



**Expert evaluation network  
delivering policy analysis on the  
performance of Cohesion policy 2007-2013  
Year 2 – 2012**

**Task 1: Financial engineering**

**United Kingdom**

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**Professor Peter Tyler  
St Catharine's college, Cambridge  
and Cambridge Economic Associates**

**A report to the European Commission  
Directorate-General Regional Policy**

## Contents

Executive summary .....	3
1. Use of financial engineering instruments .....	4
2. Rationale for using financial engineering instruments.....	6
3. The effectiveness of financial engineering instruments: selected examples .....	8
4. Main problems in using financial engineering instruments .....	12
5. Evaluations of financial engineering instruments .....	13
6. Concluding remarks.....	15
References .....	16
Interviews.....	16
Annex.....	18

## List of abbreviations

- DE Decentralised Energy
- EE Energy efficiency
- EEN Expert Evaluation Network
- EIB European Investment Bank
- ERDF European Regional Development Fund
- FEI Financial Engineering Instrument
- LEP Local Enterprise Partnerships
- LGF Jessica London Green Fund
- NEA2F North East Access to Finance Ltd
- NEF Finance for Business North East Fund
- OP Operational Programme
- PMC Programme Managing Committee
- UDF Urban Development Funds
- WEFO Welsh European Funding Office

## Executive summary

In the United Kingdom a large number of JEREMIE funds have been developed in the present ERDF round and a smaller number of JESSICAs. However, at the present time it is still early days. There is a very little evaluation evidence available for this period and much has to be inferred from ex-ante assessment. However, there is evaluation evidence relating to the use of Venture Capital and Loan funds in earlier rounds of ERDF across the United Kingdom, particularly the 2000-2006 period and we discuss this in this Report.

Financial Engineering Instruments (FEIs) are felt to be appropriate when there is clear evidence of market failure in the provision of finance for SMEs and, increasingly, certain types of urban regeneration project. However, the position and size of the gap in market provision has to be carefully researched and understood. The ability to 'recycle' funds and build longer term investment vehicles is of prime importance. Overcoming a grant based dependency culture is desirable but grants are still seen as necessary for certain types of R&D and social enterprise investment. Setting-up a FEI funding vehicle is complex and takes time. Some regions have sought expertise from elsewhere in the first instance until a local 'industry' can be established.

Fund managers are given the freedom to operate independently and make an acceptable rate of return but also seek to reflect the wider economic development objectives of Managing Authorities and their partners in their Investment Strategy. Clear and transparent governance arrangements are required with appropriate monitoring and reporting structures. Balancing these objectives, or securing what is termed the 'double-bottom' line, is not easy.

A number of issues have emerged. Ensuring compliance with Commission ground-rules can be challenging and looks to be getting more difficult as a result of proposed changes to how ERDF can be drawn-down. There is also concern about the Commission's view on private sector preferential access to capital in the event of default. Many Managing Authorities do not believe that the private sector will invest unless they have this favoured position. There is a desire amongst Managing Authorities to see FEIs as a long-term option and these compliance issues are causing some nervousness as to whether this is going to be possible.

It would also seem important to try and get more coordination between Managing Authorities in establishing FEIs and there is a role for government here. This would help to ensure that experience is shared particularly when it comes to securing expertise in appraising likely market demand. It is essential that set-up and management costs to the public sector are minimised.

The ERDF Holding Funds have to be used by the relevant end date in the programming period. The ability to absorb funds is currently being affected by a very challenging macroeconomic climate. Despite enthusiasm to develop and implement FEIs there is at present little evaluation evidence on their impact on final outcomes. There is an urgent need for more evaluation and research, particularly when it comes to comparing the relative merits of FEIs to conventional grant based regimes.

## 1. Use of financial engineering instruments

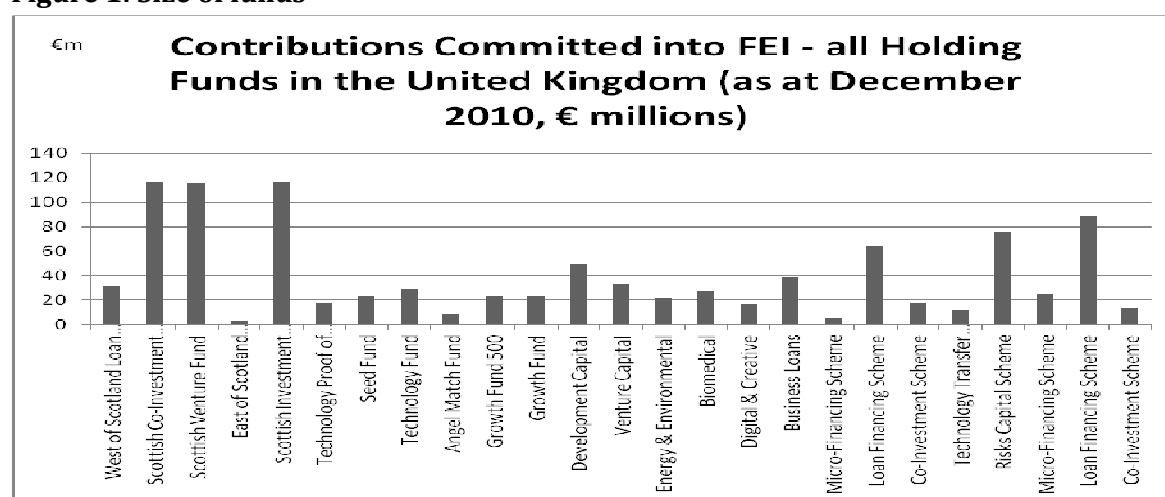
Some parts of the United Kingdom adopted FEIs in the 2000-6 round of Cohesion policy with Scotland being a notable example. There was also some use in Northern Ireland. In England and Wales 21 Venture Capital Loan Funds were established. They managed funds worth EUR 560 million (EUR 722 million including co-investment funding) and received ERDF capital grant of EUR 296 million.

In the current round there are FEIs supported by ERDF in Scotland, Wales and England but not Northern Ireland. It is still early days and there is very little evaluation evidence available and much has to be inferred from ex-ante assessment. There is evaluation evidence available for the 2000-2006 and we discuss this in this Report.

By the end of December 2010 the United Kingdom had twenty five financial engineering instruments for enterprise in a Holding Fund all with a regional scope and six offering loans and the rest equity participation. There were also five financial engineering schemes for enterprise without a Holding Fund. All had a regional scope. Three of these offered loans and two equity support. The United Kingdom has one of the largest concentrations of FEIs for enterprise across both Convergence and Competiveness regions.

The FEIs for enterprises are assigned to either priority one (where the emphasis is more on building and exploiting the knowledge base depending on the region) or priority two (which tend to be about improving business competitiveness and encouraging business growth depending on the region). It is anticipated that the number of FEIs for enterprise across the United Kingdom will continue to grow building on the substantial body of experience and evidence that has accumulated and in recognition of the continued evidence of market failure in the provision of business finance. A revolving fund approach to economic development is seen as being highly desirable.

