Evaluation Report

Operations Evaluation (EV)

Evaluation of EIF funding of Venture Capital Funds – EIB/ETF Mandate

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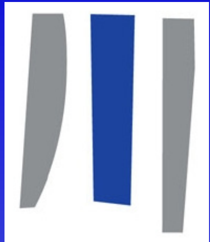

Evaluation

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GLOSSARY OF ABBREVIATIONS

NB Appendix I contains a glossary of venture capital terms used in this report

ACP	Africa, Caribbean and Pacific countries
AFIC	French Private Equity and Venture Capital Association
ASAP	Amsterdam Special Action Programme
Board (of Directors)	The EIF Board of Directors which has sole power to take decisions in respect of investments.
BVCA	British Venture Capital Association
CA	EIF's Board (*q.v.*)
EC	European Commission
EIB	European Investment Bank
EIF	European Investment Fund
ETF	European Technology Facility
EV	EIB Group Operations Evaluation (Ex-Post)
EVCA	European Venture Capital Association
GP	General Partner – in a VCF
IRR	Internal Rate of Return
LP	Limited Partner – in a VCF
MED	Mediterranean, non-EU Member State countries
RCM	Risk Capital Mandate – mandates providing funds to the EIF by the EIB.
VC(F)	Venture Capital (Fund)

EXECUTIVE SUMMARY AND RECOMMENDATIONS

Introduction

This evaluation: "EIF Venture Capital Operations – EIB/ETF Mandate[1]", is the first European Investment Fund (EIF) evaluation by Operations Evaluation (EV) of the European Investment Bank Group. The ETF (European Technology Fund) mandate was the first of a series of mandates given to the EIF by the European Investment Bank (EIB). It was signed in late 1997, as part of the EIB's "Amsterdam Special Action Programme" (ASAP) which had been developed as a response to the June 1997 meeting of the European Council, usually referred to as the Amsterdam Summit. This summit, *inter alia,* had called on the EIB to establish a facility for the financing of high-technology projects being developed by SMEs. Since then, the EIF has acted as a "fund-of-funds", with a focus on equity investments in venture capital funds investing in SMEs.

There were three main areas of work involved in the evaluation: i) a Portfolio Review, ii) the Individual Evaluation of ten fund managers controlling twelve individual venture capital funds, and iii) an analysis of EIF policies, procedures and operations as they related to the ETF mandate. When the ETF mandate was awarded, the EIF had one year's experience of venture capital investments, but these had been limited by the available resources. This evaluation report therefore considers how the EIF responded, how it interpreted the policy objectives of the EU and the EIB and, in particular, the structures and systems the EIF put in place to achieve these objectives.

The Mandate and the Use of the Funds

The ETF Mandate was signed for an amount of ECU 125 Million, to be committed by the end of 2000, and was "designed to facilitate investments in specialist venture capital funds supporting the creation and development of high growth and technology-oriented SMEs."

Mandate funds were invested in 24 different equity vehicles, with signatures between late 1997 and June 2000, and covering four different stages – Seed, Start-up, Expansion, and Generalist. These Venture Capital Funds invested the resources in portfolio companies which were almost exclusively involved in: computer hardware, software and other IT, communications life sciences, chemicals and materials. Some 517 individual portfolio companies in 19 different countries have benefited from the facility, although over 50% were located in just two countries: France and the United Kingdom.

The use of the venture capital mechanism was proposed in ASAP, and to that extent the EIF has been fully effective. Of the EUR 125 Million mandated amount, 88.3% was called by the funds and 87.0% was actually invested in Portfolio Companies. The difference between the last two figures can be seen as the net cost of using the venture capital mechanism: a good result. In addition, there are the fees paid by the EIB to the EIF to manage the funds on its behalf.

The management fees and performance bonuses at the individual fund level were in line with industry norms at the time. The fees agreed between the EIF and the EIB started significantly higher than "Fund of Funds" norms, but have now fallen to be in line.

Policy Impact of the Investments (Relevance)

The key criterion is whether the funds were passed to technology SMEs in the European Union:

- Technology – Neither the original ASAP programme, nor the ETF mandate, actually defines what is meant by the term "technology", and it is worth noting that the Amsterdam Summit *communiqué* more specifically refers to "high technology". A significant minority of the investments were in internet related, or "Dot.com", businesses. While these were clearly using technology to develop a new business model, many of them were variations on the idea of catalogue shopping, with a computer screen replacing the printed page. In the absence of a better definition, the evaluation gives this type of investment the benefit of the doubt and accepts them as being consistent with the original ASAP objectives. The use of the term "technology" might be questioned in the case of only three portfolio companies (out of 293) in the EV sample.

[1] Specifically the first ETF Mandate; sometimes now referred to as ETF-1. The later ETF-2 is not included.

- SME – The applicable definition of SME is the EIB definition in force at the time. All investments, except one, met both the original and the current, tighter, definition.
- Within the EU – The mandate includes some flexibility: up to 15% of investments may be outside the EU, although the mandate does not define whether this is to be by number or volume. In practice, none of the Funds evaluated either have, or had, more than 10% of non-EU investments, by either measure. The non-EU country which received the most funding was the USA.

All the Funds evaluated individually are rated Good for Relevance, although one fund is marginal due to possible queries over the definition of technology.

The two drivers of the Amsterdam Programme were growth and job creation. By definition, the Venture Capital Industry has the objective of maximising growth, so all investments were consistent with the original policy. The question of jobs is more difficult. According to the available data, employment in Portfolio Companies under the ETF mandate grew at a compound annual growth rate of 12.8% compared to only 0.7% for the EU-25 economy. However, this is lower than the 30.5% growth rate observed in another comparable study of venture capital backed companies. Both analyses focused on direct job creation and do not take into account either indirect job creation or job destruction. The funds have therefore been used fully in line with the ETF mandate, and should also have had a positive impact on the underlying objectives identified at the Amsterdam summit.

Fund Management

The key measure of a Fund Manager's ability is the performance of the funds it has managed. However, in 1997, the European venture capital market was in its infancy and the EIF was having to make investment decisions with little data available. The evaluation therefore revisits the appraisal process and considers each Manager against a series of venture capital industry norms, divided into Quality and Performance:

Quality: The aggregate rating for quality is based on three groups of sub-criteria: the Manager's governance and financial stability, its track record, and the capacity and motivation of its staff. Seven Funds (Five Managers) are rated Satisfactory. The lack of track record of both the individuals and the teams leads to less than satisfactory results for the rest of them.

Performance: Performance is considered against three criteria: internal processes, operating strategies and the terms and conditions of the Fund. Three Funds (two Managers) are rated Good, five Funds (five Managers) are Satisfactory, two Fund (two Managers) are Unsatisfactory, and two Funds (One Manager) cannot be rated. The Fund Managers rated Unsatisfactory have structural weaknesses in most operational areas. The team of the Manager which cannot be rated has collapsed, although the performance against the individual criteria suggests a Satisfactory rating. It can be observed that some of the teams with little or no track record (Quality) in fact turned out very positive on Performance.

Fund Performance

It can be shown that the Net Internal Rate of Return (IRR) of a fund is a sound measure of two different attributes:

- Efficiency – the higher the IRR the more efficient is the use of the resources being applied;
- Sustainability and Growth – at least for mature funds with a number of divestments (exits), the net IRR is a function of how the market perceived the likely future income streams of the investments.

At the level of the individual Portfolio Company, a proxy to IRR is used: the multiple of exit gains to original investment. This multiple shows substantial variations by vintage year. The average exit for a 1998 fund was 4.35, while for 2001 it was 0.37; figures which highlight the problem of the dot.com bubble of 2001/2002. Aggregating the returns from the individual Portfolio Companies allows the Net IRR of the fund to be calculated.

The ETF has now reached a fairly mature stage and the Net IRRs of the individual Funds currently vary between *minus* 38.1% and *plus* 165.0%. According to the mandate, the funds have to be closed-end vehicles with a maximum duration of 15 years. Thus, with the last ETF signatures in 2000, some vehicles could run until 2015. However, in rating the performance of the Funds, consideration is also given to

wider issues, e.g. the investment mortality rate, the Manager's ability to realise the investments, and benchmarking with comparable investments. Including these aspects: Four Funds are rated Good, five as Satisfactory and three Funds are Unsatisfactory. The three "Unsatisfactory" Funds are also rated either "Unsatisfactory" or "Poor" against the Fund Manager Quality and Fund Manager Performance criteria.

Pooling the returns of the individual Funds gives a Net IRR for the Mandate as a whole. This figure can be taken in isolation, and is an absolute measure of the financial return the investment is likely to provide. However, for the evaluation, this figure has to be seen in relative terms. On that basis, the evaluation found that the ETF portfolio's return was marginally better than the EVCA/Thomson Financial benchmark as of end 2005.

Another performance criterion is the commitment weighted IRR. This uses the same Fund data as the pooled IRR, but weighted by the commitment to each fund. This gives a measure of the EIF's asset allocation performance. Here again, the ETF portfolio's performance beat the benchmark.

EIF Role

Taking into consideration the weak institutional memory related to pre-2000 activities, some observations have been made on the Management of the Operation Cycle by the EIF by the evaluators, but no major structural weaknesses were identified. Given that the processes and procedures changed completely after 2000/01, no formal assessment was made. A few points deserve comments and suggest recommendations, mainly related to monitoring, as they seem to be still relevant today.

The ETF mandate had a number of identified impacts:

- It allowed the EIF to invest significant amounts in larger funds than it would have been able to do in its own right;
- It allowed four out of the twelve funds to close when they might have found it difficult otherwise. However, in one case it would have been better for the other investors if the Fund had not been able to close.
- It offered a signalling effect; encouraging other investors. However, this needs to be treated with care.

The EIF co-invested its own funds in most, but not all, of the investment funds, with no clear rationale for the different proportions of funds invested. This differentiates the EIB:EIF relationship from a normal Fund of Funds.

Conclusions

In broad terms, the ETF mandate is at least achieving its original objectives. The investments are all rated very highly for Relevance, i.e. they actively supported investments in high-technology SMEs, and while financially it may not do more than break-even, that is still better than the industry benchmark for the period.

