



SINLOC Spa
Sistema Iniziative Locali



European
Investment Bank

PREPARATORY STUDY OF JESSICA IN TUSCANY
EXECUTIVE SUMMARY

This document has been produced with the financial assistance of the European Union. The views expressed herein can in no way be taken to reflect the official opinion of the European Union.

15 February 2009

- Private and confidential -

This report has been prepared with the assistance of the Directorate General for Economic Development of the Region of Tuscany, IRPET (Istituto Regionale Programmazione Economica Toscana – Regional Institute for Economic Planning in Tuscany), the JESSICA Task Force at the European Investment Bank, Cassa Depositi e Prestiti (the Deposits and Loans Fund) and SINLOC SpA. In particular, Chapter 3 “Urban Development Funds” was written by Cassa Depositi e Prestiti, with support from Assogestioni and Prof. Edoardo Reviglio. SINLOC SpA was responsible for the overall drafting of the report and coordinated the work of the various contributors.

TABLE OF CONTENTS

1. STRATEGY FOR SUSTAINABLE URBAN DEVELOPMENT IN THE REGION	5
1.1 The growth of services and the role of the cities	5
1.2 The terms of the debate on the cities	6
1.3 The urban dimension of the “Regional Competitiveness and Employment” (CReO) / ERDF Operational Programme 2007-2013	6
1.4 IPSUDs: planning and approval procedures	9
1.4.1 Priorities and criteria for assessing proposed IPSUDs.....	10
2 DEVELOPMENT OF INSTITUTIONAL INSTRUMENTS FOR JESSICA.....	12
2.1 Structure of the Holding Fund and Urban Development Funds	12
2.2 Development of basic illustrative proposals	21
2.2.1 Arrangement without a Holding Fund.....	21
2.2.2 Arrangement with a Holding Fund.....	22
3 URBAN DEVELOPMENT FUNDS (UDFs)	25
3.1 The basic models for UDFs.....	25
3.2 The equity model.....	26
3.3 Non-equity model	27
4 URBAN REGENERATION AND TERRITORIAL DIAGNOSTICS	28
4.1 Logic of urban regeneration	28
4.2 Territorial Diagnostics of the Tuscany Region.....	31
4.2.1 Analytical objectives and methods	31
4.2.2 Environmental pressures.....	32
4.2.3 Firms and the economy.....	32
4.2.4 Education	32
4.2.5 Demographic trends	33
4.2.6 Mobility and transport	34
5 GOVERNANCE OF PROJECTS.....	35
6 ASSESSMENT OF THE “JESSICABILITY” OF PROJECTS	39
6.1 General eligibility criteria	39
6.2 Matrix for evaluating urban regeneration projects.....	41
6.3 “Jessicability” criteria	44
7 ANALYSIS OF PILOT PROJECTS.....	48
7.1 Hydro-electric power plant in the Province of Massa	48
7.1.1 Reworking of the project for JESSICA: equity model.....	49

7.2	Expansion of the industrial estate at Montopoli in Valdarno.....	55
7.2.1	Reworking of the project for JESSICA: non-equity model.....	55
7.3	Conclusions on the analysis of pilot projects.....	59

1. STRATEGY FOR SUSTAINABLE URBAN DEVELOPMENT IN THE REGION

1.1 The growth of services and the role of the cities

Tuscany, like other regions, has seen a rapid expansion in the service sector in recent decades, so that today services account for more than 70% of the region's value added.

The development of service activities is often opposed to the contraction in industry and causes concerns, as though the rise in services implied a trend towards a non-producing society, whereas, in oversimplified terms, industry is equated with production and services with consumption. In reality, the development of the service sector is the consequence of changes not only in consumer needs but also in those of enterprises, which increasingly purchase services for use in their production processes.

The juxtaposition between industry and services is therefore misleading, since the objective of any economy is not to have a set percentage of industry or services but to secure a level of income that will cover the cost of the imports the economy needs to meet its requirements over time; this can be achieved by exporting or by attracting tourists, and services are at least partly instrumental in attaining that objective.

Hence the capacity to export (tourism included) is one of the key objectives of every local economy, and today the capacity to export calls for an increasing volume of services, on the one hand to support industry and improve marketing, but on the other for direct export including tourist services.

Today Italy's industry and services are fully in line with those of wealthier European countries, and the situation in Tuscany is essentially similar to the national average. Compared to the larger regions in the North of the country, however, Tuscany does have less manufacturing industry and a correspondingly larger proportion of services. Since Tuscany's per capita GDP is lower than the average of the Northern regions, it is possible that the weight of services reflects more the weakness of industry than the particular competitiveness of the services sector. In other words, is it a question of too much services or too little industry?

This doubt is entirely legitimate, since although economic development is accompanied by a steady increase in the relative weight of services it is also true that the service sector comprises activities that increase the competitiveness of firms but also traditional activities typically aimed at meeting the final consumption needs of households (and authorities). In Tuscany the latter group appears to be more predominant than in other regions of the country.

This special and uncertain role of services echoes the role of cities, since services are mainly situated in urban areas. Furthermore, given the role that the European Union attributes to

knowledge, innovation and the enhancement of human capital, cities (and particularly large and medium-sized ones) are acquiring a new central function as environments that are more propitious than others for the development of research activities and “knowledge” in general.

In this context, there is a new and forceful justification for urban policies. Cities seem to be the preferred loci for the development of high-value business services, research activities, logistic functions and communications hubs, and engines of regional and national growth. Attention is therefore shifting steadily from observation of the city-system, with its valuable endowment of essential resources for innovation, towards the role of cities within processes of innovation and growth that can be implemented regionally. This change in focus calls for the definition of a system of relationships between the actors cooperating in implementing innovation and their links with policy-making bodies.

1.2 The terms of the debate on the cities

The notion of the city as a regional engine of growth is therefore acquiring a policy dimension. The idea is that policies to create or strengthen regional networks of innovators may be a key means of stimulating innovation in the local economies within each region and encouraging them to spread. Moreover, the establishment of networks provides for the direct participation of local actors in the design and implementation of policy measures, thus strengthening the local governance bodies on which the formulation of development strategies is based.

