



JESSICA – UDF Typologies and Governance Structures in the context of JESSICA implementation

Joint European Support for Sustainable Investment in City Areas



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Table of Contents

Executive Summary	5
List of figures	7
List of abbreviations	9
1. Introduction	10
1.1 The aim and context of the present study	10
1.2 Status Quo of the JESSICA initiative	11
2. Classifying key dimensions of urban development funds	14
2.1 First key dimension: UDF Business strategy	14
2.1.1 Integrated urban plans as a starting point	14
2.1.2 Types of urban investment project according to the life cycle of assets	16
2.1.3 Specialisation options for UDF fund management	19
2.1.4 Internal and external rate of return targets at the project level	21
2.2 Second key dimension: UDF financial products for the final recipients	24
2.2.1 Guiding principles for the selection of financial products	24
2.2.2 Provision of guarantees	25
2.2.3 Provision of investment loans	27
2.2.4 Provision of mezzanine capital	28
2.2.5 Provision of equity capital	30
2.2.5.1 Overview of the stages of equity financing	30
2.2.5.2 Venture capital in early stages of urban development projects	31
2.2.5.3 Late-stage equity for urban development projects	34
2.3 Third key dimension: UDF governance structure	36
2.3.1 Parties and financing sources of UDFs	36
2.3.2 Consequences for the UDF legal status	38
3. Developing governance structures for UDF prototypes	40
3.1 Combination of key dimensions to a UDF typology	40
3.1.1 UDFs of the first and second generation	40
3.1.2 The linkage between expected yields and costs in UDFs	41
3.1.3 The linkage between financial products and projects	43
3.1.4 The linkage between conditions offered by the UDF and necessary external rates of return	44
3.2 Resulting UDF prototypes	45
3.2.1 Prototype 1: Energy efficiency funds	45
3.2.2 Prototype 2: Infrastructure funds	47
3.2.2.1 Overview of types of urban infrastructure assets	47
3.2.2.2 Key dimensions of infrastructure funds	49
3.2.2.3 Examples of themes for infrastructure funds	50
3.2.3 Prototype 3: Environment funds	51
3.2.4 Prototype 4: “Smart city” investment funds	53
3.2.5 Prototype 5: Area-based brownfield funds	55
3.3 Governance structures for selected urban development fund types	57
3.3.1 Organisational structure for energy efficiency funds (“the Holding Fund and retail banks path”)	57

3.3.2	Organisational structure for infrastructure funds (“the promotional bank path”)	61
3.3.3	Organisational structure for area-based brownfield funds (“the independent investment fund path”)	64
4.	Outlook for the implementation of the derived UDF types	68
5.	Literature on the JESSICA initiative	71

Executive Summary

In aiming to optimise the use of ERDF resources to support regional development objectives in line with the urban agenda, both the European Commission and stakeholders seek to identify challenges and opportunities associated with the practical implementation of JESSICA throughout EU Member States, a task that can be assisted by this JESSICA Horizontal Evaluation Study. Based on European implementation experience gained by mid-2010 this study analyses possible UDF typologies and governance mechanisms for the use of Structural Funds resources in JESSICA financial engineering instruments. The study should provide guidance to Managing Authorities and other stakeholders in advancing their operations through JESSICA.

In order to characterise and systemise different fund models throughout the Member States and regions, the study introduces and applies *three key categorisation criteria* for urban development funds: the quality of UDF business strategy, the nature of financial products to be provided along with the envisaged final recipients, and finally the quality of the governance structure of the UDF. These three key dimensions should not be viewed separately, as they are interlinked.

The *first key dimension*, the *business strategy* of the UDF, contains as its core element the possible types of urban investment projects to be financed. In general, the range of possible projects can be categorised according to the life cycle of urban assets to be funded, starting with the land development phase, followed by the project development phase, the utilisation phase and the redevelopment phase. The stage of the life cycle of an urban development project is important, because it generally reflects the cash flow structure of the project: for example, projects to be financed in the development phase are characterised by high cash outflows in the early years and later on by a single cash inflow deriving from the sale proceeds. In contrast to that, projects in the utilisation phase (e.g. investments in energy efficient renewal) generate periodic cash inflows from the beginning and only need smaller investment sums to get started. As well as the stage of a project in the urban asset life cycle, a further factor influencing the business strategy of a UDF is its *intended geographic and thematic scope*. Since every fund represents a portfolio of different projects, the portfolio can either *diversify or specialise* in a certain region or the utilisation of certain assets. The latter may lead to “specialised theme funds” in contrast to general funds.

The business strategy of the UDF, as the first key dimension, determines the choice and configuration of *financial products* that are to be provided in order to support urban investment projects. This is largely due to the fact that the cash flow structures of the projects have a strong influence on this *second key dimension*. In general, the legal framework of the JESSICA initiative enables all participating fund vehicles to make use of the following four different financial products: *guarantees, loans, mezzanine capital and equity capital*. However, in order to provide for efficient financing, the cash flow of the urban investment project should match the repayment characteristics of the financial instrument chosen: since a loan, for example, requires periodic servicing of interest and repayment, it may therefore be most suitable for projects that generate periodic cash inflows such as energy efficiency investments on buildings. Although a UDF basically can offer all financial products, the fund management should aim to keep to the general guiding principle of risk sharing. In other words, UDFs should not seek to finance the entire project investment requirements, but should share risks with project investors and/or (commercial) lenders external to the UDF. Therefore, alongside the financial support provided by the UDF, all project promoters being applicants for fund financing should also be taking investment risks. The four financial products allowed for under the JESSICA initiative each result in a variety of different *risks* for the UDF. At the same time, the *impact* of providing financial support to urban projects through each of the four product types also varies considerably. For instance, guarantees and loans only constitute a moderate risk compared to equity capital investment. However, compared to other financial products, equity capital probably has the maximum impact per euro invested into the projects. This latter conclusion is drawn on the grounds that equity capital usually plays a key role in financing in that, if a project has sufficient equity capital, it will also be able to attract other types of finance.

Unlike all other financing instruments, the UDF in taking an equity stake can play an active role in project management. This links the second key dimension to the *third* one: the *governance structure* of the UDF. Depending on the parties involved, and on their number, type (public or private), expectations and legal status, the UDF can either have a *corporate governance* structure or a purely *public administration governance* structure. The number, type and expectations of the parties involved determine not only the legal personality of the UDF but also the possible exit strategies (predefined investment duration or “open-ended investments”) of key partners. This aspect is closely related to the role of the future capital providers for each UDF type and therefore to the refinancing of the UDF: every party to a UDF who supplies it with capital resources has a strong interest in co-determination and involvement in all management decisions concerning the UDF.

By *combining these three key dimensions* presented above, potential UDF prototypes emerge. In the study, *five possible UDF prototypes* are described and evaluated in more detail: energy efficiency funds, infrastructure funds, environment funds, “smart city” investment funds and brownfield funds. Depending on the complexity of the UDF structure, some prototypes represent a “*First Generation*” UDF, which is characterised by a lower complexity in the fund’s key dimensions, so that the common fund concept and innovative character of the instrument can become known as quickly as possible in the Member States. The “*Second Generation*” fund concepts may then include more complex, advanced fund types with higher institutional flexibility.

A good example of a “*First Generation*” UDF is the *energy efficiency fund* that focuses on financing the renovation of existing urban assets in order to generate savings on future energy costs. Due to the stable cash flows expected from the projects and derived from energy savings, this type of UDF could be well suited to the granting of loans (e.g. with a reduced interest rate compared to commercial loan products) to public or private owners of real estate or infrastructure. The UDF could be established as a separate block of finance in an existing financial institution with only public actors contributing public funds. In such a form, this UDF type should exhibit low establishment and operating costs. UDF-prototypes of the “*Second Generation*” would, conversely, be more complex and cost-intensive to set up: for example, an *area-based brownfield fund* would usually call for high-volume equity capital investments in projects. Due to the high risks involved, it is probably most appropriate that the UDF is set up as a separate legal entity, in turn resulting in higher operating costs and longer time-to-market.

Finally, the study also develops *potential organisational structures* for three selected urban development fund types. These organisational structures discuss in detail the relationships between the UDF and the Managing Authority, decision making bodies, management control mechanisms, as well as reporting and monitoring mechanisms for the allocation of funds to both projects and final recipients. In order to suggest possible solutions for Managing Authorities on how they may efficiently set up an UDF, the study presents *three possible (though not exhaustive) paths*. The first path, “*the Holding Fund and retail banks path*”, might be an efficient way to set up, for instance, an energy efficiency fund: a Holding Fund would be established first (e.g. with the EIB), which then allocates the given funds in a second step to the private sector through commercial banks that establish the UDF as a separate block of finance in their books. In contrast, due to the inherently high investment costs in the case of financing infrastructure investment, in this case it seems advisable to directly distribute large-scale investment loans through a designated single financial institution, which represents the second path, the “*promotional bank path*”. The third path, “*the independent investment fund path*”, involves the establishment of a separate investment company with a legal personality. As regards the management of the fund and its investments, independent fund management could be sought by a call for tenders. The chosen fund and investment managers would then be expected to allocate the fund capital to sustainable urban investment projects in line with the investment strategy defined by the MA and/or HF.

The study concludes with a summary of the evaluation of the benefits and shortcomings of each suggested UDF prototype and gives some recommendations for Managing Authorities in relation to the defining of strategies for the implementation of UDFs as regards the possible types of funds, key characteristics and key considerations.

List of figures

Figure 1:	Alternatives for the establishment of JESSICA funds	11
Figure 2:	Outline investment structure under the JESSICA initiative	12
Figure 3:	Influence on JESSICA structures of European regulations on State aid (Source: JESSICA: State Aid Perspective, Presentation at JESSICA Networking Platform, June 2010)	13
Figure 4:	Linkage of key dimensions in the design of urban development funds	14
Figure 5:	Classification of urban development projects according to the life cycle of urban assets	16
Figure 6:	Cash flow structure of a sample urban development project: financing of an energy efficiency investment	17
Figure 7:	Cash flow structure of a single urban development project (example: financing of urban regeneration investments)	18
Figure 8:	Portfolio classification of specific urban development projects	18
Figure 9:	Dimensions of a UDF project portfolio	20
Figure 10:	CABERNET classification of project types	21
Figure 11:	Project types of UDF business strategies according to the IRR target	22
Figure 12:	Single B-Projects in UDF business strategies	22
Figure 13:	B-Project Vehicles in UDF business strategies	23
Figure 14:	B-Project Vehicles in UDF business strategies	23
Figure 15:	Financial products of UDFs	24
Figure 16:	Project financing via guarantees	25
Figure 17:	Project financing via loans	27
Figure 18:	Instruments of mezzanine capital in project financing	28
Figure 19:	Project financing via mezzanine capital	29
Figure 20:	Share of mezzanine capital in project financing	30
Figure 21:	Equity financing for start-up and growth	31
Figure 22:	Project financing via venture capital in the development stage	32
Figure 23:	Due diligence process in venture capital financing	32
Figure 24:	Project financing via late-stage equity capital in the utilisation/operating stage	34
Figure 25:	Possible parties involved and financing sources of UDFs	36
Figure 26:	Resources and incentives of possible UDF actors	37
Figure 27:	Possible actors, financing sources, financial instruments and legal status of UDFs	39
Figure 28:	Developing UDF types by combining three key dimensions	41
Figure 29:	Expected yields and risks of alternative financial instruments	42
Figure 30:	Qualitative characteristics of alternative financial instruments	42
Figure 31:	Characteristics of UDF prototype 1: Energy efficiency funds	46
Figure 32:	Types of infrastructure assets as part of urban developments	48
Figure 33:	Characteristics of UDF prototype 2: Infrastructure funds	49
Figure 34:	Financial risk and expected internal rate of return in different types of infrastructure assets	51
Figure 35:	Characteristics of UDF prototype 3: Environment funds	52
Figure 36:	Characteristics of UDF prototype 4: Smart city investment funds	54
Figure 37:	Local facilities management functions to be financed by “smart city investment UDFs”	54
Figure 38:	Characteristics of UDF prototype 5: Area-based brownfield funds	56
Figure 39:	Governance structure prototype 1: Energy efficiency funds	58
Figure 40:	Flow chart for the establishment of prototype 1: Energy efficiency funds	59
Figure 41:	Flow chart for the operating management of prototype 1: Energy efficiency funds	60

Figure 42:	Governance structure prototype 2: Infrastructure funds	62
Figure 43:	Flow chart for the establishment and operation of prototype 2: Infrastructure funds	63
Figure 44:	Governance structure prototype 5: Area-based brownfield funds	64
Figure 45:	Governance structure prototype 5: Separation of UDF capital resources and management functions	64
Figure 46:	Governance structure prototype 5: Fund vs. project level	65
Figure 47:	Flow chart for the establishment and operation of prototype 5: Area-based brownfield funds	66
Figure 48:	Decision paths for Managing Authorities to establish Urban Development Funds	68

List of abbreviations

Acronym	Description
CEB	Council of Europe Development Bank
COCOF	Committee for the Coordination of the Funds
COSO	Committee of Sponsoring Organisation
DG REGIO	European Commission's Directorate General for Regional Policy
EC	European Commission
EIB	European Investment Bank
EoI	Expression of Interest
ERDF	European Regional Development Fund
ERR	Economic/External Rate of Return
ESF	European Social Fund
EU	European Union
IRR	Internal Rate of Return
FA	Funding Agreement (e.g. between MA and HF)
HF	JESSICA Holding Fund
IC	Investment Committee
JESSICA	Joint European Support for Sustainable Investment in City Areas
MA	Managing Authority
MoU	Memorandum of Understanding
MS	Member State
OP	Operational Programme
PPP	Public Private Partnership
RM	Risk Management
SPV	Special Purpose Vehicle
UDF	Urban Development Fund

1. Introduction

1.1 The aim and context of the present study

Joint European Support for Sustainable Investment in City Areas is a policy initiative of the European Commission developed with the European Investment Bank and supported by the Council of Europe Development Bank, having as a primary objective the use of EU Structural Funds through financial engineering mechanisms to support sustainable urban development. JESSICA responds to the need to support sustainable urban transformation by addressing a perceived shortage of investment dedicated to integrated urban renewal and regeneration projects in European cities. JESSICA was therefore launched with a view to providing new opportunities to Managing Authorities responsible for the implementation of Structural Funds in line with Operational Programmes agreed for the current programming period. Benefits from JESSICA should include:

- ensuring long-term durable support to urban transformation processes through the revolving character of ERDF contributions to JESSICA financial engineering instruments,
- contributing financial and managerial expertise from specialist institutions such as the EIB, the CEB and other financial institutions,
- leveraging additional resources for PPPs and other urban projects in the EU, and
- creating stronger incentives for successful implementation by final recipients, since MA receive part of the capital backflow of successful projects which can be used for further investment.

The first phase of JESSICA implementation involved carrying out JESSICA Evaluation Studies to assess the rationale and potential for JESSICA financial engineering instruments in those Member States or regions that have expressed an interest in the implementation of the JESSICA initiative. By early September 2010, 57 Evaluation Studies had been launched in 19 Member States, 42 of which completed.

As a result of this work, awareness of the opportunities offered by JESSICA financial engineering instruments has grown, with an increasing number of Managing Authorities expressing an interest in establishing JESSICA Funds. 19 Memoranda of Understanding have been signed by MAs from the MS, taking JESSICA further forward. 16 Holding Funds have been established across seven Member States, 15 of them mandated to the EIB. The total amount of ERDF resources devoted to JESSICA instruments could reach 1.6 - 2.0 billion Euros by the end of 2010. Furthermore, the EIB – in its function as a Holding Fund – have started to identify and select UDFs for investment of the HF resources, launching 7 calls for tender. As a result of these tenders, agreements are in place with 2 UDFs as of September 2010 and some additional ones are expected to reach closure by the end of the year.

In aiming to optimise the employment of ERDF resources to support regional development objectives in line with the urban agenda, both the EC and stakeholders seek to identify challenges and opportunities associated with the practical implementation of JESSICA throughout EU Member States, a task which can be assisted by this study.

Based on European implementation experience gained by mid-2010, this study will analyse possible UDF typologies and governance mechanisms likely to emerge in the use of Structural Fund resources through JESSICA financial engineering instruments. The study should provide guidance to MAs and other stakeholders in advancing their operations through JESSICA. In order to ensure that the study is closely aligned with policy processes and the needs of potential users, the contents of the study have been presented to and discussed by a Horizontal Study Stakeholders Group (HSSG). HSSG comprised representatives from DG-REGIO, EIB and MAs from a number of MSs interested in the establishment of JESSICA funds.

The study can also provide important inputs for two “handbooks” / guidelines that are to be produced during the course of 2010 and 2011. The first “handbook” will cover key implementation steps and guidelines for the establishment, operation and eventual decommissioning of JESSICA Holding Funds.

It should be completed in September 2010 and provide guidance in relation to business plans, funding agreements, and reporting standards as well as monitoring and audit verifications at HF level. The second “handbook” will cover key implementation steps and guidelines for the formation of urban development funds. This second “handbook” will be developed drawing also on this study as well as on the HF “handbook”. It will discuss business plans, funding agreements, financial contracts, and reporting standards as well as monitoring and audit verifications at UDF level. It is hoped that these three “horizontal studies” will not only provide guidance for MAs, but will also support the successive phases and subsequent implementation of JESSICA funds in all European Member States.

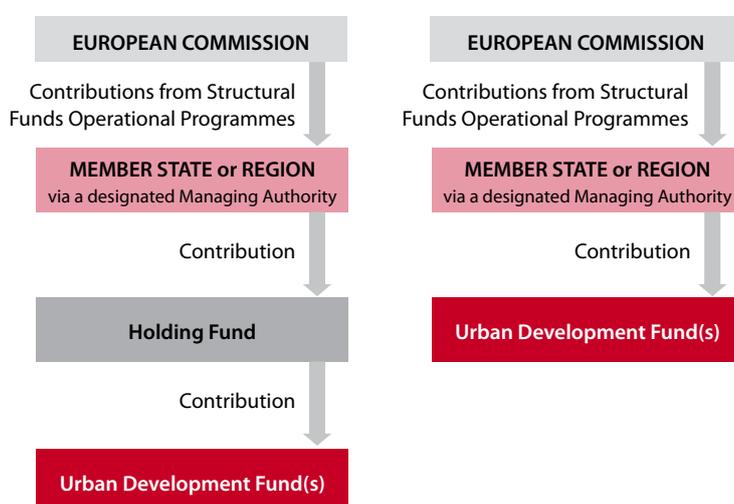
1.2 Status Quo of the JESSICA initiative

Under procedures applicable in the 2007-2013 programming period (as described by Council Regulation (EC) 1083/2006, Regulation EC 1080/2006 and Commission Regulation 1828/2006 and their successive amendments), Managing Authorities (MAs) of EU Member States have the option of employing part of their Structural Fund allocations through financial engineering instruments supporting urban development. These instruments are UDFs, investing in PPPs and other projects included in integrated plans for sustainable urban development and, optionally, HFs that select and invest in UDFs on behalf of MAs.

In essence, therefore, MAs have two alternatives for the implementation of JESSICA in their Member State. On the one hand, they can establish a HF to which different tasks may be delegated: HFs can either begin to structure new UDFs or they can identify urban development funds already established. Furthermore the HF could fund and also monitor the selected urban development funds as a service to the MA. Here the HF not only has a financing function, but also provides essential *technical assistance* in the overall JESSICA implementation process. This might be necessary in Member States in which MAs have limited or no experience with financial engineering instruments investing in urban development (left side of Figure 1).

Alternatively, the MA may invest Structural Fund resources directly into one or more UDFs (right side of Figure 1). This could be the way for MAs with notable experience in financial engineering to reduce, for example, the overall administrative costs associated with a two-layer structure (left side of Figure 1). At the same time, an efficiently managed Holding Fund (which automatically implies a two-layer structure) would not necessarily give rise to higher overall costs than with a one-layer structure. A two-layer structure can also have advantages in economies of scale. For instance, if a large OP budget is to be allocated to diverse UDFs and, if at the same time, the MA does not have experience in and capacity

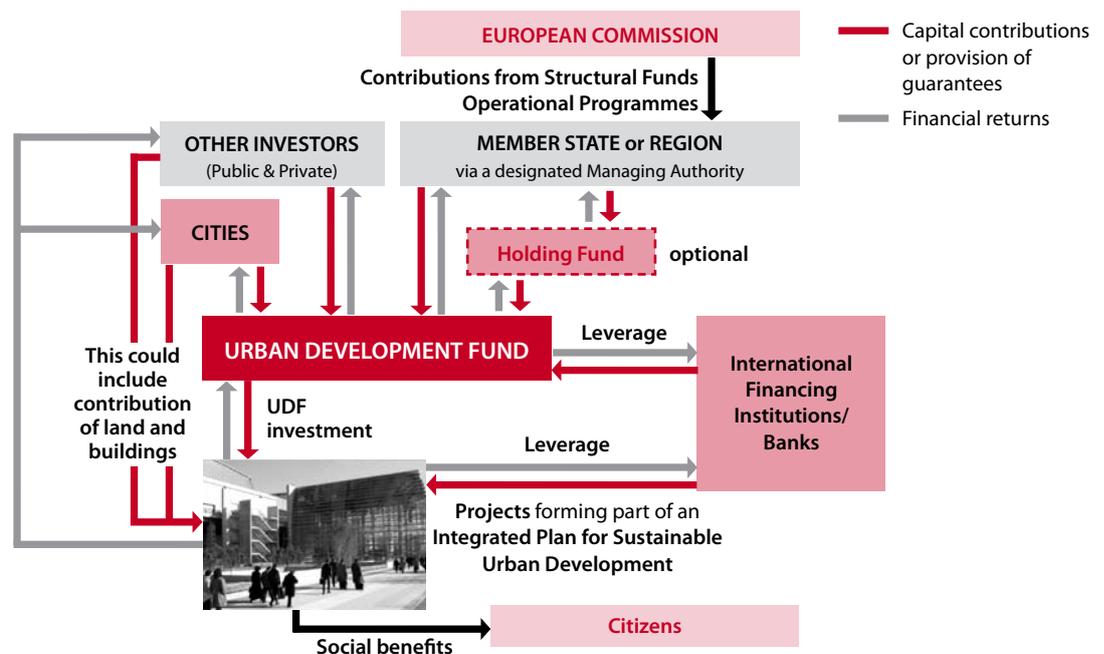
Figure 1: Alternatives for the establishment of JESSICA funds



for fund management. Nevertheless, if only a small budget is invested in JESSICA instruments and if the MA already has expertise in fund vehicles, then the two-layer structure will in all probability have higher administrative costs. The study of the German Federal Ministry of Transport, Building and Urban Affairs (BMVBS) and the Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) within the Federal Office for Building and Regional Planning (BBR) in Germany not only shows examples of comparable fund vehicles in Europe, but also proves that expertise in these instruments varies significantly across Member States¹.

Regardless of the path followed to establish JESSICA funds in a Member State, the main financial innovation and benefit becomes obvious at *the level of projects* to be funded: instead of paying out capital as a grant, capital is revolving and can therefore be reinvested in new projects (enabling the “recycling of funds”). Public entities can also participate in the financial benefits associated with the value enhancement of successful projects. In particular, the provision of equity capital by UDFs is able to attract private investors and therefore provoke higher “leveraging” of public funds, along with a transfer of knowledge from private developers, investors and financial institutions. Altogether these public and private parties manage to develop large-scale urban development projects which could not be realised by one party acting alone. However, UDFs are not suitable for every type of project. Since capital is given out as loan, equity or guarantee, only projects which generate some return flows (i.e. repayable investments) can be financed. At the same time, projects have to be part of an integrated plan for sustainable urban development. Although it is not necessary to identify specific projects (with their individual cash flows) before setting up a fund, the UDF has to present a business plan displaying a sustainable policy and predicted return flows for every provider of capital involved. Furthermore, the promoted urban development projects should generate externalities in line with the policy objectives set out in the Operational Programmes and underlying integrated urban development plans, thus giving rise to social or public benefit for citizens. Therefore, projects supported by UDFs should not only generate a financial *internal rate of return*, but also an *external or economic rate of return* representative of the above-mentioned externalities. As a result, this gives rise to a series of returns on investment paid to both investors focused on financial gains and (generally public or private “ethical”) investors seeking both financial and “external” returns.

Figure 2: Outline investment structure under the JESSICA initiative



¹ See: Nadler, Michael et al.: Urban Development Funds in Europe – Ideas for implementing the JESSICA Initiative, Bonn, Berlin 2009.

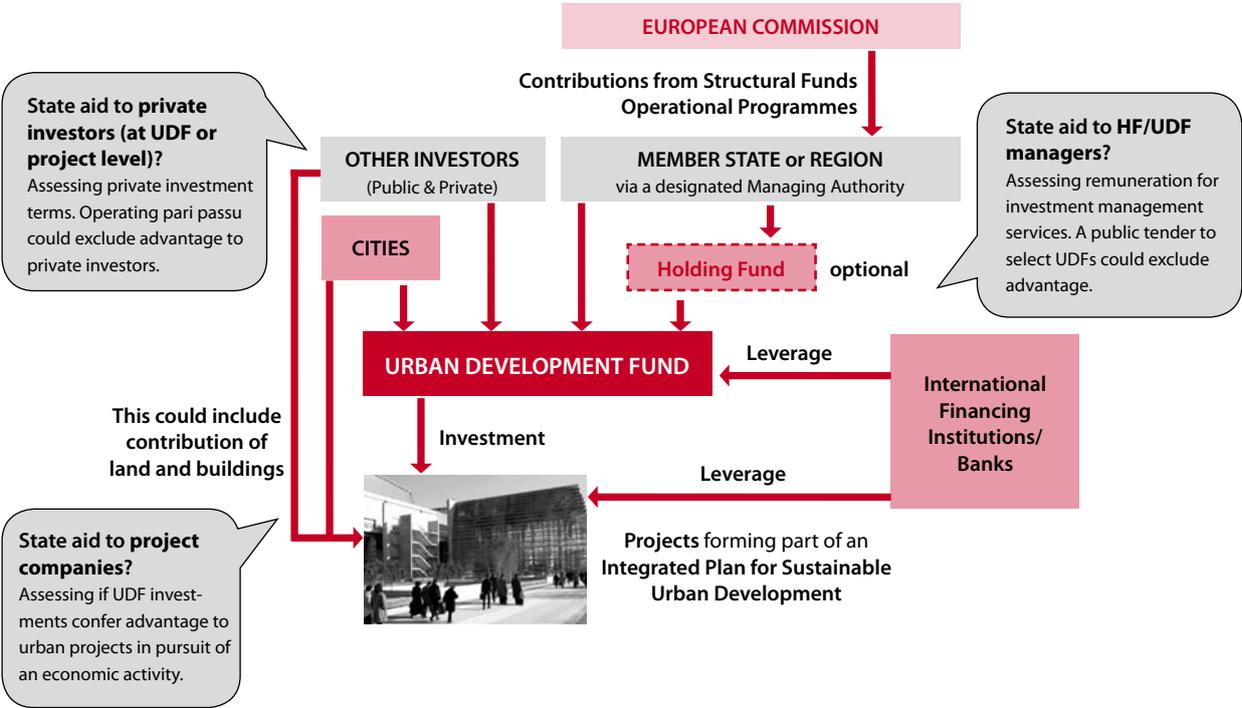
Apart from the HFs already established, there currently exist only a handful of UDF structures established under the JESSICA initiative (i.e. Brandenburg, East Midlands, Estonia, Wielkopolska, Lithuania and Wales). Progress in setting up UDFs has so far been rather heterogeneous throughout MSs, particularly as regards timeframes, fund design and the restraints imposed by national regulations.