**Figure 1: Size of funds**



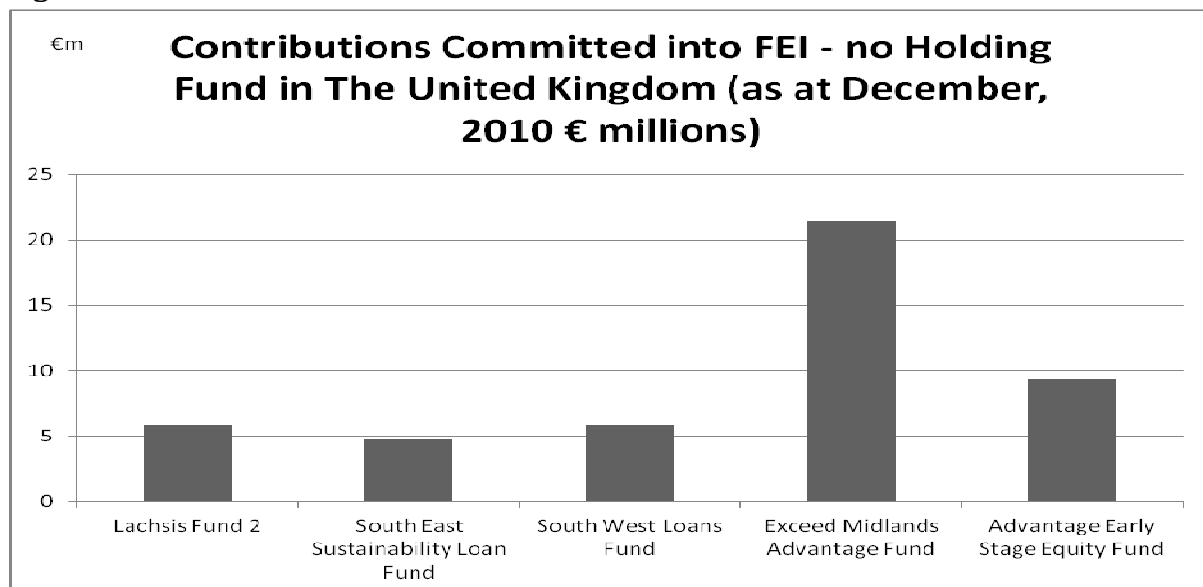
Source: EC DG Regio

The United Kingdom has four JESSICA FEIs in London, Wales, North West and North East and the possibility of others in Yorkshire Humberside and the the West Midlands. Wales is using JESSICA for both convergence and competitiveness regions. The other JESSICAs are in Competiveness regions. The priority to which the JESSICA activity is assigned varies by region. Thus, in London it is assigned to Sustainable Places for Business (Priority three).

By December 2010 FEIs for Enterprises in the United Kingdom with a Holding Fund had funds of EUR 847.9 million. The ERDF resources were EUR 373.4 million. Around 80% of this went to FEIs in the Competitiveness regions. The total 2007-2013 ERDF resource for the United Kingdom over the Programme Period is EUR 3,585 million and so Financial Engineering Instruments for Enterprises are receiving about 10% of the total at that time.

Figure 2 shows that for FEIs for enterprises with a Holding Fund (whole Funds and sub-Funds). The largest funds are capitalised at over EUR 120 million. There were also a number of quite small funds. For those FEIs for enterprises without a Holding Fund the largest was capitalised at over EUR 20 million and the smallest at just below EUR 5 million.

**Figure 2: Contributions committed into FEI**



Source: EC DG Regio

The **Finance for Business North East Fund** was established in late November 2009 and was the first JEREMIE in an English region. It has a capitalisation of EUR 145.9 million. The **Welsh JEREMIE Fund** is capitalised at EUR 164 million and is a subsidiary of Finance Wales. **Finance Yorkshire** is a JEREMIE initiative to businesses to secure funding to help with their growth and is capitalised at EUR 105 million. There is also a CDFI Small Loans project and the Creative Yorkshire Content Fund. The **North West Venture Capital and Loan Fund** was also approved at EUR 204 million. By the end of 2010 the United Kingdom had some 17% by financial size of the EU27 FEIs with a Holding Fund. It only had 1% by financial size of the total EU27 FEIs without a Holding Fund. The UK had 29% of the total number of EU27 FEIs offering equity and 15% of those involved in loans.

## JESSICA

JESSICA schemes in the United Kingdom had a total capitalisation of EUR 288.3 million by the end of December 2010 but there has been further increase since then. The schemes are designed to tackle a variety of different aspects of urban development. The **Jessica London Green Fund** was established in London at the end of 2009 as an investment vehicle to provide repayable investments in environmentally sustainable infrastructure. It is capitalised at EUR 122 million of which half is from ERDF. The **North West Urban Investment Fund** was approved at EUR 125 million. The **East Midlands Competitiveness Programme** has established a JESSICA

Urban Development Fund (UDF) with some EUR 11.85 million. A JESSICA Fund is currently seeking approval in the *West Midlands and Yorkshire Humberside*. By the end of 2010 the United Kingdom had around 17% of the total number of JESSICA FEIs across the EU27, representing 16% in terms of size of financial holding.

## 2. Rationale for using financial engineering instruments

### Market failure and the use of FEIs

Companies may not always find it easy to obtain finance from banks and other financial institutions because normal market based processes cannot easily price the risks involved. In such circumstances lenders tend to be risk averse and prefer not to lend, or require relatively high levels of collateral that may be prohibitive to companies. These problems tend to be particularly severe when companies are at an early stage of development and thus have a limited track record and/or when companies are seeking to perhaps exploit relatively untried technologies. The market is considered to fail and as a result there is a societal welfare loss that, if it could be recovered, would be reflected in a higher level of regional economic growth. It is to overcome market failure that Development Agencies have sought to find ways of assisting companies by providing loans and/or equity through FEIs.

The risk-return profile associated with supporting businesses that use relatively new environmental technologies is particularly challenging. And yet it is important to support these businesses so that they can deliver services that will help to reduce CO2 and secure other environmental improvements. In the case of the London Green Fund, Quellenec-Reid (2011) argues that FEIs are best placed to tackle market situations characterised by a) a fluid risk profile and where there is little or no robust market demand evidence, b) there is a need for longer term debt/ equity and it is necessary to find additional funding security or guarantees and c) returns are only likely to emerge over the longer term and do not meet the short-term return hurdle rates required by conventional lenders.

In a similar vein the Finance Yorkshire JEREMIE initiative provides targeted co-investment to companies seeking to develop innovative products in the digital and new media sectors where there is no current established market demand profile and it is thus relatively difficult to meet the market tests that conventional lenders require.

In Scotland there has been extensive use of certain forms of FEIs to overcome gaps in the Venture Capital market. A good example of this is the Scottish Co-Investment Fund established in 2002 to provide equity finance to companies which are believed to have the capacity for rapid growth but find it difficult to secure funds from conventional sources. This initiative has received funds from the last two rounds of ERDF Cohesion policy.

In Wales a JEREMIE based approach is being used to enable loan, mezzanine and equity investments into Welsh SMEs in both the Convergence and Competitiveness regions. The JEREMIE Fund is expected to make an important contribution to the vitality of the SME base. Its primary purpose is seen to be to -"invest in new and established SMEs to produce good commercial returns for the Fund, and generate a substantial legacy fund for Wales."