1.3 The urban dimension of the “Regional Competitiveness and Employment” (CReO) / ERDF Operational Programme 2007-2013

The strategic configuration of the OP Tuscany meets the requirements for employing the ERDF instruments to support urban development and renewal projects.

The overall objective underlying the strategy of the OP (*“to promote an improvement in the competitiveness of the area and the regional economy so that it can withstand international competition, to create high-quality employment and to ensure sustainable development”*), which is divided into six priority axes for action and twelve operational objectives, conforms closely with the Community Strategic Guidelines concerning the urban territorial dimension (*“The contribution of cities to growth and jobs”*). That match can be traced across policy areas, including Axis II – *Environmental sustainability* (specific objective: *“to promote the conservation, safeguarding and exploitation of local resources for the purposes of environmental sustainability”*), Axis IV – *Accessibility to transport and telecommunications services* (specific objective: *“to develop sustainable mobility and integration between modes in order to reduce congestion on major arteries and improve accessibility and territorial cohesion”* and *“to improve access to telecommunications services of general economic interest in order to foster the development of the*

information and knowledge-based society”) and particularly **Axis V – Exploitation of endogenous resources for sustainable territorial development** (specific objective: “**To exploit endogenous resources and to enhance urban and metropolitan systems in order to encourage sustainable development and increase attractiveness and competitiveness in international markets**”).

Table 1

Operational objectives and action in urban and metropolitan settings

Operational objective of the OP	Intensity of action in the urban and metropolitan setting	ERDF estimate EUR million (*)
To strengthen regional R&D capacity aimed exclusively at technology transfer and at supporting innovation	Operates partly, but predominantly, in the urban and metropolitan setting	30.0
To strengthen the regional economy by supporting growth, research and innovation by firms, with particular reference to SMEs, using (inter alia) integrated and innovative measures and measures to improve quality	Operates partly, but predominantly, in the urban and metropolitan setting	80.2
To encourage the rehabilitation of the physical environment and the regeneration of districts	Operates partly in the urban and metropolitan setting	4.8
To promote the protection and improvement of air quality at regional level	Operates exclusively in the urban setting	4.1
To prevent natural and technological risks and support the management thereof	Operates exclusively in the urban setting	3.2
To support the creation of production chains associated with the diversification of energy sources, promoting the production and use of renewable energy	Operates partly in the urban and metropolitan setting	2.9
To promote energy efficiency and the development of efficient energy management systems, partly in order to increase the competitiveness of firms in the markets	Operates partly in the urban and metropolitan setting	4.8
To ensure dialogue with potential beneficiaries to promote the introduction of technology for the production of energy from renewable sources and to raise energy efficiency	Operates partly in the urban and metropolitan setting	0.2
To increase sustainable transport services, thereby improving connections between the main regional production hubs, with the coastal logistics platform and the TEN-T network	Operates partly in the urban and metropolitan setting	41.8
To strengthen sustainable mobility in the Florence metropolitan area	Operates exclusively in the urban setting	17.4
To develop innovative information systems to support integrated mobility	Operates partly in the urban and metropolitan setting	1.2
To promote the reclamation and rehabilitation of the physical environment in urban and metropolitan areas and to encourage the conservation, exploitation and promotion of the natural and cultural heritage in urban and metropolitan areas	Operates exclusively in the urban setting	44.8
TOTAL		235.4
% of ERDF total		69.6

1.4 IPSUDs: planning and approval procedures

The urban policies outlined in Axis V of the CReO OP are implemented using an integrated intersectoral approach consisting in Integrated Plans for Sustainable Urban Development (IPSUDs)¹, which use complex urban planning as an instrument of local development and urban regeneration and involve measures to rehabilitate and regenerate urban areas.

Under the IPSUD implementing terms of reference² (Regional Deliberation No 205/2008), an Integrated Plan for Sustainable Urban Development is a coordinated, systematic and integrated set of public and private, multifunctional and intersectoral measures to achieve socio-economic development objectives in a sustainable manner by improving urban and environmental quality and making more rational use of urban spaces: the aim is to increase the attractiveness and competitiveness of the urban area.

In accordance with the principle of concentration and achieving the greatest possible effectiveness, Plans must relate to a defined and discrete area of a city and must ensure spatial continuity between the projects. A plan may involve two eligible neighbouring municipalities, provided that the measures are homogeneous and integrated, form part of a common strategy and relate to adjacent areas. Plans may not merely be a collection of measures.

The objectives of the Plans may be achieved by rehabilitating and improving the existing physical environment for collective use, for advanced service functions through an integrated strategy that is socially, environmentally and economically sustainable. The objective is thereby to assist in enhancing and “reinvigorating” urban areas with a high density of population and businesses in order to improve their competitiveness and, by means of targeted and concentrated territorial marketing and other methods, to make them more attractive for both highly productive human resources and outside investors.

The aim is to improve the urban environment and city landscape in the context of integrated planning, with a view not only to achieving sustainability but also to involving the players and citizens in the planning process.

In particular, Axis V provides for five lines of action:

1. the reclamation and improvement of the urban environment and areas for productive activities intended for new premises for public services, advanced services and R&D,
2. the creation of spaces for collective use (tourism, commerce, services),
3. the enhancement of the cultural heritage,
4. crèches,
5. infrastructure for personal services (social infrastructure).

¹ In Italian: *PIUSS – Piani Integrati Urbani per lo Sviluppo Sostenibile*.

² In Italian : *Disciplinare di attuazione*.

The set of operations under IPSUDs must provide for total OP-eligible public expenditure of not less than EUR 20,000,000 and not more than EUR 50,000,000.

1.4.1 *Priorities and criteria for assessing proposed IPSUDs*

In view of the limited resources available, strict assessment criteria have been laid down, which award a high score to Plans that ensure:

- urban and environmental quality (Article 37 of Regional Law No 1/2005)
- measures designed to reclaim and re-use existing premises
- the prevention and reversal of urban decay (Article 37 of Regional Law No 1/2005)
- the socio-economic impact
- effectiveness,

by giving priority to:

- the functional use of public spaces
- the promotion of a functional mix of urban settings
- the use of particular sustainable building methods (“bio-architecture”) aimed at saving energy
- the improvement of peripheral areas
- the creation of new urban centres.

