded through the different mandates and tranches. Early stage companies represent 61% of all companies financed under ETF and the two first tranches of the RCM, but only 41% of companies financed under RCM3 and later. At the same time, buyouts increased from 4% to 28%.

Table 4 - Portfolio companies per stage

Stage	Number of firms			Percentage		
	ETF1 to RCM2	RCM3 to RCM6	All	ETF1 to RCM2	RCM3 to RCM6	All
Seed	125	14	**120**	7.9%	4.7%	**7.0%**
Start-Up	846	109	**861**	**53.2%**	**36.3%**	**50.1%**
Expansion	420	84	**458**	26.4%	28.0%	**26.6%**
Replacement K	12	4	**16**	0.8%	1.3%	**0.9%**
Buyout	64	83	**137**	**4.0%**	**27.7%**	**8.0%**
Not Available	122	6	**127**	7.7%	2.0%	**7.4%**
Total	**1,589**	**300**	**1,719**	**100%**	**100%**	**100%**

3.2.2. By sector

Overall, as of 31 December 2006, firms active in sectors with a strong technology component (biotechnology, communications, computer related, medical/health related and other electronics) represented almost 80% of the financed companies. One third of the 1,719 financed companies were active in computer related activities, around 14% in communications and 12% in biotechnology.

However, when comparing investments made under the first mandates (ETF1, ETF2, RCM1 and RCM2) and the latest ones (RCM3 to RCM6), it is observed that **the proportion of technology related sectors decreases from 83% to 60%.** Only part of this change is explained by the crisis of the technology sector of 2001 (computer related sectors halves). The increase of consumer related (from 5% to 13%) and industrial products and services (from 3% to 11%) remains unexplained in the context of the Mandate. **Again, this change in the sector structure reflects the "rebalancing" strategy.**

Table 5 - Portfolio companies per sector

Sector	Number of firms			Percentage		
	ETF1 to RCM2	RCM3 to RCM6	All	ETF1 to RCM2	RCM3 to RCM6	All
Computer Related *	576	45	574	36.2%	15.0%	**33.4%**
Communications *	223	43	243	14.0%	14.3%	**14.1%**
Biotechnology *	213	26	202	13.4%	8.7%	**11.8%**
Medical/health Related *	151	47	179	9.5%	15.7%	**10.4%**
Other Electronic Related *	150	17	145	9.4%	5.7%	**8.4%**
Consumer Related	82	39	116	5.2%	13.0%	**6.7%**
Indust Products and Services	49	33	76	3.1%	11.0%	**4.4%**
Other Services	33	22	53	2.1%	7.3%	**3.1%**
Other (less than 2% each)	112	28	131	7.0%	9.3%	**7.6%**
Total	**1,589**	**300**	**1,719**	**100%**	**100%**	**100%**
*** Technology sectors**	**1,313**	**178**	**1,343**	**82.6%**	**59.3%**	**78.1%**

3.2.3. By geographical coverage

A first indicator of the geographical coverage of operations is given by the **number of funds across countries according to the location of their management teams.** As of 31 December 2006, management teams operating out of 18 countries have benefited from the EIB mandates.

As a comparison, the EIF's total portfolio of VC/PE funds includes 20 country locations. Luxembourg and Portugal have not been covered through the EIB mandates in terms of team location, which means that of the four cohesion countries (listed as targets for ETF-2), only three have received funds for teams operating there. Moreover, it is observed that over 50% of the funds are managed by teams that operate out of three countries: United Kingdom, France and Germany.

This **wide geographical spread is confirmed** by the **location of the underlying companies** financed.[12] As of 31 December 2006, the 1,719 final beneficiaries of the different EIB mandates were located in 33 different countries, 89% of which in the EU. The same three countries appear on top of the list concentrating about half of he total number of financed companies: France (23%), UK (16%) and Germany (9%). **For both indicators, the distribution is stable through the period.**

Table 6 - Fund level: Location of management team

Country	# of funds	%	WS
United Kingdom	32	21%	1.2
France	31	20%	2.0
Germany	19	12%	2.1
Spain *	12	8%	1.3
Italy	11	7%	1.5
Netherlands	10	7%	1.7
Finland	7	5%	5.6
Sweden	6	4%	1.3
Austria	5	3%	5.8
Denmark	4	3%	2.8
Ireland *	4	3%	5.6
Belgium	3	2%	0.8
Greece *	1	1%	5.0
Subtotal EU-15	**145**	**95%**	
Poland	3	2%	0.0
Estonia	2	1%	30.7
Czech Republic	1	1%	4.7
Hungary	1	1%	3.3
Subtotals New MS	**7**	**5%**	
USA	1	1%	
Total	**153**	**100%**	

** Cohesion countries*

Table 7 - Portfolio company level: Place of incorporation

Country	# of PCs	%
France	396	23%
United Kingdom	273	16%
Germany	152	9%
Italy	141	8%
Sweden	96	6%
Finland	82	5%
Spain	71	4%
Ireland	65	4%
Netherlands	60	3%
Belgium	49	3%
Austria	32	2%
Denmark	32	2%
Others (less than 1%)	86	5%
Subtotal EU	**1,535**	**89%**
USA	121	7%
Switzerland	32	2%
Norway	12	1%
Israel	11	1%
Others (less than 1%)*	8	0%
Subtotal Non-EU	**184**	**11%**
Total	**1,719**	**100%**

** Canada, Singapore, Cayman Islands*

This uneven distribution across countries is partially explained by the relative size of national economies and the relative maturities of the local VC/PE industries. Indeed, another indicator of the geographical coverage is the **share of EIF's commitments to the size of the respective national industries** as measured as the ratio between EIF's commitments in one country and the total amount invested in VC by the local management teams. This indicator is shown in Table 6 under the heading "WS" (for weighted share). This share tends to be significantly higher in countries having less developed venture capital industries compared to countries with more mature industries. As an example, although teams located in the United Kingdom have received

[12] The term "location" here indicates the firm's legal place of incorporation. In the majority of cases, it coincides with the place of the entity's main operations and is hence a meaningful indicator for the geographic distribution of the underlying PCs' business activities.

one quarter of the total amount committed by the EIF, this amount represents only 1.2% of all investment made by local management teams in seed, start-up and expansion companies between 1997 and 2006. On the other extreme, Estonia represents only 0.4% of the amount of capital invested through the Mandates but the funds in this specific country represent more than 30% of the amount invested in seed, start-up and expansion companies in the Baltic countries over the period 2003-2006.

To summarize, according to the three indicators used, **the portfolio under EIB mandates has a broad geographical spread of investments (even if it does not cover all EU countries) while at the same time it is highly concentrated in three countries**. **This result is stable through the period.** Yet, it is important to note that depending on the indicator used, the extent of the geographical concentration varies greatly. As the mandates do not provide performance indicators for geographical coverage, there is no predefined way to measure the extent to which the EIF has achieved this target.