The reason for this could be the highly innovative character of the UDF, but also the potentially complex structure that may be necessary to establish UDFs in response to challenges specific to each region or MS (see Figure 2). In addition to monitoring financial backflows (IRR) and the social or public benefits achieved for citizens (ERR), the fund management should also ensure that operations comply with rules for *State aid* at all necessary levels.

The reason for this requirement is that ultimately capital resources from the Structural Funds are used to fund projects. Although this is no longer achieved through grants, the parties involved still have to obey the same regulations at the different levels of the JESSICA financial engineering instruments (see Figure 3).

Managing Authorities therefore need guidance on the structure and the possible areas of application, as well as on the cost of implementation and mechanisms for managing and monitoring UDFs. Consequently, the primary task for this study and – in more detail for further research – is to characterise and systematise different fund models throughout the Member States and regions.

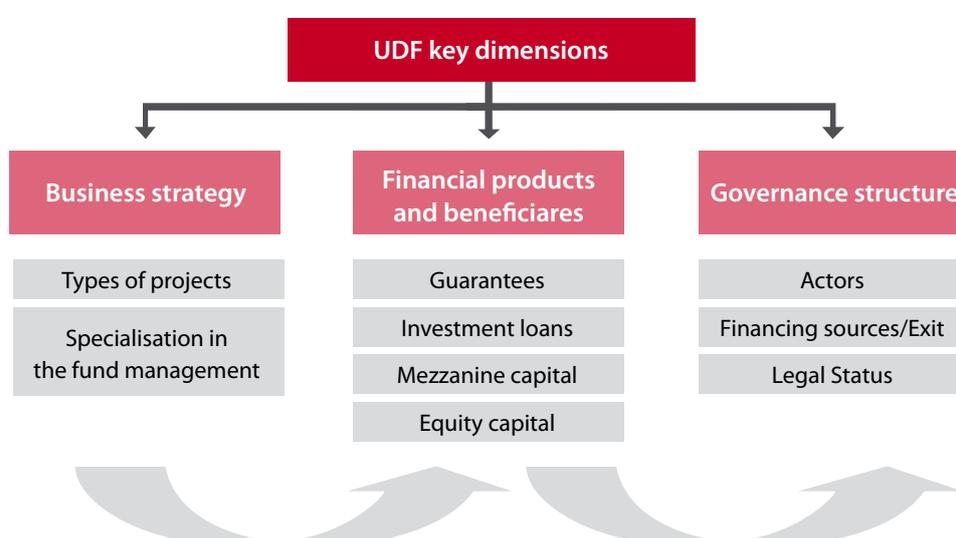
Figure 3: Influence on JESSICA structures of European regulations on State aid (based on source: JESSICA: State Aid Perspective, Presentation at JESSICA Networking Platform, June 2010)



2. Classifying key dimensions of urban development funds

In this chapter we classify and systematise the most distinctive features of UDFs. In order to do so, we have drawn on published JESSICA Evaluation Studies and academic publications as well as available guidance on JESSICA operations at the EIB. Together with the legal framework for JESSICA implementation, a comparative cross-sectional analysis of the UDFs currently anticipated in Europe (based on the JESSICA Evaluation Studies) will enable us to draw conclusions on potential business activities. In this regard, we shall introduce and apply *three fundamental classification criteria* that we describe in the following chapters. From our perspective, satisfaction of the three criteria is a prerequisite for the successful design of UDFs. In addition, there are interrelations between the three key dimensions that will be discussed in detail in chapter 2.1.

Figure 4: Linkage of key dimensions in the design of urban development funds



2.1 First key dimension: UDF Business strategy

2.1.1 Integrated urban plans as a starting point

One key requirement of the JESSICA initiative is that urban development projects form part of an *integrated plan for sustainable urban development*. COCOF note 08/0002/03-EN of 22/12/2008 states that the Structural Fund regulations for the period 2007-2013 do not include a definition of, or specific requirements for, an “integrated plan for sustainable urban development”. Consequently, these should be defined by Member States and Managing Authorities, taking account of Article 8 of Regulation (EC) No 1080/2006 and the specific urban, administrative and legal context of each region.

Nonetheless, discussions² at European level have resulted in a broadly uniform understanding of integrated urban development planning. It was in pursuit of an improved understanding of “integrated urban development policy” that the preparation of the Leipzig Charter included a comparative study of integrated urban development planning in the individual Member States which examined the central elements of integrated urban development plans. The findings showed that an integrated urban

² See presentations at JESSICA networking platform meeting from 12.3.2010 and Nadler, Michael et al.: Urban Development Funds in Europe – Ideas for implementing the JESSICA Initiative, Bonn, Berlin 2009, p. 101-105.

development plan links the various fields of action and sector planning and coordinates them in terms of space, timing and content.³ It defines goals and determines the appropriate instruments for reaching them. Finally, the relevant parties, including those outside politics and administration, should be suitably involved at each stage.⁴

As suggested by the JESSICA division at the EIB, the relevant authority (e.g. MA) would ideally have an integrated plan comprising the following elements⁵:

- the geographical area (“Target Area”) should be precisely defined;
- underlying investment strategy, justifying public interest and the need for public intervention (i.e. a planning-led approach);
- standard elements of a land-use plan with sufficient physical definition of public works needed to achieve the Plan’s objectives;
- compliance with environmental and other procedures under EU law;
- analysis of needs (expected demand for urban assets/services) to which the proposed investment should respond;
- analysis of socio-economic objectives and impacts;
- robust governance structure – timetable and responsibilities including applicable public consultation procedures;
- funding structure ensuring implementation and long-term financial sustainability;
- components to be jointly assessed to satisfy the economic, social, environmental and financial requirements.

Even in Member States with a well-developed urban planning system, difficulties have been encountered in some regions and cities in achieving all of the above. A more complex situation can be seen in some of the newer Member States where an advanced spatial planning system does not yet exist. However, the experience of the EIB shows that this does not have to be a barrier for the business strategy and for the implementation of a UDF. Urban projects without an existing JESSICA-compliant integrated plan can be accepted as candidates for UDF funding, provided that there is a commitment by the relevant authorities to engage in a planning process satisfying the integrated plan criteria within the current ERDF programming period. Furthermore, the urban projects presented for financing by UDFs are to be included in the integrated plans in preparation.⁶ Therefore, also urban plans of a strategic nature (e.g. Agenda 21 documents), plans supported by dedicated urban renewal/development agencies and plans driven by a “flagship project” can be applied to identify investment projects as a part of the UDF business strategy. For example, the Westpomeranian region in Poland used “Local Revitalisation Plans” as integrated urban plans.⁷

³ Spatial planning refers to the methods used by the public sector to influence the distribution of population and activities in spaces on various scales. It includes urban planning, regional planning, environmental planning, national and international spatial plans. Concerning the content the European Conference of Ministers responsible for Regional Planning (CEMAT) adopted in 1983 the so called ‘Torremolinos Charter’: “Regional/spatial planning gives geographical expression to the economic, social, cultural and ecological policies of society. It is at the same time a scientific discipline, an administrative technique and a policy developed as an interdisciplinary and comprehensive approach directed towards balanced regional development and the physical organisation of space according to an overall strategy.”

⁴ See Federal Ministry of Transport, Building and Urban Affairs: Necessity of integrated urban development for the success of a sustainable city; Background study for the “Leipzig Charter for the sustainable European city” by the German European Council Presidency, Berlin 2007, p. 15.

⁵ See Carbonaro, Gianni: Integrated plans for sustainable urban development in the context of JESSICA – Methodology and characteristics, Presentation at JESSICA Networking Platform – Third Meeting, Brussels 2010.

⁶ See Carbonaro, Gianni: Integrated plans for sustainable urban development in the context of JESSICA – Methodology and characteristics, Presentation at JESSICA Networking Platform – Third Meeting, Brussels 2010.

⁷ See for examples the presentations on the third JESSICA networking platform. More examples concerning the formulation of integrated urban plans can be found in Nadler, Michael et al.: Urban Development Funds in Europe, Bonn, Berlin 2009.

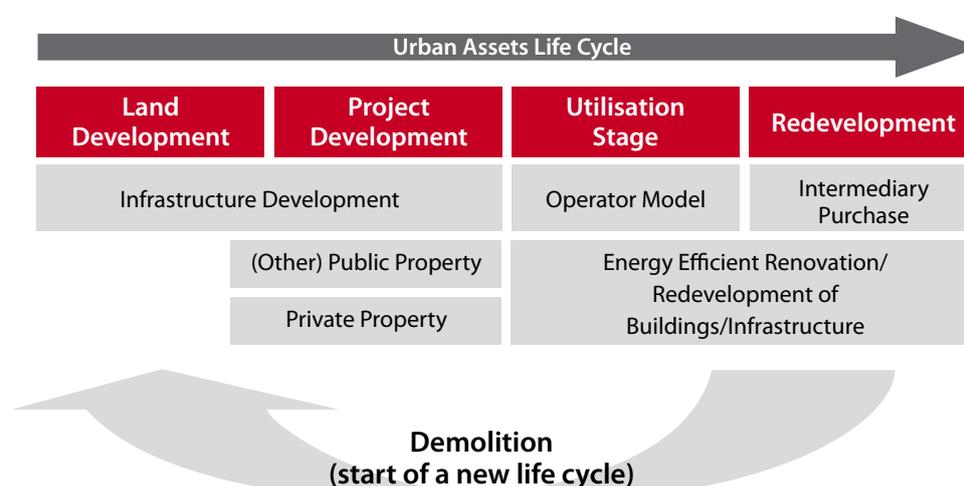
2.1.2 Types of urban investment project according to the life cycle of assets

If the “wide” definition of integrated plans for sustainable urban development according to chapter 2.1.1 is accepted, then a large variety of possible urban development projects could be eligible for support from a UDF. Therefore, a systematic analysis of future fund activities is necessary. This analysis should differentiate the activities included in the plans by the *type of urban investment projects* being funded as detailed below.

The targeted types of urban projects are the key dimension of the *business strategy* of UDFs. To be able to measure the value creation potential of UDFs, however, it is necessary to determine the nature of real estate and infrastructure assets that might be supported by a UDF.

In general, we can classify the range of possible projects according to the *life cycle of (urban) assets* to be funded:

Figure 5: Classification of urban development projects according to the life cycle of urban assets



In the typical sequence of the life cycle of assets, we can identify JESSICA project types with different characteristics that are suitable for funding by a UDF.

In the first stage, the *land development phase*, (land) infrastructure projects (e.g. building roads, providing access to public transport, telecommunication or drainage) could serve as a prerequisite for further development of greenfields or even brownfields. Infrastructure projects in the form of buildings (e.g. kindergartens, schools, hospitals) can also form an important part of projects for the second stage, the *project development phase*.

In this stage, other public property developments like administration buildings may also be funded by UDFs. The same is true for the development of private property that supports urban development (e.g. office buildings in areas with a high unemployment rate, retail property as a social initiator for other investments in the local economy).

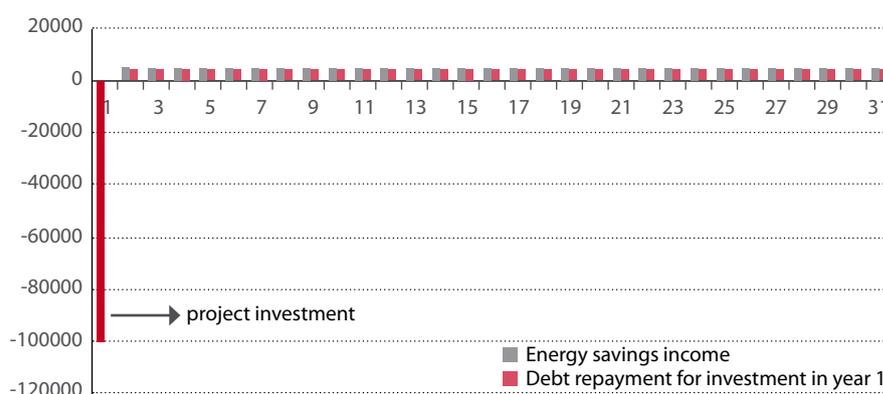
Once the development has been completed, the third stage, the *utilisation or operating phase*, begins. In this stage, UDFs could either finance the operators (but not the owners) of real estate by issuing, for example, a rental guarantee, or provide funding for the improvement of buildings, such as energy-efficient renovation, directly to the owners. Furthermore, the financing of an intermediary purchase

of developed land and/or buildings could make sense, if for example single private owners are not able to implement an integrated urban development. If existing buildings no longer meet market demands (e.g. evidenced by high vacancy rates) it might not be enough merely to renovate the building. Rather, a completely new utilisation concept should be devised after a feasibility study has been carried out. This study could conclude, for instance, that turning a former hotel into an office building would respond better to market demands and therefore form part of a successful *redevelopment*. In contrast to mere renovation of a building while preserving the old utilisation concept, redevelopment is characterised by a new concept of utilisation, which usually requires a much higher project investment. In this stage, a UDF could act as an intermediary purchasing old buildings or brownfields, redeveloping these sites and selling them back into the market.

It is important to note that the stage of the life cycle determines the cash flow structure of the project. This becomes obvious by looking at two examples of urban development projects:

The first example is the *energy efficient redevelopment of private residential real estate* (e. g. condominiums, multifamily housing or social housing). After relatively low investment in existing buildings, the project generates regular periodic income from savings in energy costs. This stable cash flow from the project permits a constant debt repayment to the funding UDF.

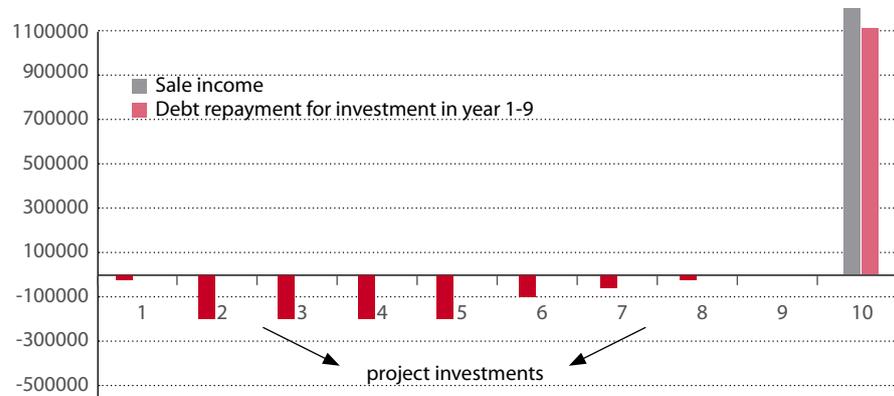
Figure 6: Cash flow structure of a sample urban development project: financing of an energy efficiency investment



While energy savings could be obtained from buildings as well as from infrastructure, in this example it is a core issue that the investment is in an asset already in the utilisation stage (see Figure 6). The owner has a higher income from property because of either cost savings or rent increases (owing to lower energy costs for the tenants). The sample project shows a relatively low financial risk on account of the periodic income and the collateral available to the UDF in form of the existing assets.

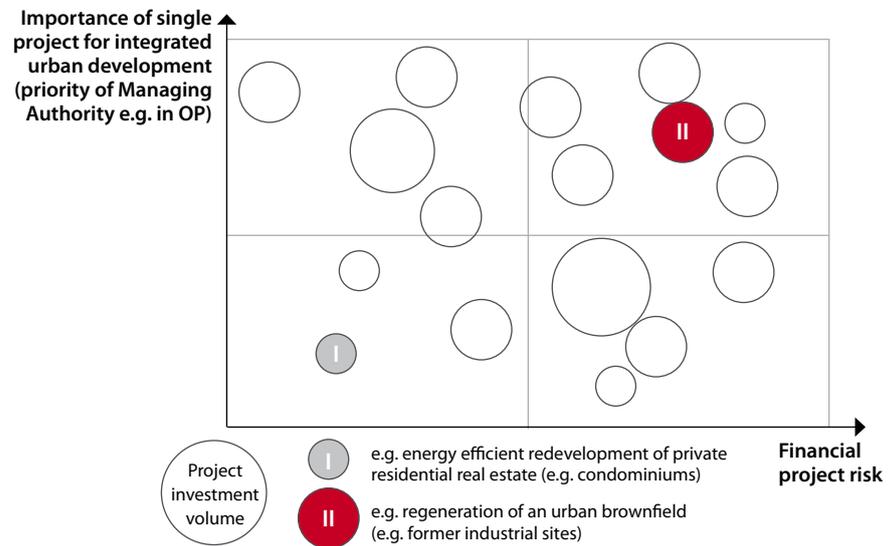
Another (completely different) example would be the case of *brownfield regeneration*. Starting with the purchase of the brownfield site, for many years only cash outflows would be expected (e.g. for cleanup operations as well as land and project development). Once the regeneration has been completed, an income would be expected from the sale of the site to the end-investors. While this sale price as well as the timeframe for the regeneration is uncertain, there is yet another risk factor: the high total amount of the investment. The combination of these factors creates a high financial risk for the UDF.

Figure 7: Cash flow structure of a single urban development project (example: financing of urban regeneration investments)



The UDF management should therefore target a project mix with both low and high financial risk projects. Furthermore, it may also be useful for the fund management to take into account the importance of individual projects for integrated urban development. The classification outlined in Figure 8 below could serve as an example for the construction of a UDF project portfolio. Thus the character of the UDF as a fund supporting a *mixed investment portfolio* becomes obvious.

Figure 8: Portfolio classification of specific urban development projects



In the above figure, projects requiring larger individual investment sums are indicated by a bigger “bubble” (representing a large share of the financing volume of the UDF). While the financial risk and the political priorities of the Managing Authorities are not necessarily correlated, this is not true for the importance of the individual integrated urban development projects: the positioning of the projects

in the classification is highly dependent on the priorities targeted in the Operational Programmes of the relevant Member States.

If an Operational Programme also included output targets (e.g. job creation, local taxes, CO₂ reduction), it would be possible to classify the urban development projects not only from a subjective but also from a more objective point of view relying on such criteria. The matrix would then represent a portfolio measured by internal rates of return (for the financial risk and yields) and by external rates of return (related to the importance of the projects for integrated urban development). For the fund management it would then be possible to combine, for instance, projects with a lower IRR and higher ERR with projects generating a lower ERR but higher IRR, depending on the targets of the MA (for the HF as well as the UDFs, see the following chapter 2.1.4).

2.1.3 Specialisation options for UDF fund management

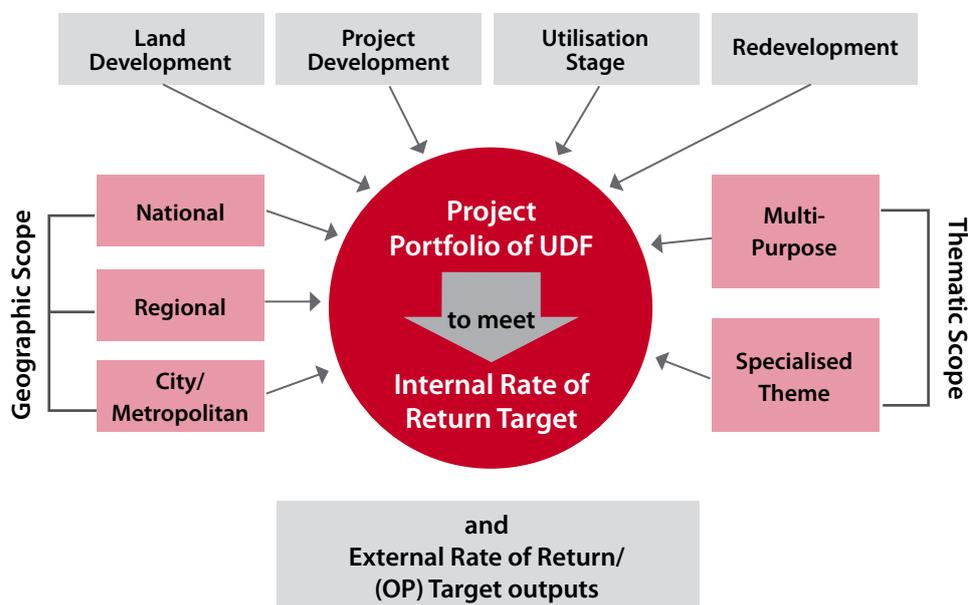
The urban asset construction, operation and redevelopment life cycle serves as the basic concept for a high level categorisation of the different types of urban development project. This is because the life cycle phase determines the cash-flow characteristics of projects (see chapter 2.1.2).

However, as well as being influenced by the stage of a project in the asset life cycle, the business strategy of a UDF is further conditioned by its intended geographic and thematic scope. Since every fund represents a portfolio of different projects, the portfolio can either *diversify* or *specialise* in a certain region or certain asset utilisation (“theme” or sector purpose).

As for *geographic scope*, it is possible that a UDF finances projects on a national, regional or only city/metropolitan level. Current HF and UDF operations throughout the MSs show both activities at the national level (e.g. Lithuania) and at the regional level (e.g. the regions of Wielkopolska and Westpomerania in Poland, and the East Midlands region and the urban region of London in the UK), but not yet at the level of an individual city. One reason for this situation might be that in many Member States capital resources in OPs are not directly allocated to single cities. Nevertheless it might be possible to create a single city UDF. The city in question has to negotiate with the responsible MA that certain OP resources shall be dedicated to that city. This could be facilitated if the city were to provide match funding (e.g. in the form of land and buildings or own cash resources).

At the same time, UDFs either can finance a wide range of asset utilisations in a multi-purpose fund or can specialise in a certain investment type, e.g. an energy saving fund or an infrastructure fund. Very often the “specialised theme” of the fund is determined by the kind of property and infrastructure financed (see Figure 5) in combination with the final use of the assets developed (e.g. educational, tourist or recreational use). For example if a UDF finances the development of a “recreation park” it will be necessary not only to develop buildings but also the corresponding infrastructure (such as streets, access to public transport, water connections or public green areas).

Figure 9: Dimensions of a UDF project portfolio



As we can see in the above figure, the project portfolio of a UDF can follow various business strategies. The selected investment criteria (asset type, geographic and thematic scope) form the *UDF business strategy* and provide the base for the rate of return targets used by the fund management.

One possibility would be to focus on one special theme such as energy efficiency improvements in a certain city or metropolitan area. Such a focus would therefore also limit UDF investments to assets in the operational phase of their life cycle. In contrast to such a *niche strategy*, a UDF could also finance the nationwide development and utilisation stage of multi-purpose urban assets. A Managing Authority that has to decide on the degree of *thematic specialisation* of their UDFs has to keep in mind two countervailing effects: if a UDF specialises in certain assets (for example by financing only infrastructure assets), this could enhance the expertise of the fund management in the chosen sector. At the same time, however, it could result in *higher financial risks* for the UDF, since there is no cross-sector risk diversification. Furthermore, there is also the possibility that the fund may be unable to find enough viable projects in its chosen sector. This may lead to insufficient demand for UDF financing at project level. If such a situation persists over time, the UDF may have to pay back part of its capital resources to the ERDF by the end of the programming period. Therefore, excessive thematic specialisation may create a further risk factor for the UDF.

Concerning the degree of *geographic specialisation*, the MA has to take into account the size of the MS and the status quo of the different regions and cities within the state. Because of the use of OP resources (ERDF and co-financing or matching funds) the UDF projects, at least in the first round of capital use, are restricted to the geographical area covered by the OP. This means that a UDF is not allowed to finance projects outside the respective OP. It is in principle possible for a single UDF to employ capital resources from several OPs. However, it might not be possible to achieve cross-geographic risk diversification. In other words, possible gains and profits from a project X (under OP region X) cannot compensate possible losses from a project Y (under OP region Y). Furthermore, where different OP capital resources are used in a single UDF, there has to be *entirely separate accounting* in the investment and backflow phase of the projects. This could clearly limit the scope for cross-geographic diversification which would then only be possible under a national (= multi-region) OP and therefore with a national UDF.

2.1.4. Internal and external rate of return targets at the project level

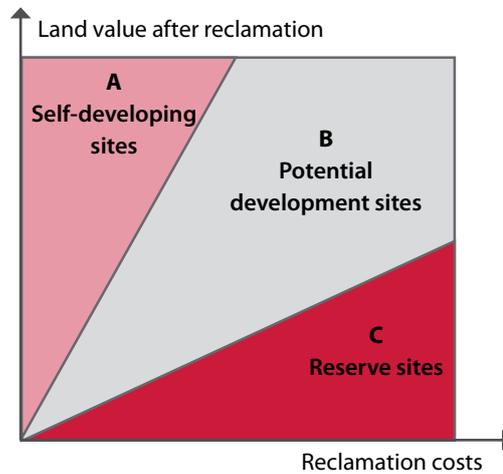
All UDFs – regardless of the project portfolio chosen – have to fulfil a certain internal rate of return (IRR) target to secure the functioning and sustainability of the fund. While the IRR target clearly depends on the costs and governance structure of the UDF (see third key dimension), the nature of the real estate or infrastructure assets to be funded also plays a significant role.