### When there is a preference for grant based approaches

All Operational Programme (OP) managers in the United Kingdom recognise that there are circumstances when a grant-based approach is to be preferred. A common example mentioned

by many respondents is when a company requires finance for investment in R&D activity where a commercial payback may be many years into the future ('blue-sky'). Two finance related problems may emerge. The first is that it may be difficult for the company to convince a bank to lend because the bank is relatively risk-averse and unwilling to finance such projects. The second is that the R&D may be advantageous to the wider economic development of the region but only the OP Managers are in a position to recognise and support this outcome. In either case a FEI Fund Manager may not be able to justify investment in certain R&D projects to investors. In these circumstances a grant based approach, or some hybrid model, delivered by the OP Managers may be the best option. This is particularly the case in regions which have a relatively low level of R&D expenditure in relation to their GDP as in Northern Ireland.

A further example where it may be difficult to use loan/equity finance is assistance for social enterprises where conventional lenders may not provide the required finance.

Grant based assistance may also be a preferred route when companies/developers seek funding for large capital projects where timing is of the essence and the business investment is of strategic importance to the economic development of the region.

### **Perceived benefits of using FEIs rather than grants in particular policy areas**

In the case of the London Green Fund the approach delivers environmental and regeneration benefits but also provides a flow of funds for future investment. There is a strong incentive for fund managers to continue to provide advice to companies after the initial investment has been made and they have relatively privileged access to companies.

In the East Midlands JESSICA UDF the emphasis is on attracting financial resources for public private partnerships to undertake urban development projects.

Partners in Finance Yorkshire believe that there is a clear gap in the provision of finance and like the ever-green nature of the funding available. There are moves on the part of the Local Enterprise Partnerships (LEPs) (which brings together the local authorities, the private sector and others) to develop a broad investment strategy for the City-Region that can draw together funds from a number of different sources (Growing Places, RGF, ERDF and income resulting from FEIs). The OP Authority has just submitted a JESSICA application that it hopes will enable four local authorities, and their respective Local Enterprise Partnerships, together.

There is also a view held by some Managing Authorities that funds provided through a FEI lead to companies adopting more competitive business responses relative to traditional grant regimes. In some regions where there is a long tradition of grant-based intervention a dependency culture may develop. In both Northern Ireland and Wales, for instance, policy makers have been moving away from grant based intervention to a more loan and equity based response. Moves in this direction are perhaps inevitable as Northern Ireland and other parts of the United Kingdom are becoming more constrained by reduced public expenditure and the restrictions imposed by State Aid rules.

### **Relative costs involved of using the two kinds of measure, including the time taken to set them up as well as to administer them?**

There is not a robust evidence base with which to assess the relative costs involved in using the two kinds of measures and there is a need for research in this area. Managing Authorities point to the significant management fees involved in FEIs. A frequent comment from OP Managers is

that they are not cheap to run. But it is also known that traditional grant based approaches can also have significant transaction costs that are often poorly recorded. Setting-up funding vehicles can be quite complex and in regions without a strong local finance base it is necessary to seek expertise from elsewhere in the first instance until a local 'industry' can be established. The relative costs may also be influenced by how ERDF money is drawn down into the Fund. Some Authorities have preferred to draw down ERDF monies into the Fund in one go. Whilst this can provide for a flexible response it does mean that attention has to be given to ensuring that there is sufficient demand for loans/ equity from the Fund so that it has been committed by the last date required by ERDF regulations. There are also obviously costs involved in funding the required financial intermediaries.

It would also seem to be important to try and get more coordination between Managing Authorities in developing FEIs. There is a role for government here. This would help to ensure that experience is shared particularly when it comes to securing expertise in appraising likely market demand. It is essential that where possible the set-up and management costs to the public sector are minimised.

### 3. The effectiveness of financial engineering instruments: selected examples

This section draws upon evidence from three case study examples to consider whether programme managers take deliberate measures to try to ensure that financial engineering tools meet programme targets and if so what this consists of. The **Jessica London Green Fund (LGF)** was established in London at the end of 2009 as an investment vehicle to make repayable investments in projects to establish environmentally sustainable infrastructure. The original LGF Investment strategy was targeted at supporting Decentralised Energy (DE) networks and waste infrastructure. However, in July 2010, the focus shifted away from DE to Energy Efficiency (EE). As such, the two UDFs now support waste infrastructure and energy efficiency measure in public buildings and social housing. However, if necessary, the EE UDF could be extended to support DE. The EIB is the holding fund manager. The LGF was initially capitalised as a EUR 110 million fund comprising EUR 55 million ERDF.

The **Finance for Business North East Fund** was established in late November 2009 and represented the first JEREMIE in an English region. It was capitalised at EUR 151.3 million with a total ERDF contribution of EUR 67.3 million. The Fund became operational in April 2010 with 5 Fund Managers in place delivering 7 sub funds. There is a Proof of Concept Fund capitalised at EUR 18.4 million which assists early stage technology and innovation through the provision of convertible loan and equity. There is also a Growth Fund that is a generalist fund assisting companies at mostly the later stages of development through loan and equity finance. A Micro Loan Fund became operational in early 2011. The first investment was made in April 2010. Investments made to-date span many sectors and cover all geographical parts of the North East eligible area. Investments have been made as loans (29%), equity (29%), quasi equity (24%) and convertible loans (18%). The Holding Fund Manager (North East Finance Holdco) manages the pace and type of investments working closely with all the Fund Managers.

The **Welsh JEREMIE** Fund is capitalised at EUR 183.9 million with an ERDF contribution of EUR 72.8 million. It is a subsidiary of Finance Wales plc with the key stakeholders being the Welsh European Funding Office (WEFO), the Welsh Government and the EIB. The Fund is divided 65:35 between the convergence and the competitiveness regions. In both regions the fund is split



22% to innovation projects and 78% to business finance projects. The fund was legally constituted in April 2009 and the first investment occurred in June 2009. There is also a JESSICA scheme in Wales which came to the market in Spring 2011. It is capitalised at EUR 67 million with a EUR 30.5 million ERDF contribution and makes loans to assist with sustainable urban regeneration with a broad remit but excluding mainstream retail and also housing.

### **Objectives**

Commercial FEIs are concerned to maximise the rate of return to their investors, although once a required target hurdle is achieved the funds can differ considerably in their overall attitude to the risks they are prepared to accept. FEIs established as part of Cohesion policy look for a return that will meet the costs of operating the fund and provide an acceptable rate of return to their private investors but they also seek to achieve wider social (and economic) objectives. In the London Green Fund these broader objectives are configured around the environment and regeneration and fit with the Priority Three of the London ERDF Operational Programme 2007-2013 to 'improve the competitiveness of economically and socially deprived areas of London and secure their longer-term regeneration through supporting the development of high quality working environments and low zero carbon employment sites and premises, with a particular focus on encouraging clusters of businesses, particularly green businesses, and low carbon demonstration projects' (London AIR, 2010). The Managing Authority is concerned to see that these objectives are achieved. The private sector partners (pension funds, private equity investors and the like) are in the main concerned with the financial return that can be secured on their investment.

In the Finance for Business North East Fund the objective is to support start-ups and SMEs through loan and equity finance. A smaller fund (The Creative Content Fund) was operated for two years from Jan 2010 to December 2012 when it closed out as being fully invested in SMEs in the creative industry sector in the region. In line with UK National Government guidelines The North East Access to Finance Ltd (NEA2F) is the Legacy Body that has been established to reinvest funds to assist SME development in the region. The JEREMIE scheme is regarded as having met a real need in the North East by enabling the creation of an investment fund that provides an ongoing source of funds to assist businesses at various stages of their development. In regions that do not have the more developed financing infrastructure found in more prosperous regions this is a valuable step-forward.