3.2.4. SME definition

The current SME definition is based on three criteria: number of employees, turnover or balance sheet, and shareholding structure (see § 2.2.2). However, the EIF only collects data on the number of employees per firm and obtains it for only about half the firms. The first evaluation carried out by EV shown that it was difficult to obtain meaningful information from management teams on employment. We can thus assume that data on the shareholding structure with the level of details requested by the definition of SMEs is, in practical terms, almost impossible to obtain.

ETF and the first version of the RCM gave priority to smaller SMEs of less than 250 employees[13]. Based on the available information, this was respected with 702 out of 736 (95%) firms supported. Surprisingly, there appear 15 non-SME firms. This priority for smaller SMEs appears to continue to the present. Note, however, that it is not possible to know whether the availability of data biases the results, i.e. whether smaller firms are more likely to provide data than bigger firms.

Table 8 – Portfolio companies per number of employees

No of employees	ETF1	ETF2	RCM	RCM2	RCM3	RCM4	RCM5	RCM6	Total	%
Less than 250 (smaller SMEs)	256	89	357	189	8	10	10	1	795	**46.2**
Between 251 and 500 (SMEs)	4	1	14	6		2			26	**1.5**
Between 501 and 3000 (mid-caps)	3		11	3		4			21	**1.2**
More than 3000 (large firms)			1						1	**0.1**
Total available	**263**	**90**	**383**	**198**	**8**	**16**	**10**	**1**	**843**	**49.0**
Not Available	256	55	171	173	44	103	84	34	876	**51.0**
Total	**519**	**145**	**554**	**371**	**52**	**119**	**94**	**35**	**1,719**	**100.0**

3.2.5. Co-investment

Table 9 shows the number of funds per signature year. Overall, at the end of 2006, the EIF had co-invested in 82% of all funds (125 out of 153). Figure 5 shows the EIF's share in terms of amounts invested. It can be observed that since 2001 it has remained quite stable varying within the band of 7%-16%[14]. **This coverage respects *grosso modo* the restrictions imposed by the mandates as described in § 2.2.2.**

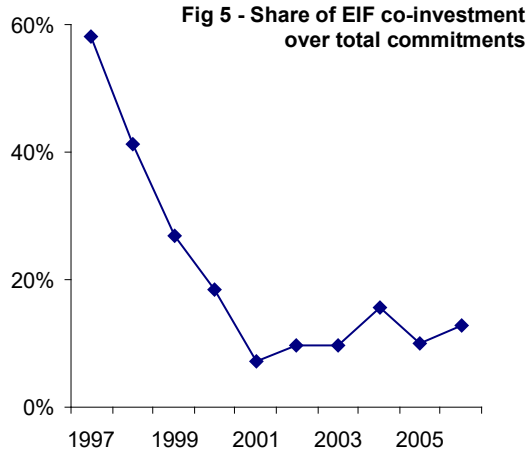
[13] The definition, however, set the threshold to 500 employees until 2005 and to 250 employees since then.

[14] The years 1997 to 2000 are only provided for information purposes, as the operational conditions within EIF at that time do not allow for a meaningful comparison with the period starting in 2001.

The results of the analysis of the commitment capital IRR of the EIF's portfolio including and excluding the funds also in the EIB Mandates portfolio are difficult to interpret but it seems that EIF has not conducted a "cherry-picking" strategy. This is confirmed by a correlation analysis between the size of EIF's co-investments and the IRR of the funds at the end of 2006, which is very low and does not vary significantly across different periods.

Table 9 - Number of funds per signature year

Signature Year	Total	With EIF co-investment	%
1997	2	2	100.0
1998	15	14	93.3
1999	2	2	100.0
2000	10	3	30.0
2001	45	37	82.2
2002	26	23	88.5
2003	5	3	60.0
2004	11	11	100.0
2005	13	10	76.9
2006	24	20	83.3
Total	**153**	**125**	**81.7**



This result raises again the question of the appropriateness of using a mechanism conceived for situations that are significantly different from the one that characterizes the Mandates (see § 2.2.2 on the co-investment ruler under Relevance). In the particular case of the Mandates, co-investment cannot be considered as "hurt money" and the analysis of commitment capital IRR suggests that the co-investment rule is not needed. Further, the Mandates' co-investment rules are not necessarily aligned with the EIF's own investment rules.

3.3. Interim financial performance

3.3.1. Choosing an appropriated benchmark

The **pooled Internal Rate of Return** (IRR) of the EIB mandates portfolio can be compared to three different benchmarks: Early stage investments, venture capital and private equity investments and the assessment will differ depending on the benchmark used. The choice of the benchmark is therefore critical for the results of the analysis. **Yet, it is not easy to find an appropriated benchmark for the Mandates portfolio.** The ideal financial benchmark would duplicate the overall strategy of EIF as funds of funds manager over the same period of investment. Unfortunately, data in the public domain are very limited on private funds of funds returns and almost non-existing on public fund of funds schemes. Therefore, the use of proxies is needed.

A first proxy is a synthetic benchmark as the one produced by EIF. The EIF recreates through a Monte Carlo simulation a distribution of returns of funds of funds that would have the same investment profile as EIF in terms of commitments across vintage year and stage focus of investee funds. For example, if a portfolio consists of € 100 invested in 5 early stage funds vintage year T and € 50 invested in 3 expansion funds vintage year T+1, portfolios are created by investing randomly € 100 in 5 early stage funds among the full population of early funds vintage year T and similarly € 50 are invested randomly in 3 expansion funds among the population of

expansion funds vintage year T+1. According to this methodology and the latest data available, EIF Mandates portfolio ranks among the top quartile synthetic funds of funds. One important limitation of such exercise is that the selection skills of EIF are benchmarked within each broad defined category (in our example vintage year and stage focus of the funds) but the ability to structure the portfolio across these categories is not benchmarked. As a matter of example, the impact of investing in 5 expansion funds vintage year T and 3 early stage funds vintage T+1 is not measured.

The second proxy is the use of benchmarks available on the underlying investee funds themselves like the ones produced by EVCA and Thomson Financial. The benchmark should comprise funds with similar vintage years and stage focus. Due to the current structure of the EIB Mandates portfolio, which contains venture capital funds and buyout funds, the benchmark should also consist of these funds and therefore the returns released on the private equity industry at large should be used. However, as the Mandates imposed a concentration on earlier stages (at least until 2003), this benchmark has obvious limitations. For this reason, any analysis of portfolio performance should cross-check results by also benchmarking each segment of the portfolio, i.e. returns of the early stage funds compared to the benchmark for early stage, venture capital funds compared to the benchmark for venture capital, etc.