In this context, the legal requirements of EU Structural Fund Regulations (e.g. EC Regulations 1083/2006 and 1080/2006) as well as the respective Operational Programmes of the Managing Authorities can further limit the selection of projects, where the UDF is funded with resources from the European Fund for Regional Development (ERDF).

In general, UDFs will focus on so-called B-Projects according to the CABERNET classification⁸ which was originally created in relation to the redevelopment of brownfield sites (see Figure 10).⁹

To evaluate any type of urban development project all cash outflows (for the investment costs) and cash inflows (sale revenues according to the land value) have to be incorporated in a dynamic capital budgeting analysis. In this context, financial performance indicators such as net present values (NPV), future values and internal rates of return (IRR) are generally used. The IRR (i_0) is the interest rate, which balances out the sum (C_n) of future values (or net present values) of all project cash inflows (E_t) and outflows (A_t).

Figure 10: CABERNET classification of project types



The internal rate of return measures the *yield of the capital invested* in a given urban development project. To evaluate a specific project, the IRR has to be compared with the *weighted average cost of capital (WACC)* of the urban development project.¹⁰

$$C_n = \sum_{t=0}^n (E_t - A_t) \cdot (1 + i_0)^{n-t}$$

$$\sum_{t=0}^n E_t \cdot (1 + i_0)^{n-t} = \sum_{t=0}^n A_t \cdot (1 + i_0)^{n-t}$$

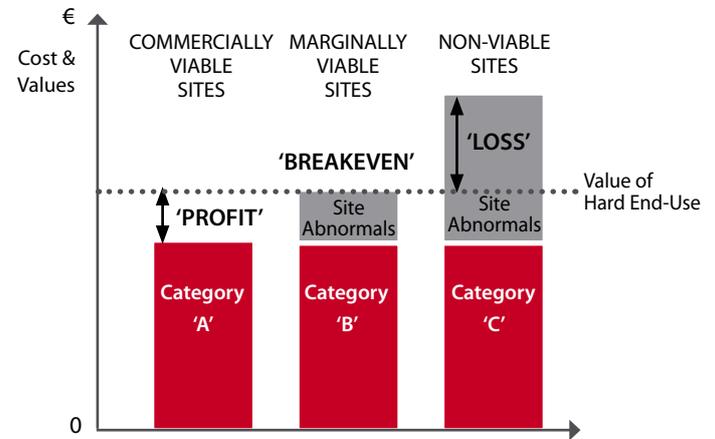
⁸ CABERNET (Concerted Action on Brownfield and Economic Regeneration Network) is the European Expert Network addressing the complex multi-stakeholder issues that are raised by brownfield regeneration. The network's aim is to enhance the rehabilitation of brownfield sites within the context of sustainable development, by sharing experiences from across Europe, providing new tools and management strategies and a framework for coordinated research activities.

⁹ See for the following figure: Groenendijk, N.: Financing techniques for brownfield regeneration: a practical guide, Twente 2006, p. 8.

¹⁰ See for the following figure: Groenendijk, N.: Financing techniques for brownfield regeneration: a practical guide, Twente 2006, p. 9.

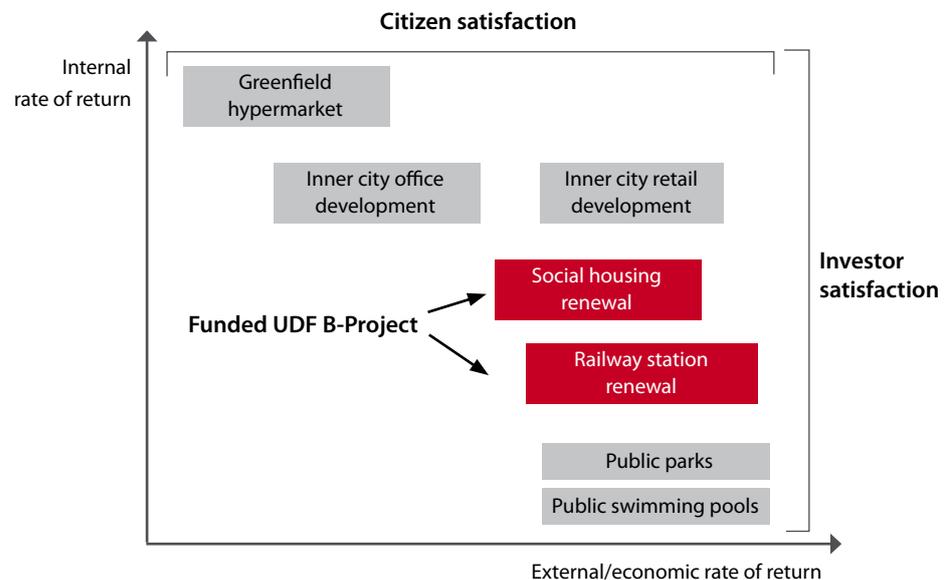
B-Projects are characterised by a limited internal rate of return that is not sufficient to meet the performance goals of private investors, unlike the more profitable A-Projects. The necessary (market) performance level depends on the type of urban assets in the funded project (see Chapter 2.1.2). On the other hand, B-Projects at least produce moderate positive returns when the weighted cost of capital is ignored. In contrast, loss-making C-Projects may not generate any capital backflow at all (e.g. the provision of public space such as parks). While C-Projects are not suitable for revolving UDF financing, they might be eligible for public grants.

Figure 11: Project types of UDF business strategies according to the IRR target



Although the UDF may be unable to enhance the limited project revenues of B-Projects, it can still provide financing with a low cost of capital. The leverage effect will help to achieve a sufficient *market return* for the remaining (private) capital partners. UDF funding should not, however, enable returns above a fair market rate to be earned because of EU regulations on State aid (see also Chapter 3.1.4).

Figure 12: Single B-Projects in UDF business strategies¹¹

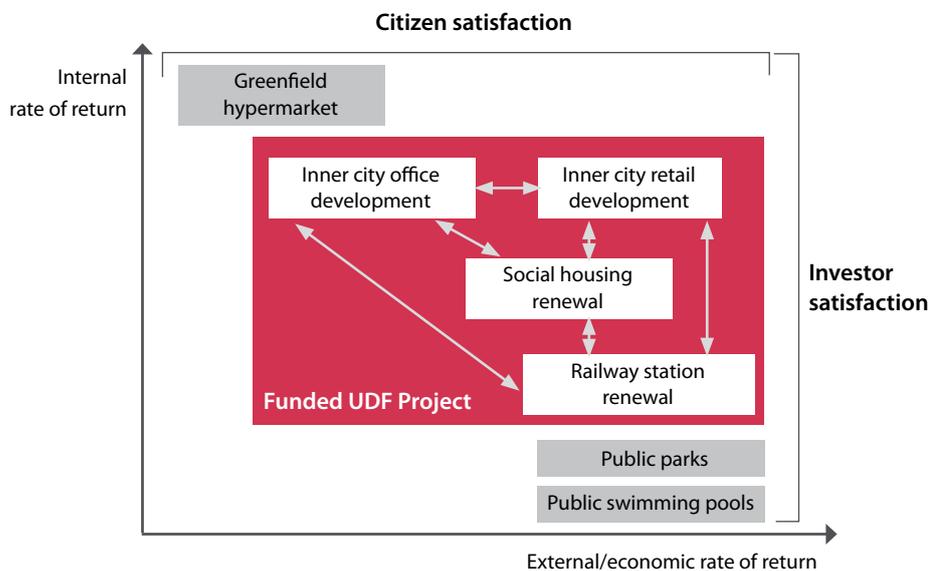


However, this does not mean that a UDF cannot finance A- or C-Projects at all. It would be possible to finance a project “vehicle” (= project as a counterpart in an investment contract) that includes revenue-generating components as well as no-revenue or low-revenue components.

Cumulatively they can produce an acceptable return for the investor and realise potential synergies between the different components. Figure 13 provides an example for the combination of differing project types in a possible project portfolio:

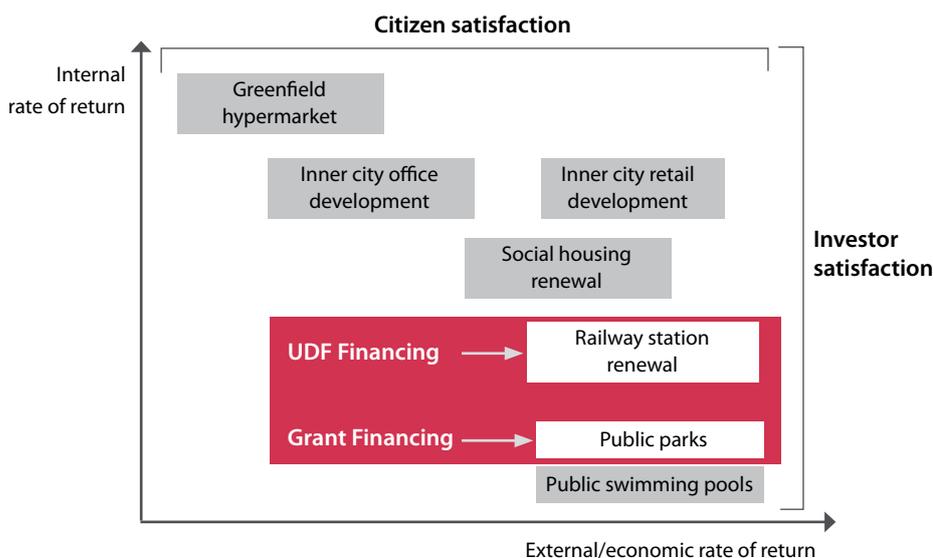
¹¹ Modified figure based on Department for Communities and Government London: Financing Investment in Sustainable Cities and Communities in Europe – the Role of the EIB, London 2007, p. 25.

Figure 13: B-Project Vehicles in UDF business strategies¹²



Furthermore it would also be possible to combine in one integrated urban development project *two alternative funding paths*. If for example a railway station is redeveloped (resulting in limited project revenues from integrated shops/offices) together with a surrounding public park (with no revenues because use of the park is free), then the redevelopment obtains the UDF financing and the public park receives *grant financing*. The only major requirement would be that the project manager clearly distinguishes between the different investments or costs of the projects:

Figure 14: B-Project Vehicles in UDF business strategies¹³



¹² Modified figure of the Department for Communities and Government, London: Financing Investment in Sustainable Cities and Communities in Europe – the Role of the EIB, London 2007, p. 25

¹³ Modified figure of Department for Communities and Government, London: Financing Investment in Sustainable Cities and Communities in Europe – the Role of the EIB, London 2007, p. 25

The UDF project portfolio therefore has to generate a certain internal rate of return that is primarily determined by the capital providers of the fund. They have to decide on the intended level of capital to be maintained in the fund, and thus the fund performance to be achieved.

Finally all urban projects should contribute to *social and public benefits* that might be defined by underlying plans or strategies for integrated urban development and measured by OP output targets and/or economic rates of return (for ERR, see Figures 12 to 14). The reason for this is that these benefits provide the justification for the (subsidised) project financing by the UDF. Furthermore, the existence of *external effects/economic rates of returns* could justify State aid (in cases of UDF financing on conditions below market rates). Possible indicators for a positive economic rate of return are very often described in the *OP output targets* of the Member States. Examples of relevant indicators for the measurement of performance could be:

- Number of jobs created/number of newly created companies;
- CO₂ reductions achieved;
- Renewable energy production (in MWh);
- Private financing leverage at project level (as a % of the sum invested);
- Private financing leverage at fund level (as a % of the sum invested);
- Brownfield land redeveloped (m² of areas recycled);
- Amount of new/upgraded floor space;
- Increase in the use of public transport;
- Increase in the tourist flow of the relevant urban/regional area;
- Increase in m² of social housing;
- Improved standards of public health, public education or cultural life of the relevant urban/regional area;
- Conservation of listed/historic buildings.

2.2 Second key dimension: UDF financial products for the final recipients

2.2.2 Guiding principles for the selection of financial products

At the centre of the UDFs financial arrangement is the funding of the selected urban development projects. More specifically, the legal framework of the JESSICA initiative enables all participating fund vehicles to make use of the following *four different financial products*:

Figure 15: Financial products of UDFs

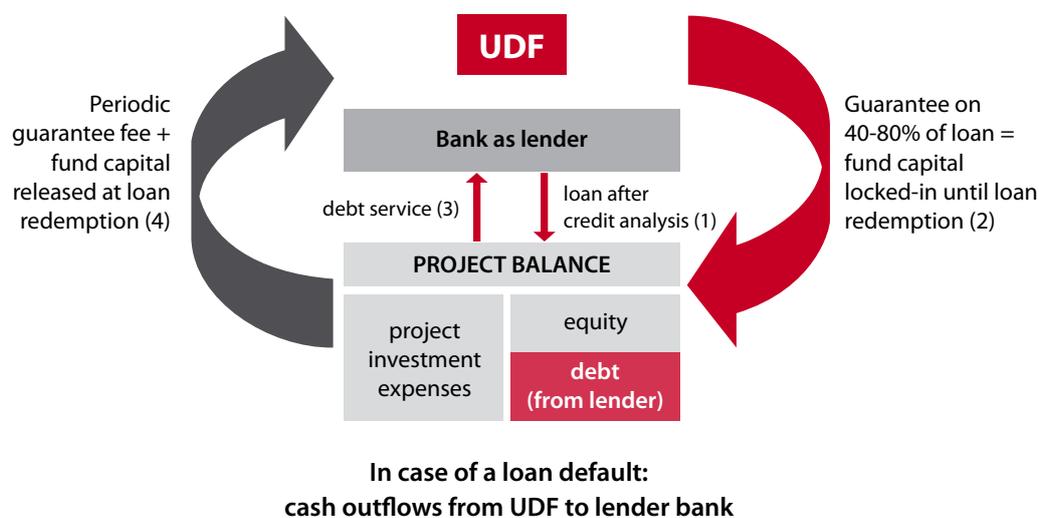


We shall introduce the financial products in order of *their (increasing) importance for the individual project financing*. Although a UDF basically can offer all financial products, the fund management should adhere to the following guiding principle on *risk sharing*: UDFs should not try to finance the entire investment requirements of the project, but should *share risks* with project investors and/or (commercial) lenders external to the UDF. Therefore, along with the financial products of the fund, all project promoters who are applicants for fund financing (whether they be public or private, companies or households) also have to take some investment risk. This raises the question of who is the ultimate recipient of the fund and bears the repayment obligation to the UDF.

2.2.2 Provision of guarantees

A UDF can support projects by providing guarantees, a legally binding commitment given by a third party to pay the remaining balance of a loan, including unpaid interest, in the event of default by the main borrower. Guarantees could be issued to project companies in order to facilitate access to external finance (mainly private sector loans) in return for a processing fee to cover both the risk exposure and the administrative and processing costs. Guarantees are an appropriate financial instrument in cases where project companies are unable to provide the lender – typically a bank or leasing company – with the necessary collateral to gain access to debt finance on reasonable terms.

Figure 16: Project financing via guarantees



The process appears as follows: the project company applies to a financial institution for a loan (see Figure 16, Action 1). The project company can seek a guarantee for a proportion of the loan (see Figure 16, red arrow 2) if so requested by the financial institution. Following a comprehensive analysis of the viability of the business plan and a risk assessment based on a range of criteria, the UDF provides a guarantee to the bank, enabling the project company to access loan finance. Typically, the borrower pays the fund an (insurance) premium, in addition to the interest and principal payments to the loan provider. The guaranteed proportion of the loan amount usually varies between 40% and 80%.

The fees the borrower pays for the guarantee depend on a series of factors: the guarantee period, the risk factor, and the proportion of the loan to be guaranteed. In most cases, the fee is 1-2% per annum of the outstanding guaranteed amount (i.e. of the loan amount insured). This is the sole cash inflow to the fund, as the actual project financing occurs through the private lender (see Figure 16, Actions 3 and 4). In the event of a loan default by the borrower – and based on terms clearly defined in the contract – the guarantee fund will reimburse the lender immediately upon notification of the repayment default. The company or the project company's collateral is then sold and any losses incurred are borne by the fund. If there is no loan default, no actual cash outflow takes place at the guarantee fund level.

Although a guarantee reduces the investment risk for the third party lenders (because they only bear part of the default risk of the loan principal), it also entails one disadvantage. Despite the guarantee, it is still necessary to find *complete equity and debt financing from third parties*. A guarantee only represents a supplementary hedge for the ultimate lender. Therefore, a UDF guarantee does not directly

provide project financing, but it can support its provision. As a result, for guarantees the final recipient is not the project company but the third-party lender, because, in the event of insolvency, the guarantee will be additional collateral for the lender.

For project companies with a short track record or a lack of security, guarantees can produce a significant improvement in the conditions for loan financing.

From the perspective of the UDF, guarantees may be difficult to implement because the fund management not only has to pay attention to the general State aid regulations (see Chapter 3.1.4) but also to EC guidelines on State aid in the form of guarantees. In March 2000 the Commission published detailed *guidelines on the use of Articles 87 and 88* of the EU Treaty as regards the provision of State aid in the form of guarantees¹⁴:

EC Notice on state aid for guarantee programmes

- It is not possible to extend guarantees to borrowers in financial difficulty.
- The aid recipient (i.e. borrower) should in principle be able to obtain a loan on market conditions from the financial markets without any intervention by the state.
- The guarantee must be linked to a specific financial transaction, be for a fixed maximum amount, *not cover more than 80%* of the outstanding loan or other financial obligation (except for bonds and similar instruments) and not be open-ended.
- The terms of the scheme are based on a *realistic assessment of the risk* so that the premiums paid by the beneficiary enterprises make it, in all probability, self-financing.
- The scheme provides for the terms on which future guarantees are granted and the overall financing of the scheme is to be reviewed at least once a year.
- The premiums have to cover both the usual risks associated with granting the guarantee *and the administrative costs* of the scheme, including, where the State provides the initial capital for the start-up of the scheme, a normal return on that capital.

These rules demand a *realistic guarantee fee calculation*. For example, if the default probability were 2% and the exposure at risk 50%, the minimum fee would be 1% of the loan amount. Furthermore, if there were management costs of 1%, it would be necessary to charge at least 2% for the guarantee. Further fees would be necessary for the “normal” (i.e. market) return on the locked-in capital.

Since the project company also has to pay the loan interest rate (on market conditions), it is clear that it will be very difficult to achieve a substantial reduction in the overall cost of capital for project companies. A substantial cost reduction is only possible with other financial instruments.

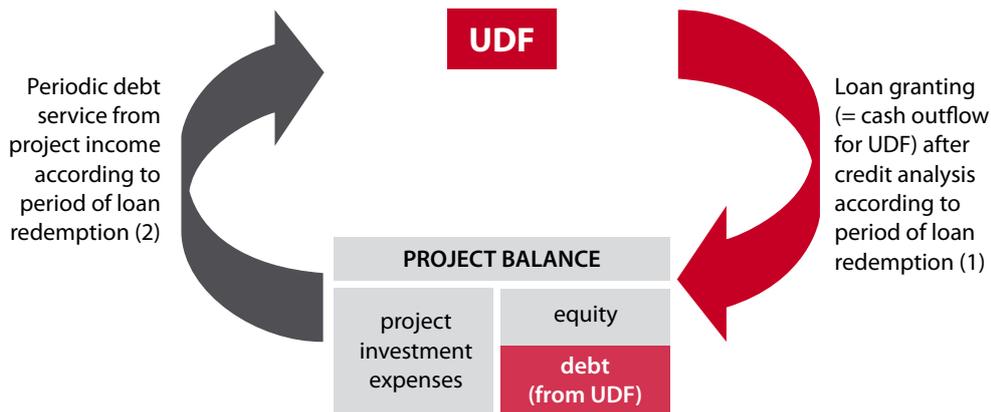
Furthermore, with regard to the existing COCOF notes (07/0018/01-EN, 08/0002/03-EN and COCOF 08/0034/02/EN), it is not clear if the guaranteed (and locked-in) capital amount can be classified as “expenditure” for the purpose of payment certification, since for the time being there is no cash outflow from the UDF (see Figure 16). This could be the reason why there have been no cases to date of UDFs providing guarantees in Member States. Further guidance on eligible expenditure as regards guarantees provided in the regulatory framework of the Structural Funds is expected to be provided by the EC.

¹⁴ See Commission Notice on the application of Articles 87 and 88 of the EC Treaty to State aid in the form of guarantees, OJ C 71, 11.03.2000, p. 14, and annex F.

2.2.3 Provision of investment loans

Loans are the most important external source of financing for development projects, and can also be granted by a UDF. Consideration needs to be given to the term of the loan and its intended purpose, the required interest rates and likely losses from default. The process for granting loans from a UDF to fund urban development projects could take place as follows:

Figure 17: Project financing via loans



**In case of a loan default:
lower cash inflows from borrower to UDF**

In MS with no contrary regulations, the loan could be made directly by the UDF at an interest rate which – if compatible with State aid rules – could be below the market rate, thanks to the investment of public capital (i.e. EU Structural Fund resources) in the UDF. In some MS, a financial institution with a *banking licence* is needed to issue loans (see Figure 17, red arrow 1). This has an impact on the governance structure of the UDF (see third key dimension in Chapter 2.3). The interest charged on the loan will typically be at a rate equivalent to the cost of funds plus the management and risk costs. The usual loan repayments by the borrower (see Figure 17, black arrow 2) are calculated based on this rate (including principal and interest). During the period of investment, the fund or the bank will monitor the repayments, but generally provide no management advice to the project company. The borrower will either repay the loan at the agreed time or default if it fails financially.

In comparison to the provision of guarantees for the same financial obligation (e.g. 1 million Euro), both the investment risk and the management costs borne by the UDF are considerably *higher*. One reason is that the guarantee covers not more than 80% of the outstanding loan, whereas the lender (without additional third party guarantees) has to bear the full risk of default (100%). Furthermore, the lender and not the guarantor is responsible for credit monitoring, which leads to higher management expenses. Due to the relatively limited income streams compared to the high loan sums to be disbursed, the use of UDF resources in this form should remain limited to *low-risk investment projects* with reliable periodic income. Only in this way can a regular repayment based on a fixed redemption table be achieved. In addition, according to Basle II the lender has to set aside only a small amount of equity to finance the loan. This would further reduce the lending rate for the final recipient.

In contrast to the guarantee, the final recipient of this financial product is the project company. As a result of the leverage effect, the lower (subsidised) interest rates have a positive effect on the internal rate of return on equity for the project developer or promoter. Loans from the UDF will lead to a substantial *reduction in the weighted cost of capital*, if the interest rate is subsidised and if the loan amount finances a substantial part of the investment. However, in order to comply with State aid rules

this subsidy is generally tied to strict conditions, whereby the funded company or development project must meet certain socio-economic targets, for example in respect of job creation or the level of new investment. This is notably the case if project companies are considered as economic operators (“undertakings”) and therefore subject to compliance with State aid rules. Furthermore, according to the Communication from the Commission on the revision of the method for setting the reference and discount rates (2008/C 14/02), all interest rates for loan instruments have to be calculated on the basis of a reference rate (e.g. LIBOR) plus a premium. The amount of the premium has to be determined according to the borrower’s creditworthiness and collateral. This will limit the “subsidy element” or rebate in loan programmes.

If the interest on the loan only covers the management costs and risk costs, it must be borne in mind that the value of the fund capital will decrease in real terms (in an inflation scenario). The fund could also demand a higher rate of interest. However, worldwide lending rates for borrowers are currently very low and this could also limit in the short run the potential market demand for UDF financing.

2.2.4 Provision of mezzanine capital

To support urban development projects with financial instruments similar to equity and at the same time to limit management costs, UDFs could also provide mezzanine capital. In general, the UDF would neither give pure equity nor pure debt capital, but instead financial products containing a *mixture of both elements*, as will be explained in detail in the following chapters.

Possible mezzanine instruments are bonus/preferred shares, participating/converting mortgages, silent/limited partnerships or subordinated debt/notes. All these instruments have the common feature that the mezzanine investor (the UDF) does *not* participate actively in the project management, and the capital provided does not bear full liability in case of insolvency. However, other investors still regard mezzanine capital as “quasi-equity” and therefore it can be used to effectively provide increased leverage. The following chart illustrates several forms of mezzanine capital and their respective categorisation as closer to either debt or equity capital.

Figure 18: Instruments of mezzanine capital in project financing

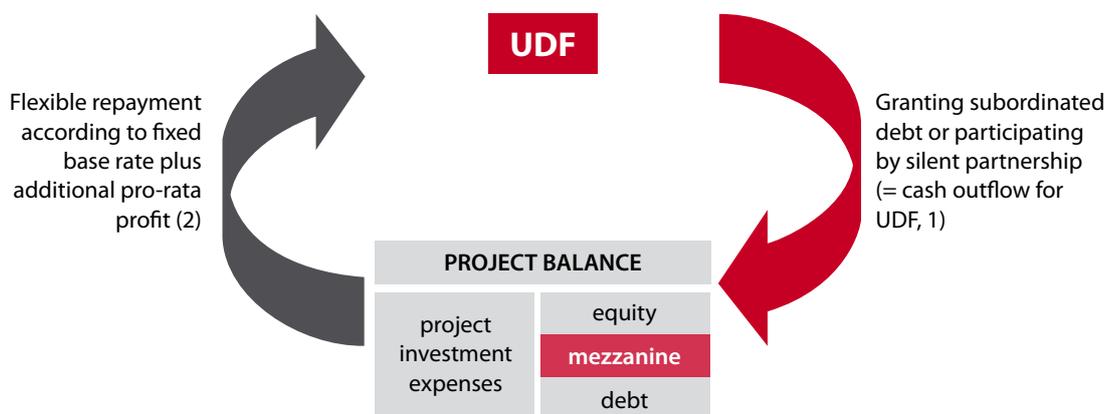
Mezzanine forms	Taxable debt	Equity on the balance sheet	Control rights	Duration in years	Liability in case of insolvency
Subordinated Loans	Yes	No	Restricted to creditor's rights	3-10	None
Silent Partnerships (typical)	No	Yes	Depending on contracts	5-10	Depending on contracts
Convertible Bonds	Before conversion	After conversion	Restricted to creditor's rights	at least 1	Yes
Preferred Stocks	No	Yes	Mostly not, but possible in exceptional cases	3-10	Yes
Silent Partnerships (atypical)	No	Yes	Approval and control rights	5-15	Yes

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The different forms of mezzanine capital are classified as closer to equity or debt capital according to the duration of the capital commitment (from five to ten years), the conditions of remuneration and the exposure to loss in case of insolvency. In the event of insolvency, *equity-oriented mezzanine* investors usually participate in losses, whereas mezzanine debt is only subordinated. Remuneration for mezzanine investment comprises a fixed current interest payment and a share of the profit generated and growth in asset values.