Main Ratings	Good	Satisfactory	Unsatisfactory	Poor
Relevance	12	-	-	
Manager Quality	-	7	5	-
Manager Performance	3	5	2	-
Fund Performance	4	5	3	-
EIF Contribution	1	11	-	-

Table of Recommendations and Observations

	EV	EIF Response
1.	When accepting Mandates from the EIB or third parties, the EIF should seek to ensure that meaningful indicators and reporting are established in advance; allowing performance to be measured against mandate objectives. (§I.2, I.4)	The EIB/ETF mandate is much clearer and consistent in its objectives than some of the subsequent mandates entrusted to the EIF. This had a positive impact on the evolution of ETF. From EIF's point of view and based on experience over recent years more clarity regarding the relative weights of mandate objectives is required. Often there are trade-offs between objectives that cannot be managed well without a priority setting. Reporting is essentially constrained by existing industry guidelines (see next point). Therefore measuring and tracking against indicators is practically only as much possible as data are provided under such guidelines. The evaluation quite rightly points out that *"VC funds are created with a single objective: maximising returns to investors."* Consequently, additional mandates' objectives, i.e. employment creation, are achieved as an indirect effect of investment activities, as the venture capitalists do not manage towards non-financial indicators. EIF proposes to take up this point in the context of the soon to be launched evaluation of the RCM.
2.	Employment data available from Managers was inconsistent and of poor quality. The EIF should consider either or both of the following actions: • Review whether the quality and value of the output justifies the resources currently being applied to a single performance measure; • Develop a clearer methodology to be followed by its Managers. This should include a cost/benefit analysis of such an improved data collection process. (§I.4)	Industry standard reporting is focusing on financial figures, and therefore there is a trade off between additional conditions attached to EIF investments and the likelihood to be welcomed as investor. Experiences over recent years have shown that employment figures may be grudgingly added to the quarterly reports, but the interests of the majority of limited partners dictate the priorities of fund managers. VC fund managers do clearly not manage towards employment creation. They even rather try to restrict job growth in their portfolio companies as this is associated with increased costs and create risks for highly cash-burning start-ups. EIF will explore other possible approaches and conduct a cost / benefit analysis for the various options (to be delivered by April 2007).
3.	When placing the ETF resources, the EIF co-invested using its own resources in most, but not all, of the funds, and it did so in varying proportions. How to handle the question of co-investments should be further investigated. (§ IV)	While co-investing of EIF with some mandates is required, the setting of proportions was not requested at that time. As the question of co-investing affects the alignment of interests, EIF cannot decide on this unilaterally. EIF suggests to reflect on this question again in the context of the ongoing evaluation exercise for the RCM.

	EV	EIF Response
4.	The EIF does not have ready access to key performance data (sales, EBITDA, etc.) of the portfolio companies it has funded. In line with market standards, it should investigate the feasibility of including such data as a new monitoring element. Again, this investigation should include a cost/benefit analysis. (§ IV)	While some funds-of-funds focusing on the buyout segment record more detailed portfolio company data, this is not market practice for venture capital. Portfolio level data for companies in their early stage are problematic as they usually have too many "moving parts" and are usually inputted only for mature companies. The inputting of portfolio company data would significantly increase the workload and could not be done with the current staffing level. At the moment EIF could not react on these data, which renders the exercise largely meaningless from a cost / benefit point of view. EIF front-office feels that the usefulness of such data for monitoring work would be limited. Having access to portfolio company details would certainly be helpful, but the effort needed to get this bears no relation to the derived comfort. Consequently, EIF proposes no further action.
5	Hardcopy files (dossiers) should be reviewed to ensure completeness and correctness. In particular, the governing version of legal and contractual documents should be clearly identified, along with the versions of due diligence reports which have been the object of a Board presentation.	EIF introduced FrontVenture to a large extent with the objective to replace paper. The point on legal documentation is taken.
	Database (eFront) elements should include clear and simple identification of: • the dates of internal milestones, and; • the staff members directly involved in the process. (§ IV)	Agreed.

Introduction

Background of the Evaluation

This report presents the findings of the first evaluation of European Investment Fund (EIF) operations by Operations Evaluation (EV) of the European Investment Bank Group. It concerns venture capital (VC) investments made under the 1997 European Technology Fund (ETF) mandate from the European Investment Bank (EIB), which provided EUR 125 Million funding to the EIF, to be committed over a three year period. This mandate was the first of a series of Venture Capital Fund agreements between the EIB and the EIF and was intended to promote the development of innovative SMEs within Europe. The evaluation analyses the activities of the venture capital funds (Funds) in which the EIF invested, and the fund managers (Managers), in terms of consistency with policy objectives and VC industry norms. It also analyses the financial performance of the Funds in absolute and relative terms. Finally, the evaluation pays particular attention to how the EIF developed its procedures and processes in what was, at the time, a relatively new field of activity for it.

In this context, "Venture Capital" means the provision of equity and equity-type funding to private, incorporated organisations which, by virtue of the nascent stage of their operations, have limited resources of their own, and for whom loan funding is not readily available from the commercial banking sector. *An introduction to some of the key terms and concepts of venture capital is presented as a Glossary in Appendix I.*

Prior EIB Operations: before giving the ETF mandate to the EIF, the EIB had been making VC investments for a number of years:

- On the EIB's own account: Always within the EU and typically for captive or semi-captive funds with existing EIB Financial Intermediaries. These operations did not involve full risk exposure. A large part of the risk returns were traded for a guarantee on the capital employed. This gave the EIB the "acceptable guarantee" required by its statute. The activity was halted when the ETF mandate was given to the EIF. Later, the monitoring and back office management of the investments was passed to the EIF under a separate agreement.
- Under "Risk Capital" Mandates outside the EU, namely in ACP and Mediterranean Partner Countries using Member State or EC budget funding. Operations were usually investments in markets with limited or no history of venture capital. This area of activity has continued, with the Bank developing its own expertise, specific to VC operations in developing countries.

EIF shareholders

%	initial	Oct 06
EIB	44	61.35
EC	33	30
Other	23	8.65

The EIF was established in 1994, following an invitation extended by the European Council of Ministers, at their meeting in Edinburgh in 1992, to establish such an organisation. The EIF's remit was to promote European Integration through the promotion of medium and long-term investments in two key areas: Trans European Networks (TENs) and Small and Medium-sized Enterprises (SMEs). Initially, this was through the provision of guarantees but, in 1996, it was decided to use the Fund's own resources to make investments in VC Funds. EIF shareholders were: EIB, European Commission (EC) and financial institutions. In 2001, the Fund was restructured with the EIB taking a majority shareholding.

The EIF started its VC operations with eight investments (22.4 M.ECU) made before the ETF mandate became operational. EIF VC activities then continued with a second ETF mandate, followed by the Risk Capital Mandates (RCMs 1 to 6), while the Fund continued to make VC investments in its own right. Under the EIB mandates, the EIF uses part of the EIB's balance sheet to invest in suitable Funds, receiving management fees in return. It does not make investments in the target beneficiaries itself, therefore it is not a venture capital fund in its own right. The term "Fund of Funds" has been used to describe this mechanism, and will be used in this report. However, strictly speaking the use of the term is not correct. The EIF manages resources made available to it by the EIB Group, usually co-invests with it, and may also co-invest funds from other sources. It has not created an independent pool of resources from diverse investors, those being invested on a pari-passu basis.

EIF expertise in this field has been recognised externally, and it now acts as a "Fund of Funds Manager" for three external organisations.

Venture Capital Funds: The EU Population and Current Environment

1997 marked a significant change in European Private Equity activity, including VC operations, both in terms of available funding, and in geographic spread of activity. Many European markets were characterised by a high degree of liquidity, with substantial sums of money seeking investment opportunities. At the same time, stock markets were buoyant and had established a significant record of year-on-year gains, drawing in further investment capital. From 1989 to 1996 new funds raised had been in the range five to ten billion ECU per annum. In 1997, this jumped to twenty billion ECU.

However, while the total amount had grown, most of the growth was at the mature end of the market: in private equity funds. Early stage investing which had represented 10% of new funds in 1989, fell to 6% in 1993 and then to less than 4% in 1997. From 1989 to 1997, early stage funding increased by circa 60%, while total funds increased by well over 200%. This probably reflected two issues. Firstly, later stage investments are perceived as carrying less risk. Secondly, top performing European buy-out funds had returned an IRR of 34% in 1996, while the return on Early Stage funds had been 13%. The figures improved to 42% and 27% respectively in 1997, but the bias to later stage investments remained.

It is also worth noting that just as the global VC industry was dominated by the US, the European VC industry was dominated by UK funds. There were developing VC markets in Spain, France, Germany, and some Nordic countries, but these were small compared to the UK which benefited from, for example, an active investment (pension) fund sector which was starting to accept VC as an acceptable alternative asset class, and a large private equity market. The value of the UK buyout market was greater than the rest of Europe put together. An indication of the potential importance of EIF operations is that the funds committed in 1998 were of the order of 10% of all early stage funds raised in Europe that year.

Between the launch of the ETF into a buoyant market and the present day, equity markets in general, and technology stocks in particular, suffered a major shock in 2001 and 2002. The effects of this are still being seen in terms of both willingness to invest and the pricing of exits from VC Funds. As a percentage of GDP, European VC investments in 2005 were less than half of the level of 2000. The fall in returns to VC investors has been substantial and it is likely that only the best-performing early-stage funds launched in the late 1990s will be able to give their investors a positive return.

Methodology

The evaluation comprises three main elements:

- A Portfolio Review. Immediately following this section, is a detailed review of the structure and performance of investments made under the ETF mandate plus a brief overview of other mandates awarded to the EIF.
- Individual Investment Analysis. Ten Managers have been selected (out of 22) for a more detailed analysis. The aim is to identify and analyse the characteristics of ETF investments, and the relationship between investment performance and the original objectives of the mandate. This comprises two elements: Manager Quality and Performance, and Fund Performance.
- An analysis of EIF policies, procedures and operations as they related to the original mandate and how they have developed over time.

The individual investment analyses cover half of the ETF portfolio; and are intended to be illustrative of the location, stage, type and size of the Funds. Individual evaluations involve also an analysis of the EIF's actions relating to the investment; from identification to the end of the fund's life. This is based on: available documentation, interviews with key EIF staff members, site meetings with members of the Managers' organisations, and a review of the performance and prospects of the VCF.

There are no Portfolio Companies (PCs) interviews as part of the evaluation, which relies on data and information held by both the EIF and the Managers. Analysis reveals that the remaining portfolios cannot produce a balanced sample of PCs. The most successful investments have been divested; very occasionally by a stock market quotation (Initial Public Offer, IPO) but most commonly by trade sale. This usually led to the investment being integrated into the buyer's business portfolio and no longer having an independent identity. The least successful investments have already been liquidated. This leaves portfolios of investments with modest performances not representative of VC operations as a whole.

When carrying out the portfolio and individual reviews, the key measure is the financial success of the investments. A Fund only exists to provide a financial return to its investors. This has to be recognised and accepted by other investors, such as the EIF and EIB Group, when they seek to use the mechanism to achieve any other objectives, e.g. Amsterdam Special Action Programme (ASAP): job creation and growth, Lisbon Agenda: innovation. Financial performance is measured in absolute terms but also, and probably more importantly, in relative terms, measuring the individual Fund's financial performance against the best available peer group.