In particular, Regional Deliberation No 239/2008 defined the evaluation criteria with the aim of ensuring that the evaluation process was highly selective. Selectivity is pursued by:

- laying strong emphasis on the **principle of concentration**: territorial concentration (cities with more than 20,000 inhabitants or combinations of cities are accepted), physical and functional concentration of measures (the project areas have to be adjacent to one another), financial concentration (the minimum threshold for the total investment of an IPSUD has been set at the relatively high level of EUR 20 million and the maximum at EUR 50 million), thematic concentration on the priority issues identified in the OP;
- introducing **consistency criteria**, not so much in terms of formal compliance (except as regards compliance with the operational objectives of the OP and the prescriptions of the urban Master Plans, which obviously determines the admissibility of the IPSUD) but rather in terms of the capacity to contribute proactively to the priorities of regional programming and local planning;
- paying close attention to **quality criteria**, in other words measuring the ability of IPSUDs to capture the potential of the urban environment, to create poles capable of providing strategic urban services and functions (and raise the competitiveness of the area over a wide range), to produce structuring effects, to improve standards of living and social inclusion, and to achieve the objective of balanced and sustainable local development. The quality of IPSUDs is directly correlated to their degree of integration. The selection criteria

- make it possible to reward explicitly the integration of operations – both between operations within the IPSUD and between such operations and projects carried out or under way in the area concerned – thereby maximising the value added of the integrated approach;
- ensuring that the **concentration processes** and the **consultation of local communities** affected by Plans are effective and of high quality;
 - maximising the **technical feasibility** of IPSUDs and their individual operations, measured in terms of the maturity of their planning and the appropriateness of their time-cost schedules;
 - optimising the **use of the public financial resources** under the OP and stimulating **local co-financing** and the **investment of private capital**.

2 DEVELOPMENT OF INSTITUTIONAL INSTRUMENTS FOR JESSICA

2.1 Structure of the Holding Fund and Urban Development Funds

This section identifies, in general terms, the characteristics of the financial engineering instruments promoted by the JESSICA initiative (“JESSICA instruments” or “JESSICA funds”): Holding Funds (HFs) and Urban Development Funds (UDFs). “Integrated plans for sustainable urban development” or “integrated action plans” are dealt with later in the document.

In general terms, the Community regulations define the JESSICA instruments as follows:

- ✓ **Urban Development Funds** invest in public-private partnerships and other projects included in an integrated plan for sustainable urban development (Article 46 of Commission Regulation No 1828/2006);
- ✓ **financial engineering instruments**, including holding funds, are set up as independent legal entities governed by agreements between the co-financing partners or shareholders or as a separate block of finance within a financial institution (Article 43 of Commission Regulation No 1828/2006);
- ✓ **Holding Funds** are established to invest in a variety of urban development funds (Article 45 of Commission Regulation No 1828/2006).

Leaving aside the specific constraints imposed by the legislation of the different countries, it is difficult to decide on the most appropriate structure for JESSICA instruments without first obtaining an overall view of the way in which they operate under an Operational Programme. This overview is necessary to increase the effectiveness of the combination of subsidies, Holding Funds and Urban Development Funds and to avoid duplication of functions or conflicts between the activities of Managing Authorities (MAs), HFs and UDFs. The characteristics and functions of UDFs and HFs are described briefly below in order to facilitate this overview.

Characteristics of UDFs

As stated above, the Commission Regulation does not specify the functions of a UDF. Such funds must be configured to comply with the legislation and strategic objectives of the Managing Authority, and their structure has to take account of three dimensions:

- territorial focus: for UDFs established for particular territories, such as individual cities (e.g. the UDF for the capital city), districts (e.g. UDFs for run-down districts in several cities), or types of urban context (e.g. UDFs for medium-sized cities). The managers of funds of this kind should have not only the essential technical expertise to assess investors’ risks and

potential financial reward but also the professional ability to evaluate in particular the risks and opportunities associated with portfolios of investments in particular urban territories;

- thematic/sectoral focus: given that the fund's field of activity is urban and, in particular, that the projects must be part of integrated plans for urban development, a thematic or sectoral fund concentrates on a particular sector or theme, such as the environment/energy (e.g. a UDF for energy-saving measures), industrial (e.g. a UDF for premises/sites for innovation/research and development), social (e.g. a UDF for social infrastructure in a system of cities), and so forth. Apart from general investment expertise, the manager must have specific skill in assessing investments in the sectors covered by the UDF;
- focus on the type of financing: the nature of the fund depends on the type of financing used, that is to say equity, loans or guarantees; in this case the fund is specialised according to the type of financing (hence, for example, a UDF for guarantees to PPP contractors).

In general, the number and type of UDFs have to be examined according to usage potential (hence the actual demand for the financial services that can be provided by means of financial engineering products to achieve the OPs' objectives of sustainable urban development), operational effectiveness and attainment of the minimum operational scale. In parallel, thought should be given to the appropriateness of establishing a Holding Fund to accelerate the creation of a system of UDFs, or increase its effectiveness.

The following activities could be performed by a Holding Fund:

- definition, on the basis of the MA's strategic investment priorities, of the HF's investment and divestment policy, including criteria for identifying UDFs and selecting their investments, to be submitted for approval by the Investors' Committee (usually set up by the Managing Authority or on its behalf);
- assistance to the MA and/or the UDFs in:
 - identifying and designing projects suitable for JESSICA and possible investments by UDFs;
 - preparing UDFs' action plans or business plans;
 - analysing and proposing structures for the control and governance of the UDFs;in this regard it is important to emphasise that, in order to avoid a confusion of roles and potential conflicts of interest, such assistance would consist of technical and methodological support, with the power of decision remaining with the MA as regards programme objectives and with the UDFs as independent managers of the fund's resources;
- preparation of the call for expressions of interest for financial intermediaries and/or other bodies potentially interested in establishing UDFs or performing as a UDF;

- negotiation and finalisation of the contractual arrangements governing relations between UDFs and the HF as agent of the MA, including funding agreements, internal regulations, legal supporting documentation and provisions for winding up the fund and exit by investors;
- management of the portfolio of investments created by the UDFs, in which the resources assigned to the HF by the Managing Authority are to be invested;
- where necessary, specific assistance to the UDFs in implementing investments, possibly on the basis of specific provisions in the funding agreements between the HF and the UDFs, here too bearing in mind the risk of conflicts of interest and avoiding a confusion of roles between the taking of a decision to finance a specific investment and assistance after the decision have been taken;
- monitoring of the performance of the investments in the UDFs and the reporting of information to the Investors' Committee;
- preparation of systems of reporting and accounting compliant not only with national regulations but also with the lending requirements of the Structural Funds;
- where necessary, assistance to UDFs on Community issues relating to state aid and the interpretation of Community regulations, especially regarding admissible expenditure;
- definition of the procedures for winding up the HF, including the provisions for the reutilisation of resources generated by investments in UDFs or, where applicable, left over after all guarantees have been honoured.