A mezzanine instrument is considered to be closer to equity than debt if the payment streams are flexible, and dependent on profits and the performance of the company.

Figure 19: Project financing via mezzanine capital



**In case of project insolvency:
lower cash inflows from project company to UDF**

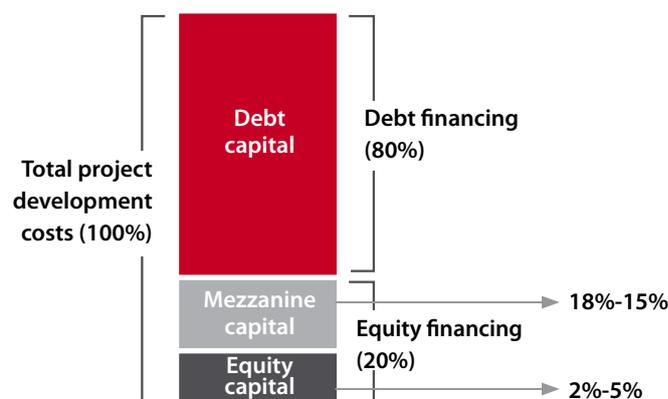
In Germany, one of the classical forms of mezzanine financing is the *silent partnership* (“*Stille Beteiligung*”). The silent partner contributes capital and in return participates in company profits (see Figure 19, red arrow 1). The partnership is treated as equity capital in the balance sheet of the respective company. The participation in losses is limited to the partner’s capital contribution. The typical silent partner does not influence the management of the company and expects a minimum rate of return on a regular basis (usually yearly). In contrast to a regular equity financing, this kind of mezzanine capital has a limited duration and a regular repayment over 5 to 10 years (see Figure 19, black arrow 2).¹⁵ The typical silent partnership is widely used in the public funding of growing small or medium-sized enterprises (SMEs).

In the case of a *subordinated loan*, the debt instrument takes a lower repayment priority than the normal debt capital provided by (other) lenders. In the event of payment default, repayment is subordinated and all other lenders are repaid in the first place. Since not only the interest payments but also the amortisation repayments are subordinated, the default risk of subordinated loans is substantially higher than senior loans. Moreover, the risk is also higher for another reason, namely the differences in the provision of collateral. Subordination means that banks do not require collateral (e.g. mortgages) for these loans. These higher lending risks must be covered by a higher bank margin, which means higher interest rates for the borrower. In practice, the lending rate is based on a benchmark rate (e.g. EURIBOR) plus up to 400 basis points (because of the higher default risk and the lower quality of collateral).

¹⁵ The arrangement described above is referred to as a “typical” silent partnership. The silent partner contributes (generally cash) to a commercial business owned by another legal or natural person in return for a share of the business profits. If this model is modified to give the silent partner certain control rights and a share in liquidation proceeds as well as losses, we refer to this modification as an “atypical” silent partnership. The silent partner’s status then resembles that of a limited partner in a limited partnership.

Both the investment risk and the management overheads for UDFs investing mezzanine capital are lower than pure equity capital but higher than pure senior loan financing. This financial product may therefore be a suitable offering from UDFs in both the development phase and in the operational phase of urban assets. It is typical for mezzanine capital to finance “only” 15% to 18% of the total investment sum in the urban development projects. The financial effect is to *bridge* the equity gap in the overall project financing, since many private project promoters and developers do not have sufficient equity for the lending requirements (particularly in large-scale projects such as infrastructure developments). Especially in the case of a property development project, the maturity of mezzanine capital is often limited to the actual development phase and ends with completion of the building.

Figure 20: Share of mezzanine capital in project financing



One advantage of mezzanine capital is its *high efficiency*. On the one hand, relatively small capital sums can provide funding for many different projects, while on the other mezzanine capital does not require active management of the urban development project by the UDF. This could limit the UDF’s management costs and at the same time maintain or even increase the incentives for private equity investors and/or developers. Another advantage compared to guarantees and loans appears to be that the mezzanine capital market is largely unregulated, being part of the “grey” capital market. This in turn leaves the parties with a high degree of freedom in terms of the (contractual) design of the UDF.

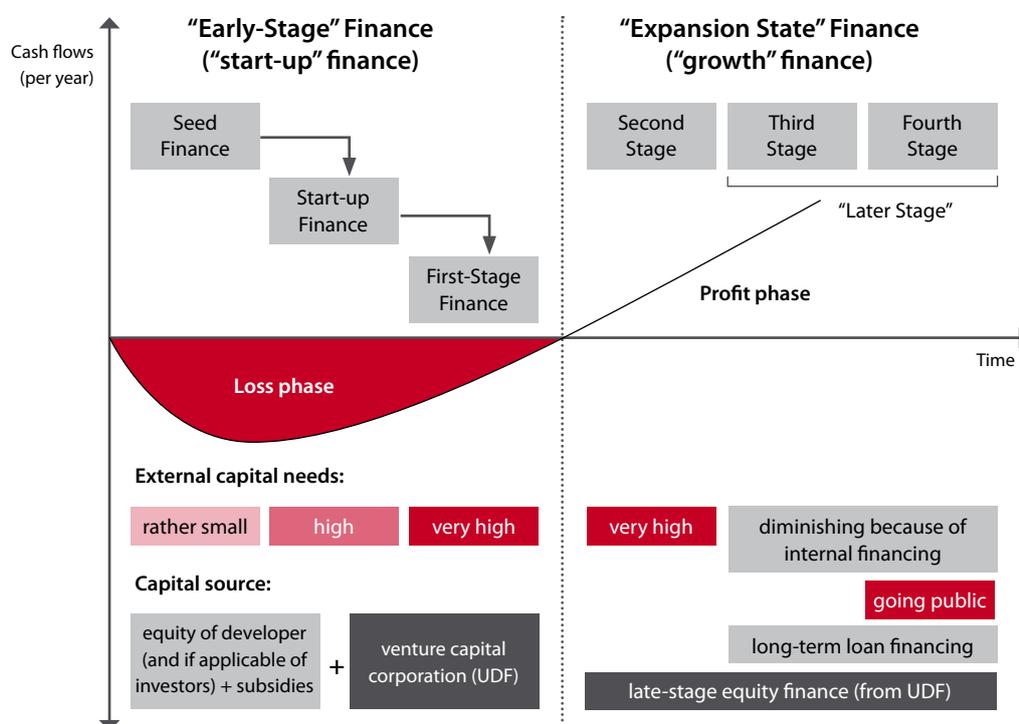
The final recipients are, in particular, private developers with insufficient equity to finance and establish the selected urban development projects on their own. Indirectly, private project lenders also benefit from mezzanine instruments because of the quasi equity characteristics of this financial product. Since it is subordinated it serves as an additional “hedge” for project losses.

2.2.5 Provision of equity capital

2.2.5.1 Overview of the stages of equity financing

One of the most important financing components for all urban development projects is the allocation of capital in the form of *equity investment*. Unlike all previous financing instruments, the UDF by taking an equity stake can play a very active role in project management. The eventual role will depend on whether the UDF provides equity capital in the development phase or the operational phase of the urban asset life cycle. On that basis, two distinct alternatives can be identified.

Figure 21: Equity financing for start-up and growth



In the following chapters, we will distinguish between *early and late stage equity financing* because of the different characteristics of these financial products for the UDF management and the potential final recipients.

2.2.5.2 Venture capital in early stages of urban development projects

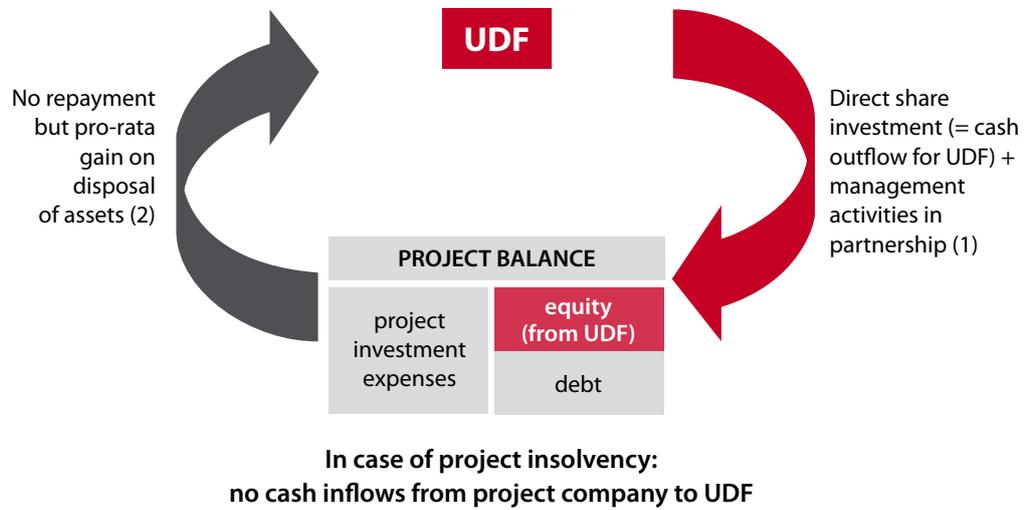
The allocation of *risk or venture capital* is arguably the financial instrument with the greatest potential impact on projects with a significant public interest component (i.e. including those involving business activities of a non-commercial "B-project" type nature).

Venture Capital is a typical form of "start-up finance" supporting the early stages of company development when companies do not have access to capital markets.¹⁶ In this context, the company is likely to be a project-specific special purpose vehicle (SPV).

Here, the UDF will acquire equity stakes in the project company (see Figure 22, red arrow 1). During the period of the investment, the UDF should not only monitor the investment, but may also provide management advice to the project developer. The UDF therefore has to assume an intensive management role as part of the executive committee or supervisory board of the project company. However, in return the UDF receives potentially high rates of return on its investment. In this case there is not usually a fixed interest rate for the capital invested nor periodic interest payments, but rather a single repayment after 6 to 10 years upon exit (i.e. when the shares are sold at a higher value than their acquisition price).

¹⁶ Venture capital typically entails a high risk for the investor, but offers the potential for above-average returns. Most venture capital comes from a group of wealthy investors, investment banks and other financial institutions that pool such investments or partnerships. To limit the investment risks, venture capitalists usually get decision rights in the company, in addition to a share of equity capital.

Figure 22: Project financing via venture capital in the development stage



The selling price is often contractually fixed as an exit premium on the basis of the project’s expected profitability (usually measured by the IRR). Double-digit IRRs on venture capital investments are quite common in the private sector. In the case of real estate projects, selling to long-term end investors seems to be a promising exit strategy. Thus, the revolving approach of the UDF is achieved in this case via a trading method, in that the proceeds from the sale of developed property should cover all costs for the UDF and its private project partners (see Figure 22, black arrow 2).

In the case of UDFs providing equity capital for the development phase, it must be borne in mind that this kind of *early stage financing* is time-consuming and cost intensive. This is because of the high rejection rate, which is typical for the evaluation (“due diligence”) of business plans for potential projects (see Figure 23).

Figure 23: Due diligence process in venture capital financing

Step	Typical selection rate	Contents
1. Incoming business plans	100%	First contact; Classification according to business segment
2. Pre-evaluation of key data	25%	Short evaluation of management (product, market, sales volume, rate of return) based on business plan; Requesting additional information (if necessary)
3. Core evaluation of applicant	8%	Personal contact, on-site visit; Detailed evaluation including external parties (Universities, Consultants, References...); Signing of Letter of Intent (optional)
4. Negotiation	3%	Investment Proposal; Negotiation on core elements: <ul style="list-style-type: none"> • evaluation • percentage of shares/financial instruments • information and supervision rights
5. Final agreement and follow-up activities		Formal contracts to be signed; Implementation of contract (e.g. mediation of banking partners...); Start of management support

Private-sector fund managers providing early stage equity financing are used to high, performance-based remuneration. A UDF manager undertaking such activity would equally need higher fees to cover costs. However, the much higher start-up and management costs for this type of UDF investment are justified, inter alia, by the far-reaching possibilities of integrating private and public capital.

In fact, the provision of equity in the development phase by a UDF ensures that public investors can exert a great deal of influence on the configuration of the project, since they are involved from a very early stage in the project life-cycle. Furthermore, the provision of venture capital by the UDF allows for a diverse range of possible mechanisms in the distribution of profit and loss arising on the activities funded.

For example, this could include an asymmetrical distribution of returns. Investors of private property, financial investors and/or lenders to project implementing bodies can thereby earn market rates on their capital employed. In contrast, public investors could waive some or all of their return on capital in favour of their public interest in the urban development project.¹⁷ In this way, the capital base of the UDF could be dramatically increased through a high share of equity and debt capital from the private sector, which could be particularly useful for UDFs investing in capital-intensive development projects. Equity capital is often critical for many types of urban development projects: if sufficient equity capital is available to cover “first loss”, then additional sources of capital (e.g. senior loans) are more likely to become available for project developers. At the same time the lower cost of capital of these additional sources of finance (e.g. senior loans) leads to improvements in the internal rate of return for other investors, which makes it easier to find private equity partners.

Therefore, private developers and investors in particular could benefit from the provision of UDF venture capital (comparable to mezzanine capital), since the UDF provides also management expertise to the urban development project. For some MS, in particular, UDFs could fill a market gap in thematic and/or geographic areas where private sector equity capital available for urban development projects may be limited (e.g. in the urban areas of small and medium-sized towns¹⁸). This is not only true as regards available capital resources. Furthermore, the risk reduction for the private sector can be substantial, since the presence of UDF equity capital signals public commitment and a joint (cooperative) interest of the capital partners in the development of the selected areas.

The provision of Venture Capital must also comply with State Aid rules. Guidelines on State Aid and Risk Capital published by the Commission in October 2001 and the “safe harbour” regulations may be useful in this regard (see State Aid and Risk Capital, Official Journal of the European Communities 2001/C 235/03 and annex F).

Safe harbour regulations for risk capital

- The individual financing tranches are *below € 1m*,
- Professional fund management ensures that the decisions to invest are profit-driven,
- The public tender procedure of the programme ensures the distortion of competition between investors and investment funds is limited,
- No companies in financial difficulties are funded,
- The investment only occurs on the basis of submitted *business plans*,
- A single company or project does not accumulate State aid measures (maximum 40-43% of capital needs of the company/project).

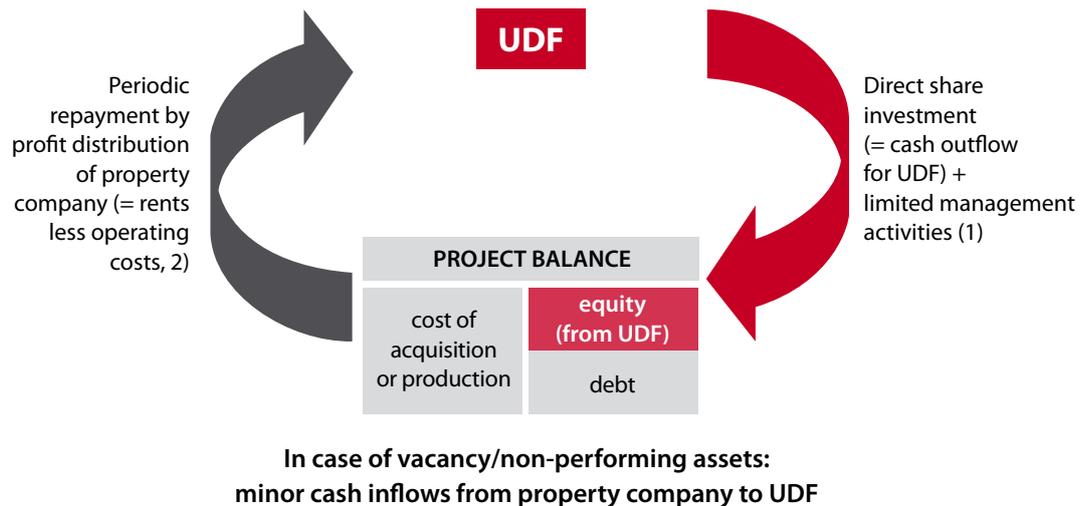
¹⁷ If the UDF waived a yield on its equity investments, it would preserve its capital only in nominal terms. In an inflationary environment, this would lead to a decreasing purchasing power of the fund's capital in future business activities.

¹⁸ Especially outside the large cities and metropolitan regions, the number of private developers and investors is frequently limited. This is often a result of a lack of market data, which leads to a low market transparency and therefore causes (too) high location and market risks. In this situation a UDF could fill a (private sector) market gap. The EIB evaluation study of the “Saarland Community Development Fund” shows this impressively.

2.2.5.3 Late-stage equity for urban development projects

The second option for UDFs is the provision of *equity for later stage financing*. In this case the UDF acts as a long-term investor in a similar way to an open-ended or closed-ended investment fund or real estate investment trust (REIT).

Figure 24: Project financing via late-stage equity capital in the utilisation/operating stage



Again the UDF invests its capital resources by acquiring shares from the potential final recipient asset-holding company (see Figure 24, red arrow 1). But here the UDF leaves the entire land and building/infrastructure development to a potential private partner (e.g. private development company and/or property owner). These partners could either develop their own property or public property, as well as that which the UDF could provide as an investment in kind. In such a scenario, the UDF would only invest in a newly-developed (real estate or infrastructure) asset. To avoid a direct asset sale, the UDF could invest in the property owning company (“the asset company”) via a share deal.¹⁹ The UDF itself could also be established as an investment company in the form of a *limited partnership* comparable to a closed-ended real estate fund.²⁰ The difference compared to a UDF investing equity capital in the

¹⁹ Only assets and liabilities that are specifically identified in an “*asset deal agreement*” are transferred to the buyer (UDF). All of the other assets and liabilities of a development company remain with the existing business and thereby with the seller. In contrast, in a “*share deal agreement*” the buyer (UDF) acquires only the stock of the development company. If all of the outstanding shares of stock of the business are transferred from the seller to the buyer, the buyer (UDF) in effect will step into the shoes of the seller, and the operation of the business will continue in an uninterrupted manner. Unless specifically agreed to, the seller has no continuing interest in, or obligation with respect to, the assets, liabilities or operations of the business.

²⁰ *Closed-end funds* represent a form of project financing for real estate or infrastructure assets: all investments have a predetermined start and termination date (including a calculation of the sales price at the end), loan maturities are linked to project maturities and they receive cash-flow-related lending. Typically the funds are structured as a limited partnership (LP). A limited partnership is a form of partnership similar to a general partnership, except that in addition to one general partner (GP), there are one or more limited partners (LPs). The GP is, in all major respects, in the same legal position as a partner in a conventional firm, i.e. he has management control, shares the right to use partnership property, shares the profits of the firm in predefined proportions, and has joint and several liability for the debts of the partnership. As in a general partnership, the GPs have actual authority as agents of the firm to bind all the other partners in contracts with third parties that are in the ordinary course of the partnership’s business. Like shareholders in a corporation, LPs have limited liability, meaning they are only liable for debts incurred by the firm to the extent of their registered investment and have no management authority. The GP pays the LPs a return on their investment (similar to a dividend), the nature and extent of which is usually defined in the partnership agreement.

development stage is in the type of revolving funds. Here, the profit is received in the form of regular rent and leasing income (minus the operating costs). This should remain the main income source even though there might also be occasional proceeds from the sale of individual properties (see Figure 24, black arrow 2).

Since the UDF would only invest in the *utilisation or operating phase* of real estate or infrastructure assets, the investment risk for the UDF is substantially lower than the risk taken in Venture Capital financing of the development stage. The reason for this lower risk is that the already completed buildings or infrastructure serve as collateral. Apart from that, cash inflows are quite stable and will only diminish in the case of vacant buildings or non-performing infrastructure. However, the investment risk for the UDF is still higher than in the case of loans and guarantees since the equity capital bears the insolvency risk. Finally, the management efforts of the UDF for the selected projects can be limited as compared to the venture capital financing, since the private investment partner is usually wholly responsible for the facility management and real estate management of the respective real estate or infrastructure assets. The UDF would therefore be expected to seek only a limited management fee.

In this context the UDF management should pay close attention to Article 7 of EC Regulation 1080/2006. The purchase of land is restricted to 10% of the total eligible expenditure for the operation concerned (in exceptional and duly justified cases, a higher percentage may be permitted by the ERDF Managing Authority for operations in the field of environmental conservation). Although the question remains open as to whether the regulation should be applied at project level or the overall fund level, this regulation could nevertheless limit the relevance of late-stage equity investments in JESSICA transactions. There is a simple reason for this: since every developed urban asset (buildings or infrastructure) comprises "land", the application of the regulation on the project level would prevent not only asset deals, but also share deals (see Figure 24) in project companies consisting only or predominantly of fully-developed urban assets.

Nevertheless, this type of a long-term investor could actually play an important role when considering possible exit strategies of funds after the development of assets through JESSICA has been completed. This can be explained by analysing the long-term final recipients of this equity financing. If the UDF accepts lower returns on equity for its asset investment, then the sale price for a newly developed property with limited rents but high public interest (e.g. educational or cultural use) will, *ceteris paribus*, be higher.²¹ Therefore, an educational property, for instance, could be developed by the private sector at market conditions with the UDF as a sustainable end or long-term investor in the property. In this situation the citizens of the respective (urban or regional) area would benefit in the end, or at least in the long-term if the equity were provided on a long-term basis.

²¹ The private sector determines the sale price of developed real estate or infrastructure assets by the expected yield for the end investor and the rent. If for example the rent is 1 million Euros and the private equity investor expects a 10% yield, then the sales price would be 10 million Euros. This price might be too low to cover all development costs. If the UDF expects only a 5% yield, the sales price would be 20 million Euros. This could enable a private property development to be undertaken, in spite of low rents.

2.3 Third key dimension: UDF governance structure

As a third criterion, we shall identify the potential *UDF governance structure*. Depending on the *parties* involved, and according to their *number, type* (public or private), *expectations* and *legal status*, the UDF either has a *corporate governance* structure or a purely *public administration governance* structure.²²

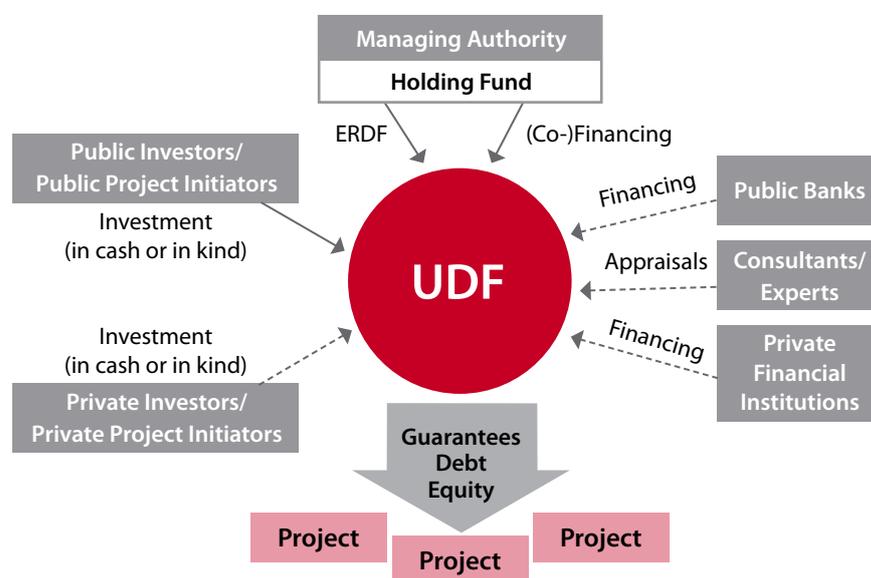
The number, type and expectation of the parties involved determine not only the *legal personality* of the UDF but also the possible *exit strategies* of key partners (e.g. private banks and investors usually have a predefined investment duration/amortisation period in contrast to “open-end” public investors). This aspect is closely related to the role of the future capital providers for each UDF type and therefore to the *refinancing of the UDF*. The reason for the close linkage of the refinancing and the governance structure of a UDF is simple – every party involved in a UDF, who supplies it with capital resources, has a strong interest in co-determination and involvement in all management decisions concerning the UDF. At the very least, they will seek to be part of some kind of supervisory board. The existence of such supervisory boards again depends on the legal status of the UDF.

2.3.1 Parties and financing sources of UDFs

In general, we can distinguish between four different groups of parties likely to be involved in UDF governance arrangements - the *Managing Authority (MA)*, *investors* (public and private), *consultants/experts* and *financial institutions* (public and private).

Apart from their expertise in certain areas, these parties provide grants, loans or equity capital to *finance* the UDF that in turn finances the projects targeted in its business plan.

Figure 25: Possible parties involved and financing sources of UDFs



²² *Corporate governance* is the set of processes, customs, policies, laws, and institutions affecting the way a corporation is directed, administered or controlled. Corporate governance also includes the relationships among the many stakeholders involved (e.g. directors, employees, customers, creditors, suppliers) and the goals for which the corporation is governed. In contrast, a public administration governance structure does not have the decentralised complexity and variety of stakeholders, management and controlling instruments. “Public administration is centrally concerned with the organisation of government policies and programmes as well as the behaviour of officials (usually non-elected) formally responsible for their conduct” (UN Economic and Social Council Committee of Experts on Public Administration: Definition of basic concepts and terminologies in governance and public administration, 2006).