The analysis shows that, until 2000, the EIB mandates portfolio has under-performed with respect to the three benchmarks used (early stage, venture capital and private equity) and for the period 2001-2003, it has underperformed only with respect to the PE benchmark. Funds with recent vintage years (2004-2006) are too young to be benchmarked.

3.3.2. Portfolio structure by quartiles

Beyond achieving a specific financial return, a fund of funds manager should also be able to demonstrate superior selection skills. A good indicator of the quality of selection skills is the break down of the portfolio by quartiles. A top quartile fund is an investment vehicle whose IRR is ranked among the 25% of the best performers of a specific population of funds. The population of funds is generally defined as funds having the same vintage year, the same stage of investment focus and the same geographical focus of the benchmarked sample. Ultimately the population's characteristics are determined by the mandate given to the fund of funds manager.

When a fund manager has superior management skills, his/her portfolio will show a proportion of top quartile funds superior to 25% and a cumulated proportion of top and second quartile funds also higher than 50%. The analysis of the EIB mandates portfolio over the whole period reveals a relatively high proportion of top quartile funds of the total number of investee funds, but also a very low share of second quartile funds. Therefore, because the cumulative proportion of first and second quartile funds is lower than 50% and the share of fourth quartile funds is high, it is not possible to draw a definite conclusion regarding the superior selection skills of EIF in relation to the EIB mandates portfolio.

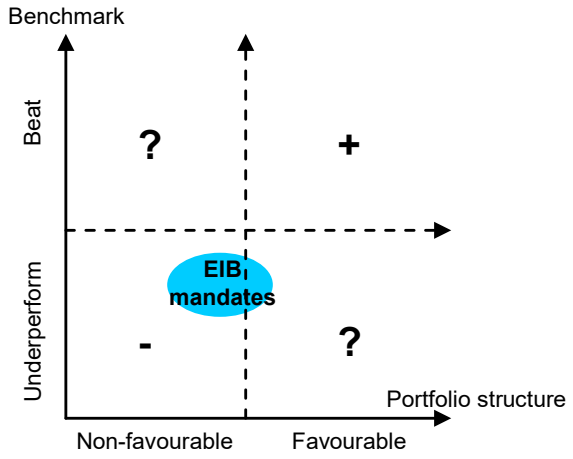
Disaggregating the information by periods shows important changes. The vintage year group 1998-2000 has a smaller proportion of first and second quartiles funds while the vintage year group 2001-2003 has a higher one. This result is driven by the year 2003 in which we find a large proportion of first and second quartiles funds, but only on 10 funds. **This evolution illustrates once again the effect of the portfolio "rebalancing"**. Note that it is too early to benchmark the group 2004-2006.

3.3.3. Conclusion

When regarding only financial performance, i.e. disregarding policy objectives, a fund of fund manager should combine the ability to beat the benchmark and have superior selection skills. The following matrix combines both dimensions. The area on the top right hand side represents the best positioning of a portfolio with a return beating the benchmark and a structure presenting a high proportion of top and second quartile funds.

The positioning of Mandates' portfolio in the matrix shows the two weaknesses in terms of financial performance: the portfolio's return does not beat the benchmark and the structure of the portfolio is not optimal with too big a share of third and fourth quartile funds. This disappointing result hides the evolution resulting from the portfolio "rebalancing": disaggregating the analysis per periods show that both financial returns and selections skills have improved over time. However, as mentioned in 3.3.1, the benchmarking exercise is limited by the fact that the *raison-d'être* of the Mandates is (or should be) to contribute to a policy objective while the rationale of the private agent is to reach the highest possible financial return.

Fig 7 – Positioning of EIB Mandates



Source: Archant based on EIF and Thompson Financial data

4. Role of the EIF / EIF contribution

Three aspects have been analyzed: the role of the EIF in determining the investment strategy, its catalytic effect on the market and the support to first-time funds. The analysis is restricted to the EIB Mandates and does not take into consideration EIF's role or contribution under other mandates.

The EIF has played a **decisive role in determining the investment strategy** particularly since 2003 when it proposed the "rebalancing" of the portfolio. This aspect is also discussed under the analysis of the design of the mandates (§ 2.2.3) and their implementation (§ 3).

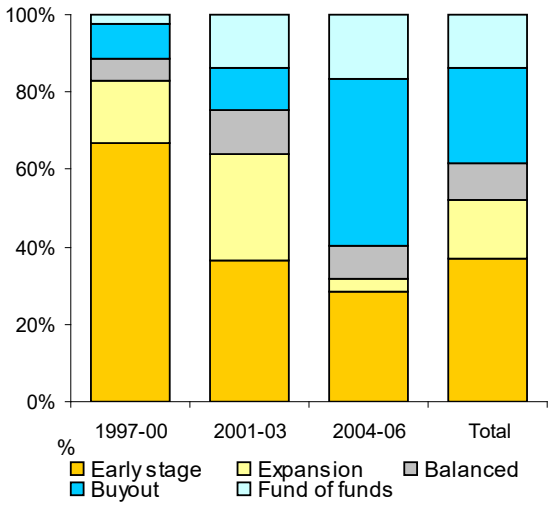
It is concluded that **EIF's catalytic effect** has mainly been channelled through the signal it conveys to the market in terms of governance and terms and conditions. The signal in terms of expected returns is not strong enough as the results of the Mandates' portfolio are not superior to the market. Finally, within the limits imposed by the Mandates, the EIF has also had a positive contribution by increasing its share in investee funds in periods of tight market.

The **EIF has supported first-time teams** during the first part of the period but later on this support decreased significantly, following the portfolio "rebalancing" as well as a generalized market trend. The Mandates do not tackle the fact that the support to first-time funds can be considered as a contribution to the development of an European venture capital market but that this strategy presents a higher risk profile.

4.1. Investment strategy

The EIF has been critical in determining the investment strategy of the Mandates, particularly since 2003 when, pushed by disappointing financial results, proposed the "rebalancing" of the portfolio. The strong returns observed for buyout funds with respect to VC sustained this proposal. Figure 8 shows the evolution of the structure of the portfolio by group of vintage year and by stage focus as measured by the amounts committed. It can be clearly observed that the relative weight of buyout funds has significantly increased in the last three years.