Bearing in mind that the formation of an HP is an option available to the Managing Authority, three possible schemes for a JESSICA-compliant structure can be outlined:

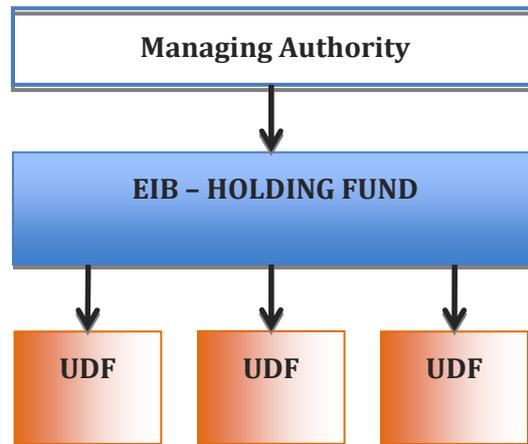
Hypothesis 1

The EIB as Holding Fund

EU regulations permit the MA to assign the role of HF directly to the EIB, without it being necessary to hold a public tendering process for award of the mandate.

Guidelines appear to differ from one EU country to another. In some countries, where the need for the MA to receive technical assistance from the EIB is more acutely felt, the role of HF could extend over the medium-to-long term. In others the EIB may act as HF for a shorter period in order to facilitate the launch of JESSICA instruments and permit a gradual transfer of knowhow to the MA and regional bodies, with the possibility of winding up the HF once its resources have been distributed to UDFs. In any case, it should be remembered that the formation of an HF is an option for the MA and that the MA may well consider it inappropriate, irrespective of the possibility of awarding the mandate to the EIB.

The formation of an HF is an interesting alternative in the initial stage in the implementation of JESSICA instruments where investment opportunities have not yet crystallised but it can be foreseen that they will be finalised at a later state in the planning period and the HF is used to speed up the achievement of these opportunities. The HF may therefore be viewed as a body at the service of the regional authorities that is not only able to disburse the Community portion of OP resources rapidly but also to support the Region in the provision of consultancy services and technical assistance that may prove necessary for implementing financial engineering instruments for urban development. In this sense, the HF can also assist municipalities, the Region, institutions associated with the Region and promoters in finalising the UDFs' investment proposals.



The swift creation of an HF would bring the following benefits:

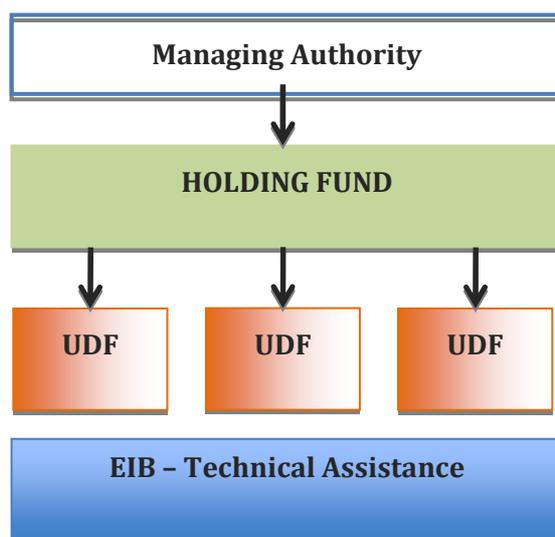
- early disbursement of Community funds and any state financing;
- greater opportunity to design and construct a system of Urban Development Funds where early disbursement makes it possible to mobilise additional resources that can be used for technical assistance;
- positive repercussions on the organisational and decision-making plane for the Region, since the HF would offer the various stakeholders – first and foremost the regional authorities – the opportunity, possibly with technical assistance from EIB departments, to design a long-term investment strategy operating through UDFs with objectives, investment evaluation techniques and types of project in line with the region's strategic objectives. In this case the EIB could, at least initially, assume a prominent role in providing technical and financial coordination and assistance, without prejudice to the regional authorities' central role in setting guidelines for and approving investments proposed by the HF.

Hypothesis 2

Financial institutions as Holding Fund

A financial institution other than the EIB but normally selected on the basis of publicly advertised competitive procedures could act as the HF. In this case the functions performed by the HF are similar to those described in hypothesis 1 (the EIB as HF), but the time required could be longer on account of the procedures for selecting the HF. Moreover, given that JESSICA is an innovative financial engineering instrument that calls for continuous interchange with the Community institutions and detailed knowledge of the procedures for planning and controlling Community financial engineering instruments, it might be more difficult for a local financial institution to provide the Managing Authorities with adequate assistance on this front.

It is also possible to envisage an arrangement in which UDFs and planning are initially handled by the EIB acting as the HF and where the EIB subsequently transfers its role to local level when experience with the JESSICA instruments is more established. The sharing of experiences and the spread of the relevant practices could therefore enable national or regional financial institutions to promote the creation of HFs in the various regions.



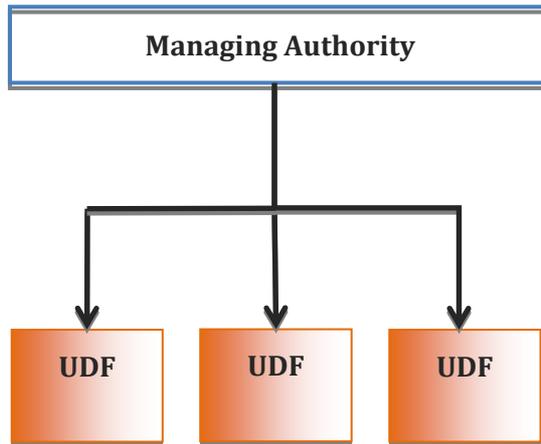
Hypothesis 3

Implementation of JESSICA without a Holding Fund

If it is decided not to form an HF, the Community resources are paid by the region directly to the UDFs, which will proceed to invest them in eligible projects.