The first actor, the *Managing Authority*, provides ERDF funding and may add public co-financing. The intention of the MA is to ensure that public funds are sustainably invested in integrated urban development projects taking into account relevant legal requirements and Operational Programmes. If the Managing Authority wishes, and is institutionally entitled, to use the ERDF funding nationwide, it would make sense to include a *Holding Fund* whose tasks are assigned to a financial institution (e.g. EIB).²³ The HF's management could provide not only general technical assistance, but also help to structure, develop, contact and monitor sensible business strategies for potential UDFs. Especially in Member States in which Managing Authorities have only limited fund experience this could accelerate the establishment of UDFs.

The central group of actors for a UDF consists of *public investors/public project initiators and promoters*. Since the role of UDFs is to promote sustainable urban development, it is clear that public partners, such as local authorities (e.g. cities) and government agencies (e.g. local development agencies), have an important role to play. It is a core task of the public stakeholders to identify individual districts or whole areas that are part of an integrated urban development plan, and are in serious need of development. In many cases, public investors do not only have a great interest in targeting deprived areas, but are themselves the owners of brownfield sites which have not yet been developed due to lack of public funds.

UDFs may include not only investment in capital, but also investment in kind, i.e. a public brownfield can also form part of the assets of a UDF. Consequently, cash capital of other fund investors serves to finance the respective real estate development. Having supplied an equity investment in the UDF (e.g. a site), public stakeholders are able to safeguard their interests and co-determination during project planning and implementation.

Figure 26: Resources and incentives of possible UDF actors

Actors	Resources (= Input for UDF)	Incentives (= Output from UDF)
Managing Authority	ERDF capital from national, regional or urban OP	Sustainable financing for integrated urban development
Holding Fund	Efficient supplement to existing banking structure in Member State	Efficient allocation of EU Structural Funds
Public investors	Identification of deprived areas, investment in kind (e.g. brownfields)	Development of urban projects with high public interest
Public banks	Public capital and expertise in project evaluation, credit analysis, monitoring	Efficient allocation of national/regional/local funds
Private investors	Equity capital and expertise in project development	Portfolio diversification, quicker project development with lower risk
Private banks	Debt/equity capital and expertise in project evaluation, credit analysis, monitoring	Portfolio diversification in new business segment
Experts/Consultants	Expertise and appraisals (project evaluation, energy audits, etc)	New business segment

²³ As described in chapter 2.1.3, UDF projects are restricted to the geographical area covered by the OP. It might be possible to use in one HF or UDF several OP capital resources and therefore create economies of scale and efficiency gains. However, the (possible) requirement to separate the entire accounting in the investment and backflow phase of the projects could limit the scope of a cross-geographic diversification, unless there is a multi-region OP with urban development priorities (as in Romania or Bulgaria).

This leads us to the role and motivation of *private UDF investors*. In the light of the scarcity of public funds, the importance of (partial) financing of public projects by private capital has grown steadily.²⁴

However, equity investment of private capital in UDFs will only be a realistic option if private investors can expect a market-level return on investment. As previously mentioned, the business strategy of a UDF will focus on B-projects, which provide returns below those of commercial projects. UDFs may nevertheless be able to attract private investors. One possibility to enhance the return for private investors is an asymmetrical distribution of profits and losses with a “first loss” to be born by public capital (see also previous chapter). These public investors (such as cities or local development agencies) are less focused on the IRR and more on external/economic rates of return for their citizens. Apart from that, private parties in a public-private partnership may benefit from a shorter development process due to their shared interests, leading to faster administrative decisions. In return, public partners may benefit from private expertise in project planning and control.

The third group of important actors are *public and private financial institutions such as banks*. Obviously, financial institutions can provide additional debt capital to the UDF to invest in integrated urban development projects. Apart from that, they can also support UDFs by contributing their expertise in project evaluation, credit analysis and monitoring. Although banks traditionally act as lenders and rarely as equity investors, this could be another option for a UDF. Other financial institutions (such as investment firms, investment funds or leasing companies) may also contribute equity capital instead of loans. This certainly implies a higher risk-return level for the business transaction and therefore presupposes a more risk-oriented attitude by the respective private partner.

Finally, in many project types already described above, *experts and consultants* are necessary partners of the UDF’s management, since they can provide objective, external valuations (e.g. real estate appraisals) and audits (e.g. energy audits on buildings and infrastructure assets). For them, UDFs represent a new business segment, which is not restricted to single UDFs or single MSs. Therefore this business segment could become quite attractive for these UDF actors in the future.

2.3.2 Consequences for the UDF legal status

As a consequence of the different interests of the possible parties in the UDF as described in chapter 2.3.1, we can draw a first conclusion concerning the third key dimension of possible UDFs – the more actors participate in the UDF, the more capital is available to finance integrated urban development projects. However, as more parties become involved in the UDF, there is an *increase in the complexity* of the participation rights, the distribution of gains and losses and hence also the by-laws of the fund. In this context, it is fundamental to differentiate between merely public UDFs and UDFs that contain public *and* private stakeholders in a public-private-partnership (PPP) at the fund level. The different parties providing financing resources to the UDF, together with the financial products provided to the projects, influence the legal status and thus the overall governance structure of the UDF.

At the same time, European regulations on the *governance structure* have to be obeyed. According to Article 43(2) of Regulation No. 1828/2006, a UDF can either be part of a financial institution, when the UDF resources are ring-fenced in a separate block of finance, or established as a separate legal entity. If the UDF is part of a financial institution, typically a bank, the set-up of the UDF is considered to be quicker and less costly. Establishing a separate private legal entity is a more expensive and

²⁴ Especially after the recent financial crisis many MS suffered dramatic increases in their national debts. As a consequence, many MS lack public capital for necessary tasks (e.g. infrastructure investments or energy-related investment in public properties). Therefore, private capital is needed, leading inter alia to a constant rise in the importance of public private partnerships with private capital in all MS (see in detail: Kappeler/Nemoz: EIB Economic and Financial Report 2010/04: Public Private Partnerships in Europe – before and during the recent financial crisis, Luxembourg 2010). Over the past two decades more than 1,400 PPP deals were signed in the European Union, which represent an estimated capital value of approximately €260 billion.

time-consuming way to set up a UDF. In this case, a new *corporate governance* structure is required. However, if the UDF only contains public sources of capital it might be possible to place the fund in a (pre-existing) public entity. In that situation the UDF could be a part of a more *administrative governance* structure. Therefore, one could distinguish governance models as follows, on the basis of indicative combinations of the sub-criteria.

Figure 27: Possible actors, financing sources, financial instruments and legal status of UDFs

Actors	...providing UDF financing resources	Products applied for project financing	Implications for UDF legal status	Governance model and fund management
Only public	Grants / equity	Non-equity	Part of public bank	Administrative governance, integrated fund management
Only public	Grants / equity	Equity-based	Separate public legal entity	Administrative governance, integrated fund management
Public actors & private bank	Grants / equity & loans (only on project level)	Non-equity	Part of private bank (+ Holding Fund)	Corporate governance as part of general risk-based banking
Public actors & private fund investors	Grants & loans/equity	Equity-based	Separate private legal entity	Corporate governance, independent fund management

As shown in Figure 27 we can establish some *guiding principles* concerning the legal status of a UDF depending on the financial products (see key dimension 2) and the financing sources (see Chapter 2.3.1) of the UDF. These principles should not be taken as absolute “rules” for the establishment of UDFs but, from the consultants’ perspective, they are logical consequences of the first two key dimensions.

- When comparing the time and costs involved in each fund type, UDFs *without private participation at the fund level* are the easiest and quickest way to set up a fund. UDFs can adopt a more administrative governance structure (by forming part of an existing public entity) and still incorporate private capital at project level. In this case the fund’s capital consists only of public funding. The rest of the co-financing comes in at the level of the urban development projects and is provided by private developers or commercial banks. This also makes the legal structuring of the UDF simple, but requires *appropriate structuring of PPP project companies* using a separate legal entity. The UDF could be part of a new public entity or, if established as a separate block of finance, part of existing public entities such as promotional banks/institutes or administrative/donor agencies. If necessary, the public participants can include consultants/experts to appraise or audit the chosen projects. Even in this “public-public” governance structure (at the UDF level) it is possible to achieve a certain added value. For example, through the combination of public capital resources it would be possible to capture synergies between different governmental levels and/or different ministries and/or different OP programmes (subject to the existing regulatory limitations explained in chapter 2.1.3).

- Furthermore, if the UDF decides to finance urban development projects with *loans or guarantees* the participation of a bank as one of the fund partners would be advisable. This is because banks usually have the expertise needed for credit analysis and monitoring and in some Member States (for example in Germany) it is even forbidden by law to make loans or issue guarantees without a banking license. For this reason it may well be appropriate for the UDF to be part of a financial institution with a banking licence.²⁵ Then the UDF has a corporate governance structure and is part of an overall risk-based banking.
- If the bank provides not only the fund management but also co-financing (of the ERDF resources) at the fund level, the financing of the UDF should normally consist of *equity capital*. This is because banks cannot lend to “themselves” (where the UDF is only a separate block of finance within the same bank). This means that whenever a public or private bank makes a loan to a UDF, this UDF cannot be part of the same bank account and should therefore form part of a separate legal entity. One possible alternative would be that the bank with the UDF could make loans directly to the project companies with a separate legal entity. In this situation a different UDF stakeholder has to provide the (upfront) co-financing of the ERDF contribution.²⁶
- In cases when private sector equity investors (other than a bank) come in at UDF level (resulting in a PPP model), it is usually necessary to set up a *separate legal entity*. This is not only due to the higher risk involved, but also to the more complex fund by-laws including asymmetric gain-loss distribution, decision-making and delegation of management and supervision. Apart from that, this may also be true in cases where the UDF is part of a bank and decides to support the urban development projects with equity capital. This is because the higher risk-return relationship of equity investments and the low overall equity ratio in bank balance sheets could increase the risk of bank insolvency.

3. Developing governance structures for UDF prototypes

3.1 Combination of key dimensions to a UDF typology

3.1.1 UDFs of the first and second generation

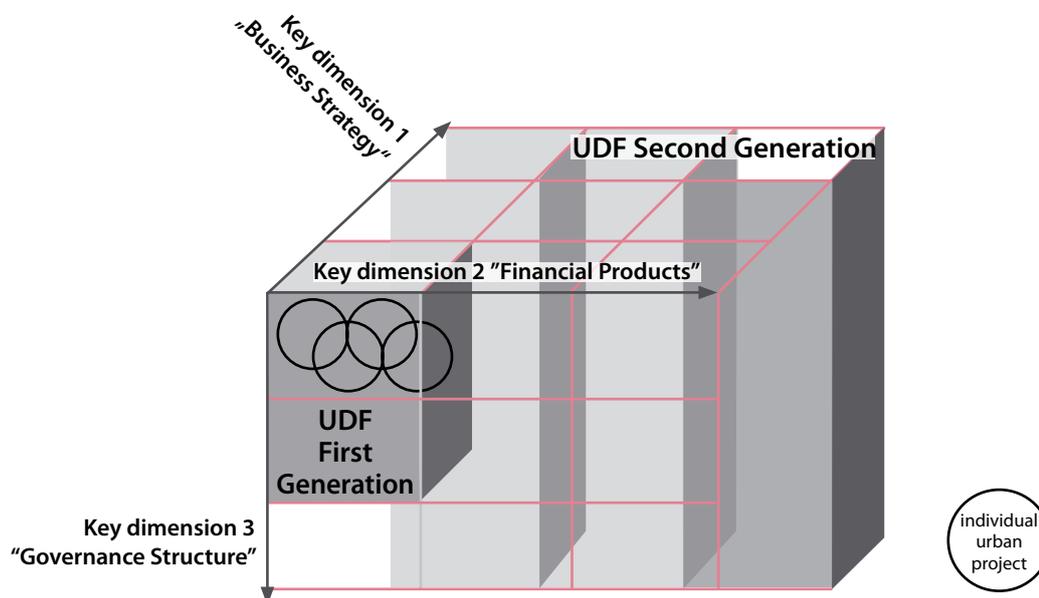
Building on the classification of the key dimensions outlined in Chapter 2, we shall now characterise five UDF prototypes. To do this, we shall combine the business strategy (key dimension 1) with financial products of the fund (key dimension 2) and the governance structure (key dimension 3). For each type, we shall present essential features in a standardised way.

From our perspective it seems reasonable, in the first stage, to focus on establishing *fairly simple* UDF types. These “First Generation” UDFs are characterised by a lower complexity in their key dimensions, so that the common fund concept and innovative character of the instrument is disseminated as quickly as possible in the Member States. This could mean for instance that the UDF focuses only on certain low-risk project types, uses only one financial product and involves only public participants and resources in its governance model. “Second Generation” funds could then include more complex, advanced fund types with higher institutional flexibility, more stakeholders and more (sophisticated) financial products.

²⁵ As long as no deposit taking activities are necessary, in some jurisdictions non-bank financial companies can also be suppliers of loans and credit facilities. Non-bank financial companies are financial institutions that provide banking services without meeting the legal definition of a bank, i.e. they do not hold a banking license. Operations are, regardless of this, still undertaken under bank regulations. Examples of this are development finance institutions, leasing companies, investment or joint-venture companies or housing finance corporations (such as “Bausparkassen”).

²⁶ The example of the Brandenburg UDF shows that it is possible for a bank to give a (matching) loan to a UDF when the bank is not the owner of the UDF and only fulfils a “service contract” to manage the fund on behalf of the MA.

Figure 28: Developing UDF types by combining three key dimensions



To develop UDF prototypes all three key dimensions have to be defined on each occasion, since the financial product has to match the cash flows of the urban development project. Furthermore, the financial products selected require not only capital resources at fund level, but also a certain expertise on the part of the fund manager (such as credit analysis, due diligence or project management skills). Therefore, not every actor described in chapter 2.3 is appropriately equipped to manage the UDF, and that in turn may well have an influence on the (necessary) governance structure of the UDF. We shall describe these linkages between the three key dimensions in the following chapters and then apply these considerations to create the first UDF prototypes.

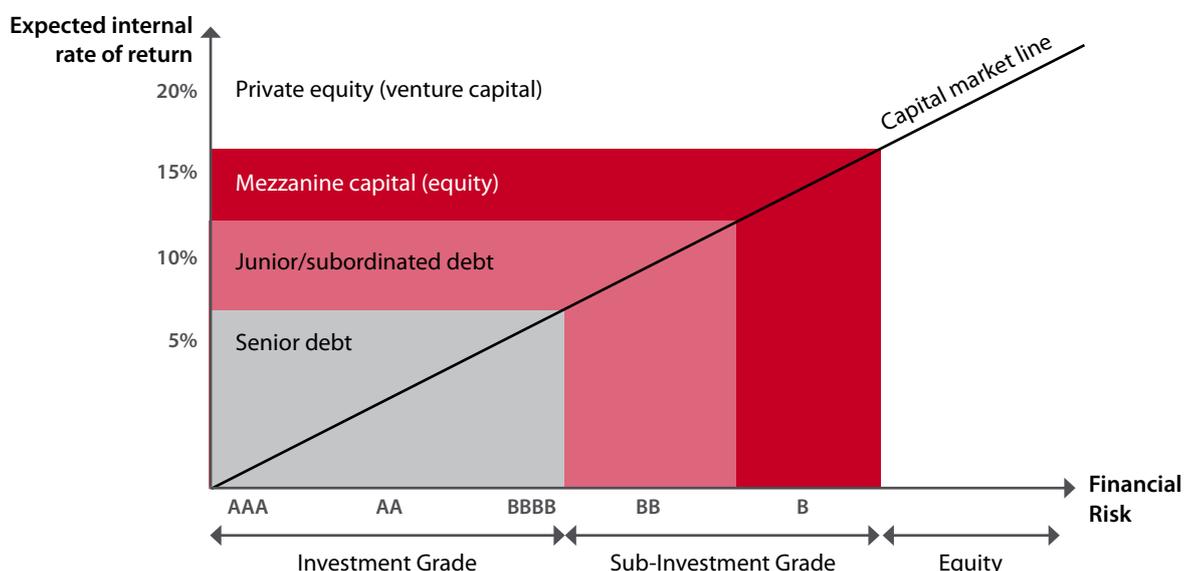
3.1.2 The linkage between expected yields and costs in UDFs

The financial products described in Chapter 2.2 differ according to the *risks* connected to the development and utilisation stage of the urban assets financed.

According to Modern Portfolio Theory, the higher the risk of the investment, the higher are the expected risk or default costs. The expected return for the different types of investors therefore has to be high enough to compensate for their risk-return expectations. This is also shown by the Capital Market Line²⁷.

²⁷ The line is used in the capital-asset pricing model to present the rates of return for efficient single investments or portfolios. These rates will vary depending upon the risk-free rate of return and the level of risk (as measured by beta) for particular assets. The capital market line shows a positive linear relationship between returns and betas. Not only for the financial instruments of the UDF, but for every kind of investments the yield can be measured by the expected value for the IRR and the risk can be measured by the beta factor: A beta is a mathematical measure of the sensitivity of rates of return on a portfolio compared with rates of return on the market as a whole. A high beta (greater than 1.0) indicates moderate or high price volatility.

Figure 29: Expected yields and risks of alternative financial instruments



According to our prior analysis, the highest risk-return ratio is connected to the investment of equity capital in the early stages of urban development projects (see chapter 2.2.5.2 on venture capital). Therefore, the highest internal rates of return (typically in the range of 20% and more) are expected in the private sector. The fewer financial risks a capital lender has to absorb, the lower would be the expected IRR. This would lead to typical yields for senior loans (with extensive collateral) of 5% and lower. Even if no financial risks exist, the interest rates will have to cover at least the management and financing costs of the lender.

In the case of additional public financing and public fund management, the return expectations might be lower, but the different risk-related stages shown in Figure 29 should remain. In addition to that, the financial instruments described can be classified according to the following criteria:

Figure 30: Qualitative characteristics of alternative financial instruments

	Guarantees	Investment loans	Mezzanine capital	Equity in later stage investments	Venture capital in early stage investments
Financial risks for UDF	●	●	●	●	●
Impact on urban development projects	●	●	●	●	●
Reduction in cost of capital for projects	●	●	●	●	●
Achievable financial leverage	●	●	●	●	●
Expected management cost	●	●	●	●	●
Required expertise fund manager	●	●	●	●	●

Figure 30 shows that, on the one hand, guarantees imply a low risk-return ratio, but on the other hand also show a correspondingly lower potential impact on urban development projects and their cost of capital. The opposite is true for the provision of venture capital²⁸ – here we see high management costs, because the UDF needs comprehensive expertise in project evaluation and project management in order to control the high financial and operational risks involved and to achieve the high expected returns. Especially in this field, UDFs including public capital resources are able to considerably lower costs of capital and at the same time enhance financial leverage effects at project level.

Finally, this linkage between expected yields and costs in UDFs also has implications on the *minimum volume or size of the fund*. When the UDF has low financial risk, the management costs as well as the management fees are limited (e.g. in a low risk loan programme up to 1.0%). For the UDF manager this would mean only 10 000 Euro fees on every 1 million Euro UDF volume. In order to cover all administrative expenses the UDF in this situation should at least have a minimum fund volume of *10 million Euros*. This would probably be sufficient to finance only one full-time fund manager including his/her back office. If the financial risk and therefore the necessary management performance rises (e.g. in equity funds), then either the minimum fund volume or the minimum management fee (generally up to 3% depending on the regulations on financial engineering instruments) will have to rise as well.

3.1.3 The linkage between financial products and projects

Guarantees in general are compatible with development projects (to ensure sufficient project loans) and also for urban assets at the operating stage. Here they could secure, for instance, sufficient rental income or the loan of an end investor in a developed property. Since the UDF acts here only as a guarantor for loans, the loans will be granted and managed at commercial rates through a private partner, usually a commercial bank. This partner will also carry the entire loan on its own balance sheet.

It has to be borne in mind that the trade-off for the simplicity of guarantees is the general disadvantage that the public authorities' influence (with respect to public interest) is limited. However, guarantees in the development stage of urban assets have a higher impact compared to guarantees in the operating stage, since especially guarantees in the development stages (e.g. for contaminated land) can facilitate the initial investment needed to attract follow-up investments. Only with the provision of guarantees at a very early stage of the investment will banks agree to provide a project loan followed by an equity investment by developers and investors. In contrast to that, another disadvantage of the provision of guarantees at the operating stage is the high capital amount to be guaranteed. Thus a considerable amount of fund capital may need to be set aside for one project.

Loans can generally only be relevant for the operational phase of the real estate or infrastructure assets, as a project development company is unlikely to be able to offer any ongoing, periodic interest payments during the development stage. Here a loan fund would only be able to extend loans with deferred payments (interest and principal), though this in turn would result in much higher risks for the business activities of the fund. However, if the fund is the lender for the development *and* operating phase of the real estate, sustainable loan financing is possible. In this situation, the loan is not granted as intermediate but as *permanent financing*.

Furthermore, it would even be possible for the fund to provide pure development loans, if the borrower was a municipality, a municipal service or a municipal enterprise. From the perspective of the UDF management as the lender, in this situation the loan is secured by a *public guarantee* of the municipality. This could potentially be applied, for instance, in the promotion of the energy-efficiency upgrading of (public or private) housing. The rapid, inexpensive implementation (and simultaneous limitation to small loan sums) would be feasible, in particular, using the corresponding housing funds in the new

²⁸ This statement assumes the same underlying urban development project respective urban assets to be funded by different financial products of a UDF.

Member States. Furthermore, the development and operation of infrastructure, for example telecommunication networks, could be financed by the UDF if the municipal utility company was the borrower. Finally, the development and operating of recreation and/or cultural and/or educational real estate assets would be a promising segment since in these segments the market can be seen to be failing because of the low expected financial returns.

Mezzanine capital could be provided to private developments of real estate and infrastructure projects to a limited extent (a maximum of 20% of the investment sum) and a limited investment horizon (between 5 to 8 years). In this way, it could support the private contribution to urban development projects and at the same time provide efficient incentives for private investors. This kind of financing is suitable for larger cities *with a sufficient number of private developers and private investors*. By providing mezzanine capital especially in the form of a silent partnership, projects of high public interest (e.g. social housing or the development of cultural centres) could benefit from the expertise of private parties. In this case the UDF fund management would not take an active role in the management of the respective projects, and would merely help to achieve a sufficient rate of return for the private partners (by providing mezzanine capital on favourable terms).

A similar approach is valid in the context of *equity investments* by the UDF. To limit the business risk and the amount of fund capital required, the UDF should always be (only) a *minority partner* of private developers or investment companies.

In case of development stage financing the UDF should only focus on a short-term investment (and exit the project after completion of the buildings). In contrast to that, where operational stage financing is concerned, the UDF could also act as a long-term equity capital investor (5 to 8 years, depending on the overall maturity of the UDF), due to the lower risks in this phase. In both stages the main aim of equity investment by the UDF could also be to achieve a sufficient rate of return for the private partners or to reduce development risk. Equity investment would be meaningful in market segments that do not have enough private equity capital. This could apply for instance to small and medium-sized towns/cities with only a limited number of private investors/developers. Furthermore, equity gaps are also typical for project types with high investment requirements and high development risk (such as brownfield developments in deprived areas).

3.1.4 The linkage between conditions offered by the UDF and necessary external rates of return

The minimum IRR of the projects to be funded is linked to the governance structure (see key dimension three) and the resulting management and financing costs of the UDF. The maximum project IRR is based on the cost of capital at market rate for the chosen project type (see Chapter 3.1.2 and 3.1.3).

If the UDF management provides the project with financial products on favourable conditions (especially as regards the equity-based instruments) and if at the same time private developers/investors benefit from these conditions, this will create an *economic advantage* for the private partners. However, *State aid rules* regard any kind of interest rate subsidy, guarantee subsidy or below market return on equity investments as an economic advantage, with the risk of distortion of competition (see also Figure 3).

In this situation a given State aid scheme will only be compatible with EU State aid rules, if it complies with the *economic balancing test*. To pass the balancing test it is necessary that the individual UDF investment addresses an objective of “*common interest*”, has an “*incentive effect*” and is “*proportional*”.

To follow a common interest objective, projects should not only be part of an integrated urban plan but also improve market efficiency, i.e. address a market failure. This could be achieved if a UDF invested only in projects that are unlikely to be developed by the market alone because they are not financially viable (“B-Projects”), but that address socio-economic problems. For example, in many MS necessary

investments in brownfields, culture heritage properties, public sporting areas or theatres are inadequate because of a lack of equity capital. The absence of these developments might cause socio-economic problems (e.g. decline of certain urban areas). UDF management could prove this common or public interest if the development projects to be funded created external or economic rates of return (ERR) for the citizens of the respective (urban, regional or national) area. As described in chapter 2.1.4 this economic performance could be measured for example with certain *OP output targets*.

Based on the principle of “*proportionality*” in the balancing test, a guideline for the UDF management could be that the better the economic rate of return (ERR) of the urban development project, the greater the benefits to the public from the favourable conditions provided to the private sector by the UDF’s financial products. As a consequence, the resulting return on equity for the private investors would not be considered to exceed a “fair rate of return”.

At the same time, every UDF investment in projects should be kept to the minimum participation required, so that the UDF not only shares risks with other private project partners (see Chapter 2.2.1), but also sets incentives for them. Together with open tender calls to all possible private sector investors and developers, this could meet the demands of the economic balancing tests and therefore the requirement of compatibility with State aid regulations.

3.2 Resulting UDF prototypes

Following the limited experience with the very small number of UDFs already operating in Europe, we shall now describe five UDF prototypes by combining the three key dimensions and taking into account their linkages. From our perspective, the first three suggested prototypes belong to the “first generation” UDFs and could therefore be developed in a fairly short period of time, while the subsequent two prototypes would require more expertise and time to be established.

Recent JESSICA implementation experience and stakeholder consultations indicate that the following UDF types could represent good candidates for in-depth examination.

3.2.1 Prototype 1: Energy efficiency funds

The first prototype focuses on financing the *renovation* of existing assets in order to save future energy costs. Suitable targets for financing can be private and public real estate as well as public infrastructure (e.g. street lighting). Furthermore, this UDF prototype could also finance additional investment (“*upgrading*”) in buildings to generate alternative energy (e.g. photovoltaic on the roof of existing properties).