Fig 8 - Portfolio structure by stage focus of the funds (% of total amount committed by vintage year)



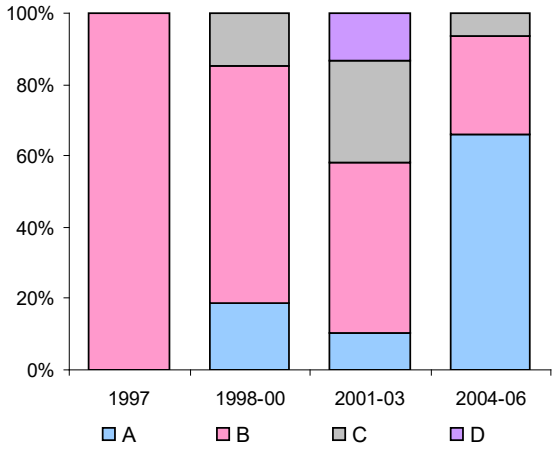
The rebalancing was acted through modifications in the Risk Capital Mandate (§ 2.2.3): In 2003, a Portfolio Management Guidelines were added to the Mandate limiting 'riskier' investments: maximum of 45% of grade-C and 10% of grade-D investments. In 2004, this limit was further increased: maximum of 10% in grade-C and no grade-D investments:

Investments by historical Performance Grades

In 2003, the EIF started carrying out a systematic performance grading (P-grading) as part of the due diligence process: ex-ante, the EIF's risk management unit grades investments according to a four-letter scale: A (lower risk), B, C or D (higher risk). Based on certain key parameters of the proposed investment (e.g. track record of the proposed management team, etc.), the grade

indicates the underlying VC/PE fund's expected future financial performance relative to its peer group *at the time of signature*.[15]

Fig 9 - Portfolio structure according to risk grading at the time of signature



As shown on the graph, on average, close to 75% of the investments funded through the EIB mandates were graded A and B at the time of signature, which means that they were expected to fall into the first or second quartiles. The period 2001-2003 show the lowest proportion of grades A and B (58%). The year 2001 shows the highest number of C or D-graded funds (19) and 2002 the highest proportion of C or D-graded funds (46%). Since 2004, there is a clear predominance of funds graded A and B (98%) with very few C-graded funds and no D-graded funds. This evolution reflects the "rebalancing" of the portfolio and follows the Portfolio Management Guidelines.

4.2. Catalytic effect

It is considered desirable that the EIF implementation of the mandates produces a catalytic effect by indirectly encouraging private investors to commit capital in the European venture capital industry. The Mandates do not provides any hypothesis as to the mechanisms at work (§ 2.1.3) but it can be assumed that the catalytic effect could have been achieved through four channels: (i) a signalling effect on the expected returns, (ii) a signalling effect on the governance and the terms and conditions of the funds, (iii) a volume effect, or (iv) a counter-cyclical behaviour. During times of low investors' interest for an asset class, the most important signalling effect is the one on the strength of expected returns which is the primary driver for private investors. The signalling effect on governance is weaker in all phases of the cycle and will probably work only for investors that have already decided to invest.

i. **The signalling effect on the expected returns** works when there is one recognized seasoned investor with acknowledged superior returns who can motivate other investors to commit to a fund. In that respect, it is the recognized superior selection skills of the seasoned investor that certifies the expected returns of that particular fund. The EIF achieved financial returns are not strong enough to result in a positive signalling effect based on the expected performance.

ii. **The signalling effect on the governance and the terms and conditions of the funds** works when the ability of an investor to perform thorough due diligence on governance and terms and conditions is recognized by its peers. The signal refers to the capacity of the fund manager to meet the market standards in terms of the overall structure of the fund but it does not in itself certify expected returns. Based on the results of the first evaluation carried out by EV, the EIF has a positive contribution in this regard. General partners confirmed the high quality of the procedures carried out by the EIF in comparison with other limited partners.

[15] Note that as the performance grading started in 2003, P-grades were not readily available for funds signed before that date. At EV's request, the EIF calculated historical P-Grades for those funds but a simplified approach with a limited number of indicators was used.

iii. **The volume effect** relies on the willingness of private investors to commit to a fund once this fund has secured a significant size or has already done a first closing and is therefore operational. While here there is no quantitative evidence on whether limited partners were encouraged to invest after a substantial investment by the EIF, there is some indirect evidence. Figure 10 shows that the EIF has used the average share of its commitments in investee VC funds to counteract the market. In 2000, year of the peak in fundraising, the average share of EIF's commitments (all resources included) to the total size of the investee venture capital funds was 10%, significantly lower than the average of 25% reached during the most difficult year of 2003.

Fig 10 - EIF share in investee funds and funds raised in Europe

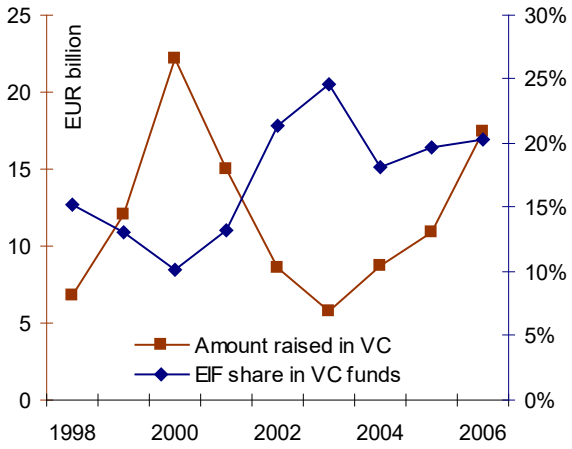
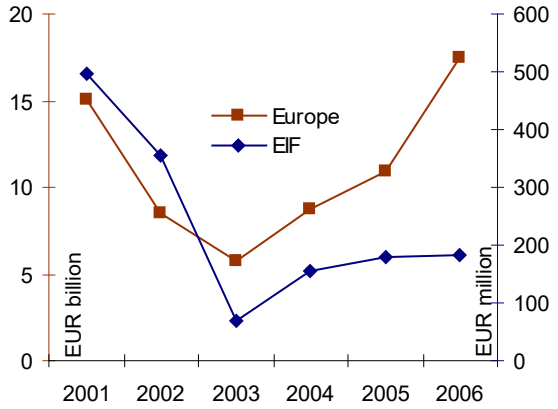


Fig 11 - EIF signature activity and funds raised in Europe



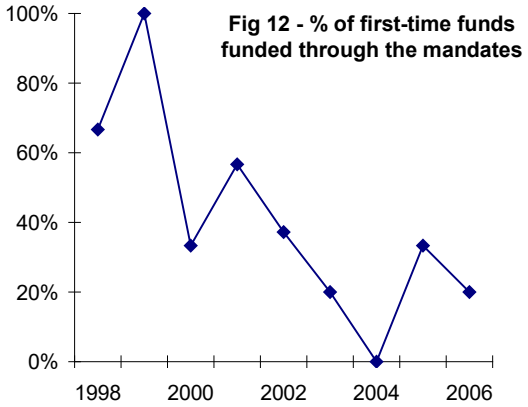
iv. Finally, the terms and conditions of the mandates, namely investing on *pari passu* basis and Community regulation on state aid, limit the potential means to have a **counter-cyclical behaviour**. Indeed, by investing on *pari passu* basis, the EIF cannot modify the expected risk/return profile of the asset class of private investor; i.e. it cannot provide private limited partners with a downside protection or an upside leverage. Regulation on state aids limiting to 50% all public money in one single vehicle, mean that the EIF's commitment strategy is highly correlated with the swings in private limited partners' appetite. Figure 11 confirms this hypothesis. Only in 2006, the commitment activity of EIF seemed not to have followed the same pattern as the market. However, this change may be due to the fact that the surge in funds raised for venture capital in 2006 are concentrated in the UK, a country which already represents a high share of the EIB mandates portfolio[16].