Portfolio Presentation

Overview of the EIF VC Portfolio

EIF VC operations are funded from two sources: its own balance sheet, and external mandates. As this table shows, amounts approved under EIB VC mandates totalled EUR 2.2 Billion plus the "EIB legacy portfolio" of EUR 0.9 Billion. This represented over 80% of the EIF's VC approvals. EUR 124.5 Million of investments were approved under the ETF Mandate, compared to a total of EUR 3.8 billion using funds from all sources: all EIB mandates, external mandates, and own resources.

Mandate	Approvals	
	M EUR	%
EIB *	2207	58
EIB legacy **	923	24
EC funding	242	6.5
DE funding	99	2.5
EIF own funds	340	9

* All mandates from ETF in 1997 to RCM6 in 2005
** EIB legacy portfolio under EIF administration

The ETF Portfolio – Overview of Funds

ETF is the first of the nine EIB mandates signed with the EIF between 1997 and 2005/06, allowing the use of EUR 125 Million. Between 1997 and June 2000 commitments to a total of 24 Funds through 22 Managers were signed.
It shows that almost the entire EUR 125 Million authorised under the ETF mandate was approved by the EIF Board over a two and a half year period between late 1997 and mid-2000, well before the end of the Commitment Period.
From this amount, 108.8 M reached Portfolio Companies ("PCs"); the funds made available under the ETF mandate have therefore been highly utilised.
While the funds were fully absorbed, the distribution over time is uneven, both by number of signatures and signed amount, with a disproportionate level of signatures in 1998.

Utilisation of Funds

At 12/31/2005	M EUR
Approved	124.5
Committed	116.9
Signed	116.9
Disbursed	110.1
Invested in PCs	108.8

Year	Investments	
	number	Amounts M €
1997	2	6.4 (5%)
1998	15	65.4 (56%)
1999	2	13.4 (11%)
2000	5	32.0 (27%)

Two thirds of investments are in 'first-time funds' being managed by 'first-time teams'; the remainder are 'follow-on funds'. By contrast, of the twenty-five EIF signatures in 2005 under different mandates, over twenty were 'follow-on funds'.
To date, eleven of the ETF funded General Partners/Fund Managers either have received, or are about to receive, subsequent funding through the EIF in follow-on funds.

Stage	No.	ETF by volume	EIF own funds by volume
Seed	1	6%	4%
Early Stage	14	54%	48%
Expansion	4	22%	25%
Generalist	5	18%	23%

Considering the four investment stages[2] :

The EIF co-invested its own resources to the extent of 65% of ETF fund, but not in the same proportions. The table shows that the EIF tended to invest in slightly later stage funds.

As a proportion of the total value of the Funds, ETF investments represent between 3.7% and 18.3%, against a mandate cap of 25%. These figures do not include EIF Own-Resource co-investments, but the cap of 25% was always applied to the combined total. The highest proportion found was 23% in one of the funds, but that only applied to the first closing. It was later diluted to 9%.

Finally, nineteen funds cover ten specific EU member states, while the remaining five are "multi-country". Two countries (France, UK) are weighted particularly heavily in the portfolio, one with four Funds, the other with three, but these two countries are also home to some of the multi-country funds. The concentration on these two countries mainly reflects their stage of VC development at the time, but does have an impact on the distribution of Portfolio Companies.

The ETF Portfolio – Overview of Distribution of Portfolio Companies (PCs)

As at 31 December 2005, a total of 517 PCs had benefited from the ETF facility. Of these, 168 have been exited (trade sale, IPO, etc.) and 124 written off. The remainder, i.e. 225 PCs, were still active at year-end 2005. The Funds invested in a fairly wide spectrum of sectors as shown beside, but with more than half in Information Technology and Communication (ITC) companies.

Sector	PCs	%
Computer Related	286	55.3
Communications	73	14.1
Other Electronic Related	53	10.3
Biotechnology	34	6.6
Medical/health Related	28	5.4
Consumer Related	26	5.0
Other Products and Services	17	3.3
	517	

PCs were located in 19 different countries, including four non-Member States (the USA, Israel, Switzerland and Norway). However, reflecting the bias in the location of the funds, 50%, both in terms of count and investment amount, are in two Member states (France, UK). These are followed by a Member State (Finland), with 9% of investments and then the first non-member state (US), with 8%.

[2] It is EV's understanding that the stage classification at the EIF is currently undergoing a review. It should also be noted that the investment stage as defined in the EIF's systems did not always match the findings of individual evaluations.

I Policies and Strategies – Relevance

The over-riding question for the evaluations is "To what extent are the (investment) objectives of the Investment Funds consistent with the policy objectives outlined by the EU, and specifically in the Amsterdam European Council's Resolution on Growth and Employment?". There are also questions on coherence of the ETF Mandate with ASAP and the actions of the EIF with the ETF Mandate.

Findings

All twelve funds evaluated can be rated "Good". The investments at both Fund and PC level have a remarkably high level of consistency with the mandate, and thus with EU and ASAP policy. Two Funds are also consistent with specific national policies and actions in support of VC operations. The following four points consider different aspects of Relevance and conclude that:

a) EIB actions on VC investments, and EIF actions under delegation from the EIB, have clear policy justification at all levels;

b) The combination of the EIF's due diligence and the EIB-EIF consultation process should have assured that proposed investments were in line with EIB and EU policy;

c) While the ETF mandate does not limit the stage of funds to be supported, it does closely reflect the policy objective of targeting early stage and technology oriented SMEs;

d) With very few exceptions, even at the individual investment level, all Funds evaluated are fully consistent with the mandate's objectives.

I.1. EU Policies and Objectives

The communiqué of the Amsterdam Summit gave a general direction to the EU as a whole, before going on to specifics for the EIB:

"…we recognize the important role of the European Investment Bank and the European Investment Fund in creating employment through investment opportunities in Europe. We urge the EIB to step up its activities in this respect….., in particular:

- to examine the establishment of a facility for the financing of high-technology projects of small and medium-sized enterprises in co-operation with the European Investment Fund, possibly making use of venture capital with involvement of the private banking sector."

The Amsterdam Summit in 1997
General direction to the EU

"…more attention will be given to improving European competitiveness as a prerequisite for growth and employment, so as to, among other objectives, bring more jobs within the reach of the citizens of Europe. In this context, special attention should be given to labour and product market efficiency, technological innovation and the potential for small and medium-sized enterprises to create jobs."

Thus the EU gave a clear direction as to the tasks to be performed and the mechanism by which funding should be made available. Technological innovation and SMEs were to be one of the mechanisms by which growth and employment could be increased.

The Amsterdam Special Action Plan (ASAP) was a wider initiative than just high-technology SMEs. It also included investments in education, health, urban environment, environmental protection, large infrastructure networks and general SME financing. In June 1997, the plan was endorsed by the Board of Governors of the Bank, and in July the Board of Directors accepted a proposal from the Management Committee to set up a "special window" which, where appropriate, would employ part of the annual surplus of the Bank.

I.2. EIB Policies / Mission and the ETF Mandate

Having established the validity of the EIB's actions, the extent to which the investment objectives of the ETF mandate are consistent with the policy objectives outlined in the EIB's Amsterdam Special Action Programme (ASAP) has to be considered.

> The ASAP decision indicates policy objectives, direction and an action mechanism,
> - Economic growth;
> - Employment growth;
> - Support for technological innovation by SMEs;
> - Possible use of the EIF;
> - Possible use of part of the EIB surplus, i.e. part of the bank's reserves.
>
> without identifying quantified objectives:

Considering the last two points first. The EIB had channelled venture capital funding through established financial intermediaries within the EU and had also some experience of VC operations through its operations in partner countries. However the decision was taken that the most appropriate route was a "Fund of Funds" structure using the EIF. The mandate given to the ETF mandate specifically refers to the Bank's surplus as a source of the funds.

> **ETF mandate: main focus**
>
> *"…the creation and development of high growth and technology-oriented SMEs. Through these investments, its aim is to help improve the competitiveness and the capacity to innovate of eligible SMEs across the Union and thereby their ability to create jobs."*

For the first three points, the ETF Mandate makes reference to ASAP, but does not give the EIF the duty to promote either economic growth or employment growth directly and is more specific in its main focus.

EIF objectives were therefore to promote the actions under the third bullet point and, through that, support the objective of the second bullet point, with only implicit support for the first bullet point. The mandate is therefore clearly consistent with ASAP policy objectives, but only to the extent of supporting technology-based SMEs. On job creation, the mandate's objective was to support the ability of high technology SMEs to create jobs, not the direct creation of jobs *per se*.

The Mandate includes a set of Investment Guidelines covering: the stage of funds, the size of individual investments, that they should target SMEs, the type of fund i.e. a preference for independent rather than captive funds, etc. These guidelines are fully in line with EU and EIB policy. Neither EU nor EIB policies explicitly define what type or stage of Fund should be supported. However, this is implicit from the definition of the target beneficiaries mentioned in the EIB and EU policies: technology oriented SMEs.

I.3. Analysis of Portfolio Companies (PC): Match to ETF Objectives

Having established that the ETF mandate is coherent with policies and objectives, the outcomes of the investments can now be considered, i.e. whether or not the Funds invested in technology oriented SMEs based in the European Union.

In negotiating an investment in a particular Fund, the EIF made the conditions of its involvement clear from the beginning:

> Technology and Innovation

All of the Funds evaluated individually included the term "technology" in their investment guidelines. In all cases, this had been the Fund's objective from the outset, even if it was not explicit before the EIF involvement. Managers were seeking returns which were substantially above risk-free rates. The commonest quoted target was 25%, the only exception had a target return of Government Bond Rates + 10%. The Managers interviewed during the evaluation of individual funds believe that technological innovation is the activity which is most likely to achieve the level of growth that a 25% return implies.

The only question mark is over the definition of "technology". Many of the PC investments were in what has come to be called "dot-com" investments, often offering retail services via the internet. This was certainly an innovative business model at the time, but it is questionable whether it could legitimately be called "technology". All of the Managers visited are, or were, active investors in Information Technology and Communications (ITC) and almost all have some involvement in Life Sciences: mainly bio-technology. Apart from the question mark over dot-com investments, out of 293 PCs in the Funds which were the object of an individual evaluation, fewer than five were not based on innovative technology, and most of these involved advanced engineering technologies.

SMEs

All PCs were identified as being SMEs at the point the investment was made, except possibly one where it is not clear. Again, the objective of rapid growth would tend to indicate involvement at the SME stage.

EU location

The mandate requires that at least 85% of onward investments should be located within the EU, although it does not specify if this is to be by number or by value. The evaluation finds that only Managers from countries which already have well-developed VC sectors are likely to have invested outside their home country. Less developed countries tend to focus on their domestic markets. However, even Managers from the most developed countries were happy to accept the geographic limitation, and all funds evaluated meet the condition. Only two Managers expressed reservations about the limit. Both are active in Life Sciences and would like greater freedom to invest in Switzerland.