Since this fund finances the improvement of existing buildings and infrastructure, it targets the *operating stage* of urban assets. Due to the fact that it only finances energy investments (which also would be subject to an energy audit to demonstrate their value) this UDF prototype is a *specialised theme fund*. In order to ensure sufficient demand for the financial products, it would appear inappropriate to restrict the UDF to a limited geographic area. Rather the UDF should operate over *the widest possible geographic scope*, preferably at *national level*. As already mentioned in Chapters 2.1.3 and 2.3.1, the formulation of the respective OPs could limit the possibility of establishing a nationwide UDF. However, it would at least be possible for a single UDF to target several cities within a region or MS. Furthermore, if a national UDF can be implemented, then the fund management could perhaps target specific final recipients.

In order to maintain the incentives for private co-investment, the UDF should refrain from offering equity capital investments and should focus on the provision of loans instead. Due to potentially high collateral value (in the existing buildings) it would be possible to offer a relatively high loan amount of *80 to 90%* of the investment sum. This would fulfil the requirement of Article 13 (paragraph 3 - 6) of

Figure 31: Characteristics of UDF prototype 1: Energy efficiency funds

UDF key dimensions: Prototype 1 Energy efficiency funds	
1. Business strategy	
Type of project	Renovation of buildings
Life cycle stage	Utilisation/Operating stage
Geographic scope	Wide, possibly national
Thematic scope	Specialised theme fund
2. Financial products and beneficiaries	
Revolving financial instrument	Long-term investment loans
Incentive	Lower interest rates; lower collateral requirements; longer periods of redemption
Final project recipients	Public or private owners of real estate or infrastructure
3. Governance structure	
Actors	Only public (on the fund level)
Financing sources	Only public
Legal status	Part of an existing public entity (bank)
Governance costs	Establishment costs (one-time): low; Operating costs: low (circa 1%); Additional expenses for energy audits
Necessary cooperation partners at the project level and/or fund level	Energy experts; retail banks
4. Impact on urban development	Moderate (low public leveraging; CO₂ reduction)

Commission Regulation (EC) No 800/2008, which requires a minimum level of equity capital for borrowers of 10% to 20% of the investment costs.

In order to keep the repayment rate for the borrowers at an affordable level despite the high loan amount, the loans should have *long maturities* (10 to 20 years).

Basically, potential borrowers can be *public or private owners of real estate or infrastructure*. In some cases, it may be useful to establish an additional intermediate level “borrower”. This could be, for example, an owner community of final recipients that all live in the same building. In such a way, the whole building could seek support for energy efficiency improvements. However, this will only work if the owner community or condominium has a separate legal entity and can therefore act as a borrower. In both Lithuania and Estonia, we see UDFs already in operation that use this approach.

Since there always exist other loan offers for energy redevelopment from private sources (e.g. connected to a higher mortgage from commercial banks), the financial product of the UDF should always offer an advantage (“*incentive*”) for the potential borrower. This advantage of a UDF loan compared to an alternative private loan could be a *reduced interest rate, a longer maturity or lower collateral* (or a smaller equity capital requirement).

However, all borrowers should invariably provide a minimum level of equity capital (10% to 20% of the investment sum) in order to avoid dysfunctional incentives and limit the default risk for the UDF. Apart from that, the loan repayment profile should be matched with the cash flow structure of the investment. In the case of an energy efficient redevelopment, it should therefore be *linked to the savings of energy costs*.

In order to ensure attractive financial products compared to alternative loan offers, the UDF should mainly comprise public financing sources (not only concerning ERDF funding of the MA, but also

the co-financing). As ERDF financing might be provided interest-free²⁹ it is possible to offer loans on favourable terms. In addition, loans could be provided by already existing national institutions or national promotional banks that have extensive experience in low-cost lending.

If the UDF is established as a separate block of finance within an existing public financial institution this would have two consequences:

On the one hand, the institution could only provide equity capital as a co-financing source to the fund (because banks cannot lend to “themselves”, see chapter 2.3.2). This equity capital will be exposed to the risks connected to it, which makes the loans more expensive. Therefore, it would make sense for the existing institution not to provide capital at the fund level (but only if necessary additional loans at the project level).

On the other hand this fund model could keep the establishment and the operating costs for the UDF at a low level (e.g. close to 1% per year of the administered funds). This is especially true if only public stakeholders (MA and promotional banks) are part of this UDF, because then a pure public administration governance structure is possible.³⁰ The resulting low operating costs enable finance to be provided on favourable conditions to the projects, and the UDF’s capital to be preserved. This effect will be further enhanced if the final recipients of the loans are public institutions because of their very low default risk. However, where public institutions are concerned, the UDF may compete with alternative low-cost loan products (e.g. regional or local loan programmes).

As a consequence, the *public leveraging of fund capital* is only promoted by the equity capital requirements of private households or companies as final recipients. It seems possible that the equity capital requirements could be met by another loan from the banking partner (see Swedbank in the case of Estonia), since private banks can also enable a leveraging of funds. In addition to that, the impact on urban development of this UDF prototype is likely to be moderate, since generic energy efficient redevelopment is not necessarily part of an integrated urban development plan in the strict sense. Potential external effects from these projects can only stem from future energy savings implying CO₂ reductions. In the case of energy loans to public institutions one further impact of the UDF would be that after repayment of the loan the renovated buildings will display lower energy costs during their remaining life cycle and will therefore sustainably reduce *public maintenance costs*. This contributes to a diminishing public debt in all Member States and would enhance the impact of the UDF.

In this context it is important to note that the UDF requires a relatively high level of capital (due to the high rate of project financing, the wide geographical scope of the fund and the long maturities of the loans). If under the specific Operational Programme there are only limited funds for the whole JESSICA initiative, the UDF will soon “dry up” (e.g. after the first few months of every year). Recent experiences in Germany show this effect quite clearly with respect to a similar product offered by the KfW.³¹

3.2.2 Prototype 2: Infrastructure funds

3.2.2.1 Overview of types of urban infrastructure assets

Infrastructure refers to the permanent facilities and networks that provide basic services to the households and businesses of a region, guaranteeing the smooth running of an economy. Infrastructure

²⁹ In general, it is the decision of the MA to provide ERDF financing to the UDF at 0%. Especially if the UDF is established by a private financial institution also at the fund level (not only at the project level), State aid rules have to be followed (see Figure 3 and Chapter 3.1.4).

³⁰ Private banking partners should not be ruled out, but the example in Estonia shows that in this situation private banks do not offer interest rates as low as 2% (as in a comparable KfW programme in Germany with only public capital).

³¹ See also chapter 4 (“JESSICA funds for financing investments in housing”) in Nadler, Michael et al.: Urban Development Funds in Europe – Ideas for implementing the JESSICA Initiative, Bonn, Berlin 2009.

is thus essential for the economic growth, sustainability and prosperity of a country. The different fields of infrastructure can be divided as follows:

Figure 32: Types of infrastructure assets as part of urban developments

Economic infrastructure			Social infrastructure
Telecommunication	Transport	Public utility	
Data network	Bridges	Wastewater	Education
Telecommunication			
Network	Airports	Gas	Healthcare
Satellites	Harbours	Oil	Culture (e.g. theatres)
Antenna towers	Toll roads	Electricity	Security
	Railway systems	Water	
	Tunnels	Waste management	
		Recycling	

In addition to the *physical (“economic”) infrastructure* services in telecommunications, transport and public utility infrastructure for private households and businesses, the definition of infrastructure also encompasses intangible basic services. This is the so-called *social infrastructure*, including education, healthcare, and also appropriate cultural and leisure activities.

With a constantly increasing demand for capital for new infrastructure as well as for maintenance and modernisation, and in view of the fact that public funds are becoming increasingly scarce – especially compared to the high investment volume needed – more and more infrastructure projects are privatised. Therefore, UDF financing could *initiate PPPs with private companies*. In this context it is important to note that such public-private financing of infrastructure assets often calls for a long-term partnership, due to the fact that infrastructure facilities are subject to long-term and constant use, regardless of economic influences and changes. At the same time, infrastructure projects have long technology cycles until they become redundant either due to technical progress or the development of alternative methods of providing the same services. Building bridges and tunnels has been playing an important role for transportation for thousands of years and electricity still requires transmission lines to be transported throughout the country.

This basically leads to a *high level of interest by the private sector* in development projects in this field. At the same time, these investments also involve some risks for the population and the local governments. Infrastructure investments often create a *protected market position with high market entry barriers* for competitors. This protected position in the market is characterised first by a generally high minimum investment size and, second, by the fact that it is not economically viable to implement a parallel project (e.g. a bridge or a power grid) nearby. As a result, infrastructure projects often have a *monopoly position* which makes *State regulation of prices* necessary. Basically, there are two *Public Private Partnership (PPP)* alternatives generating revolving financial flows for the UDF:

- In the case of traditional PPP projects the State provides services and receives revenues from the users. Only the necessary infrastructure (e.g. buildings, computer systems, etc.) is built, operated and/or maintained by the private investor. The public sector transfers part of its revenue (e.g. rents or service fees from hospitals, schools or theatres) to the private investor.
- Alternatively, the private investor could offer services that final recipients are willing to pay for (e.g. roads, telecommunications, utilities, etc.). The private investor assumes the full responsibility for the provision of the (formerly) public infrastructure. The investor realises

the full project investments and *directly* receives revenues from users. Depending on the features of the contract, such user paid infrastructure investments could be more risky for the private investors than the traditional PPP projects.

In both cases it is advisable to establish a project company for the infrastructure development, before a corresponding UDF funding takes place. Furthermore, a neutral expert evaluation and appraisal of the future market potential of the proposed infrastructure is essential.

3.2.2.2 Key dimensions of infrastructure funds

Infrastructure investments generally require specific expertise (in the specific market and technology segment), relatively high capital resources and, as a result, long-term funding. Therefore, in order to limit the investment and financial risk for the UDF, a *risk reduction strategy* is imperative.

Firstly, if possible the UDF should focus on *one particular type of infrastructure* (i.e. a specific theme), since otherwise the investment areas are too heterogeneous for effective project appraisal and project monitoring (e.g., telecommunication networks and cultural buildings).

Figure 33: Characteristics of UDF prototype 2: Infrastructure funds

UDF key dimensions: Prototype 2 Infrastructure funds	
1. Business strategy	
Type of project	Economic or social infrastructure asset development
Life cycle stage	Land/project development <i>and</i> utilisation stage
Geographic scope	Wide, possibly national
Thematic scope	Specialised theme fund (e.g. telecommunication fund or school fund)
2. Financial products and beneficiaries	
Revolving financial instrument	Long-term investment loans or guarantees for commercial loans
Incentive	Lower interest rates; lower collateral requirements; longer periods of redemption
Final project recipients	Private households and local economy (final recipients)
3. Governance structure	
Actors	Only public (on the fund level)
Financing sources	Only public
Legal status	Part of an existing public entity (bank)
Governance costs	Establishment costs (one-time): low; Operating costs: low (circa 1%); Additional expenses for feasibility studies
Necessary cooperation partners at the project level and/or fund level	Local utilities/providers/operators of infrastructure assets to be developed
4. Impact on urban development	Medium to high (private financing leverage at project level; improvement of public transport or health or education or cultural life)

In order to generate sufficient simultaneous market demand, it is advisable to establish the fund on the widest possible spatial scale, and preferably at national level, within the geographic scope provided for by the Operational Programmes. As already mentioned in Chapters 2.1.3 and 2.3.1, the formulation of certain OPs may only allow for a regional UDF.

Since the final recipients of the newly created infrastructure assets are usually private households and local economies, the UDF should not only provide interim financing for the development stage, but also *long-term financing* for the operating stage. Thus, the UDF would be a financing partner for both stages. The upshot of this is that an infrastructure UDF must be established for *long-term operation (more than 10 years)*, and not as a short-term financial instrument.

Due to the periodic returns from the infrastructure projects it seems suitable for the UDF to make long-term *investment loans (or guarantees for comparable commercial loans)* that finance a substantial part of the overall investment sum with low interest rates. These loans could also be disbursed in tranches matching the implementation of the project. Financial activity of this nature is typical of public or *promotional banks*, which could be a natural entity for the assignment of UDF tasks for such operations, especially if the UDF is only funded via public capital.

In order to reduce the financial risk, all projects should be financed together with private investors *at the project level*. This implies that private investors provide their *specific expertise* on a market and technical level (in the development and operational stages) *as well as their equity capital*. Depending on the sector in which the fund operates, potential partners could be local suppliers or operators of public utilities.

Often infrastructure investments generate a continuous, but relatively low return (e.g. 3% p.a.). However, an 80% loan financing by the UDF (with a low interest rate of 2%) could at the same time secure a *market level IRR of 7% to the private partner's 20% equity investment*. If the equity share is further reduced in favour of the loan financing, private investment partners could receive even higher rates of return. In certain infrastructure asset categories this equates to the market rates for the private sector.

While a low loan interest rate might well be sufficient to cover the limited start-up and administrative costs of the UDF, the given infrastructure investment could generate significant external effects for the local population and the economy.

In addition to public fund leverage at the project level, there may also be – depending on the kind of urban assets developed – *significant improvements in public transport, health, education, cultural life and the residential value for the population*. Hence, other effects, such as the *upgrading of urban areas or the creation of new jobs in the local economy* may follow.

3.2.2.3 Examples of themes for infrastructure funds

Possible investment sectors for UDFs could generally arise from all types of infrastructure assets.

For some considerable time we have seen private investment funds active in the *telecommunications and transport sectors*. These sectors often have extremely high investment costs, which may be too high for the capital resources of UDFs.

More opportunities could come from the area of waste management. The London JESSICA UDF example shows that the implementation of a UDF focused on the *financing of facilities for waste recycling* ("Waste UDF"), may be useful. The call for tenders of the London Fund shows clearly that not only the necessary specialisation, but also the leveraging of private capital at the project level is required and accepted by the private partners.

Alternatively, it is possible that there will be UDFs that focus on the financing of *cultural buildings, leisure or sporting facilities (e.g. swimming pools or stadiums) or school buildings*. In this case the UDF could be a valuable support for PPP models. Several Member States have seen a constantly growing market for PPP models in infrastructure development as well as in the *renovation of school buildings*. The latter is

nowadays rarely carried out by the public sector. Instead, the necessary investment is achieved through private contractors after calls for tender. Often these companies are able to achieve 10% to 20% lower construction costs. The ownership of the newly-created and/or renovated school buildings remains with the public sector. The private project partner is awarded a long-term contract, and after construction either receives part of the user fees or a fixed fee from the public owners. In return he manages the entire building (including maintenance) as part of the contract.

Recent experience in Germany has highlighted that a *key barrier* to the implementation of PPP models in the construction sector is the *necessary project financing* for investments to be made by the private construction company. The banks were either unwilling to provide financing at all or did so only at very high interest rates (from 7% upwards). However, social infrastructure buildings are not able to generate the necessary revenue streams. In this context, a UDF that provides more favourable credit terms in order to achieve public goals, could bring about a huge boost for the PPP market in all Member States (*"UDFs as PPP financing partners"*). More specifically, this could involve the establishment of, for instance, *School UDFs, Theatre UDFs or Sports Arena UDFs* in the MS.

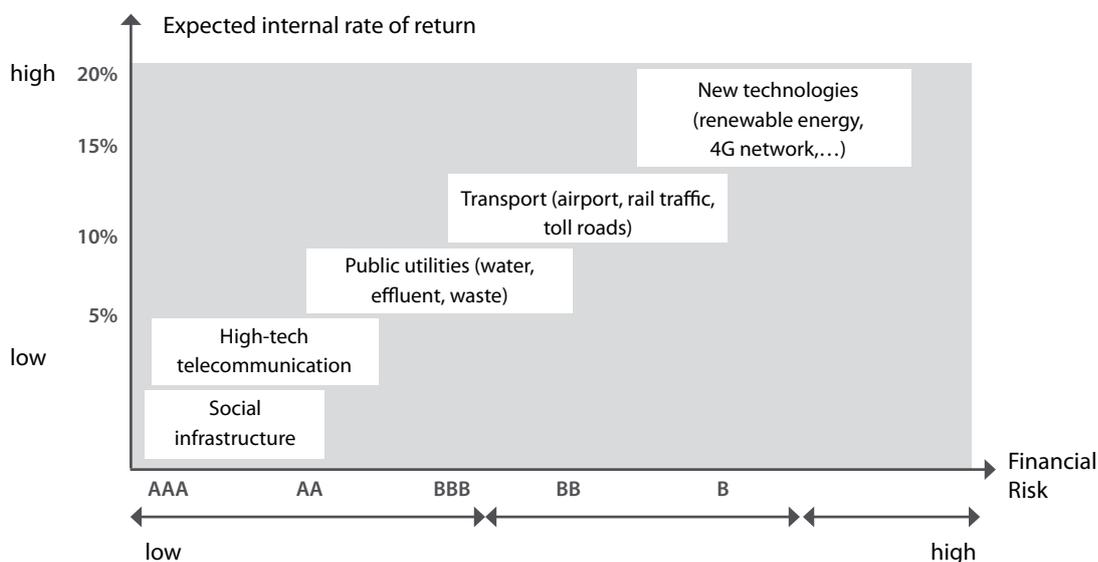
It is, in principle, possible for a UDF to be designed to provide financing for projects in several Member States. In this case, from a theoretical point of view even a *supranational* UDF with a specific theme would be possible. However, this obviously needs to be compliant with the relevant objectives of the national OPs and the Managing Authorities.

3.2.3 Prototype 3: Environment funds

UDFs could also be financing partners for so-called *Environment Funds* (or Green/Eco Funds). The central idea is to make an active contribution to environmental protection by financing projects related to renewable energy and other environmental objectives. Thus, this fund type also deals with economic infrastructure investment in the broader sense, but in contrast to prototype 2 here we have *highly innovative projects* in sectors where the technology may not necessarily be fully developed.

This not only clearly requires a higher amount of technological expertise on the part of the fund management, but also the investment risk is significantly higher, especially in comparison to social infrastructure investments. Therefore, we can derive the following categorisation:

Figure 34: Financial risk and expected internal rate of return in different types of infrastructure assets



Again, in the private financial sector there are numerous fund offers, which, however, are characterised by either high return expectations by the investors (in the case of direct investment), or indirect holdings in respective enterprises in each sector (e.g. the solar industry). Here, an UDF could be an alternative financial source.

Figure 35: Characteristics of UDF prototype 3: Environment funds

UDF key dimensions: Prototype 3 Environment funds	
1. Business strategy	
Type of project	Development of green energy facilities
Life cycle stage	Land/project development <i>and</i> utilisation stage
Geographic scope	Wide, possibly national
Thematic scope	Specialised theme fund
2. Financial products and beneficiaries	
Revolving financial instrument	Mezzanine capital (no active project management)
Incentive	Lower IRR requirements; less equity from private partners (leverage effect)
Final project recipients	Private developer/investors
3. Governance structure	
Actors	Only public (on the fund level)
Financing sources	Only public
Legal status	Part of an existing public entity
Governance costs	Establishment costs (one-time): low; Operating costs: low (circa 1-2%)
Necessary cooperation partners at the project level and/or fund level	Energy utilities/renewable energy companies/ private green funds/external experts
4. Impact on urban development	Medium (private financing leverage at project level; renewable energy production)

As already mentioned in the context of infrastructure funds, here the funding applies to the development stage *and* the utilisation stage of urban assets. Again, we do not have a geographical but a thematic specialisation. In this case, the fund could target its finance on “*green technologies and facilities*” for energy production. In general, objects of finance could be:

- solar systems;
- geothermal systems for geothermal energy production;
- wind and water power plants;
- energy generation through waste recycling facilities (thermolysis methods);
- biomass and biogas;
- district heating stations, etc.

In contrast to social infrastructure funds, potential private investors here are likely to obtain sufficient debt capital from commercial banks. Therefore, there may be no reason for the UDF to compete with private investment loans in these cases.

Instead, the UDF could provide *mezzanine capital*, if possible at the national level. By so doing, the fund management could not only limit the financing volume for each project, but also cut down its own management costs significantly and, for example, diversify into different technologies.

This does not only enable *administrative expenses to be limited*. Since the fund does not make loans or issue guarantees, in many jurisdictions it will not need a banking license. As a consequence, an existing public institution could serve as an institutional framework for the fund. However, if private investors (e.g. national energy providers or energy investment/fund companies) are to be brought in at fund level at a later date, it would be advisable to establish a new company.

In any case, the fund should seek a *partnership with companies in the energy sector* at national, regional and local level as well as cooperation with experts and consultants in the field of renewable energy. This seems reasonable in view of the technical feasibility of the projects to be funded.

For those companies the incentive in cooperating with the UDF would be that they have to invest less equity capital in the projects, that they can obtain an *adequate market return* due to the leverage effects and that the implementation of projects in cooperation with a public partner might be easier and faster to achieve. If the UDF only provides mezzanine capital, even cooperation with private environmental funds which act as equity investors, appears both possible and useful. In this case, this would once again increase the leveraging of public capital, so that together with the resulting production of renewable energy significant external effects can be achieved.

3.2.4 Prototype 4: “Smart city” investment funds

A fundamentally different approach compared to the previous UDF prototypes is the creation of so-called “*smart city investment funds*”. This prototype does not necessarily imply a geographical concentration on a single town or city. Rather, there should be a very close cooperation with the respective municipal government and urban planning. The objective of the fund management should, in principle, be to support sustainable urban investments to improve the quality of the location.

For this purpose it seems advisable not only to renovate and restructure *existing public assets*, but if necessary, carry out a more comprehensive redevelopment implying a different utilisation concept for the urban assets. Typically, the city administration could contribute *investment in kind* – public land, buildings or infrastructure – to an urban project company. The UDF could participate in this company by contributing capital resources. Alternatively, the UDF could give out redevelopment loans to the municipality, if the local government has no project company.

Because of the *strong geographical concentration* the UDF should be open to all sectors of urban investment. Consequently, it is characterised not by single-sector, but by a “*multi-purpose*” or a multi-sector investment approach. Due to the limitations on existing urban assets, such a fund is likely to focus on *financing the utilisation stage of the assets*. This will enable riskier business fields such as land and project development to be avoided. The UDF would concentrate its financing activities on existing urban assets, preferably public ones (which for example could be privatised at a later stage).

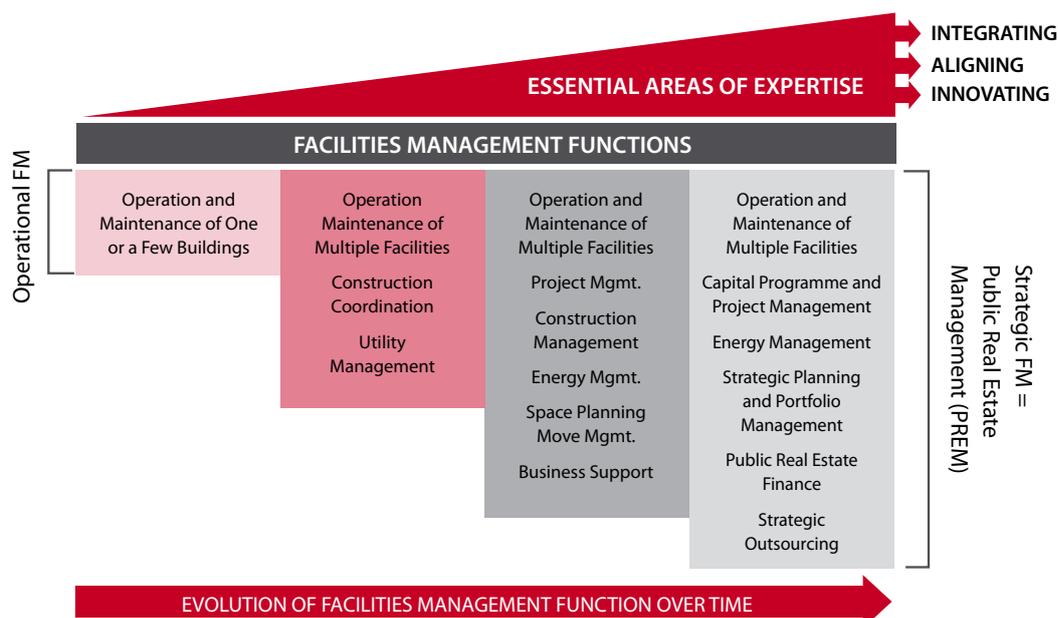
The objective of the fund is to support *necessary investment in urban assets*. Thanks to investment in urban redevelopment and renovation, the city’s budget benefits from subsequent savings in user costs or from increased rents or property values. These potential revenues could be used to repay an investment loan by the UDF. After full loan repayment the city exclusively benefits from the reduced costs and increased rents in terms of a “*smart investment*”.

Figure 36: Characteristics of UDF prototype 4: Smart city investment funds

UDF key dimensions: Prototype 4 Smart city investment funds	
1. Business strategy	
Type of project	Renovation/redevelopment of public assets (infrastructure and buildings)
Life cycle stage	Utilisation/Operating stage
Geographic scope	City
Thematic scope	Multi-purpose (open to all public assets)
2. Financial products and beneficiaries	
Revolving financial instrument	Long-term investment loans or later-stage equity capital (in case of planned asset sales)
Incentive	Lower interest rates or IRR requirements
Final project recipients	Private households and local economy in the relevant city
3. Governance structure	
Actors	Only public (national and local)
Financing sources	Only public (in cash and in kind)
Legal status	Part of an existing public entity (bank)
Governance costs	Establishment costs (one-time): low; Operating costs: low to high; Additional expenses for feasibility studies
Necessary cooperation partners at the project level and/or fund level	Local government
4. Impact on urban development	High (reduction in public expenses/costs and indebtedness; CO₂ reduction; improvement of location criteria)

Basically, the potential sources of benefit are not limited to energy renovations or the introduction of renewable energy facilities. In addition to that kind of energy management, *all measures of operational and strategic facilities management* for public property and infrastructure also seem to be possible. Figure 37 below gives an overview of the possible investment fields for this local UDF.