Hence in this case the MA will not receive assistance from an HF in identifying UDFs and projects, nor will it delegate responsibility for managing investments in the UDFs to an HF. The MA must therefore either itself perform the functions of an HF or call on services provided by other units of the regional authorities or by external consultants. However, here too it can still receive technical assistance from the EIB. The potential advantages of this model lie in the financial saving from not having to pay the HF and a reduction in organisational complexity. It should be borne in mind,

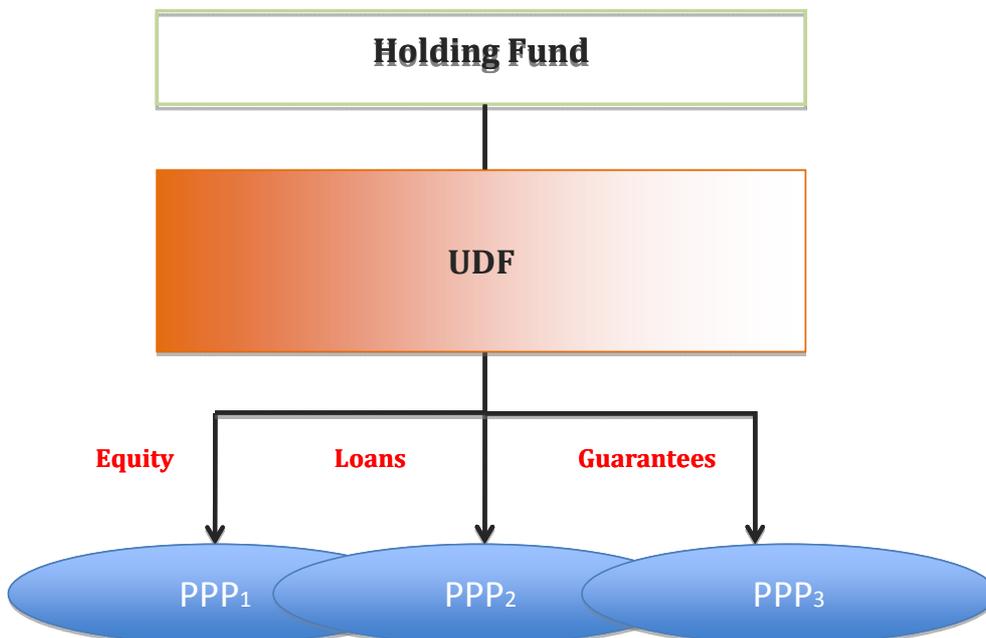
however, that the UDFs or the departments of the regional authorities and the MA must perform more functions, demonstrate expertise in an innovative field and – to the extent that it takes some time to get UDFs up and running – cannot earn interest on the sums used to fund the HF if it is not possible rapidly to activate one or more UDFs able to absorb the resources foreseen for the financial engineering instruments for urban development.



EXAMPLES

Hypothesis A: a single Urban Development Fund investing in equity, debt and guarantees

By way of example, an arrangement is conceivable in which there is a single UDF, with or without legal personality, investing in projects under integrated plans for sustainable urban development.



- In this architecture the formation of an HF may not be necessary or appropriate, except perhaps with a limited and temporary role during the preparatory stage or in order to bring forward the receipt of Community resources, while the overall functions of primary operator of financial engineering for urban development would be performed by the UDF;
- this arrangement can be implemented if it is possible to identify, from both the legal and functional points of view, a single financial engineering instrument able to acquire shareholdings in companies, grant loans and issue guarantees;
- since in the case of Italy it could be difficult to construct a body able to operate with different financial mechanisms, a UDF along these lines may be confined to using banking instruments – concessional loans and possibly guarantees – in a setting of multisectoral measures (indeed, several Member States are tending in this direction);
- the main advantage of this arrangement is its simplicity, particularly where a fund relies on concessional loans and may also operate in relatively unsophisticated financial situations or possibly during the initial implementation of JESSICA instruments.

Hypothesis B: a number of “specialised” Urban Development Funds

In this hypothesis a number of UDFs could be formed that were able to invest in PPPs and projects in a variety of ways, in the form of equity, debt or guarantees.

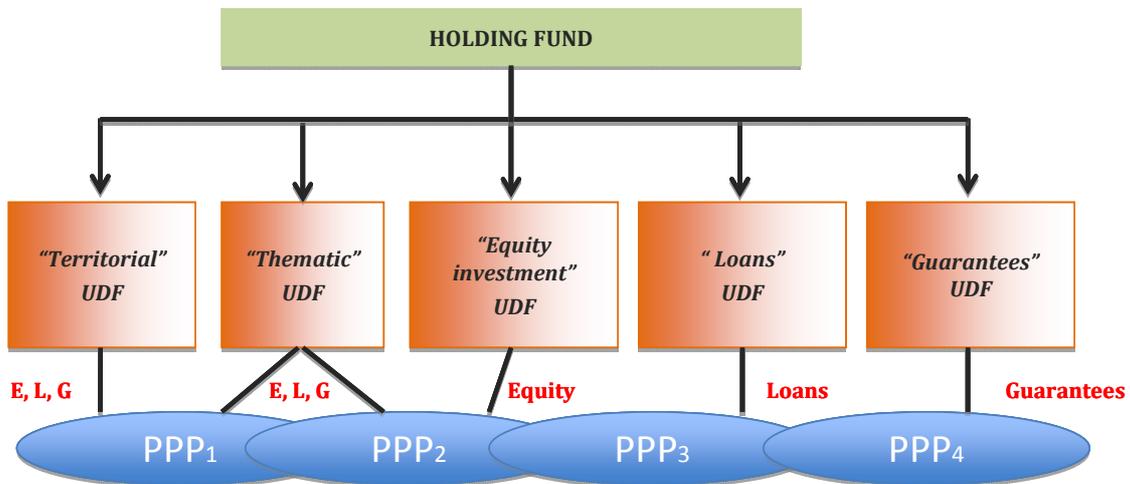
In particular, three types of UDF could be formed: territorial, thematic and “according to type of investment”. A “territorial” UDF is based on development strategies for a particular territory, such as an investment fund for a single city. A “thematic” UDF has specific themes, such as funds for energy saving in public buildings, in one or several cities or in a region’s urban territory. A UDF “according to type of investment” could be formed by bodies with the legal forms best suited to investments of various kinds in urban regeneration, thus ensuring specialised expertise in the management of a variety of financial investment instruments.