Stage of Funds

VC activity is categorised using terms such as seed, start-up, early-stage, expansion, later-stage, etc. However, these terms tend to represent overlapping segments of a continuum. Different Managers may describe individual investments in slightly different terms. Similarly, a Manager will normally continue to make follow-on investments in PCs until a suitable exit can be achieved. This might involve a follow-on fund making follow-on investments in a PC when it is well past the seed/early stage. Fortunately this option is specifically included in the Investment Guidelines. An individual analysis of the 293 PCs funded by the evaluated funds is not within the scope of the evaluation, and the EIF IT system does not identify the stage of investment for all the PCs it has recorded. However, with the possible exception of two funds, which contained a small, but significant, number of later-stage businesses, the 12 evaluated ETF fund portfolios were made up almost exclusively of seed and early stage investments.

I.4 Analysis of Portfolio Companies: Match to ASAP Objectives

VC funds are created with a single objective: maximising returns to investors. Job creation is therefore not a priority and it is not a direct ETF mandate objective. However, it does form part of the EU and ASAP policy framework, in line with §I.1 above and the EIF has been attempting to monitor employment. As a job creation mechanism, seed/early stage investment is probably neither effective nor efficient, at least in the short term; a view reflected in "Employment Contribution of Private Equity and Venture Capital in Europe"[3]. This paper found that while there was a higher rate of job creation in early stage VC funded companies, it was the buyout phase, which actually created the most jobs in absolute terms. This particularly applied to buyouts of companies with up to 200 employees.

Still, investing in new technologies and high-growth companies should create employment within those companies. Based on data received by the EIF, this evaluation has prepared a preliminary analysis of the employment effects of the ETF mandate. However, the underlying employment data has some serious shortcomings, with less than 50% of the data being useful, which leads to the question of the quality and value of the employment data received by the EIF.

Bearing these data quality concerns in mind, the data analysed suggests that the average PC had circa 58 employees. Extrapolating this to all 517 PC investments gives an indicative figure of 30,000 employees that benefited from the programme at some point. This figure can be considered as an indicator of the total level of employment under the ETF mandate, but it is not an indicator of job creation.

To estimate job creation, the growth in employee numbers between the initial investment date and the latest date of available employment data was used. This analysis was performed on roughly 45% of the

[3] European Venture Capital Association, Research Paper, November 2005

total population of portfolio companies under the ETF mandate. After excluding two PCs employing particularly large numbers of people, this approach suggests that, on average, PCs each created 17 jobs. Taking all PCs into account, total job creation might lie between 10,000 and 15,000. It is important to note that this analysis focused on direct job creation and did not take into account either indirect job creation or job destruction.

This overall job creation figure can also be expressed as a (job) growth rate between the initial investment date and the latest date of available employment data. The average annual growth rate for the ETF portfolio was estimated as 12.8%. This is lower than the comparable EVCA/CEFS study mentioned above, which found 30.5%. However, the calculated figure is still well ahead of the employment growth rate for the EU-25 as a whole, which was only some 0.7%.

II ETF VC Operations – The Managers: Quality and Performance

Introduction

Of the twenty four funds mentioned in the introduction, twelve were selected for individual evaluation, involving ten fund managers, i.e. there are two instances where the same fund manager has two consecutive funds under management. These ten fund managers are operating out of seven different countries and cover all investment stages present in the ETF portfolio. But for one fund their geographic investment focus coincided with their countries of operations. That fund follows a multi-country investment strategy. The twelve funds selected for individual evaluation ranged in size from below EUR 50 million to larger than EUR 200 million.

Managers and Funds have separate legal identities, and it is also common for Managers to set up specific management companies to handle individual Funds. These companies may be either simple limited liability companies or limited liability partnerships, depending on the jurisdiction. There are two main reasons for the separation: to allocate different returns to the Manager and the investors, and tax efficiency.

Although irrelevant for the EIF by virtue of its tax-exempt status, the question of tax efficiency is important for most investors. This led to a number of Funds and/or Managers being registered in locations which might be considered as having favourable taxation regulations, e.g. British Channel Islands, Madeira Free Trade Zone (Portugal). However, none of these are on the watch lists issued by the EIB Group Chief Compliance Officer and none are registered outside the EU. The legality of the structures was confirmed by the EIF before investing, with particular attention paid to the strength of the limited liability and to ensuring that the funds were operating within the respective legal frameworks.

All Funds have a fixed term structure. All are for ten years, except two which are for eight years. However, these terms could be extended by vote of the investors for up to two, three or even four years. At the end of the period, the investment agreements call for the remaining equities to be distributed pro-rata between the investors. At present, none of the Funds have reached their final close.

In the following two sections, Managers have been rated first for Quality and then for Performance.

II.1. The Managers: Quality

Quality was rated against three groups of criteria, presented in the following sub-sections: Governance and Financial Stability, Track Record, and Staff Capacity and Motivation. At the point at which the investment decision was made, this produced ratings of :

Rating	Good	Satis.	Unsatis	Poor
Number of Funds	0	7	5	0

Industry experience shows that the strongest indicator of a Manager's potential to make a high return to investors is track record. Only two of the Managers had any prior track record in VC operations: one good, one poor. Similarly, only one small team and two individuals had any personal experience of having been through a full VC cycle. This lack of a significant track record weighs heavily against most of the Funds and their Managers. Similarly, the heavy workload placed on many professionals limits their ability to provide added value services to their investments. These two factors, plus question marks over corporate governance is what produced such a significant number of Unsatisfactory ratings. This has to be read in conjunction with "Manager Performance" which takes into account decisions taken to mitigate the potential weakness of inexperience.

Governance and Financial Stability

The reason why emphasis is placed on corporate governance arrangements is because the investor is normally handing over all responsibility for the identification, selection, due diligence, approval, disbursement, monitoring and exit of investments to the Manager. The term "blind pool" is often applied to this process. The funds of individual investors', or Limited Partners' (LPs), create a pool which the Manager is free to manage at its own discretion, provided its actions are in accordance with the Fund's prospectus and with any shareholder agreement. On agreeing to invest in a blind pool, the investor loses almost all control over its funds, and can only recover control where there are serious issues of dishonesty, gross negligence or gross incompetence.

Although track record is a key indicator of future success, previous Funds and the background of the individuals can create conflicts of interest, typically where there is a question of co-investments. Conflicts of interest can also occur where some investors are granted co-investment rights with the Fund, or if individual managers' share of the carry is on a personal deal-by-deal basis. All Managers have procedures in place to mitigate this problem, either through pre-established codes of conduct, or by using an Advisory Board/Committee to adjudicate, but there were still a few instances of potential conflicts of interest.

Investment/divestment decisions are made by groups of individuals working for the Manager. The decision group ranges from just two partners up to all professionals with the right to part of the Manager's carry. As a general principle, the larger the group the better, and investment decisions being made by the people responsible for the due diligence is to be avoided. The evaluation found that equity holders/partners in the Manager always have a key role but, with very few exceptions, decisions are taken on a consensus basis. There are three cases where the decision taking is limited to the Partners/shareholders; in one of these, it is in the hands of two individuals. Such a concentration of decision power is generally to be avoided. In the case of one Manager, associates are excluded, while for another Manager all the professionals are shareholders anyway. In some cases it was proposed that these Advisory Boards/Committees play a significant role in the investment decisions; either because of the reputation of particular members, or to compensate for an apparent lack of experience on the part of the Manager. This has only been substantive for two Managers, and due to their home country's legal framework. Even there, it only has the right of veto. In fact most Managers are dismissive of the Advisory Board's role in the investment decisions.
This criteria is the weakest for the Funds evaluated, with 10 Funds where this process is considered less than satisfactory:

Financial stability: all Managers have sufficient revenues to be able to carry out their functions. They are all operating independently and raising funds from the open market. Three Managers did have strong links to large commercial banks when the Funds were established, but their Funds cannot be described as either captive or semi-captive.

Given the weaknesses observed on the decision process, 5 Funds are rated Satisfactory and 7 Unsatisfactory on this sub-topic.

Track Record

As already stated, track record is a key indicator of success, but eight of the twelve funds are "first-time" funds, i.e. they were the Manager's first attempt at managing a venture capital fund. Two are follow-on funds from the Manager's first time fund, where there had already been an EIF investment, and two are follow-on funds with no previous EIF investment. The EIF was therefore investing in funds where the Manager had little or no track record of VC operations. It is normal practice for Managers to have the right to launch new funds when a specific proportion, e.g. 60%, of committed funds on the first fund have been invested. This allows the situation whereby even where the EIF was investing in follow-on funds, it was usually investing in Managers which had not been through a full fund cycle, i.e. fund-raising, deal making (identification, due diligence, investing), investment development, and exit (route identification, route development, divestment deal, divestment implementation).

There are at least two possible explanations for the EIF's investment choices. Firstly, although the mandate requires the EIF to pay particular attention to "the quality of management teams, their experience, …..", it also requires the EIF to "…ensure the widest possible coverage of the 15 member States". Funds typically concentrate on their home territory, so the only way to achieve the "widest possible coverage" was by including investments with less experienced Managers operating in less well developed markets. Secondly, institutional investors and Funds of Funds, which make up the bulk of the supply side, tend to re-invest with successful Managers. These can therefore reach their funds' target size without needing to look for new investors, particularly investors which attach specific conditions to their funding. This would have limited the EIF's ability to invest in the "best", established funds.

Four of the Funds selected are rated as less than satisfactory: two because they had no track record, and two because their previous funds had performed badly.

Staff Capacity and Motivation

Individuals and teams can, and do, move between Managers. It is possible for a first-time fund to be managed by experienced professionals, and for a follow-on fund to be managed by novices. When the investments were made, four funds were managed by teams, which included one or two experienced professionals but nine out of the ten Managers, could still be described as "first-time teams". This does not mean the individuals were either incompetent or unqualified. Almost without exception, team members either came with a background in corporate finance, or were technically qualified with either management or financial experience. However, only one Manager could be said to have had full fund cycle VC experience when the investment was made.

At present, all of the Managers are either running, or have run, parallel funds. Fund professionals are therefore normally expected to carry a portfolio of investments at different stages of development. A "best-practice" target for individual portfolios in seed and early stage funds is three investments per professional, although this figure might appear rather low. In practice, only two fund managers have achieved this level, the performance of both of which is well above average. Most funds are operating at between four and six, and there is one case where the figure is greater than ten.

Typically, professionals in Managers are well paid. However, their real incentive is a share in the carried interest. Rights to the carry lie with the Management Company, but it is normal for part of this to be distributed to team members. Only one fund does not share the carry with the professional staff. To allow teams to grow, Managers often reserve part of the carry for new staff, but in two cases the Partners in the Management Company agreed to reduce their individual shares to be able to offer an attractive package to an incoming partner.

This rating is made up of four criteria, or sub-topics; all relating to the ability, capacity and willingness of the Manager to bring value to their investments. More than half of the Funds are satisfactory but what separated these from the rest of the Funds, is their willingness to devote staff resources to individual PCs and to share the carry between the interested parties.