The Finance Wales JEREMIE scheme provides support to SMEs at the micro scale through to medium-sized companies requiring Venture Capital. Loans vary from EUR 6,000 through to a maximum of EUR 2.4 million. The JESSICA scheme in Wales supports sustainable urban development and regeneration with the original emphasis being to assist urban investment projects that could not be readily financed through existing commercial channels. Investments are guided by an Integrated Plan for Sustainable Urban Development which is overseen by the Managing authority. Returns from investments can be held in the Fund and used for future schemes and form the basis of a 'Legacy Fund' that can be used for future investments.

### **Managing Authority control over allocation of funds**

The JESSICA London Green Fund is managed by the European Investment Bank on behalf of the Greater London Authority as an Intermediate Body to the Managing Authority and the London Waste and Recycling Board. The implementation of the fund is overseen by a seven-person

Investment Board. The fund does not invest directly itself in projects but makes a financial contribution to two UDFs that are managed by professional fund managers. They have the responsibility for deciding the projects that are supported. The Managing Authority does not intervene directly in this process. However, the Managing Authority has representation on the overseeing London Green Fund Investment Board (with four members) and thus a key role in shaping the strategy and implementation of the fund on the ground. In the case of the Green Fund the UDF contract is the European Investment Bank and the Managing Authority has Third Party rights but they have agreed terms and agreements with EIB that reflect the outcomes that the Managing Authority would like to see emerge.

The Finance for Business North East Fund (NEF) Board is assisted by an independent Investment Advisory Board that comprises leading experts and professionals in the field. They help with guidance on a range of strategic issues. However, all commercial investment decisions are undertaken by the respective Fund Managers. NEF works closely with Fund Managers to develop their referral networks and corporate delivery arrangements. The Managing Authority has representatives on the NEF Board (DCLG and BIS are present as observers).

In Wales the JEREMIE fund managers were recruited through a procurement process run by the Board members as well as a representative from the European Investment Fund. The Managing Authority is at arm's length from this and investment decisions are made by the Fund Managers. Programme Authorities have no representatives on the Board. However, the Programme Authorities make it clear what are the non-financial areas where they wish to see progress and thus, the relevant key indicators that should be used to chart progress. The Key Performance Indicators used are gross job creation, number of SMEs receiving investment, investment induced and innovation.

Fund Managers produce a quarterly report to the Managing Authority and the EIB. Progress is reviewed every six months with both FEIs in Wales reporting to the Programme Committee twice a year.

JESSICA schemes tend to involve a Managing Authority setting-up a Holding Fund and in some cases delegating the selection of the Urban Development Fund to the European Investment Bank. In Wales the approach has been to set-up a UDF directly as a limited liability partnership called the Regeneration Fund for Wales. This partnership ensures that the overall direction of fund investments accord with the regeneration objectives that have been set-out in a number of documents produced by the Welsh Government and its partners. Governance is through a Management Board comprising five representatives from the Welsh Government. The Fund Investment managers are responsible for investment decisions. The Management Board are kept informed on a regular basis of all investment approval and the financial performance of the funds.

This approach appears to be fairly typical across Managing Authorities using JEREMIE and JESSICA. Thus, the Holding Fund identifies what it believes is required to fulfil the objectives of the OP (and thus meet the requirements of the Programme Managing Committee (PMC)). This is set-out in an Investment Strategy agreed between the respective parties. The Operational Programme Managers ensure that the contractual Agreement between them and the Holding Fund also spells out the types of investment in line with these objectives. There may be an advisory panel/board to ensure that the activities of Fund Managers are in line with these

objectives as described in the Investment Strategy. The Managing Authority may have a member/s on the Board but the key point is that the Fund Managers are responsible for making the investment decisions

### **Criteria for final beneficiaries**

In the case of all the examples looked at the Fund Managers are responsible for deciding whether the companies supported are meeting the relevant commercial criteria. Taking the London Green Fund as an example, the Managing Authority does not seek to be prescriptive in relation to these criteria. The overall investment strategy for the London Green Fund was set up by the Greater London Authority as the Intermediate Body for the Managing Authority and was endorsed by the PMC . Among other things, it sets out the eligible activities under London's ERDF Programme that are deliverable under the LGF. The investment policy of the individual UDFs is informed by the LGF's Investment Strategy.

The approach is much the same in the Finance for Business North East Fund. Once investments have been made there is a real-time database that includes all necessary information from the point of enquiry to the investment decision. The database is then also updated with data on performance since the investment.

In the Welsh JESSICA scheme the commercial criteria are set by the Fund Managers but have to fit-in with the broad sustainable development strategy and the broad areas/ sectors of investment that the Managing Authority believe are appropriate.

### **Criteria to assess performance of the Fund and appropriate criteria and targets**

The London Green Fund Managers report on a quarterly basis to the EIB and then back to the Managing Authority. The Managing Authority identifies the indicators it would like to monitor its social objectives. These include the creation of sustainable local employment, diversion of waste from landfill and reductions in CO2 emissions. There are hurdle rates for both financial and non-financial returns.

The Welsh JESSICA has adopted the same Key Performance Indicators as the JEREMIE FEI but the view is that investments do not easily lend themselves to conventional indicators, particularly gross job creation. There is a need for more research in this area. In the Welsh JESSICA fund there is a formal review of progress every six months but also on-going active discussion between the Managing Authority and Regeneration Fund Wales on a regular basis.

The North East ERDF Secretariat has worked closely with the Holding Fund Company (North East Finance) to develop a database that allows performance to be assessed and modelled. Besides company performance attention is given to a number of Strategic Indicators that assess contribution to regional economic development and targets are set around these. In the North East emphasis is given to underpinning SME supported, jobs created and safeguarded, private sector R&D leverage and contribution to the knowledge base. There is a keen interest on private sector leverage.

Across the United Kingdom the FEIs are at different stages of development. In the case of JEREMIE by early 2012 the Finance for Business North East was performing strongly with outputs broadly according to target with strong private sector leverage. Progress has been much slower in relation to JESSICA. The London Green Fund has just made its first investment. The North West Urban Investment Fund is still at an early stage. The East Midlands JESSICA

opened for business in December 2011. In the West Midlands and Yorkshire Humberside the Funds are at an early stage of development.

#### 4. Main problems in using financial engineering instruments

##### **Problems experienced in practice in using FEIs as part of Cohesion policy**

It is relatively early days in the use of FEIs for most Managing Authorities and their respective partners. They are feeling their way against a background of economic recession and fiscal austerity. In the past grant based approaches have dominated the landscape of business support, urban renewal and regeneration. There is still relatively limited understanding amongst many as to how FEIs work and in many regions the pool of *locally-based* experience is felt to be quite limited. It is also very challenging at the present time to secure investments that meet the Lisbon high value-added growth agenda [or the Europe 2020 smart growth agenda] and a flexible approach is needed. Conventional bank lending is very restricted.

A number of issues have been considered challenging. Thus, some find it difficult to understand and apply some of the regulations from the Commission and are apprehensive about proposed changes. One example given is the status of the public sector in relation to claim on fund capital in the case of default. The private sector and banks seek first call on the fund capital with the public sector being subordinate. The Commission has been concerned about ERDF being in this subordinate position but some Managing Authorities do not feel that private sector fund investors will come forward without this. There have also been some issues around the assets that can count for match-funding purposes, particularly when it comes to land and buildings. In some cases it has been a problem being a 'first mover' given the issues involved in interpreting the regulatory framework.