- In this case the HF could have the role of enhancing the overall consistency of the activities of the various UDFs;
- the governance arrangements of this setup (relations between the MA, the HF and the UDFs) could be more complex;
- the greater “customisation” of the UDFs for specific investment needs (thematic or territorial) and forms of investment (equity, debt or guarantees) brings them closer to current market practices and should increase market confidence in the UDFs, making it

URBAN DEVELOPMENT FUNDS - UDFs

easier to involve third parties and more likely that a significant financial leverage effect will occur;

- the differentiation for which this hypothesis provides is effective only where – other conditions remaining the same but taking account of the potential to tap private sector resources – the Managing Authority decides to invest a substantial volume of Structural Fund resources in JESSICA;
- this hypothesis also makes it possible to involve appropriate financial instruments and types of measures of the UDFs – for example, a “thematic” fund might operate better using equity instruments and a territorial fund using loan instruments.

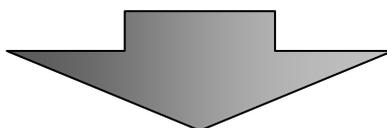


In conclusion, the MA's decision whether to create a **Holding Fund** will have to take the following **advantages and disadvantages** into consideration:

URBAN DEVELOPMENT FUNDS - UDFs

FOR	AGAINST
<ul style="list-style-type: none"> + Technical assistance + Earlier disbursement of Community funds and possibility of financing the HF's initial activities out of the interest income on unused funds + Greater opportunity to design and configure a system of UDFs + Delegation of tasks, some of which have a high-tech content and are administratively complex + Potential for institutional learning and for exchange of experience with other stakeholders in the design of complex governance arrangements + Independence of judgement, with potential streamlining of decision-making procedures 	<ul style="list-style-type: none"> - Additional structure - Procedural complexity at implementation, especially if it is decided not to use the EIB - Management cost. The financed projects must be able to remunerate the HF as well as the UDF.*

* The impact on management costs may be mitigated both by interest income and by providing that the HF's fees will be revised downwards once the capital has been completed invested in UDFs.



Each Management Authority must therefore base its assessment of the **benefit of establishing a Holding Fund** on consideration of the following aspects:

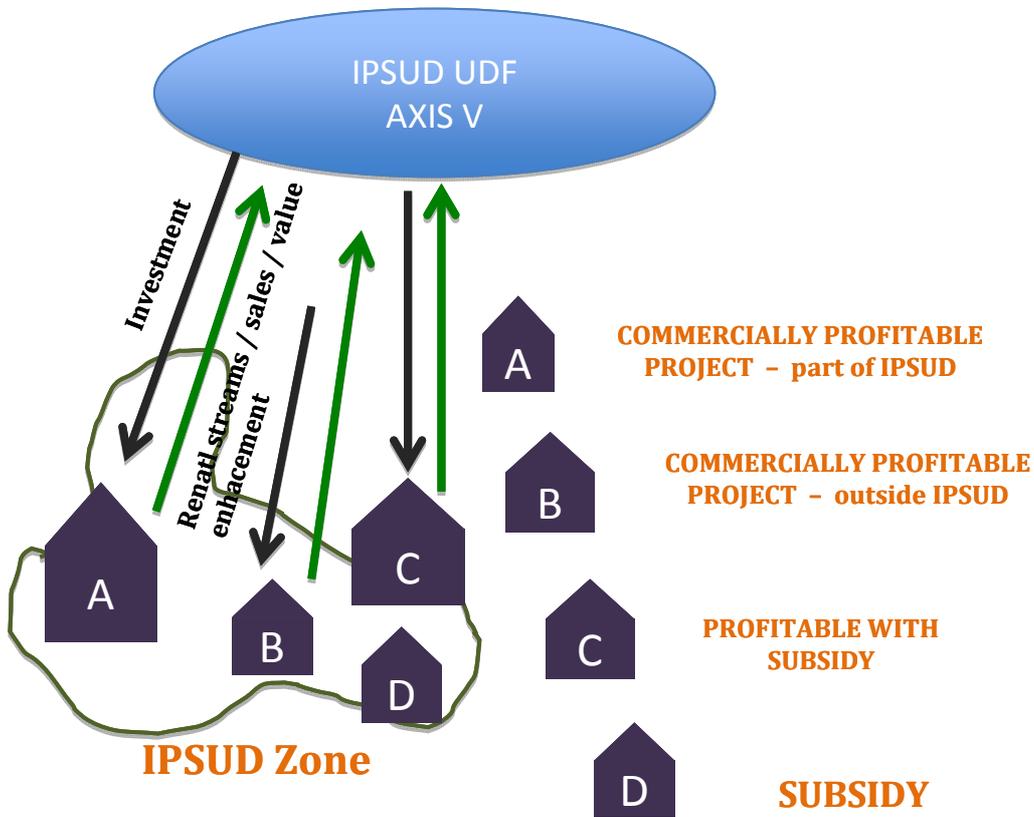
- Availability of a dedicated and highly specialised entity within the regional administration and the costs of such a body in relation to the cost assumptions for a Holding Fund;
- Economic feasibility of purchasing services from consultants outside the regional administration by comparison with the scope for using interest income earned initially by the HF to cover the cost of specific assistance;
- Relative ease of "liquidating" the contractual and legal entity if regional priorities change.

The next section contains a more analytical presentation of the institutional instruments for JESSICA, especially as regards the formation of a fund based on the equity model.

2.2 Development of basic illustrative proposals

2.2.1 *Arrangement without a Holding Fund*

The first proposal takes account of the fact that there is already a procedure for determining a specific type of integrated plan for sustainable urban development under Community legislation (IPSUDs), and that the OP specifically provides for the use of JESSICA financial instruments for the priority axis in question. The proposal is therefore to establish a UDF to finance the “Jessicable” elements of IPSUDs and possibly other measures eligible for financing by means of financial engineering instruments.