II.2. The Managers: Performance

Performance is measured against three groups of criteria: internal processes, operating strategies and the terms and conditions of the Fund. Although ratings for the individual criteria groups could be given, no overall rating can be offered for two funds managed by one fund manager. Both these Funds had to undergo a profound restructuring due to their poor financial performance and, the current structure is divorced from the original configuration. It should be noted, however, that the current management of the legacy portfolio is satisfactory.

Rating	Good	Satis.	Unsatis.	Poor
Number of Funds	3	5	2	0

In terms of being able to invest in technology SMEs across the European Union, all Managers show a satisfactory level of performance. All had access to a large enough deal flow to be able to select projects, which met those criteria. However, if Managers are accepting only between one and four per cent of the deals being presented to them, as is the case here, then even if there is a substantial number of funds in the market, there will still be enough deals available for any sentient Manager to make eligible investments.

Internal Processes

One of the crucial responsibilities of a Manager is deal flow identification. All Managers claim to be particularly active in seeking out new opportunities, and that they normally expect to take the lead in any new deal. This might be true for many seed and start-up investments, but is usually not true for later stage investments, where most deals are syndicated. Managers usually depend on networks of contacts to create a stream of potential deals: professional advisers, consultants, financial intermediaries, etc. Potential deals also arrive through their membership of the relevant venture capital association. Only two Managers could clearly identify a specific deal development mechanism. The first has well-established links with academic research centres and has established an “entrepreneur in residence” programme. Potential entrepreneurs, with an interesting proposition, are given office space in the Manager’s offices, administrative support, and business and financial advice, to allow them to develop their ideas. The success rate of this programme has been running at 50%. The second Manager employs a “boiler-room” of “associates” to cold-call potential deals and to follow up on trade and academic publications.

Again, all Managers see the due diligence process as being part of their core competence, but actual performance cannot be measured. All except one claim to have technical competence, but most call on consultants to verify specific technical aspects of deals under consideration. Managers also usually rely on external legal advisors.

All Managers report to their investors on a regular basis: normally quarterly with unaudited figures, plus an annual audited report. However, the reports supplied for ETF investments have often been limited to financial information and a brief comment on the main activities undertaken in the past quarter. Good managers also provided highlights of their investment and divestment prospects, sometimes on an investment-by-investment basis; but this was the exception, rather than the rule.

Ratings of the Funds are satisfactory or better, except for two Funds, which were passive in terms of deal flow, with no clear, proactive strategies for identifying or developing investment opportunities.

Operating Strategies

With one exception, all Managers were projecting a net IRR return of 25% when the Funds were being proposed. The figure usually appeared in sales presentations, but occasionally in the Private Placing Memorandum (PPM) or Limited Partnership Agreement (LPA) itself. The objective for one fund was the government bond rate plus 10%, which would have been substantially lower than 25%. The figure of 25% should not be seen as the Manager’s return objective per se, but rather as an indicator of the proposed Fund’s risk strategy.

All except one Manager claim to have sector expertise, typically split between IT, Communications and Life Sciences, depending on the objectives of their Funds. The one exception argues that modern technologies are now so vertically specialised that a generalist sector expert, with mainly horizontal

knowledge, could not contribute anything to the PC. Where they need specific expertise, they buy it in. However from discussions with the other Managers, it is clear that what their in-house specialists supply is not detailed technical expertise. It is an understanding of the technical and scientific principles involved, and a knowledge of both the market for the product and the structure of the industry. The skill which all Managers believe they can offer is financial and commercial deal structuring.

Likewise, all Managers claim to be active investors, but only three can point to specific actions on their part to justify this. All are conscientious about attending Board Meetings and offering guidance on strategic issues. However, with possibly one exception, none are involved in hands-on management. What the Managers appear to bring to the investment is an independent, rational opinion as to the actions management need to take, particularly where the entrepreneur's skills lie with the technology rather than the business.

Eleven out of the twelve funds are rated as Satisfactory or better on this sub-topic. The Manager of the weaker fund has now moved on to much later-stage operations.

Terms and Conditions

The Managers of all funds receive three types of fees: (1) a set-up charge, (2) annual management fees, and (3) profit sharing. Set up fees for the Funds in question were within typical range, although Managers often tried to negotiate a higher figure. Alternatively, the figure would be based on a percentage of the value of the fund. Particularly where the figure was a high percentage figure, potential investors would negotiate a cap based on actual costs.

All funds except one are based on an annual management fee of the capital committed by the investors to the fund. In some cases there are step-downs, say in year six of the fund, to reflect the decreasing workload. One fund has a complex structure, but the net result over the life of the Fund will be in line with all the other funds. These fees are meant to cover the normal operating expenses of the funds, including the salaries of professional and support staff, administrative overhead and office space. Office accommodation ranges from the run-down to the luxurious but the evaluation found no cases where the fees were not sufficient to sustain the manager. In one specific case the fund had been restructured, with management fees going from industry standards to a budgetary fixed fee arrangement. This is a satisfactory arrangement, reflecting the significantly reduced team put in place to manage the remaining PCs.

Every Manager benefits from a percentage of the Fund's profit, referred to as the "carry" or "carried interest", and this is the key incentive which aligns the interest of the Manager and the investor. Furthermore, it is normal for the Manager to make investments in the Fund itself, as well. There is only one case where this did not happen. However, this investment is usually not significant, and the return on that is insignificant compared the effect of a carry in a successful fund. This carried interest becomes payable after the original capital has been returned, plus a minimum return, referred to as the hurdle rate. The hurdle rate to be applied is usually in line with industry norms. The level of the hurdle rate has to be seen against the target returns referred to in the previous section.

Flat fees are not an incentive to effectiveness: the income is the same whether the committed capital is invested or not, although this is partly mitigated by the Managers' own investment in the Fund. The level of fees are a point of negotiation between the Manager and potential investors, and it was the area where the Finance Committee of the EIF most frequently asked for changes to the investment agreement. In this case, the interests of the EIF and other investors are fully aligned and it is not clear at this distance in time whether changes to the final structure were prompted solely by comments from the Finance Committee.

Overall, the terms and conditions associated with EIF investments are fully in line with industry norms, with no particular advantages or disadvantages associated with the EIF's involvement. All Funds are Satisfactory apart from two where the Managers' investment is either minimal or absent.

III. Fund Performance

The utilisation rate of the mandate is Good, with a high percentage of available resources invested in PCs, taking into consideration a small amount cancelled.

At the level of the individual Funds, ratings are based on the assessment of the Portfolio developments, which includes investment capacity, portfolio structure and exit activity and on the Financial Performance of the Funds, which include benchmarking with similar investments in the VC industry.

Individual Funds Rating	Good	Satis.	Unsatis	Poor
Number of Funds	4	5	3	0

The performance is clearly mixed, but largely positive; a common factor of the Funds with an Unsatisfactory rating is that they had the poorest financial performance against the benchmark.

The full portfolio of ETF Mandate investments is out-performing the Thomson Financial/EVCA benchmark both in terms of purely financial performance, and against an asset allocation performance measure. The absolute returns will be well below investors' expectations, but the industry as a whole has suffered as a result of the internet bubble. The general fall in confidence had a knock-on effect which damaged many Funds, even those with limited exposure to dot.com and whose own investments were quite sound.

III.1. Utilisation of ETF Resources

This section considers the effectiveness of EIF resources, rather than Fund performance per se. While the ETF mandate is for EUR 125 Million, 87% of this actually reached the target portfolio companies:

100.0 %	Available to the Fund
99.6 %	Approved by the finance committee
93.5 %	Committed to funds.
88.3 %	Funds actually called by the funds.
87.0 %	Amounts actually invested in portfolio companies.

The difference between the mandated figure and the amount approved is negligible, but there is a significant drop at the next stage. This 6.1% difference is largely due to one Manager of two consecutive funds acting responsibly and returning, or rather cancelling, capital committed by investors *ex post*.

The next stage also shows quite a large drop: 5.2%, which reflects standard practice in the industry. At the end of the investment period, the Manager typically sets aside a proportion of the fund, say 30 to 40%, to allow it to make follow-on investments in the portfolio companies - and to be sure that there are sufficient funds available to pay the management fees for the life of the fund. There is a level of uncertainty in this process but, bearing in mind the difficulties during the period, the level of unused resources is probably acceptable.

The difference between the amounts called by the funds and actually invested in portfolio companies might appear too small, considering the level of management fees. The answer lies with the possibility of reinvestment early gains, which applied to many of the funds. In some cases, substantial sums were reinvested, with one fund investing 186% of the called amount. The ability of a Manager to reinvest early gains is usually tightly limited by the LPA, as it increases the risks for investors. Typically, the Manager can only reinvest during the early stages of a Fund's life, e.g. before the end of year five.

With the exception of two consecutive funds, all the Funds in which the EIF invested either invested the full amount of the Fund, where there was a follow-on fund available to provide any additional support the PCs might need, or kept back a minority of the Fund to make follow-on investments in PCs. Similarly, with very few exceptions, the Funds were able to make these investments within the foreseen timescale. Where there were delays, this was always attributable to exogenous factors, particularly the instability in the VC markets in 2001/2002, following the "dot.com bubble". So, while the figure of 87% arriving at PCs may appear low, the EIF's performance is possibly better than expected and the level of funds absorbed is Good.

III.2. Portfolio Developments at the Fund Level

Investment capacity and Development

To achieve a single investment, Managers expect to carry out a due diligence on between five and ten potential deals. For each opportunity reaching the due diligence stage, the Manager will have filtered between eight and ten deals. These figures are quite consistent, and the normal ratio of potential deal to investment is between 40 and 100. Developed markets tend to show the highest number of unsuccessful proposals, but it is not clear if this is due to higher numbers of deals or lower quality. There is no clear correlation between rejection rate and fund performance: the highest performing funds have high ratios, but so do some of the weakest funds. The Internet bubble may have masked differences between funds.
Seven Funds are rated Good against this sub-topic; all the rest are Satisfactory.

Portfolio Structure

As seen in §I.3, the structure of the Funds' portfolios in terms of technology, location, size of investments, etc. is almost universally good. The portfolio structure of the Funds, covering issues such as portfolio diversification, syndication, appropriateness of funding levels is also generally satisfactory. Nine funds are rated Good and two are Satisfactory. Only one fund is rated Poor, being weak in all of these areas.

Exit Activity

While all Managers were successful in making the initial investment, three have been less successful so far in realising them, particularly if they had a vintage 2000 Fund. Intuitively it might be expected funds with a high mortality rate, i.e. the failure rate of investee companies, would also have a weak performance overall. However, a high mortality rate would be acceptable to financial investors if the surviving investments were to show a large enough return: that is the VC business. In practice, a benchmark of 30% mortality can be applied. Of the twelve funds evaluated in-depth, only four funds have a score below 30%. The other eight funds have an effective mortality rate of more than 30%. This includes two funds that were in the top 25%, or first quartile (See §III.3), of their peers overall, but all of the Funds rated as Unsatisfactory or Poor on this criterion are in the fourth quartile.