Figure 37: Local facilities management functions to be financed by “smart city investment UDFs”



These include in particular the *technical, commercial, infrastructural and legal management as well as the space management of all existing public assets (real estate and infrastructure) of a municipal authority*. The objective here is basically a reduction in life cycle costs or an increase in life cycle revenues for the city administration.

Very often local governments need technical support to prepare and implement such investment programmes (e.g. feasibility and market studies, business plans, energy audits, preparation for tendering procedures). The UDF could provide this additional technical support, although this would require a certain technical expertise in the fund and could lead to higher operational costs. Nevertheless, this could enhance the added value of the UDF for local governments, since it may be difficult to combine JESSICA financing with other Community financial instruments (e.g. for technical assistance) in view of Art. 54 (5) of EC regulation 1083/2006.

If certain urban assets are initially subject to a redevelopment and are afterwards sold to the private sector (e.g. privatisation of renovated public housing), the UDF could also participate through a *later stage equity financing as an alternative to a loan*.

In this case, the UDF would abandon the option of receiving periodic interest and capital repayments. Instead it would achieve a moderate internal rate of return from the sale of the redeveloped property. For this the UDF could either acquire shares of existing public property companies or of the newly established project companies.

Both the loan and equity financing from the UDF would represent particular *support for the city administration*. Ultimately, however, the citizens and the local economy of the city will be the final recipients as, on the one hand, their urban infrastructure and assets will improve considerably, increasing the *attractiveness of the city*. On the other hand, the reduced operating costs and increased sales will ultimately lower the costs on the municipal budget. This is a significant *contribution to the reduction of the municipal debt and deficit*, which is increasingly important in all Member States.

Especially in the case of the sale and privatisation of municipal assets there could also be a significant *debt reduction at the municipal level*. Some German cities (such as Düsseldorf and Dresden) are good examples of this. These cities have become *completely debt free* after the successful redevelopment of urban real estate and their sale to private investors. As a consequence, these cities in subsequent years have been experiencing more freedom for *further action to improve the quality of life*, thereby increasing population and creating new jobs, resulting in additional municipal tax revenues. Therefore, this type of UDF could actually make a significant contribution to “*smart city*” policies.

3.2.5 Prototype 5: Area-based brownfield funds

A UDF prototype that may require more expertise and time to be established by Managing Authorities is the area-based “brownfield fund”. The main strategy of this prototype is to combine multiple sectoral components (physical, economic, environmental, see Figure 12 in Chapter 2.1.3) in areas (usually parts of cities) designated for regeneration. Very often these areas will be typical brownfields resulting from vacated former industrial, public or military buildings.

At first, such a fund type will focus on buying brownfields at a reasonable price in order to carry out extensive urban renewal. Typically, this renewal will not only include renovation of existing buildings and infrastructure, but will also go further: a redevelopment often includes a completely *new utilisation structure for the deprived area*.

Since brownfields are often quite large sites, the new utilisation concept mostly consists of a *mixed use*. Therefore, brownfield funds are not specialised theme funds, but may be confined to certain target areas within a city. Furthermore, such a fund will always concentrate on cities. In addition, it might not

be limited to one city, but could offer its financial products on a *multi-city, regional or national level*. In the end, this depends on the specific requirements of relevant OPs.

Figure 38: Characteristics of UDF prototype 5: Area-based brownfield funds

UDF key dimensions: Prototype 5 Area-based brownfield funds	
1. Business strategy	
Type of project	Intermediary asset purchase of brownfield and urban renewal
Life cycle stage	Redevelopment stage
Geographic scope	City (depending on OP: regional/national) in certain urban areas
Thematic scope	Multi-purpose (combination of multiple asset utilisations)
2. Financial products and beneficiaries	
Revolving financial instrument	Equity (venture capital) and equity mezzanine
Incentive	Lower IRR requirements; less equity from private partners (leverage effect)
Final project recipients	Private households (final recipients)
3. Governance structure	
Actors	Public (MA + local governments)
Financing sources	Only public (in cash and in kind)
Legal status	Separate legal entity (to be established)
Governance costs	Establishment costs (one-time): high; Operating costs: high (max. 3%); Additional expenses for feasibility studies
Necessary cooperation partners at the project level and/or fund level	Local developer and consultants/experts and local banks (for additional loans)
4. Impact on urban development	High (high public leveraging; brownfield land recycled; key investment in deprived areas; revaluation effects on land and real estate in the area; jobs)

As described earlier, such an area recycling is characterised by *high external/economic rates of return* combined with *low internal rates of return*.

The low expected IRR is due to the long project duration, high investment costs and high development risks (see Chapter 2.1). This is the reason why this market segment is often insufficiently attractive to private investors, developers and private owners of the respective sites. In order to enable these groups to benefit from UDF financing, the fund management should take an *active role* in the development process and possibly even take part in the project management. Thus, the UDF should deploy *equity-based financial instruments* such as venture capital or equity mezzanine capital. By providing (quasi) equity capital with lower IRR expectations than private investors, the UDF creates an *incentive* for private project partners to participate. This is due to the fact that these private project partners now need less equity capital of their own. The *leverage effect* of the UDF also secures a sufficient internal rate of return for them. Apart from that, the fact that the project is developed jointly with the public stakeholders helps to reduce the high development risks.

Due to the generally high risks involved with brownfield redevelopments, the desired influence on the urban regeneration projects and the possibility of bringing in private fund investors, it seems advisable to establish this UDF prototype as a *new corporate entity* with a separate legal personality. If there are no private fund investors available to at the outset, it will be possible to incorporate them

later via an increase in the share capital. This could even be realised by *contributions in kind*, e.g. by bringing private or public sites into the UDF. The separate legal entity would also make it easier for the UDF to get loans from private banks. These advantages may compensate for the *higher costs and the longer period of time required for the establishment* of this UDF prototype.

As already explained in detail in Chapter 2.2.5, this UDF type will imply *higher administration costs* (especially for project due diligence). Therefore, the upper limit of 3% on fees (as defined in the SF regulations) will be most probable. Apart from that, there may also be further costs for feasibility studies commissioned by management from local surveyors. In any case the fund management should seek *active cooperation with local actors* (public administration, developers, site owners, banks and surveyors).

Although this will lead to the *highest governance costs* for this prototype, these costs are justified by the *high impact on urban development*.

Financing brownfield redevelopments is likely to produce a *high public sector fund leveraging*, an area *recycling* of brownfield sites³² (instead of green developments), a *key investment* in deprived areas, *value enhancement effects* on land and real estate in the area, supplementary tax revenues for the municipality concerned and new job creation. Due to the necessarily close involvement of the local government, brownfield redevelopments represent an *ideal example of integrated urban development* (see also Chapter 2.1.1).

3.3 Governance structures for selected urban development fund types

Continuing the analysis of 3.1 and 3.2, we now describe three corporate governance structures for UDF management in relation to the stakeholders involved. To do so, we focus on:

- Relationships between the UDF and the Managing Authority and/or the Holding Fund;
- Decision-making bodies, management control mechanisms, reporting and monitoring issues securing a balance between the public and private interest;
- Possible process flows from the allocation of funds (in the UDF) to the projects and to the final recipients.

In the following sections we shall describe three concepts of governance structure for three possible UDF prototypes. On the one hand, the creation and establishment of the UDF requires clarification of the structure and process organisation between the various parties involved according to our three key dimensions. On the other hand, we also describe the expected process organisation in the day-to-day business operations of the UDF. This will enable us to clarify the process structure and thus the future cash flows, starting from the European Structural Funds and ending with the final recipients.

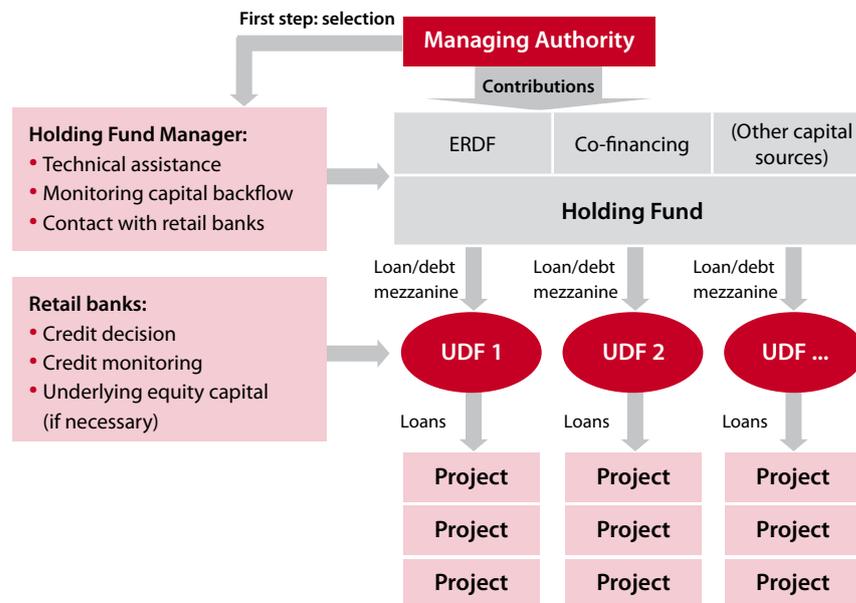
3.3.1 Organisational structure for energy efficiency funds (“the Holding Fund and retail banks path”)

As already outlined in Chapter 3.2.1, the design of energy efficiency UDFs must take into account the fact that they ultimately target a retail client base, principally because private property owners (households and/or companies) receive small-scale investment loans for rehabilitation and reconstruction. The energy savings are then used for loan repayment.

³² Very often this area recycling brings about a better utilisation of existing infrastructure (such as water and sewage networks), which leads to lower fees for all surrounding property owners and citizens. This is a classic example of the external economic benefits achievable through brownfield redevelopments.

To limit the fund administration costs at national level, our firm recommendation would be to establish a Holding Fund first (e.g. with the EIB), which then allocates the given funds (as a second step) to the private sector (as loans, see Chapter 3.2.1) through private commercial banks (by selecting UDFs). Consequently, the organisational structure is based on a *two-stage approach*:

Figure 39: Governance structure prototype 1: Energy efficiency funds.



Basically, it has to be decided which party is to fulfil which functions in the overall programme. In this case, there are *two possible alternatives*:

On the one hand a Holding Fund – established for example by a national or supranational promotional bank³³ – could receive the public capital from the Managing Authority and provide an alternative funding source to private commercial banks with a substantial branch network in the Member State concerned (see *upper path* in the following Figure 40). These so called “*retail banks*”³⁴ can operate as UDFs, providing the loans to the potential borrowers or final recipients.

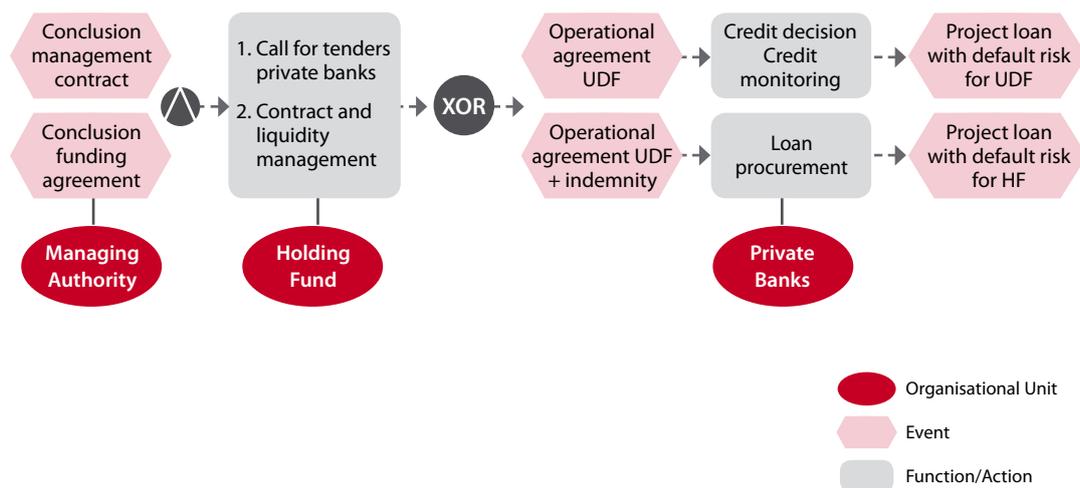
Agreements regulating the financial relationships between the Holding Fund and each UDF are required - “funding agreements” or “operational agreements” depending on the terminology adopted. The fund contribution from the Holding Fund to the UDF can be contractually formulated as equity capital, mezzanine capital, loans or guarantees. Each of the instruments has specific advantages. Guarantees could be attractive to commercial banks with sufficient capital resources. In most cases, however, the use of debt instruments seems to be more favourable compared to guarantees or equity. If the HF provides loans or mezzanine debt to the UDFs, there will be no need to be a shareholder of the UDFs. Particularly if the UDF is a long-established financial institution, there may, in any event, be no interest in having a new shareholder. Furthermore, the “exit” of the HF could be difficult. Depending on the amount of risk, the HF manager should then either take “normal” (senior) loans or any kind of subordinated, riskier mezzanine debt

³³ A national promotional bank may not be able to establish a single HF. In Germany, for instance, there could be as many HFs as there are federal states (“Länder”), which decide to establish JESSICA structures. However, it would be possible for different OPs to contribute funds to a single HF at national level (similar to the case of Portugal), provided the relevant MA of several regions are able to reach an agreement.

³⁴ The term “retail bank” refers to a standard commercial bank that directly serves retail and business clients through its branch banking system.

instruments (see Chapter 2.2.4). In this case the funding sources are given to the private banks and appear in *their* balance sheet on the liabilities side. In return the bank provides loans to the final recipients that appear on the asset side of *their* balance sheet as part of their regular loans. In this situation the UDF takes the credit default risks. Therefore, it should be responsible for the complete credit monitoring.

Figure 40: Flow chart for the establishment of prototype 1: Energy efficiency funds



On the other hand (see *lower path* in Figure 40 above)³⁵, it could be possible to use the already existing “retail banks” more in the role of a “*distribution channel*”. In this situation, the retail bank operates as “*agent*” for the Holding Fund, with the latter bearing (most of) the loan default risks. Again according to the existing regulation the UDF has to be established as a separate account in the retail banks by a funding agreement. Furthermore, the retail bank will give the loans to their private customers. In contrast to the first alternative, in this case the retail bank could receive in addition a so-called *indemnification* agreement. Indemnification means that the retail bank is partially or fully exempted from its share of risk. The borrower, of course, still has to comply with its repayment obligations in full. In case of default, however, with indemnification the retail bank only has to bear a partial loss or no loss at all. In the case of partial or full indemnification, another party - in our context the Holding Fund - bears the partial or full capital loss. The less default risk is borne by the retail banks, the more the UDFs operate as a pure distribution channel for the Holding Fund, receiving therefore a low commission fee.

Concerning our first proposed decision path, namely “the Holding Fund and retail bank path” in chapter 3.3.1, both suggested alternatives – the upper path and the lower path – seem to be possible. SF regulations (EC 1083/2006, Article 44; EC 1828/2006, Articles 43 to 46) do not refer to the allocation of default risk between the HF and the UDF. Therefore, it is possible that the HF and the UDF share the default risk (partial indemnification) or that the HF takes the full default risk (full indemnification), whereas the UDF only pays out the loan. Examples of already established JEREMIE funds in NRW investing ERDF capital show that full indemnification is possible.³⁶ In Estonia, the role of the Credit

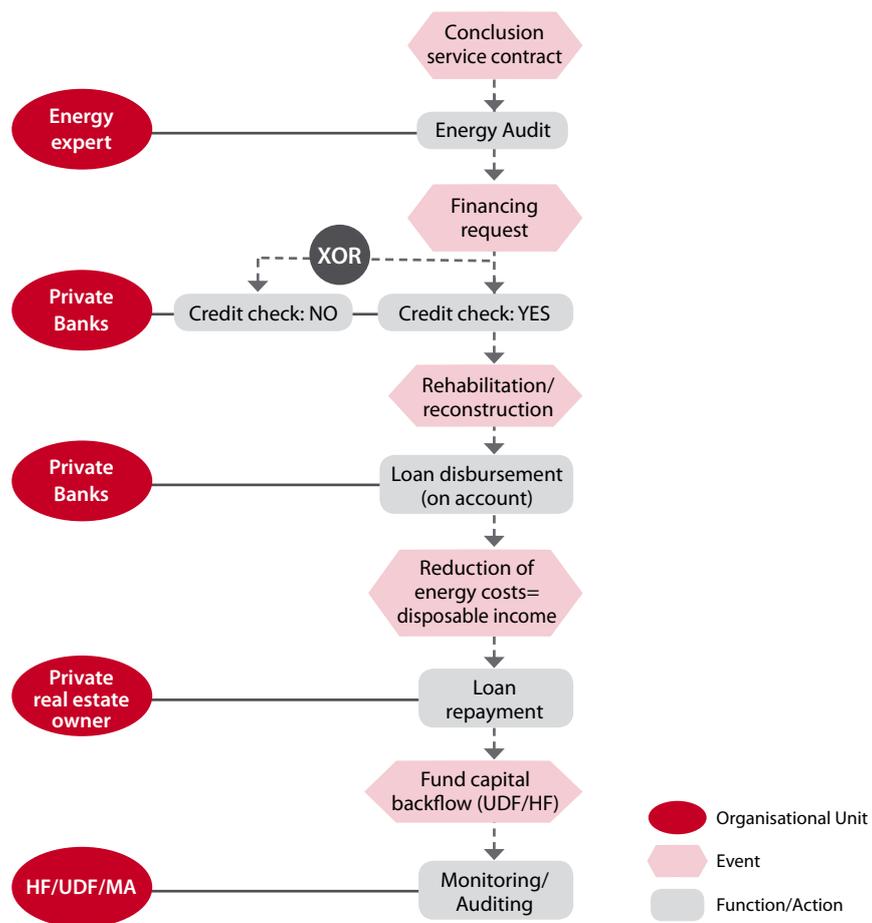
³⁵ In the organisation charts the XOR symbol represents two alternative paths.

³⁶ This release of liability is quite common in financing small and medium-sized enterprises (SMEs) in their growth stage. The SME risk capital fund in North Rhine Westphalia (NRW) – established by the Managing Authority of NRW in order to invest ERDF capital in SMEs – may serve as an example: This fund gives subordinated loans with 100% exemption from liability on innovation-oriented investments. These loans are given out not by the fund itself, but by the retail bank of the SME. In case of default the fund bears the whole default risk leaving the retail bank with no capital loss to bear. The same is also true for the University Startup Fund of NRW, which invests ERDF capital in university spin-offs also with 100% indemnity for the corresponding retail bank.

and Export Guarantee Fund of KredEx in combination with the UDF of Swedbank on energy efficiency is also based on partial indemnification. Although the commercial banks officially take the default risk on lenders, KredEx provides a guarantee covering up to 75% of the loan amount.³⁷

From the point of view of the private real estate owners, which – in terms of financing – are the final recipients of the UDF, the two alternatives concerning the establishment of the JESSICA loan programme show no differences in the *operational process* (see the following Figure 41).

Figure 41: Flow chart for the operating management of prototype 1: Energy efficiency funds



The private household or company has to authorise an energy expert first. His audit report is the base for the investment calculation and therefore for the loan financing request. The retail bank of the private household or company then has to do not only the credit analysis and the loan payout. Furthermore, the banking partner must monitor the loan amortisation and – in the case of the first path in Figure 40 – must fulfil its own repayment conditions (from the HF).

³⁷ See slide 10 and 13 of the KredEx presentation (M. Adler: The Housing Fund perspective) at the 4th JESSICA Platform Meeting and slide 4 and 10 of the Swedbank presentation (J. Purgi: Implementing Energy Efficiency Investments with EU Structural Funds – The UDF perspective) at the same meeting (available at http://ec.europa.eu/regional_policy/funds/2007/jjj/jessica_network_en.htm).

However, significant differences may arise in the loan conditions. For the first path according Figure 40, in which the private commercial banks take the full default risk and therefore fulfil more UDF functions, they will not only have *increased administrative costs* for loan scoring and loan monitoring. In addition to that, they will have the *financing costs* (for the fund allocation of the Holding Fund) and their own *risk costs*. This could lead to significantly worse interest rates for future borrowers. A balance could be achieved if the salary of the Holding Fund management were lowered significantly due to their reduced activity.

While it would appear to be quite usual for Managing Authorities to enter into a single funding agreement with a Holding Fund, in some cases Managing Authorities may have to enter into two different agreements before the start of the corresponding loan programme: first, the *funding agreement with the Holding Fund*, and second the *contract for services* with the manager of the Holding Fund.³⁸ In this case, the contracts with the UDF would be processed under the general contract management by the Holding Fund. In both management contracts a fixed and a performance-based variable payment could be incorporated (e.g. depending on the rate of repayment of loans).

3.3.2 Organisational structure for infrastructure funds (“the promotional bank path”)

Due to the inherently high investment costs in the case of financing economic, social or environmental infrastructure, it seems advisable not to use retail banks through a HF-based structure for capital distribution. Rather, in our view it would be advisable to *distribute* large-scale investment loans directly *through a designated banking institution*. Therefore, in order to establish an infrastructure fund, a UDF could be set up as *part of an existing financial institution* (Regulation 1828/2006, Article 43 paragraph I).

The bank, which obviously needs to have a *banking licence*, can be selected through a public call for tenders. If the Managing Authority *directly* selects an existing promotional bank³⁹, a public procurement procedure can be waived where allowed by the regulatory framework. The objective should be that the bank provides investment loans directly to potential borrowers. This implies that the *creditworthiness check, the loan disbursement and monitoring* as well as the *risk-adjusted refinancing* all remains with the bank operating as UDF.

The bank can either form a separate fund for the UDF or simply keep the assets of the UDF in a *separate account* (a separate block of finance as part of the whole balance sheet of the bank). For the low-cost OP financing the bank receives the ERDF funds and the corresponding co-financing / match funding from the Managing Authority on the basis of the funding agreement. However, if necessary, the Managing Authority can already include in the call for tenders the bank’s obligation to provide the *co-financing* out of its own capital.

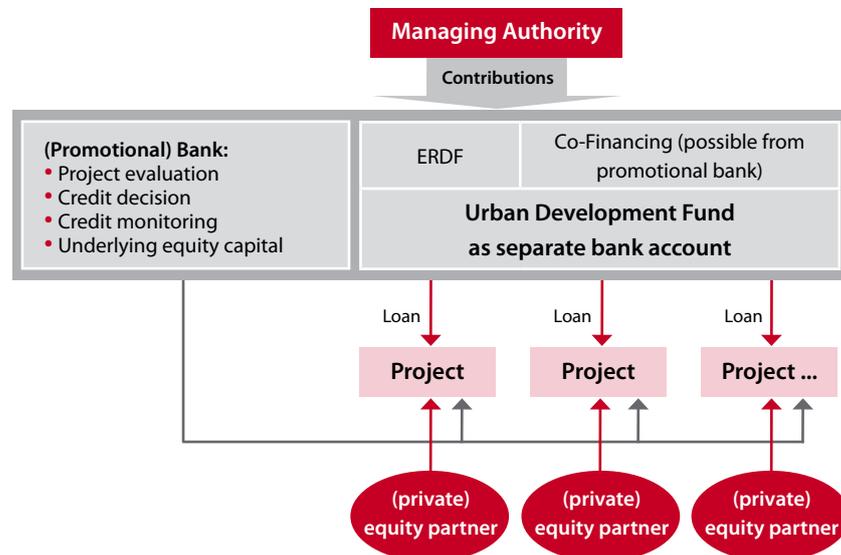
Additionally, the funding agreements should also contain terms and conditions as to when and how repaid loan funds are to be returned to the Managing Authority.

Infrastructure investments are undertaken mainly by municipalities, public utilities, public service corporations and municipal special purpose associations. Unless this is an important target group for the loans of the UDF, it will be competing in these cases with existing financing alternatives for infrastructure and municipal finance. In almost all Member States we find these investment support

³⁸ It is also possible for the MA to sign only one contract with the future HF manager. In this situation the funding agreement specifies also the services to be delivered by the HF manager. Nevertheless, this could have one disadvantage: in case the MA is not satisfied with the Holding Fund management, not only the service, but also the fund (and therefore the complete JESSICA structure) may need to be renegotiated.

³⁹ In Germany, for instance, “promotional banks” are legally defined and considered as “in-house” financial entities for the corresponding regions (“Länder”). Therefore Länder, as Managing Authorities, are exempt from tendering if they assign the role of a UDF to an in-house financial entity.

Figure 42: Governance structure prototype 2: Infrastructure funds



schemes, frequently with very generous loan conditions (interest rates are currently between 1.0 to 3.5%). Against this background, the UDF financing also has to offer very favourable loan conditions, otherwise no adequate loan demand will materialise from this target group.