There are also proposals to alter the way in which Managing Authorities can draw down FEI ERDF related funds. In the past it has been possible to draw down all the relevant ERDF into the FEI Holding Fund in one go but in the future it looks as though Programme Managers will be required to draw down in two-year tranches. This requires the flow of deals, and thus likely claims on the Fund, to be carefully modelled through time.

A further aspect of FEIs that received comment was the time that it takes to set-up a FEI and the resources involved. It can take up to two and a half years to set up an FEI and it may take three to four years for them to meet their investment targets and begin to close out. Some argue that the proposed two-year rule may diminish interest in FEIs given the significant management costs involved in running them. It is also uncertain as to how many more JESSICAs might be established in future rounds of ERDF. Managing Authorities have found in line with other FEIs that it takes a considerable amount of time to establish them and therefore must be convinced that they meet a real need.

Another factor that can be challenging is managing what is termed by some as the "double bottom line". Thus, the Fund has to meet the financial targets required to ensure repayment of debt and at the same time ensure that the Fund meets the regeneration and renewal performance targets of the Managing Authorities and their partners. Ensuring a smooth drawdown of legacy funds is difficult if there are large 'up-front' capital requirements required to 'catalyse the market'. This may be the case in a JESSICA scheme tackling a significant urban environmental infrastructure related project. In some cases projects may be good at meeting non-financial social returns like CO2 remediation but not offer sufficient rate of return to attract

commercial co-funding interest. These issues have to be managed over the fund and through time.

To use FEI efficiently to support business they have to be targeted at the appropriate gap in the funding market but this may be difficult to identify. Focused target based research is essential.

There may also be problems in ensuring that the funds in the Holding Funds are used by the relevant end date in the current programming round. This is an issue of absorption and it is clearly important that the Fund is able to attract sufficient interest from companies and co-investors. At the present time in some cases Fund Managers are struggling to attract eligible co-investment.

Despite the enthusiasm to develop and implement FEI approaches there is little evaluation evidence on the ground relating to the present round and whilst there is an urgent need for more it is also important that lessons are learned from evaluations based on the experience of FEIs in the 2000-2006 round .

## 5. Evaluations of financial engineering instruments

At the present time there is very limited evaluation evidence on the impact of FEIs in the United Kingdom in the current ERDF round but there are evaluations of FEIs used in the previous period of Cohesion policy 2000-2006. This section considers the findings from these before outlining the plans that exist for evaluations relating to FEIs in the current round of Cohesion policy.

The most extensive source of interim evaluation evidence in England and Wales relates to a study of ERDF Venture Capital and Loan Funds funded by ERDF over the 2000-2006 period (DCLG, DTI and Welsh Assembly Government, 2007). This study undertook an in-depth review of ten funds. It found that the rationale for intervention was identified as constrained business access to traditional sources of finance but the precise position varied by FEI as did the integration of the policy with the economic strategy of the development agency concerned.

The interim evaluation also pointed to a number of issues around management and governance including the challenge of securing high quality fund management and ensuring sufficient knowledge and expertise was available to manage the ERDF investments. The scale of these problems was generally under estimated at the outset. There were useful pointers on what constituted good monitoring and reporting procedures and it was likely, in practice, to secure the expected outputs.

There was mixed performance across the funds studied with progress being most challenging for the equity funds. The interim evaluation identified that the likelihood of the Funds being able to achieve their investment outturn targets was often unclear and there was evidence of Funds negotiating down their investment targets. In the light of the Credit Crunch of 2008 one suspects that the Funds found the challenge of meeting their targets greater than anticipated at the time of the evaluation. Across the Funds the average management fees were around 22% of the funds under management.

The evaluation was able to make some tentative estimates of the ERDF cost per job created and gross turnover created per unit of ERDF. Albeit at a relatively early stage in the lifetime of the Funds the evaluation concluded that the VCLFs were tending to achieve their anticipated outputs and impacts but 'if judged solely on the basis of unit costs for additional job creation

and turnover, the VCLFs appear a relatively expensive (even after allowing for legacy returns) means of securing regenerative impacts. However, the funds should not be judged solely on this basis-they also generate a range of wider business and regional economic benefits which are typically harder to quantify'. (DCLG et al, 2007).

Scotland has a tradition of developing FEIs to tackle equity gaps in the provision of finance to business particularly as it relates to the provision of venture capital. The Supported Venture Capital and Loan Funds and Scottish Co-Investment Fund were established in the earlier 2000s by Scottish Enterprise, partly funded by funds from ERDF. Their performance was evaluated in 2008 (Scottish Executive, 2008). The evaluation concluded that the additionality of the programme was very high (over 90%) and this view was held by both the business and investment community. Moreover, the programme has helped to build and enhance the development of the market rather displacing activity. There was a comprehensive assessment of the Risk Capital Market in Scotland in 2008 and it concluded that 'the various SE Funds are meeting an important need in the market and are helping both established investors and new entrants to the market meet the demand for investment that they face from portfolio and new companies' (SE, 2008).

A case analysis of the Scottish Co-Investment Fund has been undertaken and its performance reviewed recently by Richard Harrison (2009). As Harrison comments (2009) the approach in this form of FEI has been somewhat different to that in England where government has been a direct investor (acting in a subordinate position with capped returns and taking 'first-loss' if the capital base is eroded). In the Scottish case the Development Agency does not enter into deals itself but rather funds as Harrison comments 'a contractual partnership' with active VC fund managers, business angels and business angel syndicates from the private sector. These partners find and negotiate the deal and all relevant aspects and thus the state is removed from the market decision making and fund management process. Harrison concludes that 'the evidence to date is that this approach works, and that as a result Scotland is now estimated to have the most generous and effective framework for the support of risk capital investment in early stage companies in the UK' (Harrison, 2009). He finds an economic effect on the turnover, value added and employment of the companies supported.

An evaluation of ERDF Supported Venture Capital and Loan Funds over the period 2000-2006 identified high levels of additionality from the use of the Scottish Co-Investment Fund, although the ERDF supported Fund played a relatively small part in the market overall. The equity funding appeared to have a greater impact on turnover, whilst loans had a more immediate effect on jobs. Overall, the funds assessed as part of the evaluation had been invested in 350 new businesses, 700 existing businesses and created more than 5300 new jobs (Scottish Government, 2008).

In Northern Ireland there are currently no FEIs financed under the current ERDF round but in the past they have been used to address market failure in the provision of Venture Capital. Examples include the Crescent Capital Funds 1 and II. Crescent Capital Fund I was set-up in 1995 and was 50% supported by Government funding. It operated in the investment range £250k-£1 million and was fully invested by 2004. Crescent II was established in 2004 and has continued to meet the venture capital needs of companies in Northern Ireland in the £300k-£1.5 million funding range for manufacturing, IT and tradable services. A Past Project Evaluation of the earlier Crescent Capital Fund I (FGS, 2009) concluded that the fund had been an appropriate

response to the equity gap in the market and helped to meet demand from manufacturing and tradable service companies. There was a high level of project additionality and the fund had contributed to developing the local venture capital market. An Interim Evaluation of the Crescent Capital Fund II was undertaken in October 2009 (FGS, 2009). The evaluation concluded that the initiative was addressing a clear gap in the market.

Mid-Term ERDF OP evaluations have been undertaken in the North East, North West and Yorkshire and Humber ERDF OPs (Regeneris Consulting, 2011, 2010 and 2011). These provide contextual and process reviews of the achievements of the relevant JEREMIE and JESSICA stages at that stage.