Ex-ante, most Managers had indicated that their preference was for exits via an Initial Public Offering (IPO), usually on one of the second tier markets. In practice, there have been very few IPO exits: <u>most positive exits have been trade sales</u>. The dot.com bubble and associated stock-market perturbation is partly responsible for this. The market appetite for new issues, high-technology new issues in particular, was substantially reduced by the events of 2001/2002. Managers, and particularly Managers in more peripheral markets highlight two issues. Firstly, products which are proven in these markets often lack credibility in wider markets. This limits growth, which in turn limits the investments' attractiveness to potential buyers. Secondly, multi-nationals with a willingness to invest and the resources to pay good price: earning multiples are not interested in businesses with a potential annual turnover of less than EUR 80 – 100 Million. Very few early-stage investments involve products and services which can achieve that. It can therefore be very difficult to find buyers for PCs.

This also raises a policy issue. The country with the largest appetite for acquisitions is the USA. A large proportion of the trade sales went to companies which were operating internationally, e.g. Yahoo, Microsoft, Cisco, but which are headquartered outside the EU. To what extent, therefore, are EU Funds developing indigenous technology, products and services for the benefit of non-EU corporations, and does this represent a problem for policymakers?

While eight funds are rated Satisfactory or better, two funds are Unsatisfactory and two are Poor. For three of these, the Funds could reasonably be described as failing, while the Manager of the fourth is no longer operating in VC and is trying to extricate itself from its investments.

III.3. Financial Performance of Individual Funds

The most common and widely accepted measure of value creation is the Internal Rate of Return (IRR). In a study[4], the British Venture Capital Association (BVCA) found that the IRR *"is the most appropriate method to measure the performance of venture capital and private equity funds."*

The financial performance of the individual Funds includes an assessment of the performance at the level of the PCs and the IRR calculations and benchmarking at the individual Fund level, giving more weight to the benchmarking than to the actual IRR observed.

Investment Performance at the PC level

The return indicator used at the portfolio company level is the multiple that is calculated by dividing the total proceeds realised at exit by the invested amount at cost for a specific company.

Out of 517[5] underlying investee companies, a total of 292 companies were exited as of end 2005, either through a sale or a complete write-off. The exited companies produced an average multiple of 1.76. There are significant discrepancies between the underlying portfolio companies according to their vintage year: the vintage year is defined as the year of first received investment by the company from the VC fund. The exited 1998 vintage year companies produced an average multiple of 4.35, compared to an average of 0.55 for the vintage year 2000. The exited 1999 vintage year companies achieved an average multiple of 1.87. Data for vintage years post 2000 have to be treated with care due to the low exposure of the portfolio to these vintages.

Exits and Realised Multiple, and Number and Value of Write-offs by Vintage Year

Vintage Year	Number and share of exited companies (1)	Average multiple realised at exit (2)	Number and share of written-off PCs	Amount and share at cost written off (EURM)
1998	58 (19.9%)	4.35	19 (15,3%)	52,9 (13,1%)
1999	101 (34.6%)	1.87	37 (29,8%)	87,7 (21,7%)
2000	109 (37.3%)	0.55	62 (50,0%)	226,6 (56,0%)
2001	18 (6.2%)	0.37	5 (4,0%)	37,1 (9,2%)
2002	1 (0.3%)	0.00	0 (0.0%)	0 (0.0%)
2003	4 (1.4%)	1.80	1 (0,8%)	0,3 (0,1%)
2004	1 (0.3%)	0.93	-	-
Total	**292**	**1.76**	**124**	**404,5**

(1) Including fully written-off companies.

(2) Multiple calculated from amounts expressed in the fund's currency

The figures in this table highlight the 2001/2002 problem. Early vintage funds which were able to make investments, develop the companies and then exit were able to show substantial multiples. Later funds were unable to exit their investments.

When looking more specifically at the exits through write-offs, it appears that the vintage year 2000 represents approximately 50% of all written-off companies. This high concentration of exited companies (through sales and write-offs) is explained by the pattern of the EIF's commitments.

Comparing across the columns reinforces the impact of 2001/2002. Looking at the 2000 vintage year, some 60% of exits were due to write-offs, compared to 33% for the 1998 vintage year.

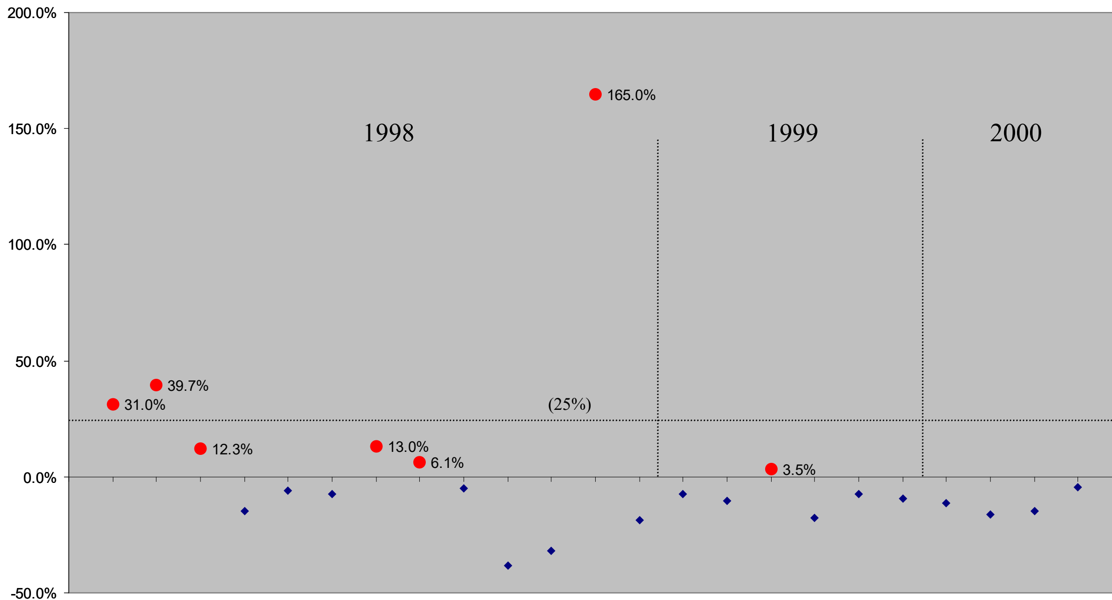
[4] See British Venture Capital Association, in: UK Venture Capital and Private Equity as an Asset Class for Institutional Investors (Executive Summary). See also: CFA Institute, Private Equity Provisions for GIPS standards; AFIC (The French Private Equity Association), Private Equity & Venture Capital – A Guide For Institutional Investors; US Private Equity Industry Guidelines Group (PEIGG), Reporting and Performance Measurement Guidelines, dated March 1, 2005, and others.

[5] N.B.: This number and the number of exited companies exclude double counting due to syndicates in companies by two or more VC funds.

Investment Performance at the Fund level

As the following graph shows, there were substantial variations in Fund performance ranging from minus 38.1% to plus 165% with the majority of Funds currently showing slightly negative interim IRRs.

Distribution of Net IRRs by Vintage *Portfolio as at 31/12/2005 (EIF/Origo Data)*



This graph highlights also the importance of vintage year presented in respect of the individual PCs.

Breakdown of the ETF portfolio by quartile

Investee funds	Share %
First (Top) quartile	29
Second quartile	4
Third quartile	29
Fourth quartile	38
Total	**100**

Source: Origo analysis based on EIF data

This table shows the breakdown of Fund performance (in number), benchmarked against funds with the same vintage year and stage of investment. If the ETF portfolio were to match the market as a whole then there would be an equal number of Funds in each quartile. In fact the share of the funds in the first quartile is higher than 25%, suggesting a better-than-average performance. However, the second quartile is far below expectation, and the total for the first two quartiles is only 33% - well below the desirable minimum of 50%. As a consequence, funds in the third and the fourth quartiles have a share which is much higher than 50%, i.e. 67%.

III.4. ETF Financial Performance

At the portfolio level, the IRR performance of the individual Funds has to be aggregated. This can be done in multiple ways, for example by weighting the individual rates of return according to the commitment of that fund relative to the portfolio or by pooling the cash flows for a group of funds and then calculating the rate of return on that 'portfolio of cash flows'. These two approaches produce quite different results, and measure quite different aspects of portfolio performance. They will therefore be treated separately when benchmarking ETF to the market, which is the measure adopted here, given the terms of the ETF mandate.

ETF mandate : *" target funds generating returns acceptable to investors in line with market trends. "*

NB The figures used in this section are based on EIF data for the whole of the ETF as at 31 December 2005.

ETF Investment Performance – Commitment Weighted IRR

The commitment weighted IRR is a measure of the EIF's ability to allocate resources across investment opportunities. There are three inputs: actual cash outflows (investment drawdowns, fees, etc), actual cash inflows (repayments, dividends), and the residual value of the portfolio. This allows the IRR to be calculated at the individual fund level. These individual IRRs are then aggregated by weighting them by the capital committed. In the case of the ETF Mandate, the IRR was calculated for the purpose of this evaluation.

However, it cannot be considered in isolation. Proper account has to be taken of exogenous factors, and the approach used here is based on benchmarking the ETF Portfolio performance against comparable portfolios.

The benchmark considered is the return achieved by all European venture capital funds. These data are obtained from Thomson Financial and the European Private Equity and Venture Capital Association (EVCA). Before comparing these returns, an analysis of the structure of the portfolio and the benchmark indicated that, amongst other characteristics:

- The benchmark has different weightings in terms of vintage years, e.g. vintage year 1998 represents almost 56% of ETF commitments as opposed to 12% in the benchmark;
- The weighting of the stages of funds is significantly different. Early stage funds play a much more important role in the ETF portfolio than for the industry as a whole.

Benchmark returns for the 1998-2000 vintage years
Commitment weighted net annual IRR since inception

Stage of investment of funds	C-W IRR
Early stage	-15.1 %
Development/Expansion	-2.4 %
Balanced/Generalist (1)	-4.3 %
Venture Capital (2)	**-9.6 %**

Source: Thomson Financial/EVCA

Based on this exercise, the ETF Portfolio is out-performing the venture capital benchmark by a significant margin; despite there having been no evidence of an asset allocation strategy at the time potential investments were being screened, and despite the curious distribution of individual fund performances shown in §III.3.

ETF Investment Performance – Pooled IRR

Whereas, the commitment weighted IRR gives an insight into the Manager's ability, the Pooled IRR is a simple and direct indication of the financial success of the investments. The three inputs are the same, but this time the results are simply summed for the time periods to produce a real, unweighted IRR.