In summary, EIF's catalytic effect has mainly been channelled through the signal it conveys to the market in terms of governance and terms and conditions. The signal in terms of expected returns is not strong enough to produce a catalytic effect as the financial return achieved by the Mandates portfolio is not superior to that of the market. Given that these returns are partially explained by the policy nature of the Mandates, it is important to counteract the potentially negative signalling effect that these results may have, to clearly post these policy objectives. Finally, within the limits imposed by the Mandates, the EIF has also had a positive catalytic effect by increasing its share in investee funds in periods of tight market.

[16] The analysis does not take into account the years 1998-2000 because during this period, EIF's organization in terms of venture capital programmes was not stabilized and the Risk Capital Mandate was only signed in December 2000.

4.3. Support to first-time teams

Although the Mandates do not mention it explicitly, the support to first time funds can be consider as a contribution to the development of a European venture capital market. Between 1997 and 2006, the EIF has invested in 54 first time funds (out of 121). These 54 funds received around € 600 million from the EIF (coming from the EIB Mandates but also from other resources managed by the EIF, including its own resources). This amount represents approximately one third of the total amount committed by EIF in venture capital between 1997 and 2006.



Yet, there is a clear trend towards a larger proportion of EIF signatures with follow-on funds, as shown by Figure 12. This is also a consequence of the portfolio rebalancing (the net pooled IRR of first time VC funds at the end of 2006 was lower than the IRR of the total VC funds in the Mandates portfolio)[17] although it also reflects an European trend. The market in general, is not receptive to first time funds due to the specific risk profile of such funds.

Indeed, the distribution of VC funds across different categories of IRR for the sample used in the Thomson Financial/EVCA benchmark shows the riskier aspect of first time funds. There is a probability of 53% of having negative IRRs for follow-on funds, against 56% for first time funds. The difference is even stronger for returns less than -15%: 14% for first time funds and 8% for follow-on funds. First time funds do not present a significantly higher upside potential than follow-on funds.

Table 12 - Cumulated probabilities for different IRRs

IRR	Benchmark	
	First time	Follow-on
<= -40	6	2
[-39,-20]	7	5
[-19,-15]	14	8
[-14,-10]	20	17
[-9,-5]	32	34
[-4,-0.01]	56	53
[0,5]	70	74
[6,10]	80	84
[11,15]	86	90
[16,20]	91	92
[21,40]	96	98
>= 41	100	100

The analysis of the distribution of returns for first time funds and follow-on funds within the EIB Mandates confirms the riskier profile of first time funds.

Although not explicitly requested by the mandate, the EIF has supported first-time teams in particular during the first part of the period. Later on, this support has decreased significantly, following the portfolio "rebalancing" as well as a generalized market trend. As with other underlying trade-offs, the Mandates do not tackle the fact that the support to first-time funds can be consider as a contribution to the development of an European venture capital market but that this strategy presents a higher risk profile.

[17] The population of first time venture capital funds in terms of committed capital by stage of investment is not significantly different than all venture capital funds in the EIB Mandates portfolio.

Annex 1
Evolution of the Mandates

1. Policy references

ETF-1	
EU level	▪ Presidency Conclusions on Employment, Competitiveness and Growth - Amsterdam European Council 16-17 June 1997 ▪ Council resolution on growth and employment (OJ, No C 236/3, 2.8.97)
EIB level	▪ Amsterdam Special Action Programme (ASAP, July 1997)
ETF-2	
EU level	▪ Same as ETF-1 plus: ▪ Presidency Conclusions - Vienna European Council 11-12 Dec 1998 - See §40 §41 §42 ▪ Presidency Conclusions - Cologne European Council 3-4 June 1999 - C10See §14
EIB level	▪ Same as ETF-1
RCM/IG-2000	
EU level	▪ Same as ETF-2 plus: ▪ Presidency Conclusions - Lisbon European Council 23-24 March 2000
EIB level	▪ Same as ETF-2 plus: ▪ Innovation 2000 Initiative (i2i, June 2000

2. Activities

ETF-1 & ETF-2
Take shares in funds or other vehicles established specifically to provide equity or other forms of RC to SMEs
RCM/IG-2000
Take participations and enter into finance transactions in relation to funds or other vehicles - including but not limited to fund-of-fund structures established specifically to provide equity or other forms of RC to SMEs
RCM/IG-2003 (no change in later versions of the investment Guidelines)
Take investments into eligible funds in relation to funds or other vehicles - including in exceptional cases, fund-of-fund structures established specifically to provide equity or other forms of RC to SMEs, including but not limited to: quasi-capital, mezzanine finance, leveraged lending, participating loans. In the exceptional cases of FoF structures, the EIF will justify to its Board (…) that such investment will meet important policy objectives that are not attainable through other vehicles.

3. Types of SMEs targeted through investee funds

ETF-1 & ETF-2
"Investments will be made in VC funds targeting SMEs developing or using advanced technologies in industry or services."
RCM/IG-2000
"… EIF may invest in risk capital structures aiming at SMEs (…) having their place of business in a member state of the European Union pursuing one of the following: 1) The creation and development of high growth, and innovation and the ability to create jobs, notably through early stage, development and expansion capital, where appropriate. 2) 'E-migration' investments (i.e. those SMEs seeking to make available the benefits of the new technologies to 'old economy' or 'brick and mortar' SMEs or the SMEs beneficiaries of those new technologies). The aim being to contribute to the diffusion of innovation (…) 3) Investments with a regional development focus are additionally to be targeted (…)" 4) Projects to fight social exclusion such as micro-credit (on a pilot basis)
RCM/IG-2003 (no change in later versions of the investment Guidelines)
"… The investments should provide value added to SMEs and be in favour of one or more of the following objectives:

1) Technology and industrial innovation through early stage, development and expansion capital
2) Higher economic growth and job creation
3) The transfer of new technologies to, and their adoption by, more traditional SMEs; the objective being to contribute to the diffusion of innovation (…)
4) Investments with a regional development focus (…)
5) Contributing to the establishment of efficient RC markets (…)
6) EIF investments may support SMEs in their later stages of development that otherwise meet one or more of the Objectives"

4. Stage targeted

ETF-1
As allowed by the market, priority to early stage and technology oriented. Part of the investment could also aim at supporting more mature innovative companies.
ETF-2
As allowed by the market, priority to early stage and technology oriented however, this objective can be relaxed to obtain wider geographical coverage in particular in the less developed markets. Where market permits, this objective can also be widened to include seed capital / start up phase (comprising both new SMEs and / or recently created management teams).
RCM/IG-2000 & 2003
Nill
RCM/IG-2004 (no change in later versions of the investment Guidelines)
The EIF can invest in funds that may engage in buy-outs on a selective basis and as part of a balanced split between buyouts and other investment types. These investments should follow the Buy-out Guidelines.