With regard to ongoing and planned evaluation research a Mid-Term Evaluation has been recently commissioned to evaluate the JEREMIE initiative in Wales and will report in 2012. A JESSICA evaluation is planned in London for 2012 and a JEREMIE evaluation in Yorkshire Humberside in 2012.

## 6. Concluding remarks

Much valuable experience has been gained in recent years across the United Kingdom in establishing and operating JEREMIE and more recently a more limited number of JESSICA funds. It is still relatively early in the process but the general feeling is that JEREMIE initiatives are addressing gaps in the provision of funds that are constraining business development in the assisted regions and are beginning to build momentum albeit in a difficult macroeconomic environment. There is wide appreciation of the benefits of establishing funds that can continue to meet the needs of business in the future and help to reduce dependence on grant based regimes. Overall JESSICA is at an earlier stage of deployment but is also now beginning to commit funds to projects.

When creating FEIs it is essential to research the market shortfall that is being addressed and where the application of a well-defined investment strategy can be most effective. Fund managers have to operate independently and take robust, commercially driven decisions, whilst also recognising the wider economic development objectives of Managing Authorities. The process operates best when there are clear and transparent governance arrangements in place which appears to be the case across the FEIs in the United Kingdom at the present time.

Whilst the benefits of FEIs are recognised, considerable expertise and judgement is required to balance the costs of setting-up and managing the funds in relation to future returns, the deal flow, the rate of market absorption that can be secured and the timing and profile of ERDF draw down.

Much remains unknown as to what the overall impact of FEIs supported regimes will be on the key outcomes that matter for sustainable urban and regional development and, importantly, how they compare with grant and hybrid based regimes. There is a keen desire to know more. Whilst evaluation evidence relating to 2007-2013 funding is currently limited it is essential that lessons be learned from earlier evaluation research based on FEIs in the 2000-2006 period.

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## Interviews

Because of the devolved nature of the governance and delivery arrangements adopted in the United Kingdom it has been necessary to hold discussions with a number of policy officers from across England, Scotland, Wales and Northern Ireland. I am most grateful for assistance from:

Sue Baxter, Department of Business, Innovation and Skills. England.

Iain Derrick, European Strategy and ERDF Secretariat Manager. Evaluation Team, North East, Department of Communities and Local Government.

Richard Gill, Local Economies, Regeneration and European Programmes. European Regional Development Fund. Department for Communities and Local Government

Peggy Haywood. ERDF Implementation Manager, ERDF Programme Delivery Team: Yorkshire and The Humber. Department for Communities and Local Government

Kathryn Helliwell. Research, Monitoring and Evaluation. Welsh European Funding Office. Welsh Assembly Government.

William McCulla. Director InvestNI. Northern Ireland.

Robert.McGhee, Scottish Enterprise. Scotland.

Stephen Moore. European Support Unit. Department of Enterprise, Trade & Investment. Northern Ireland.

John Osborne, Lead FEI Policy, Department of Communities and Local Government. England.



Sian Price, Senior Strategy Manager. Finance Wales plc

Sue Price. Head of Programme Management (ERDF), Welsh European Funding Office.

Kenroy Quellenec-Reid. Senior Article 13 and Financial Engineering Manager European Programmes Management Unit. Greater London Agency.

Stuart Scott, Senior ERDF Development Manager. European Programmes Management Unit. Greater London Agency. London.

Craig Wallace. ERDF Implementation Manager. Yorkshire and Humberside.

Gary White, European Structural Funds, Department of Communities and Local Government.

Nuala Crossin, European Programmes, Department of Enterprise, Trade & Investment. Northern Ireland.

## Annex

## Annex Table A

<b>FINANCIAL ENGINEERING INSTRUMENTS FOR ENTERPRISES (EUR million) – UK (Source: EC DG Regio).</b>																		
<b>General Information on Holding Fund</b>		<b>Contributions to the Holding Fund</b>		<b>General Information on specific funds (being equity funds, guarantee funds or loan funds)</b>					<b>Contributions to the specific funds</b>						<b>Add resources at level of FRs &amp; Investments by specific funds in FRs</b>			
Geographical scope	Signing date of Funding Agreement of Holding Fund	Size of Holding fund	Contributions effectively paid into Holding Fund	Name of specific fund (being equity fund (E), guarantee fund (G) or loan fund (L))	Type of fund	Geographical scope	Manager of specific fund (being equity fund, guarantee fund or loan fund( (or manager of holding fund)	Signing date of the funding agreement of specific fund	HF contribution committed to specific fund	HF contribution effectively paid into specific fund	ERDF resources committed to specific fund	National public co-financing	Add. resources committed to FEI	Contributions committed into FEI	Contributions paid to specific fund	Add resources at level of final recipients (FRs)	No. Investments in final recipients	Resources committed to final recipients
<b>No holding fund</b>																		
				Lachsis Fund 2	E	R	Spark Ventures	08-02-09			2,3	3,5		5,8	4,3			
				South East Sustainability Loan Fund	L	R	Finance South West	01-11-09			2,3	2,3		4,7	NP			
				South West Loans Fund	L	R	South West (Investment Group) Limited	31-03-09			4,4	1,5		5,8	NP			
				Exceed Midlands Advantage Fund	E	R	Midven	NP			8,8	2,0		21,5	NP			
				Advantage Early Stage Equity Fund	L	R	Early Advantage Limited Partnership	NP			4,7	4,7		9,3	NP			
<b>Venture Capital and Loan Funds</b>																		
R		217,9	217,9				Scottish Enterprise											
				West of Scotland Loan Fund	L	R	Scottish Enterprise	xx-04-09	17,5	4,4	7,0	5,3	14,6	32,1	12,4			
				Scottish Co-Investment Fund II	E	R	Scottish Enterprise	xx-04-08	77,8	26,5	31,2	46,7	39,0	116,8	65,5		91	66,7
				Scottish Venture Fund	E	R	West of Scotland Local Authorities	xx-08-10	58,4	22,7	32,7	35,0	47,9	115,5	70,6			
				East of Scotland Investment Fund	E	R	East of Scotland Local Authorities	xx-10-10	5,8		2,0			3,8				
				Scottish Investment Bank Loan Fund	L	R		xx-04-10	50,0		23,3	35,0	58,4	116,7				
<b>One North East</b>																		
R	xx-xx-2008	145,9																
				Technology Proof of Concept Fund	E	R	NorthStar Equity Investors	Np	17,5	NP	8,8			17,5			34	3,4
				Seed Fund	E	R	NorthStar Equity Investors	NP	23,3	NP	11,7			23,3			19	7,0
				Technology Fund	E	R	IP Group	NP	29,2	NP	14,6			29,2			4	1,7
				Angel Match Fund	E	R	Rivers Capital Partners (E-synergy & business advisors Free Tree of Newcastle)	NP	8,8	NP	4,4			8,8			8	1,1