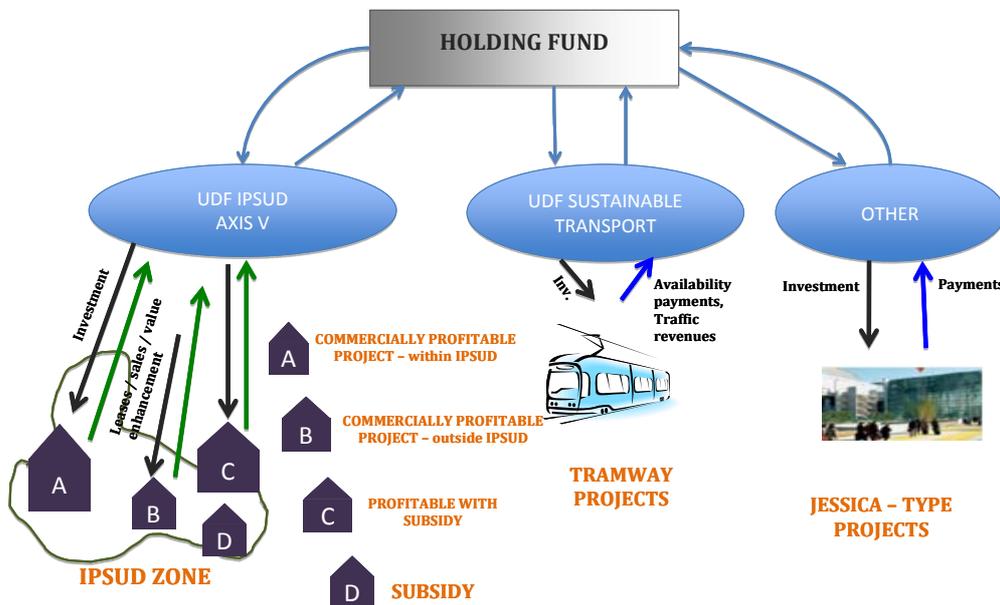


2.2.2 Arrangement with a Holding Fund

The next proposal illustrates the potential that would open up if the Region of Tuscany adopted the option of a Holding Fund, taking account of the fact that the IPSUD procedure exists, that the OP explicitly provides for the use of JESSICA instruments in the transport priority and finally that JESSICA instruments can be employed, if the MA considers it appropriate,

- a) either by drawing on Community resources from other priority axes;
- b) or in relation to Integrated Plans meeting the Community criteria but not necessarily falling within the scope of the IPSUDs or measures identified within them (“other” in the following diagram).

The general layout is illustrated in the following diagram:



“Multiple track” for plans and projects

The EU regulations do not lay down specific methods for selecting PPPs and the projects in which UDFs must invest. Subject to the need to identify projects arising in the context of integrated planning as part of a strategy of sustainable urban development and able to yield a return to investors, Managing Authorities have been given a high degree of autonomy, and have adopted different approaches in different countries. Some regions of Italy, including Tuscany, have used open competitions up to now.

In order to reap the maximum benefit from the flexibility of the mechanisms for selecting projects and defining integrated plans, selection could be based on the following procedures, which are not mutually exclusive:

- an open competitive approach

- a “window” approach
- a “direct designation by the region” approach.

Each of these approaches offers advantages and disadvantages.

The open competition approach

Using this approach, publicly advertised selection procedures are carried out to identify projects that can be financed under JESSICA. For example, the Managing Authority might publish a notice asking the local authorities in its territory to draw up Integrated Plans for Urban Development and to identify potential strategic projects in the area. This is the path followed by, among others, the Czech Republic, Brandenburg and the Region of Liguria by means of IPSUDs.

Advantages:

- consistency with traditional open competition approach for the award of grants
- transparency and fairness towards local authorities
- (potentially) minimises the scope for disputes

Disadvantages:

- limited time frame for the receipt of proposals
- less scope for negotiation and amendment of project proposals on a case-by-case basis.

The “window” approach

Under a second approach, the Urban Development Fund is interpreted as a permanent financial engineering window for urban renewal able to provide services designed to help promoters formulate or amend projects and/or Integrated Plans. This role, which may be performed by the Holding Fund during the initial stages of the initiative, draws on similar schemes provided for firms. It would encourage interested investors and local authorities to establish direct contact with the relevant Managing Authorities or, if they have been created, with financial engineering instruments (HFs and/or UDFs).

Advantages:

- consistency with the “on-demand” approach of financial institutions
- wider scope for negotiating and amending project proposals on a case-by-case basis
- fewer time constraints for the receipt of proposals

Disadvantages:

- greater (potential) risk of dispute and need to define mechanisms that ensure transparency and fairness towards all potential candidates.

The “direct designation” approach

It is also possible for the Managing Authority itself, working with the other departments of the regional authorities and other stakeholders, to identify specific projects – possibly “key projects” strongly affecting the region’s sustainable growth objectives – that meet the criteria for using JESSICA instruments and which can serve as a test bed of the functioning of the JESSICA mechanism. An approach of this kind might be appropriate during the launch phase of JESSICA instruments. Naturally, the examination of possible investments “designated” by the regional authorities does not mean that the UDF will accept the projects as investment targets; in addition to the criteria and priorities laid down in the funding agreement with the regional authorities (and possibly with the HF), the UDF retains its independence to assess the technical and financial validity of the projects in which to place investors’ resources.

Advantages:

- short timeframe for focusing resources on “key” projects and their allocation (subject to technical and financial approval by the UDF)
- wide scope for negotiating and amending project proposals on a case-by-case basis
- fewer time constraints for the receipt of proposals

Disadvantages:

- (potentially) greater risk of disagreements between the MA and local authorities.

It is therefore important to bear in mind that Community regulations leave these options open; they are not necessarily mutually exclusive and can therefore complement one another to a considerable degree.