5. Geographical coverage

ETF-1
▪ "Investments will only be made in venture capital funds operating in the EU" ▪ At least 85% of onward investments made by the individual funds should be in the EU
ETF-2
▪ "Investments will only be made in venture capital funds operating mainly in the EU" ▪ At least 85% of aggregate ETF-2 investments should be in the EU ▪ No individual fund can invest more than 35% of its committed capital outside the Union ▪ At least 20% of the total ETF funds had to be invested in Spain, Portugal, Greece and Ireland
RCM/IG-2000 (no change in later versions of the investment Guidelines)
▪ "Investments will be made in RC structures whose focus is in operations in the EU" ▪ No quantitative geographical targets ▪ Accession countries are included in the geographical coverage

6. Size of the investments according to the Mandates

	Share in any given fund	**Size of the investment to the size of the Mandate**	**Size of the investment in any given fund**	**Size of the fund in which to invest**
ETF-1	Max 25%	Max 10% (of ETF-1)	(nill)	Min € 15m
ETF-2	Max 25%	Max 7% (of ETF-1 + ETF-2)	(nill)	(nill)
RCM/IG-2000	Max 50% (incl. EIF investment)	(nill)	Max € 75m	(nill)
RCM/IG-2003	Max 33% (exceptionally 50%)	(nill)	(nill)	(nill)

7. SME definition

ETF-1 & ETF-2
Definition of SME: ▪ L < 500 ▪ Net assets <= EUR 75 m Priority to SMEs where: ▪ L <= 250 ▪ Non-SME shareholders < 1/3
RCM/IG-2000
Definition of SME: ▪ L < 500 ▪ Net assets <= EUR 75 m ▪ Non-SMEs shareholders <= 1/3 Priority to SMEs where: ▪ L <= 250
RCM/IG-2003
Definition of SME: ▪ L < 500 ▪ Net assets <= EUR 75 m ▪ Non-SMEs shareholders <= 25%
RCM/IG-2004
Definition of SME: ▪ L < 500 ▪ Net assets <= EUR 75 m ▪ Non-SMEs shareholders <= 25% Exceptionally also mid-cap (L<= 3,000) if they contribute to geographical diversification or achieve objectives otherwise not obtainable
RCM/IG-2005
Definition of SME: ▪ L < 500 ▪ Net assets <= EUR 75 m ▪ non-SMEs shareholders <= 25%
RCM/IG-2006
Definition of SME: ▪ L < 250 ▪ Turnover <= 50m or balance sheet <= 43m ▪ Non-SMEs shareholders <= 25% Exceptionally, also mid-cap (L<= 3,000) if they achieve objectives otherwise not obtainable

8. Co-investment rules

ETF-1
- EIF will co-invest whenever this provides value added to the investment - EIB and EIF may seek to encourage financing partners to co-invest so as to max leverage
ETF-2
- EIF co-investment is possible - EIB and EIF may seek to encourage financing partners to co-invest so as to max leverage - Co-investment with ETF-1 limited to cases where ETF-1 funds are not sufficient or a ETF-1 supported fund call for a capital increase and ETF-1funds are exhausted
RCM/IG-2000 to 2004
- EIF will co-invest from own-resources - If not 80% of operations (per year), EIB may require changing the guidelines
RCM/IG-2005 (no change in later versions of the investment Guidelines)
- EIF will co-invest at least an amount equivalent to 5% of the RCM investment, or if lower, a minimum of EUR 1 million

9. Portfolio Management Guidelines

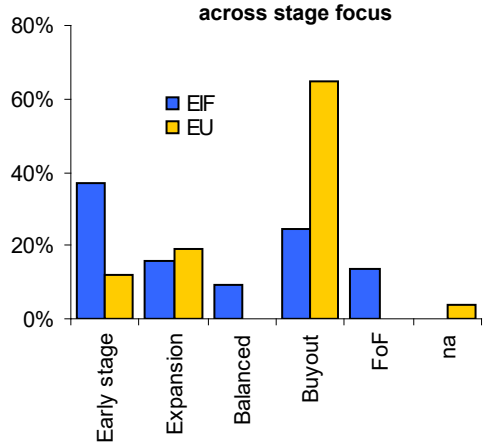
ETF-&, ETF-2 & RCM/IG-2000		
None		
RCM/IG-2003		
Risk Grade	**Limit**	**Max %**
A	EUR 60m	100%
B	EUR 40m	80%
C	EUR 30m	45%
D	EUR 10m	10%
RCM/IG-2004 (no change in later versions of the investment Guidelines)		
Risk Grade	**Limit**	**Max %**
A	EUR 60m	100%
B	EUR 40m	60%
C	EUR 30m	10%
D	EUR 10m	0%

Annex 2
Illustrations of the trade off between policy and financial objectives

1. Investments by stage

Given the policy nature of the Mandates its portfolio structure does not reflect that of the private sector. The EIB Mandates portfolio presents a relatively high exposure to venture capital (62% of the amount committed, compared to 31% for the entire European private equity industry – Figure A2.1) and a relative high exposure to funds focusing on early stage SMEs (37% versus 12% for the entire private equity industry).

Fig A2.1 - Portfolio structure across stage focus



Analysis of the data shows that the focus on venture capital and particularly on early stage funds has had a negative impact in the IRR of the EIB Mandates portfolio. Financial returns have been poor for early stage funds and this is observed for both the EIB mandates portfolio and the industry at large as demonstrated by the benchmark published by EVCA and Thomson Financial. Expansion and balanced funds have produced positive returns but the main sources of financial out-performance for the EIB Mandates portfolio were buyout funds. The early stage funds in the EIB Mandates portfolio have, on the other hand, underperformed the benchmark for early stage.

2. Investments by location

In order to assess the influence of the geographical coverage as a development target on the financial returns of the portfolio, we group countries by the level of development of their venture capital industry and look at the returns of each group.

As a proxy for the degree of development of a country's venture capital industry, we use its relative weight in the total amount invested by the European venture capital industry over the period 1995-2006 in seed, start-up and expansion companies. Table A3.1 bellow groups EU countries according to this variable[18]. Group A contains the countries with the most developed venture capital industries while Group D the countries with the less developed industries. Countries not mentioned have shares of less than 0.1 or, due to the small size of the industry, data is not collected; they are considered in Group D.