The Pooled IRR made an extraordinary leap in value early in its life. This was the impact of one single fund's performance. While that particular Fund has remained the most successful, its impact diminished as the Portfolio developed, with an accelerating decline in returns as the impact of the 2001/2002 market downturn took effect. However, the return has been improving since 2004.

Benchmark returns for the 1998-2000 vintage years
Pooled net annual IRR since inception

Stage of investment of funds	Pooled IRR
Early stage	-3.8 %
Development/Expansion	-0.7 %
Balanced/Generalist (1)	-3.8 %
Venture Capital (2)	**-3.1 %**

Source: Thomson Financial/EVCA

As with the Commitment weighted IRR, the pooled IRR cannot be read in isolation. The same benchmarking approach was therefore used to assess the financial performance of the portfolio.

The ETF Portfolio is also outperforming the venture capital benchmark on the key measure of Net IRR.

In addition, the EIF also regularly produces "projected final outcomes" for its venture capital portfolios. This takes the form of projected, or 'expected', IRRs. The main assumption underlying such a statistical analysis is that historical data is representative of the future. Typically, a pool of historical data stretching from 1980 to 1999 is used to determine a given VCF's (or portfolio of VCFs') likely future performance.

In terms of sustainability, Funds are governed by the quality of the Manager and the exogenous market. Considering only the manager, therefore, it is worth noting that the ability of a Manager to raise a new fund is almost directly linked to its performance on its most recent fund. To that extent, the Net IRR is also a key indicator of Manager sustainability.

IV EIF Role

EV has reviewed the **Management of the Operation Cycle by the EIF**. Taking into consideration the weak institutional memory related to pre-2000 activities, some observations have been made by the evaluators; no major structural weaknesses were identified.

Given that the processes and procedures have changed completely after 2000/01, no formal assessment was made. A few points deserve comments and suggest recommendations, mainly related to monitoring, as they seem to be still relevant today.

- Although the monitoring of EIF is now performed in a sound and consistent way, there is no readily available information on financial indicators of underlying portfolio companies (like sales and EBITDA). A careful assessment regarding the costs and benefits of including this information in the EIF's database would be justified.
- Some key information, including key decision dates, version tracking etc, do not appear to be managed by the database, and that while information on EIF contact names are in the system, they do not appear as a matter of course on the opening pages.
- Gaps and discrepancies in the hard copy files were found, e.g. missing final versions of the Authorisation to negotiate and the Financial Committee authorisations; the files often contained multiple, undated versions of contractual documents with no clear indication of their status.

All other remarks will potentially be considered again within the next evaluation which will be looking at EIF activities until the most recent period and are not reported in this report.

EIF contribution

This section is concentrating on the EIF Contribution throughout the life of the Funds evaluated.

The EIF's Contribution to Fund operations has been evaluated at three phases of the Funds' lives; Fundraising, Start-up (capacity to attract investors) and Operations.

Rating	Good	Satis.	Unsatis.	Poor
Number of Funds	1	11	0	0

EIF contribution is Good on Capacity to attract investors, Satisfactory or better in Fundraising, while EIF role during the operations of the Funds is more uneven.

Role in Fundraising

Two questions were addressed to Managers during the individual evaluations: whether or not the EIF's presence encouraged other investors to commit to the Fund, and whether or not the Mandate's conditionalities affected the willingness of investors to participate in the Fund.

All Managers welcomed the EIF presence. Despite being relatively new to VC operations, the EIF was seen as being a good investor to have on the commitment list, and that its presence sent a positive signal to potential investors. There were also four Funds which would either have struggled, or failed, to reach a first close without the EIF's presence. However, it should be noted that one of these funds can be described as having failed; without the EIF's presence the Fund might have been unable to close, in which case the other investors in the Fund would not have lost such a large amount of money.

The conditionalities included in the mandate do not appear to have deterred investors. This is probably because they were so closely aligned with the Funds' original objectives.

Role in Start-Up

The EIF played a very positive role in the launching of the Funds. Firstly, it was prepared to make a clear commitment at an early stage. This can be seen by the fact that Financial Committee approval was often many months before the first close. Similarly, on the Funds evaluated, there were only three cases where the EIF did not participate in the first closing. In one case, this was because the Manager only sought non-domestic investors after the first close. In another, the lack of involvement in the first close was purely administrative.

Secondly, the EIF was prepared to make significant investments in individual funds, and the combined ETF and EIF stake was usually in the range ten to twenty per cent of the Fund's total commitments. This usually made the EIF one of the biggest investors in the Fund.

Role in Individual Fund Operations

It was noted that the EIF's involvement in Fund operations was inconsistent, with active monitoring on some funds and entirely passive monitoring on others. Where monitoring was active, this tended to be in the collection of data and discussions with the managers. There were only isolated instances of the EIF playing an active role in the investment/divestment process. On the other hand, where there was a problem with a Fund, or if the Manager had a legitimate need to modify, say, the Partnership Agreement, then the EIF was an active and willing participant.

Management of Several Sources of Capital

> According to ETF internal documentation:
>
> *"EIF will invest its own resources alongside the funds provided by the EIB in the context of the ETF facility, whenever this provides added value to the investment and is compatible with EIF's existing priorities and guidelines on equity operations".*

Over and above the ETF mandate (EUR 125 M), the EIF co-invested EUR 75.8 Million from its own balance sheet. This can be compared with the current cumulative situation, where it has provided overall less than 9% of disbursed funds through mandates and its own funds.

The evaluation finds no clear relationship between ETF and EIF investments, with different proportions invested and three of the ETF portfolio's funds having not received any EIF commitments. This begs the question as to the criteria used by the EIF to allocate its own resources. No guidelines were found that would have helped the decision process in 1997-2000. The development and specific use of guidelines regarding the EIF's co-investment rights is therefore recommended in order to clarify the co-investment relationship and to avoid conflicts of interest.

GLOSSARY OF VENTURE CAPITAL TERMS USED IN THIS REPORT

The following terms and definitions are drawn from the Glossary of the EVCA. The full Glossary may be consulted at www.evca.com/html/PE_industry/glossary.asp.

Arm's Length — The relationship between persons (whether companies or not) who deal on a purely commercial terms, without the influence of other factors such as: common ownership; a parent/subsidiary relationship between companies; existing family or business relationships between individuals.

Beauty parade — An accepted mechanism for an investee company to select a provider of financial and professional services. The investee normally draws up a short list of potential providers, who are then invited to pitch for the business.

Business angel — A private investor who provides both finance and business expertise to an investee company.

Captive fund — A fund in which the main shareholder of the management company contributes most of the capital, i.e. where parent organisation allocates money to a captive fund from its own internal sources and reinvests realised capital gains into the fund.

Carried interest — A bonus entitlement accruing to an investment fund's management company or individual members of the fund management team. Carried interest (typically up to 20% of the profits of the fund) becomes payable once the investors have achieved repayment of their original investment in the fund plus a defined **hurdle rate**.

Clawback option — A clawback option requires the **general partners** in an investment fund to return capital to the **limited partners** to the extent that the general partner has received more than its agreed profit split. A general partner clawback option ensures that, if an investment fund exits from strong performers early in its life and weaker performers are left at the end, the limited partners get back their capital contributions, expenses and any preferred return promised in the partnership agreement.

Closed-end fund — Fund with a fixed number of shares. These are offered during an initial subscription period. Unlike **open-end mutual funds**, closed-end funds do not stand ready to issue and redeem shares on a continuous basis.

Closing — A closing is reached when a certain amount of money has been committed to a private equity fund. Several intermediary closings can occur before the final closing of a fund is reached.

Commitment — A **limited partner's** obligation to provide a certain amount of capital to a private equity fund when the **general partner** asks for capital. See **Drawdown**.

Disbursement — The flow of investment funds from private equity funds into portfolio companies.

Distribution — The amount disbursed to the **limited partners** in a private equity fund.

Early-stage — Seed and start-up stages of a business. See **seed, start-up**. Compare **later stage**.

Exit — Liquidation of holdings by a private equity fund. Among the various methods of exiting an investment are: trade sale; sale by public offering (including IPO); write-offs; repayment of preference shares/loans; sale to another venture capitalist; sale to a financial institution.

First stage/round — The first round of financing following a company's startup phase that involves an institutional venture capital fund.

Fund — A private equity investment fund is a vehicle for enabling pooled investment by a number of investors in equity and equity-related securities of companies (investee companies). These are generally private companies whose shares are not quoted on any stock exchange. The fund can take the form of a company or

of an unincorporated arrangement such as a limited partnership. See **limited partnership**.

Fund capitalisation The total amount of capital committed to a fund by investors

Fund focus (Investment stage) The strategy of specialisation by stage of investment, sector investment, geographical concentration. This is the opposite of a generalist fund, which does not focus on any specific geographical area, sector or stage of business.

Fund of funds A fund that takes equity positions in other funds. A fund of fund that primarily invests in new funds is a Primary or Primaries fund of funds. One that focuses on investing in existing funds is referred to as a Secondary fund of funds.

Fund size The total amount of capital committed by the limited and general partners of a fund.

General partner A partner in a private equity management company who has unlimited personal liability for the debts and obligations of the **limited partnership** and the right to participate in its management.

Hands-off A private equity investment in which the venture capitalist contributes only capital – and not business know-how or management involvement – to the investee company.

Hands-on A private equity investment in which the venture capitalist adds value by contributing capital, management advice and involvement.

Hurdle rate The IRR that private equity fund managers must return to their investors before they can receive **carried interest**.

Independent fund One in which the main source of fundraising is from third parties. Compare **captive fund, semi-captive fund**.

J-curve The curve generated by plotting the returns generated by a private equity fund against time (from inception to termination). The common practice of paying the management fee and start-up costs out of the first **drawdowns** does not produce an equivalent book value. As a result, a private equity fund will initially show a negative return. When the first realisations are made, the fund returns start to rise quite steeply. After about three to five years the interim IRR will give a reasonable indication of the definitive IRR. This period is generally shorter for buyout funds than for early stage and expansion funds.

Later stage **Expansion, replacement capital** and **buyout** stages of investment. Compare **early stage**.

Limited partner An investor in a **limited partnership** (i.e. private equity fund). Compare general partner.

Limited partnership The legal structure used by most venture and private equity funds. The partnership is usually a fixed-life investment vehicle, and consists of a **general partner** (the management firm, which has unlimited liability) and limited partners (the investors, who have limited liability and are not involved with the day-to-day operations). The general partner receives a management fee and a percentage of the profits. The limited partners receive income, capital gains, and tax benefits. The general partner (management firm) manages the partnership using policy laid down in a Partnership Agreement. The agreement also covers, terms, fees, structures and other items agreed between the limited partners and the general partner.

Management fees Compensation received by a private equity fund's management firm. This annual management charge is equal to a certain percentage of investors' initial commitments to the fund.