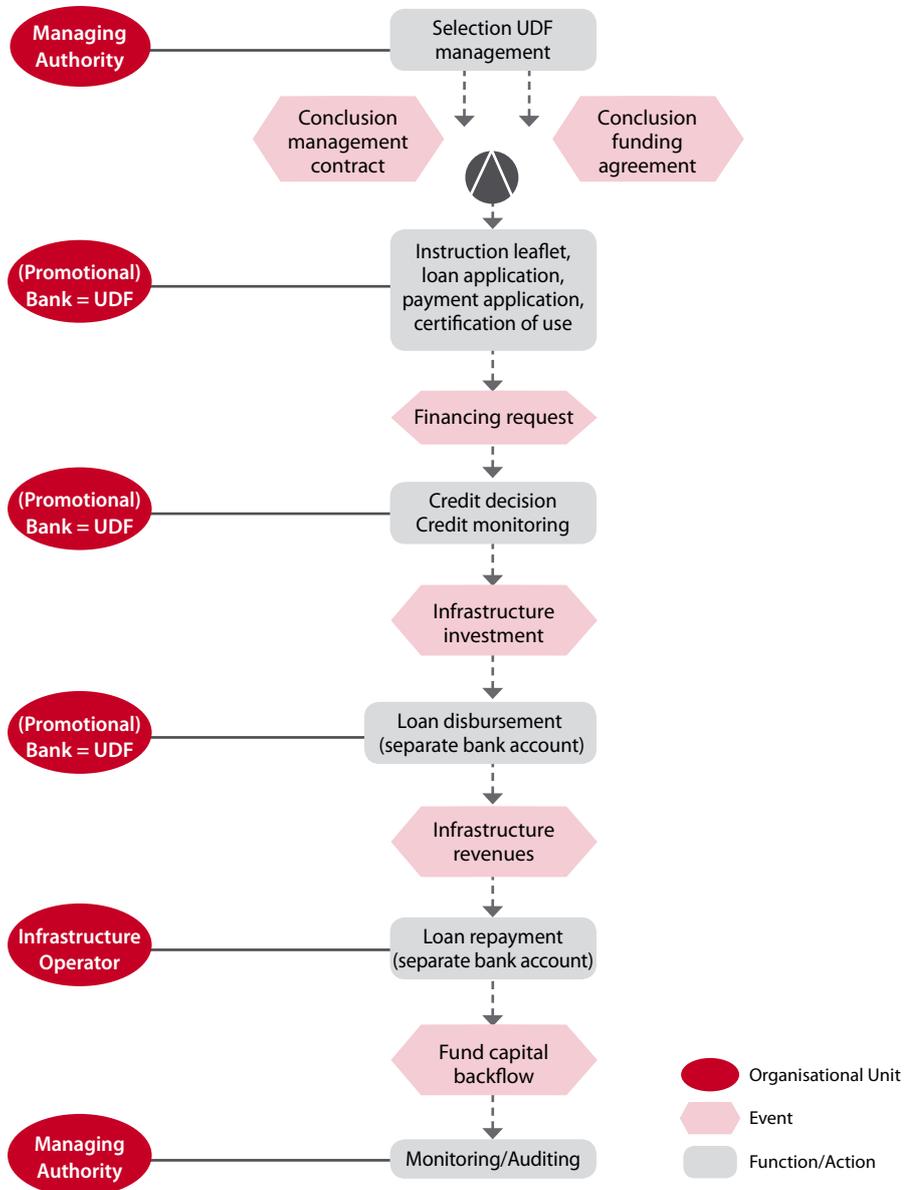
From the perspective of the infrastructure UDF, however, these public borrowers are at the centre of attention, since the inherent public sector credit default guarantee usually reduces the risk and administrative costs for the UDF. At the same time, however, it seems advisable to also include the private sector (non-profit-making and profit-making companies) as well as other investors as potential borrowers. In this target group, the corresponding equity capital requirements and the need to carry out the entire project management on their own could lead to a risk reduction for the bank. While in the case of loans to private investors more stringent documentation requirements concerning the feasibility of the specific investment project certainly have to be expected, in the case of public borrowers (municipalities, public utilities, public service corporations and municipal special purpose associations) simpler documentation appears possible. Often just the provision of an *instruction sheet*, a *general loan application*, a *payment application* and a *certificate of use* (after loan disbursement and investment financing) could be sufficient to initiate and operate the infrastructure loan programme.

In order to generally limit the risks and the administrative burden on the bank, it would be suitable for the UDF management to use, in particular, *existing (national or regional) promotional banks*.

The example of German promotional banks (e.g. Kreditanstalt für Wiederaufbau (KfW), Nordrhein-Westfalen Bank (NRW), Landestreuhandbank Rheinland-Pfalz (LTH), Sächsische Aufbaubank (SAB) or Förderbank Bayern (LfA)) shows quite clearly that these banks have been used for decades to channel public capital investment in the form of loans with very favourable terms. A UDF would be just another *“alternative funding mechanism”* with its funds earmarked for a specific investment purpose and kept in a separate account.

If only public funds were used for the financing of the UDF loans by promotional banks, it would be possible to minimise administrative costs and also offer very favourable loan conditions. The previous loan practice in this area of business shows that, due to the high investment costs and the steadily, but slowly growing revenues from infrastructure, only low-interest, long-term loans (maturities of up to

Figure 43: Flow chart for the establishment and operation of prototype 2: Infrastructure funds



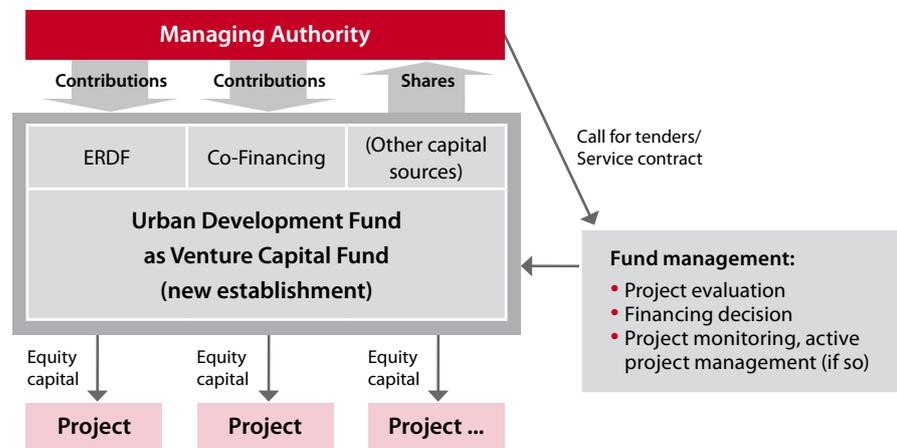
30 years) with long-term fixed interest rates (10 to 20 years) are made, and in the case of public borrowers with loans covering up to 100% of funding requirements. The possibility of interest-free ERDF funding⁴⁰ would therefore allow favourable financing terms for the borrowers. The use of existing promotional banks (including their high expertise) leads to low start-up and low management costs.

⁴⁰ In general, it is the decision of the MA whether to provide ERDF financing to the UDF at 0%. Particularly if the UDF is established by a private financial institution also at the fund level (not only at the project level) State aid rules have to be followed (see Figure 3 and chapter 3.1.4).

3.3.3 Organisational structure for area-based brownfield funds (“the independent investment fund path”)

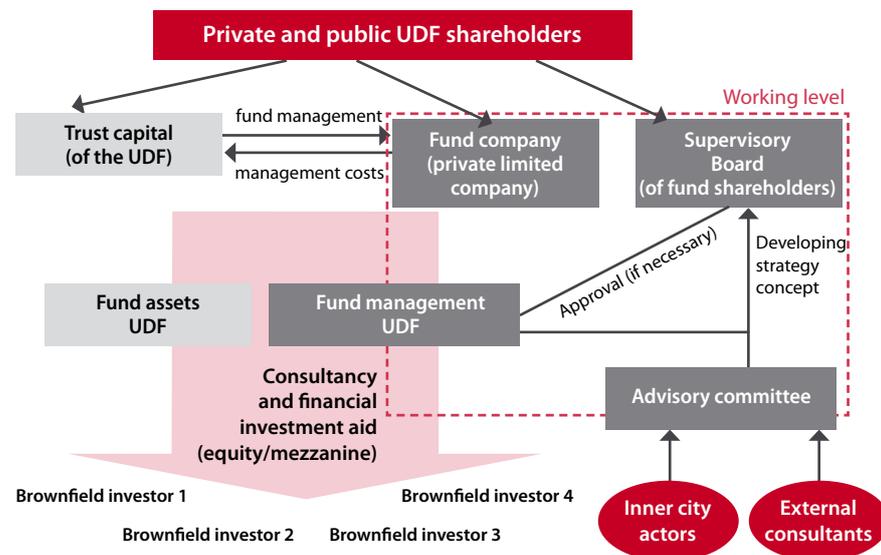
In order to finance urban development projects on brownfields with equity capital or equity mezzanine, it is advisable that a separate company with a legal personality should be established. This *investment company* is the final recipient of public funds (especially from the ERDF). As an *independent* company it meets the requirements of Article 43 paragraph 2 of Regulation (EC) No 1828/2006. At the same time, the fund requires no banking licence, as it does not award loans or guarantees. For the management of the fund, an independent fund manager could be sought via a call for tenders. In principle not only banks, but all types of financial institutions (such as investment firms, leasing companies, insurance companies or pension funds) could fulfil the UDF role. In more general terms, all functions of the UDFs can be assigned to different parties.

Figure 44: Governance structure prototype 5: Area-based brownfield funds



In this concept we find a “real” *corporate governance structure*: The fund should be established as a separate legal entity.

Figure 45: Governance structure prototype 5: Separation of UDF capital resources and management functions



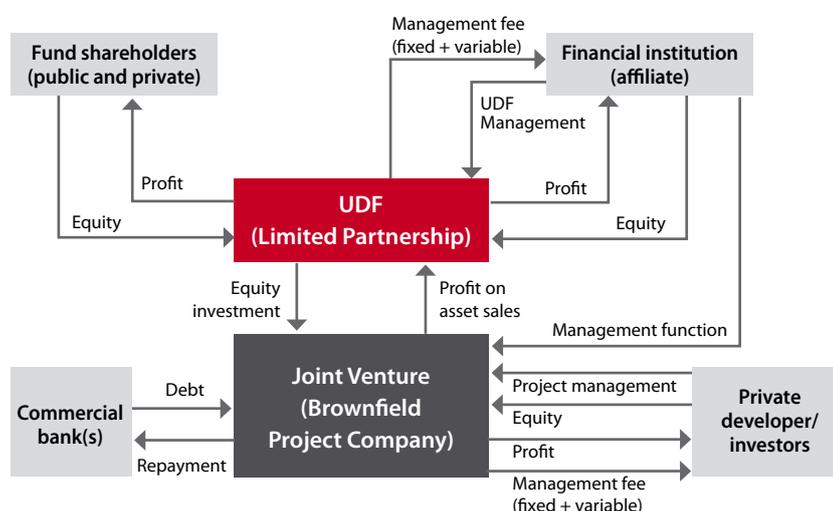
As legal forms, the *private Limited Company (Ltd)* or *Limited Partnership (LP)* appear to be particularly suitable due to their low formal requirements. With the establishment of such a company, only a low share capital has to be invested, which minimises the organisational expenses. Once a UDF is established as a Ltd or LP, it is generally very simple to bring in new investors and gradually expand the fund's capital by issuing new shares against contributions in cash or in kind. With the ability to (partially) sell shares, private partners are also offered a simple way to exit the investment.

Managing Authorities will define the overall investment strategy for JESSICA investments in line with underlying Operational Programmes, and this strategy will be carried through to define the framework within which the selected fund manager will operate and go on to identify and/or select projects. The selected private company would usually include an independent fund manager and the fund capital would generally be considered as trust capital with an advisory committee as well as a supervisory board. Every fund shareholder would usually be part of the supervisory board.

The fund could start with only public participants, and at a later stage additional private partners could become shareholders and provide further equity for the UDF. For example, these shareholders could be specialised private investors, developers or commercial banks and investment funds.

However, the principal advantage of this prototype is apparent at the project level. Projects are provided with *equity capital* that is interest free during the construction period. Repayment obligations on the equity capital normally arise only after completion of the project. This has the advantage that the repayment to the UDF coincides with the payment of cash inflows from the project itself, e.g. receipt of the sales revenues. In addition to this benefit, the allocation of equity capital enables the project promoters to obtain *additional financing via commercial loans*, so that the following structure results:

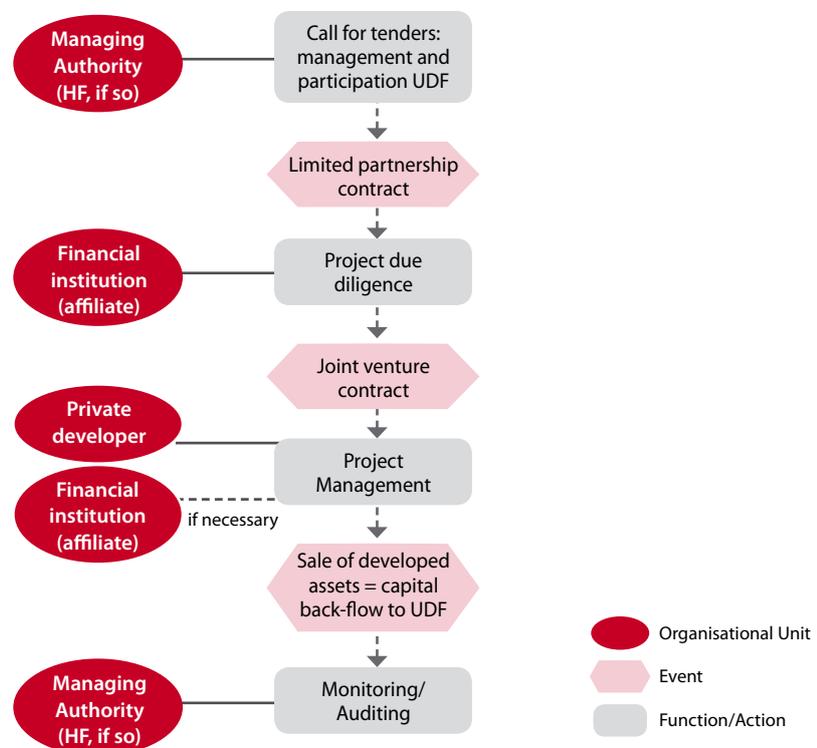
Figure 46: Governance structure prototype 5: Fund vs. project level



The organisational structure of Figure 46 explains the longer preparation phase and higher costs for the establishment of the UDF. Although this governance model in principle does not require a Holding Fund, the Managing Authority should consider whether or not to outsource the entire structuring process to a *specialised Holding Fund*. This seems particularly useful if the intention is not only to have one brownfield UDF, but to establish other, equity-based UDFs (for example with different themes) in the future.

To arrive at the structure described above, it is firstly essential to find a suitable holding company or financial institution by public tender - one possessing not only capital resources, but also expertise in the necessary project due diligence. The main task for the MA here is to define the overall investment strategy (in line with the underlying OP) for the UDF, a definition which will form a central part of the tender documents. This investment strategy defines the framework in which the selected fund manager will operate (and identify/select projects). The joint founding of the UDF will be initiated by a Limited Partnership agreement. This contract should, *inter alia*, set out the amount of capital contributions, the proposed (public and private) shareholders, the timing of the contribution and the possible exit, the profit distribution rules and the allocation of management functions.

Figure 47: Flow chart for the establishment and operation of prototype 5: Area-based brownfield funds



After this time-consuming and costly process is completed, the great advantages of this governance structure can be realised. In the operating phase of the fund, all functions and tasks are clearly separated from one another, so that not only the management process but also the auditing process is considerably simplified.

The entire fund management and therefore the complete due diligence for all requested projects is the responsibility of the (private) financial institution (e.g. an asset management company), which in return receives a higher management fee (usually including performance-related components). The entire project management is thus in the hands of the private partners of the joint venture company that may be supported by the fund management.

After the sale of the developed assets the return is not “automatically” generated at UDF level as this would normally be dependent on the exit clause in the Limited Partnership contract. At the appropriate point as designated by agreement, the Holding Fund or Managing Authority receives their share of returns. As far as financial returns are concerned, the monitoring and auditing for the Managing Authority may be limited to the *auditing of annual accounts of the UDF*. Here the MA could easily monitor how the ex-ante defined investment strategy is ex-post fulfilled by the UDF. Thus, there is no need to go into the individual project review if the UDF follows the defined investment strategy and achieves the revolving payment flow. Compliance with specific EU auditing requirements relative to the use of ERDF funds, however, remains however obligatory.

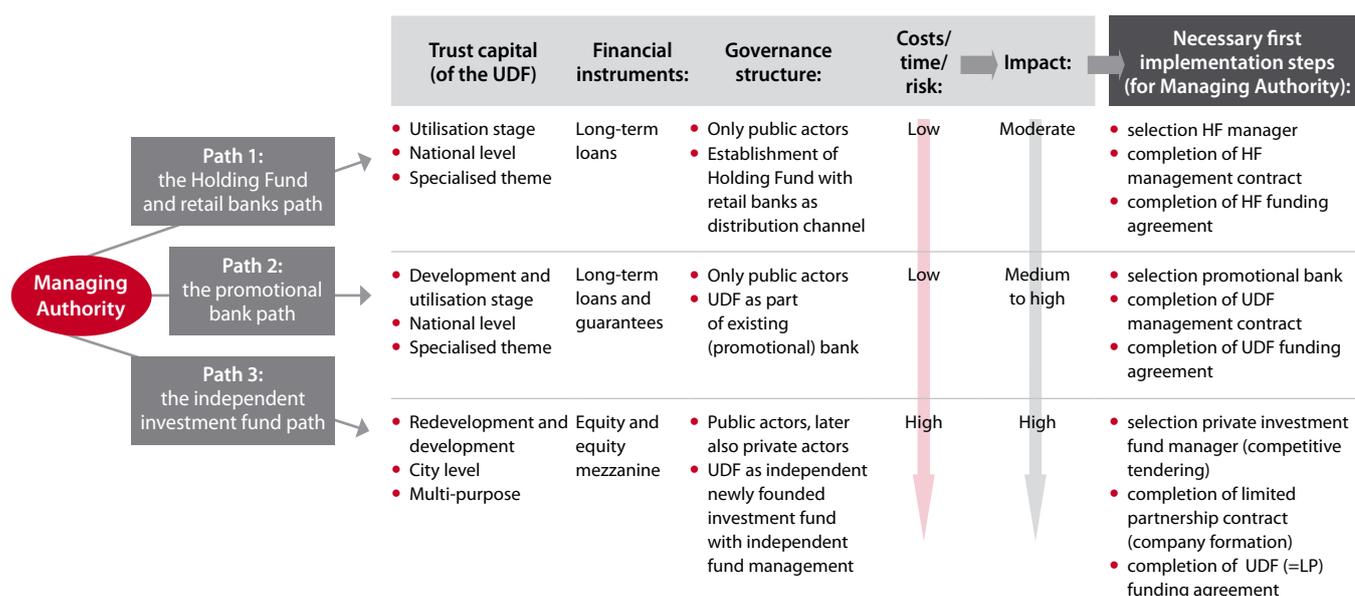
Therefore it can be stated that the higher costs of establishing the UDF as LP are accompanied by lower costs for the Managing Authority in controlling and monitoring the UDFs. The more funds in a comparable form and design the Managing Authority plans to establish, the higher will be this “administrative advantage”.

4. Outlook for the implementation of the derived UDF types

The study concludes with a summary of the evaluation of the benefits and shortcomings of each UDF prototype. In the following section, we propose offering some recommendations that – in our view as independent consultants – can give Managing Authorities in the process of defining strategies for the implementation of UDFs, an informed and concise insight into the possible types of funds, key characteristics and key considerations. These recommendations do not necessarily reflect the views or approaches promoted by the EIB or the EC. At this stage of the JESSICA initiative, the UDF sector in all MS is rather flexible and not yet mature enough to consider all options for the implementation of JESSICA fund vehicles, and the track record from the operation of existing UDFs is inevitably limited.⁴¹

Nevertheless from our consultancy perspective we currently see *three (main) options to implement urban development funds* for Managing Authorities in their Member State (see Figure 48 on the following page). All three paths have their own benefits and shortcomings. Therefore, each Managing Authority has to decide which path appears the most suitable, taking into account the individual circumstances in the Member State, the national regulations, the basic conditions and the corresponding urban investment needs. Each path leads to *different implementation steps* for the corresponding Managing Authority.

Figure 48: Decision paths for Managing Authorities to establish Urban Development Funds



The *first path* is a two-stage approach involving a *Holding Fund and several retail banks*, with private households or enterprises as final recipients. In order to limit the fund's administrative costs, Managing Authorities should firstly establish a Holding Fund (e.g. with the EIB), and contribute the public capital that they want to be invested in sustainable urban development projects.

⁴¹ The final results of the "Call for Expressions of Interest" of the different EIB Holding Funds might give even more insight about the possible implementation steps of UDFs. However, they were not yet available at the time of the conclusion of this study.

In a second step, the Holding Fund uses the “*distribution channel*” of private commercial banks to provide loans to private households or enterprises. From our consultancy perspective there are two alternatives to provide the loans to the private sector. It is possible that the retail bank receives the additional funding from the HF and bears all credit risks. Alternatively the retail banks could be insured by indemnification clauses. In this situation the UDF, established as a separate block of finance within the retail bank, operates primarily as an agent for the Holding Fund.⁴² In the last alternative, in particular, it would be possible to introduce a cost-efficient financing structure in a short period of time. However, the potential of this financial structure is limited to financing pre-existing urban assets with loans, since other investment fields appear to be too risky. The investments achieved, such as energy-efficient renewal measures, have a moderate impact on sustainable urban development. The benefit for the Managing Authority is simple: it only has to select a Holding Fund through the completion of a management contract and a funding agreement.⁴³ In the case of the EIB as Holding Fund, a contract can be awarded directly on the basis of the second paragraph of Article 44 of EC Regulation 1083/2006. The Holding Fund then has the function of structuring, screening, contracting, funding and monitoring the commercial banking partners. The Managing Authority “only” has to audit cash outflows and inflows of the Holding Fund.

The *second path* also uses existing institutional structures. Here, a UDF can be established as a *separate block of finance in an existing financial institution*, preferably a promotional bank, if such an institution exists in the MS. Depending on the Member State and the applicable Operational Programme, the Managing Authority may choose a financial institution that operates at the federal, regional or local level. Since promotional banks have a high level of expertise in making loans on favourable terms as part of government support for certain public goals, the Managing Authority could in principle delegate the whole process of project evaluation, credit decision and credit monitoring to a promotional bank.

The Managing Authority only has to make sure that public funds are effectively invested in projects according to their intended use and the objectives of the underlying OP. The second path also shows a way to establish a *cost-efficient governance structure* in a short period of time. However, since the UDF does not have a separate legal entity, the financial instruments are limited to the less risky loans and guarantees. Therefore, the second path may also not provide a route to finance sustainable urban development projects most effectively with equity capital. Still it is possible for instance to finance infrastructure investments that may have a medium to high impact on urban development. In this path, a UDF could be created as an alternative funding mechanism for an already existing promotional bank. There is no need to form a company or to establish a Holding Fund, as this would only create additional administrative costs. After completing the UDF management contract and funding agreement the Managing Authority merely has to audit the *segregated accounts* in the promotional bank for the funding, management, interest and repayments of the investment loans provided.

The last and *third path* corresponds to setting up a traditional (private) *investment fund*. In contrast to the two previous paths, the establishment of an investment fund requires the establishment of a separate legal company, which has an independent fund management. The fund management is non-public and solely decides on the project investments. For this reason, public procurement rules should be applied. Therefore, a competitive tendering for the investment manager (with or without equity contribution to the UDF fund assets) seems to be necessary.

⁴² As already mentioned in chapter 3.3.1 it would also be possible for the retail banks to co-finance projects with their own resources, on which they bear all default risks. The advantage over the “agent-only” model is the stronger incentive of the UDF management to carry out due diligence and credit analysis. The disadvantage is that this could lead to high management expenses which lead to higher loan interest rates. Given the alternatives for loan financing in the private sector this could lead to a problem of insufficient market demand.

⁴³ As already mentioned this can be even done in one agreement between the MA and the future HF manager. Furthermore the “HF and retail bank” path is not restricted to energy efficiency UDFs. On the one hand the examples of Sicily and Andalusia show that HF could also support for example EE and urban regeneration UDFs. On the other hand it could make sense to establish a HF if the MA has the plan to establish several UDFs. In this situation the HF has to coordinate a range of tasks related to calls for expression of interest, and support UDF-specific investment strategies etc.

After the tender procedure not only a funding agreement, but also a limited partnership contract has to be signed to establish the new UDF investment company. Here the MA defines the investment strategy for the future fund management. After the company formation is completed, the shareholders of the fund judge the quality of the fund management by evaluating the UDF's annual accounts, and may substitute the fund management in case of poor results. This independent UDF establishment is not only more costly, but also more time-consuming. The benefits of this third path, however, are valuable. By establishing a separate legal entity it is easier for a UDF to invest equity capital in the urban development projects. In addition to that, an investment fund has a very *flexible governance structure* that allows private fund investors to be brought in easily at a later stage. In this way, more capital resources can be invested in sustainable urban development.

Since equity capital is the scarcest resource in project financing, the UDF may be able to contribute to the development (or the even riskier redevelopment) of projects by opening the door to further financial resources (e.g. commercial loans), which have previously been denied. Thus, Managing Authorities are able to promote even risk investments such as brownfield redevelopments, which also have high multiplier effects on the region or area, namely follow-up investment, job creation and image enhancement. Finally it might be easier in this flexible governance structure to attract financial institutions other than banks - e.g. investment companies, fund management, leasing, or insurance companies - to become UDF partners. Whether or not these companies will form part of a UDF will become clear at a very early stage in the establishment of the UDF, because the defined UDF investment strategy of the MA must fit into the business strategy of the potential financial institutions. The results of the necessary competitive tendering procedure will show the MA if a private partnership at fund level is possible.

Thus, path three may be in general a favourable long-term strategy for Managing Authorities. However, in the shorter term, those Managing Authorities with far-reaching experience of employing fund vehicles in urban development (such as the United Kingdom) might already be able to directly create their UDFs as independent investment companies, as proposed in path three.

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EIB Evaluation Studies on JESSICA for:

Belgium (Flanders, Wallonia)
Bulgaria
Czech Republic (Moravia-Silesia, South-East)
France
Italy (Liguria, Tuscany)
Germany (Hamburg, Berlin, Nordrhein-Westfalen)
Greece
Lithuania
Poland (South, West, Silesia, Pomerania)
Portugal
Spain
Sweden
United Kingdom (London, Wales, North West Region)

EIB Holding Funds: Calls for expression of interests for UDFs:

London
North West Region
Andalusia (Spain)
Wielkopolska (Poland)
Lithuania

JESSICA Networking Platform

Presentations of first to fourth meeting, available at:
http://ec.europa.eu/regional_policy/funds/2007/jjj/jessica_network_en.htm

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Regulation (EC) No 1080/2006 of 5 July 2006
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Regulation (EC) No 397/2009 of 6 May 2009
Regulation (EC) No 846/2009 of 1 September 2009
COCOF/07/0018/01-EN
COCOF 08/0002/03-EN
COCOF 08/0034/02/EN
Vademecum Community law on State Aid
Vademecum State Aid control and regeneration of deprived urban areas



JESSICA – UDF Typologies and Governance Structures
in the context of JESSICA implementation

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