Table A2.1 – Countries by the degree of development of their VC industry

Group	Country	Share in industry
A	United Kingdom	34.3
	Germany	14.3
	France	13.2
B	The Netherlands	6.6
	Italy	6.5
	Spain	6.3
	Sweden	4.6
C	Belgium	2.7
	Denmark	2.0
	Finland	1.5
D	Portugal	0.9
	Ireland	0.8
	Austria	0.8
	Poland	0.6
	Greece	0.4
	Hungary	0.3
	Czech Republic	0.2
	Romania	0.1

[18] Based on data from EVCA / Thompson Financials / PricewaterhouseCoopers.

The net pooled IRR as of 31/12/2006 for venture capital funds whose management teams are located in country of the Group D is lower than the return of all expansion and balanced funds in the portfolio (respectively 4.6% and 1.6%). Further, Table A3.2 shows, for the EIB mandate portfolio, the probability of having an annual IRR equal or lower than -15% at the end of 2006 according to the location of the management team. It is observed that this probability is higher the less developed the market is. The distribution of returns (not shown) also indicates that that funds belonging to the groups C and D have a lower upside potential. These results are consistent with data from Thomson Financial/EVCA for Europe. The probability of having a annual IRR equal or lower than -15% at the end of 2006 for Europe as a whole is 7.6% and for funds whose management teams are located in country of the Group D at the end of 2006, it is 10.3%.

Table A2.2 - Probability of having an IRR lower than -15% according to country group

Group	A	B	C	D
Probability	8.16%	16.67%	20.0%	30.7%

Annex 3
An account of the European Venture Capital industry

1. Fundraising and investment activity

Since the first ETF mandate was given by the EIB to the EIF, the European private equity industry has gone through three phases that can be characterized as follows:

a) 1998-2000: The venture capital boom

During this period, venture capital attracted the attention of investors translating in a rapid growth of the funds raised. In 2000, more than € 22 billion were raised by venture capitalists, more than a three-fold increased with respect to 1998. This growth was mainly driven by early stage funds that raised almost € 10 billion in 2000, compared to less than € 2 billion two years earlier. The flow of capital translated in a relative abundance of finance for SMEs in their start up and expansion stage. In 2000, € 20 billion were invested in almost 9,200 such companies while in 1998, less than € 6 billion were invested in 4,700 companies. In the meanwhile, buyout funds managed to raise € 24 billion, a two-fold increase with respect to 1998.

b) 2001-2003: The "nuclear winter"[19]

Following the burst of the internet bubble, the annual amount earmarked for venture capital in Europe decreased significantly. In 2003, when the bottom of the cycle was reached, only € 5.7 billion were raised. This level was even lower than the amount achieved in 1998 (€ 6.7 billion). As consequence, capital available to finance early stage and expansion companies was significantly reduced. In 2003, € 8 billion were invested in 6,300 companies.

This lack of interest was observed for both segments of venture capital but early stage companies suffered more than expansion companies in finding finance. This can be explained by the fact that: (i) some venture capitalists reduced the size of their funds by not drawing down the money committed, (ii) some management teams terminated their operations, (iii) some limited partners defaulted on their undrawn commitments, (iv) some funds were shifted towards expansion stage firms due either to a perceived lower risk or the obligation to support their existing portfolio companies for a longer period than expected.

The VC crisis had a more limited effect on buyout funds. In 2003, these funds managed to raise € 21 billion (down from € 24 billion in 2000) and invested € 18 billion (up from € 14 billion in 2000) in 1,100 companies.

c) 2004-2006: The fragile recovery of venture capital and booming of buyout

Buyout houses had managed to invest in companies that produced high financial returns. This, combined with a favourable macro-economic environment (high growth, liquidity and low real interest rates), resulted in an exponential growth of the fundraising activity for buyout between 2004 and 2006. The amount raised per year more than quadrupled to € 85 billion in 2006.

This surge in the interest of the investors for the buyout asset class was not observed for venture capital. In 2006, € 17.5 billion were raised for venture capital funds, lower than the amount raised in 2000 (€ 22 billion) but three times the funds raised in 2003 (€ 6 billion). Once again, the

[19] Expression popularized by Southern California venture capitalist Bill Stensrud.

evolution was different for expansion and early stage: while funds earmarked for expansion are almost back to the level of 2000, early stage funds are still about half their 2000 level.

Table A3.1 - Evolution of the European private equity industry

		1998	1999	2000	2001	2002	2003	2004	2005	2006
	Funds raised	1.69	5.56	9.85	6.73	2.77	2.15	1.97	4.40	5.94
Early stage	Funds invested	1.64	3.24	6.66	4.18	2.92	2.12	2.38	2.43	5.86
	Nb of firms	1978	3196	4676	3306	3273	2706	2515	2485	2255
	Funds raised	5.05	6.54	12.30	8.30	5.76	3.57	6.79	6.47	11.52
Expansion	Funds invested	4.33	7.43	12.99	8.01	6.87	6.24	7.89	10.24	11.39
	Nb of firms	2658	3629	4506	3708	3878	3649	3318	3186	3335
	Funds raised	6.73	12.09	22.14	15.03	8.53	5.72	8.76	10.87	17.47
Venture Capital	Funds invested	5.97	10.67	19.65	12.19	9.79	8.37	10.27	12.67	17.25
	Nb of firms	4636	6825	9182	7014	7151	6355	5833	5671	5590
	Funds raised	12.07	11.84	24.35	23.33	18.25	20.99	17.79	57.72	84.35
Buyout	Funds invested	7.41	13.20	14.40	10.94	16.90	18.44	25.70	32.10	50.34
	Nb of firms	1144	1201	866	754	854	1089	1221	1441	1653

Funds raised and funds invested in EUR billion
Source: EVCA, Thompson Financials, PricewaterhouseCoopers

The recovery of fundraising translated into a higher investment activity, in particular for the expansion stage. Expansion investments reached in 2006 a level that is only 14% lower than the one of 2000. The early stage segment, on the other hand, remained at the same low level of investment until 2005 (around € 2.5 billion invested per year). A significant increase however, is observed in 2006 (to € 5.9 billion) which brings the invested level close to that of 2000 (€ 6.6 billion).

It can be observed in Table A4.1 above that in both segments of venture capital but more in particular for early stage, the average amount invested per company has increased. This is partly explained by the unwillingness of European venture capitalists to invest in seed companies and by the argument that one of the weaknesses of the 1990s was the fact that too small amounts were spread over too many firms.