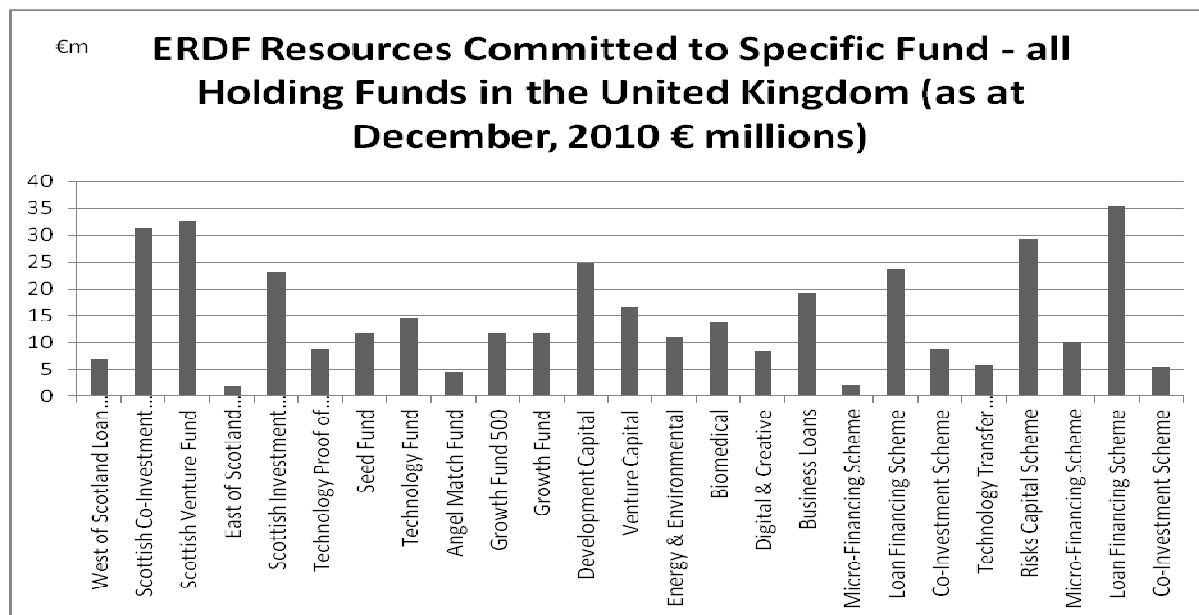
<b>FINANCIAL ENGINEERING INSTRUMENTS FOR ENTERPRISES (EUR million) – UK (Source: EC DG Regio).</b>																		
<b>General Information on Holding Fund</b>		<b>Contributions to the Holding Fund</b>		<b>General Information on specific funds (being equity funds, guarantee funds or loan funds)</b>					<b>Contributions to the specific funds</b>							<b>Add resources at level of FRs &amp; Investments by specific funds in FRs</b>		
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				Growth Fund 500	E	R	Finance Wales Investments	NP	23,3	NP	11,7			23,3			5	3,7
				Growth Fund	E	R	NEL Fund Managers of Newcastle	NP	23,3	NP	11,7			23,3			15	2,9
<b>North West Business Finance Limited</b>																		
R	30-11-09	204,0	187,0				North West Business Finance Limited											
				Development Capital	E	R	YFM Private Equity	15-12-10	49,7		24,8			49,7				
				Venture Capital	E	R	Enterprise Ventures	15-12-10	33,1	4,0	16,6			33,1				4,0
				Energy & Environmental	E	R	CT Investment Partners	15-12-10	22,1	1,0	11,0			22,1				1,0
				Biomedical	E	R	Spark Impact	15-12-10	27,6		13,8			27,6				
				Digital & Creative	E	R	AXM Venture Capital	15-12-10	16,6		8,3			16,6				
				Business Loans	E	R	Finance Wales Capital	15-12-10	38,6	6,0	19,3			38,6				6,0

<b>FINANCIAL ENGINEERING INSTRUMENTS FOR ENTERPRISES (EUR million) – UK (Source: EC DG Regio).</b>																		
<b>General Information on Holding Fund</b>		<b>Contributions to the Holding Fund</b>		<b>General Information on specific funds (being equity funds, guarantee funds or loan funds)</b>					<b>Contributions to the specific funds</b>							<b>Add resources at level of FRs &amp; Investments by specific funds in FRs</b>		
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<b>Finance Wales plc</b>																		
R	24-04-09	175,1	164,3				Finance Wales plc											
				Micro-Financing Scheme	L	R	Finance Wales Investments Limited		5,8	1,9	2,2	0,6		5,8	1,9		85	1,9
				Loan Financing Scheme	L	R	Finance Wales Investments Limited		64,2	34,7	23,7	8,4		64,2	34,7		166	34,7
				Co-Investment Scheme	E	R	Finance Wales Investments Limited		17,5	3,5	8,8			17,5	3,5		19	3,5
				Technology Transfer Scheme	E	R	Finance Wales Investments Limited		11,7	3,9	5,8			11,7	3,9		5	3,9
				Risks Capital Scheme	E	R	Finance Wales Investments Limited		75,9	18,4	29,3	8,7		75,9	18,3		16	18,4
<b>Yorkshire Forward</b>																		
R	04-12-09	105,0					Yorkshire Forward RDA											
				Micro-Financing Scheme	L	R			25,3		10,1	2,5		25,3				
				Loan Financing Scheme	L	R			88,5		35,4	8,8		88,5				
				Co-Investment Scheme	E	R			13,6		5,5	1,4		13,6				
<b>TOTALS</b>		<b>847,9</b>	<b>569,2</b>						<b>825,1</b>	<b>127,1</b>	<b>373,4</b>	<b>152,4</b>	<b>159,8</b>	<b>1.000,6</b>	<b>210,9</b>		<b>467</b>	<b>160,0</b>

Annex Table B

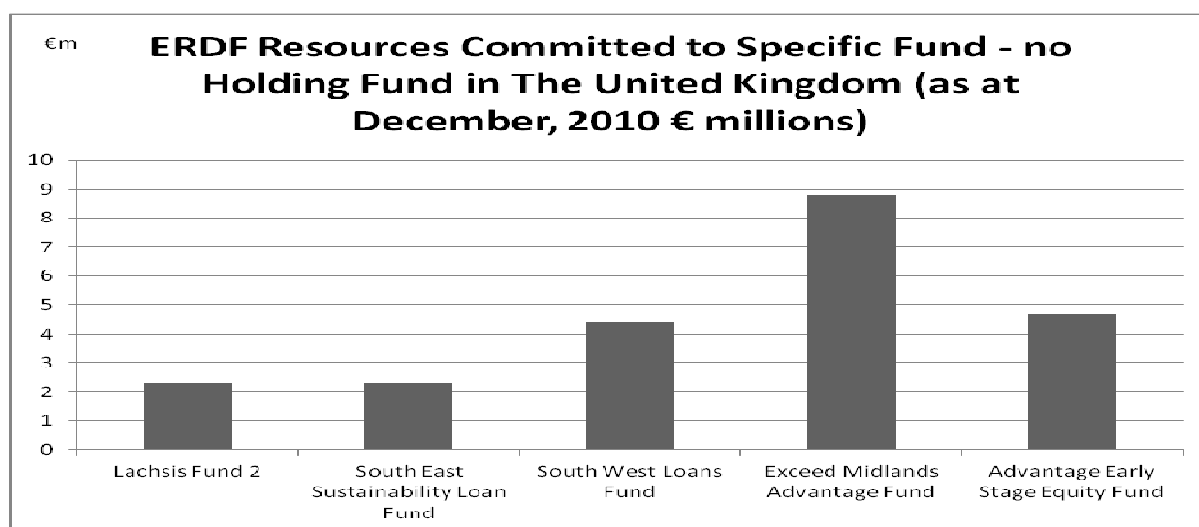
<b>FINANCIAL ENGINEERING INSTRUMENTS FOR URBAN DEVELOPMENT, ENERGY EFFICIENCY AND RENEWABLE ENERGIES (EUR million) – UK (Source: EC DG Regio).</b>																			
<b>General Information on Holding Fund</b>		<b>Contributions to the Holding Fund</b>		<b>General Information on specific funds (being equity funds, guarantee funds or loan funds)</b>					<b>Contributions to the specific funds</b>						<b>Add resources at level of FRs &amp; Investments by specific funds in FRs</b>				
Geographical scope	Signing date of Funding Agreement of Holding Fund	Size of Holding fund	Contributions effectively paid into Holding Fund	Name of specific fund (being equity fund (E), guarantee fund (G) or loan fund (L))	Type of fund	Geographical scope	Manager of specific fund (being equity fund, guarantee fund or loan fund) (or manager of holding fund)	Signing date of the funding agreement of specific fund	HF contribution committed to specific fund	HF contribution effectively paid into specific fund	ERDF resources committed to specific fund	National public co-financing	Add. resources committed to FEI	Contributions committed into FEI	Contributions paid to specific fund	Add resources at level of final recipients (FRs)	No. Investments in final recipients	Resources committed to final recipients	
<b>No holding fund</b>																			
				East Midlands		R	King Sturge Financial Services	09-02-10						22,0					
				Wales		R	Amber Infrastructure and Lambert Smith Hampton	Q2 2010						60,0					
<b>Jessica Holding Fund London</b>																			
R	28-10-09	116,1	98,7				Europa Investment Bank												
				London Green Fund		R	Foresight Environmental Fund LV	03-03-11	40,1	40,1									
<b>Jessica Holding Fund London North West England</b>																			
R	12-11-09	117,2					European Investment Bank												
				No FEI has been put in place															
<b>Jessica Holding Fund London Scotland</b>																			
R	30-0-2010	55,0	55,0				European Investment Bank												
				No FEI has been put in place															