Memorandum Brochure presented by a **general partner** in the process of raising funds. This document is dedicated to potential investors (**limited partners**), and usually

contains (amongst other information) a presentation of the management team's track record, terms and conditions and investment strategies.

Private equity Private equity provides equity capital to enterprises not quoted on a stock market. Private equity can be used to develop new products and technologies, to expand working capital, to make acquisitions, or to strengthen a company's balance sheet. It can also resolve ownership and management issues. A succession in family-owned companies, or the buy-out and buy-in of a business by experienced managers may be achieved using private equity funding. Venture capital is, strictly speaking, a subset of private equity and refers to equity investments made for the launch, early development, or expansion of a business. See **venture capital, venture capitalist**.

Rounds Stages of financing of a company. A first round of financing is the initial raising of outside capital. Successive rounds may attract different types of investors as companies mature.

Seed stage Financing provided to research, assess and develop an initial concept before a business has reached the start-up phase. See **early stage**.

Semi-captive Fund A fund in which, although the main shareholder contributes a large part of the capital, a significant share of the capital is raised from third parties. Compare **captive fund, independent fund**.

Start-up Financing provided to companies for product development and initial marketing. Companies may be in the process of being set up or may have been in business for a short time, but have not sold their product commercially. See **early stage**.

Takedown schedule The plan stated in a private equity fund's memorandum to provide for the actual transfer of funds from the **limited partners** to the **general partner's** control.

Valuation **International Valuation Guidelines:** Guidelines developed by EVCA, BVCA and AFIC (the European, British and French Private Equity and Venture Capital Associations) towards investors internationally concerning valuation methodologies. Their aim is improved transparency, so that investors are better able to monitor and evaluate the performance of their investments and to make the asset class more accessible and comprehensible to new and existing investors. The guidelines have been endorsed by more than 20 European and Non-European Associations and are consistent with IFRS and US GAAP.

Venture capital Professional equity co-invested with the entrepreneur to fund an early stage (seed and start-up) or expansion venture. Offsetting the high risk the investor takes is the expectation of higher than average return on the investment. See **private equity, venture capitalist**.

Venture capitalist The manager of **private equity** fund who has responsibility for the management of the fund's investment in a particular **portfolio company**. In the **hands-on** approach (the general model for private equity investment), the venture capitalist brings in not only moneys as equity capital (i.e. without security/charge on assets), but also extremely valuable domain knowledge, business contacts, brand-equity, strategic advice, etc.

Write-off The write-down of a portfolio company's value to zero. The value of the investment is eliminated and the return to investors is zero or negative.

PORTFOLIO REVIEW

This review is split into three sections: an overview of the EIF VC portfolio, an overview of the ETF portfolio of VCFs and the distribution of PCs. The detailed list of Venture Capital Funds financed appears at the end.

(I) Overview of the EIF VC Portfolio

Apart from own resources, the EIF's VC operations are funded by mandates from external sources, including: (1) the EIB, (2) the European Commission (EC), (3) the German Federal Ministry of Economics and Labour, and more recently (4) a mandate through the Spanish Ministry of Industry, Tourism and Commerce. These mandates differ in size, time horizon, geographic focus and/or policy objectives but the resources from the EIB constitute by far the largest share of funds; according to the 2005 Annual Report, EIB mandates account for over 80% of the EIF's venture capital investments.[6]

(1) The ETF mandate from the EIB was the EIF's first "external" mandate. The EIB mandates as a whole have evolved and expanded over time through ETF II (October 1999), the transfer of the 'EIB legacy portfolio' of VC activities to the EIF in 2000, and the various RCM mandates received since then. The underlying policy objectives of these EIB mandates have also evolved over time. It is important to note that at 31/12/05 the first ETF mandate constitutes only some 4% of the total amounts approved under all the EIB mandates. The EIB legacy portfolio made up 30%, and the RCM mandates taken together 62% of total approvals amounting to EUR 3.1 Billion at year-end 2005.

(2) The mandate(s) from the EC are geared towards VC activities under various programmes, which have now been consolidated in the EC's "Multi-annual Programme for Enterprise and Entrepreneurship" ("MAP"), covering the years 2001 to 2006. These programmes target the financing of seed or early stage funds, business incubators, smaller or newly established funds, funds operating regionally, or focused on specific industries or technologies, and funds financing the exploitation of R&D results (research centres and science parks). They also include a grant scheme that supports the recruitment of additional investment managers in seed capital funds.[7]

(3) The mandate from the German Federal Ministry of Economics and Labour is based on a EUR 500 Million Facility for investments in VC funds focusing on domestic high-tech companies. Its investment focus is two-fold: (1) Seed and early stage funds with a strong technology transfer emphasis (access to research centres, etc.), and (2) second and subsequent financing rounds for tech companies in their early, development and mid-stages.

(4) Finally, a new mandate, from the Spanish Ministry (of Industry, Tourism and Commerce), comprises a fund-of-funds and a co-investment vehicle, with emphasis being placed on technology funds. This initiative, signed in February 2006, brings together domestic public and private sectors for investments in domestic SMEs fostering innovation and research and development.

The following analysis does not cover the universe of the EIF's VC related activities. The focus of this evaluation is on the first mandate received by the EIB, the European Technology Facility (ETF).

[6] See European Investment Fund, Annual Report 2005, p.12, ("Annual Report – 2005").

[7] The programme now succeeding MAP, is called the "Competitive and Innovation Framework Programme" ("CIP") covering the years 2007 through 2013.

(II) The ETF Portfolio – Overview of Venture Capital Funds (Funds)

The first ETF mandate, signed in late 1997, authorised the use of EUR 125 Million from the EIB's reserves. Between 1997 and June 2000 commitments to a total of 24 Funds through 22 Managers were signed.

Almost the entire amount initially authorised under the ETF mandate (EUR 125 Million) was in fact approved by the EIF Board between late 1997 and mid-2000, a period of roughly 2½ years. Similarly, the amounts committed and ultimately signed amount to 94% of the amounts originally approved. Finally, as of December 31, 2005, actual disbursements to the VCFs were also at roughly 94% of the amounts committed and signed, of which 99% have actually reached Portfolio Companies ("PCs").

Track Record

8 of the 24 Funds were 'follow-on funds'; the remainder were 'first-time funds'. By contrast, of the 25 signatures in 2005 over 20 were in 'follow-on funds'. Of the 24 Funds in ETF, some 15 could be considered as managed by 'first-time teams'. To date, 11 of the 24 Funds, or rather their Managers, have received or are about to receive subsequent funding through the EIF in follow-on funds.

ETF Interest Held

Internal documentation between the Bank and the Fund specifies that the Fund will *take minority positions amounting to a maximum of 25% of the capital of any venture capital fund*. In practice, the interest held in the Funds under the ETF mandate, ranges between 3.7% and 18.3%; the average – adjusted for one outlier – being 7.9%. Compared to later mandates (ETF II, EIB legacy portfolio, RCM) the interest held through the ETF mandate is noticeably lower.

EIF Co-Investments

The EIF also committed its own funds in 21 of the 24 Funds in the ETF portfolio. In fact, in 7 instances the EIF signature with own funds matched or exceeded the funds provided through the ETF mandate. In one of these cases, the EIF own fund signature was 1.5 times that of the ETF. The smallest co-investment amounted to 24% of the total EIF signature. Overall, the EIF's own fund commitment was three quarters of the ETF commitment, or 43% of the total amount signed for these 21 Funds.

Geographic Investment Focus

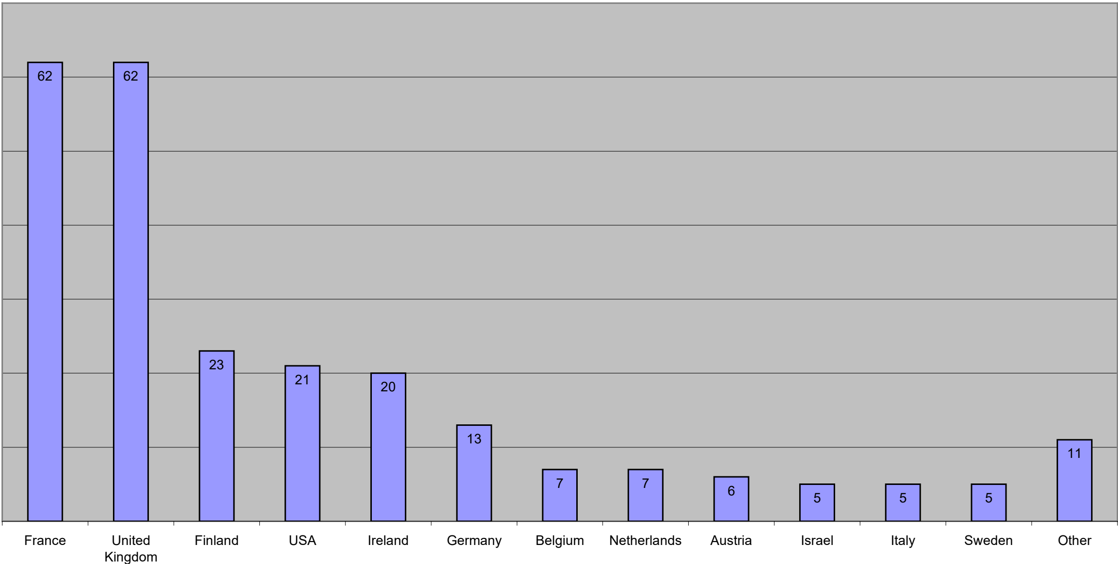
The geographic investment focus of the funds, as reported by the EIF for the ETF mandate, covers 10 Member States (and 1 "multi-country" category). France and the UK are the clear leaders with 4 Funds classified as focusing their investments on the former, and 3 on the latter. Beyond that, some of the funds classified as "multi-country" also operate out of one of these two countries and, in fact, have more than half their investments reported as in these two countries.

(III) The ETF Portfolio – Distribution of Portfolio Companies

As of 12/31/2005 a total of 517 separate Portfolio Companies have benefited from the ETF facility over time. Of these 168 have been exited (trade sale, IPO, etc.) and 124 written off. The remainder, i.e. 225 Portfolio Companies, were active investments at year-end 2005.

These 225 active Portfolio Companies, which represent a total of 247 investments[8] by different Funds, are located in 19 different countries, including non-Member states such as the USA, Israel, Switzerland and Norway. At year-end 2005 over 50%, both in terms of count and investment amount, however, are in two Member states: the United Kingdom and France. These are followed by Finland, the USA, Ireland and Germany. The following chart illustrates the country breakdown of the 247 investments in the portfolio (12/31/05):

[8] The difference between the number of PCs and the number of investments is due to different funds investing in the same PC.



Sector distribution has been dealt with in the main report.

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:

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3. Contribution of Large Rail and Road Infrastructure to Regional Development (1998 - available in English, French and German)
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