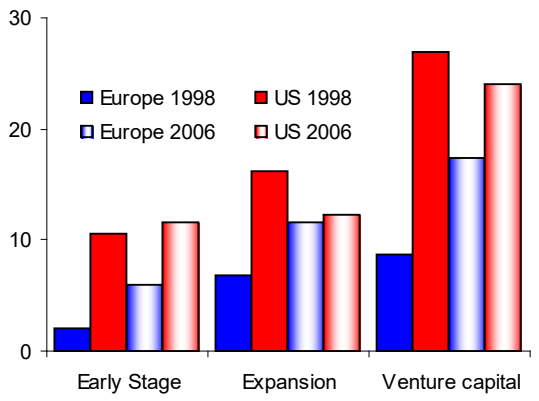
The current growth in early stage is concentrated in a small number of management companies (around 30-50 out of some 300-350) and in one country: the UK industry attracted two thirds of the funds raised for early stage in 2006 and this share is even higher in terms of investments. These, combined with the significant gap in terms of returns still observed between the European and the US industries, lead experts to conclude that the recovery of the venture capital industry in Europe can still be qualified as fragile.

2. Comparison between European and US industries

As the United States has the most developed venture capital industry in the world, it is used as a benchmark by both investors and policy makers. For the latter, having a functioning local industry capable of creating the same success stories as the US industry constitutes an important factor in achieving a competitive economy. For the former, the historical returns of the US industry are an objective for their investment decisions.

At the end of the 1990s, European policy makers had as implicit objective a venture capital industry that would have the same size as the US counterpart[20]. In 1998, while both the European and the US economies were more or less similar in terms of size of their GDP, the European venture capital industry was clearly lagging behind the US industry. Eight years after, and despite the growth identified in 2006, the European industry is still behind its US counterpart. This gap is more important for the early stage segment than for expansion.

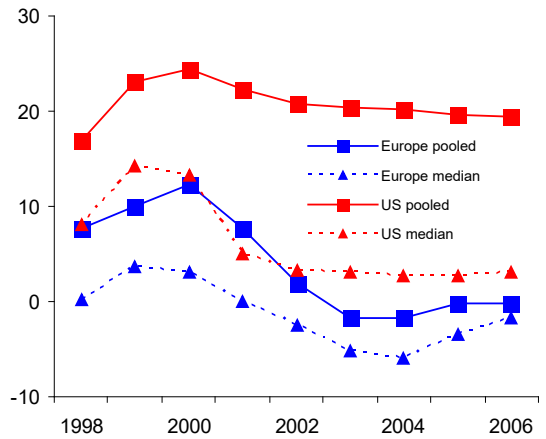
Fig A3.1 - Funds raised – € billion



Source: EVCA, Thomson Financials, PricewaterhouseCoopers

It is argued that the difficulties encountered in early stage in Europe originate in its disappointing financial returns. For instance, Gompers and Lerner (1998) have shown that venture capital fundraising is positively impacted, among others, by its historical performance. Under this hypothesis, decreasing funds raised between 2000 and 2004 for early stage are largely explained by the significant fall in annual returns achieved by this asset class. The annual pooled net IRR since inception was more than 12% in 2000, -1.8% in 2004 and still -0.1% in 2006. Moreover, as shown also by Figure A3.2, the difference between the European and US industries in terms of pooled IRR are very significant. Further, because the European industry is relatively young compared to the US one, European venture capitalists cannot rely on the returns achieved before 1997-98 to compensate for the negative returns resulting from the frenzy of internet investments as happens in the US industry.

Fig A3.2 - Compared returns for early stage: Pooled and median IRR (%)



Note: returns are net pooled IRR since inception as at the end of each calendar year
Source: EVCA, Thomson Financials, PricewaterhouseCoopers

The challenge for the early stage in Europe would therefore be to produce long term returns that adequately compensate private investors for the risk taken and that are comparable with other competitive asset classes and notably the US venture capital. In this view, and according to historical figures, the annual net pooled IRR since inception that the European industry would need to achieve on early stage in order to be competitive is comprised between 15% and 20%.

[20] See for example the "Communication of the European Commission: Risk Capital: A Key to Job Creation in the European Union", SEC 1998/552 Final, Brussels 31.03.1998 Downloadable at http://ec.europa.eu/internal_market/securities/docs/risk_capital/sec98_552_en.pdf (accessed 27 May 2006).

Annex 4
Evaluation Process and Criteria

In accordance with EV's Terms of Reference, the objectives of this evaluation are:

- to assess the quality of the operations financed, which is assessed using generally accepted evaluation criteria, in particular those developed by the Evaluation Cooperation Group, which brings together the evaluation offices of the multilateral development banks. The criteria are:

  a) **Relevance** corresponding to the first pillar of value added*:* is the extent to which the objectives of a project are consistent with EU policies, as defined by the Treaty, Directives, Council Decisions, Mandates, etc., the decisions of the EIB Governors, as well as the beneficiaries' requirements, country needs, global priorities and partners' policies. In the EU, reference is made to the relevant EU and EIB policies and specifically to the Article 267 of the Treaty that defines the mission of the Bank. Outside the Union, the main references are the policy objectives considered in the relevant mandates.

  b) Project performance, measured through **Effectiveness (efficacy)**, **Efficiency** and **Sustainability** and second pillar of value added*.*

  Effectiveness relates to the extent to which the objectives of the project have been achieved, or are expected to be achieved, taking into account their relative importance, while recognising any change introduced in the project since loan approval.

  Efficiency concerns the extent to which project benefits/outputs are commensurate with resources/inputs. At ex-ante appraisal, project efficiency is normally measured through the economic and financial rates of return. In public sector projects a financial rate of return is often not calculated ex-ante, in which case the efficiency of the project is estimated by a cost effectiveness analysis.

  Sustainability is the likelihood of continued long-term benefits and the resilience to risk over the intended life of the project. The assessment of project sustainability varies substantially from case to case depending on circumstances, and takes into account the issues identified in the ex-ante due-diligence carried out by the Bank.

  Environmental Impact (and social when relevant) of the projects evaluated and specifically considers two categories: (a) compliance with guidelines, including EU and/or national as well as Bank guidelines, and (b) environmental performance, including the relationship between ex ante expectations and ex post findings, and the extent to which residual impacts are broadly similar, worse or even better than anticipated.

  Evaluations take due account of the analytical criteria used in the ex-ante project appraisal and the strategy, policies and procedures that relate to the operations evaluated. Changes in EIB policies or procedures following project appraisal, which are relevant to the assessment of the project, will also be taken into account.

- to assess the EIB contribution and management of the project cycle:

  EIB Financial value added (Third Pillar of value added) identifies the financial value added provided in relation to the alternatives available, including improvements on financial aspects as facilitating co-financing from other sources (catalytic effect).

  Other EIB contribution (optional) relates to any significant non-financial contribution to the operation provided by the EIB; it may take the form of improvements of the technical, economic or other aspects of the project.

  EIB Management of the project cycle rates the Bank's handling of the operation, from project identification and selection to post completion monitoring.

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)).
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17. Evaluation of EIB Financing of Air Infrastructure (2005 - available in English (original version) German and French)
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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.)
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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)
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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