Annex Figure A



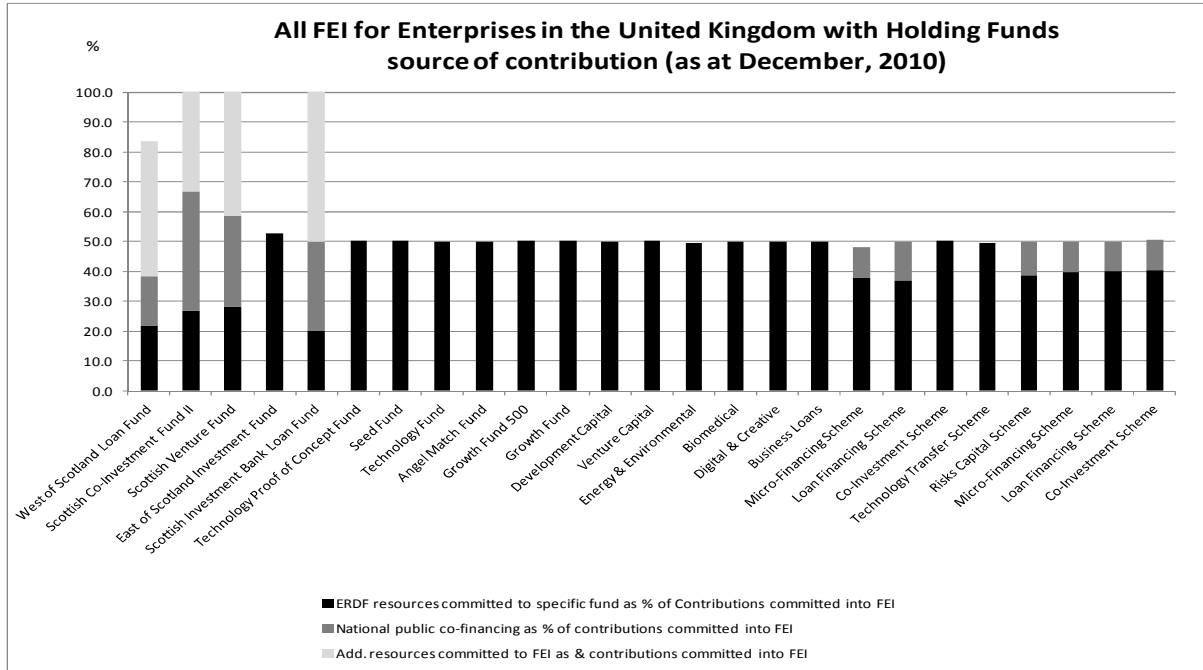
Source: EC DG Regio

Annex Figure B



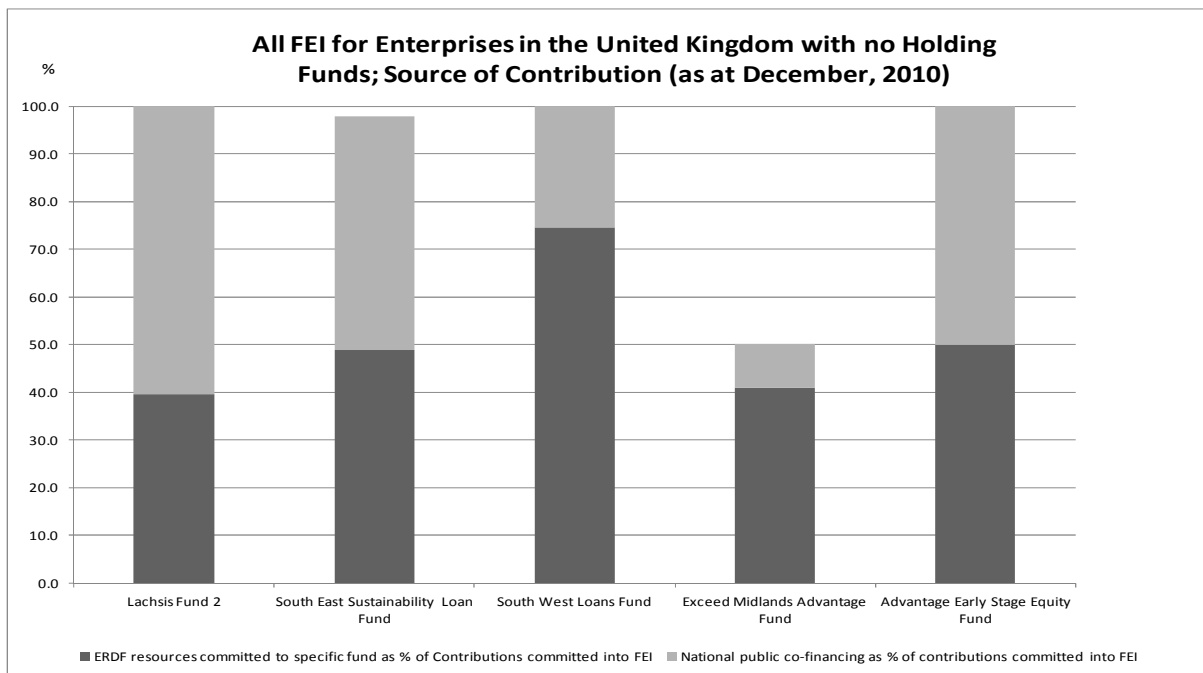
Source: EC DG Regio

Annex Figure C



Source: EC DG Regio

Annex Figure D



Source: EC DG Regio