3 URBAN DEVELOPMENT FUNDS (UDFs)

3.1 The basic models for UDFs

Under the Community's "urban regeneration" policy for revitalising critical urban and suburban areas, the initiative that goes by the name of JESSICA (Joint European Support for Sustainable Investments in City Areas) is aimed at promoting the creation of Urban Development Funds (UDFs), that is, "funds investing in public-private partnerships and other projects included in an integrated plan for sustainable urban development" (Article 44 of Council Regulation (EC) No 1083/2006).

The resources come from the financial assets of individual Managing Authorities (MAs), which can use part of their funding from the ERDF and the ESF in this way. The aim is to establish and operate a revolving financing mechanism that makes it possible to implement projects involving public and private actors.

The innovation therefore consists in the replacement of grants by revolving financial mechanisms, essentially equity, guarantees and loans. Repaid credits can be reinvested via the UDFs or returned to the MA to support other urban projects, including those financed by means of conventional grants.

The UDF does not have a privileged legal form under primary Community legislation, but it must be an independent entity or a separately managed "block of finance" within a financial institution and it can invest directly in Public-Private Partnerships (PPPs) or in "other" urban projects eligible for financing by means of equity, loans or guarantees.

The MAs could decide to invest directly in UDFs or, given the complexity of managing financial instruments other than grants, could deal with the UDFs via Holding Funds.

The principle underlying such instruments is to develop urban regeneration projects by forming a long-term fund that is economically viable thanks to the combination of various elements, such as contributions in kind of public property with high development potential, contributions of public property producing income, the construction of infrastructure producing cash flow and in turn using public funds, energy, transport, etc. In addition, it is plausible for the UDF to derive part of its income from public works and part from commercial projects.

For this to function, it is beneficial to involve long-term ethical and/or public-sector investors (government bodies, Cassa Depositi e Prestiti and banking foundations, amenable to returns that are adequate but not speculative) as well as private-sector investors earning market-related returns.

The UDF is designed to support the realisation of projects to do with urban development in a particular area or areas or on the territorial scale best suited to attaining the city's sustainable development objectives. The goals may be of various kinds; by way of example, they may relate to different objects, separately or in combination, such as basic public infrastructure, parks, public

spaces, transport and sustainable mobility systems, office and commercial premises, university and scientific research premises, equipment, leisure facilities, measures for protection of the land and prevention of natural risks, and more besides. They may also relate, again by way of example, to various kinds of measure, such as modification, conversion and exploitation/management of premises vacated by firms, scientific and technological activities, research and development, industrial archaeology, redundant barracks; improvements to transport systems, networks in general and local infrastructure, measures to ensure better liveability and better energy and environmental compatibility; measures to support incubators of technology firms.

In some cases measures involving objects situated away from the main site of interest have also been approved where their contribution may benefit implementation of the integrated programme of urban regeneration.

Under Article 46(2) of Council Regulation (EC) No 1828/2006, UDFs may invest by means of equity, loans and guarantees and urban projects receiving grant assistance from an operational programme may also be supported by UDFs.

The two possible forms of UDF that can be created in Italy stem from the ability/willingness to involve the private financial sector in the relevant market. There are two basic models: the equity or universal model, and the non-equity model, or simplified rotating loan fund.

The equity model satisfies the requirement of investors in the UDF for a minimum guaranteed medium-to-long-term return on their investment. By contrast, as pointed out above, the non-equity model is suitable in situations where the financial market is underdeveloped and public resources are sufficient and need no further leverage (particularly for underutilised areas).

From the point of view of economic and financial viability, the UDF must be sufficiently profitable to permit repayment and re-utilisation of the investment (non-equity fund) or to remunerate the equity and repay the debt (equity fund).

3.2 The equity model

In the majority of cases this model entails a shareholding in the capital of public-private partnerships (PPPs). The fund will have to manage its shareholdings in vehicle companies formed specifically to carry out and manage the project.

The instrument best suited to this type of fund is undoubtedly a regulated entity, and under Italian legislation the most appropriate form is the closed-end fund, and in particular real estate funds.

The use of a real estate investment fund as a UDF

From the technical point of view, the use of a real estate investment fund as an urban development fund certainly appears possible, offering considerable flexibility as regards both the investment needs (through the use of umbrella funds, for example) and the possibility of involving investors with different investment objectives.

The closed-end real estate fund will be established by an asset management company, which will participate in calls for tender issued by authorities managing Structural Funds (regional authorities) in order to obtain co-financing from OP resources, which could consist in non-interest-bearing revolving funds.

3.3 Non-equity model

This is a simpler model, consisting essentially of revolving funds based on “soft” loans. The UDF would take the form of a separate block of capital within a financial institution, selected on the basis of open competition.

A UDF may decide to invest its capital exclusively in activities such as the funding of PPPs, formed as vehicles for investment in Integrated Plans for Urban Development. The fund, which may also be financed exclusively by the region, takes the form of a revolving fund of low-interest loans remunerated at a weighted concessional interest rate. Other funding sources may be contributed by the financial institution responsible for management or by other institutions at market rates. The rate on the fund’s loans to projects would be the weighted average of the rates on the resources it raises. The financial institution managing the fund must remain independent and autonomous during the assessment of creditworthiness, subject to the general eligibility criteria set out in the funding agreement signed with the regional authorities.

4 URBAN REGENERATION AND TERRITORIAL DIAGNOSTICS

4.1 Logic of urban regeneration

In order to define the means of applying the JESSICA system to the Region of Tuscany it is necessary to introduce a definition of sustainable development projects that can be financed under that system. Attention focuses here on **regeneration projects**, a term that can refer not only to the restoration of the qualities an urban territory once had but also to a veritable “rebirth” of the territory in a new context in which all the dimensions that determine sustainable long-term growth change for the better. The term therefore goes beyond simply “urban renewal” in the real-estate and town-planning sense to include the factors underlying the overall sustainability of the urban areas and their competitiveness.

Urban regeneration may be defined as (EC 2006):

*“a process of renewal, or improvement and repair. In a public policy context the term is used to mean the combination of measures to transform a **set of physical and socio-economic variables**. Hence, a process of regeneration is commonly aimed at revitalising critical urban and suburban areas by taking actions relating to the **natural environment and infrastructure, conservation of the cultural heritage, social integration, employment and economic variables**”.*

From this initial definition it is clear that regeneration as a process of sustainable urban transformation does not refer simply to the physical transformation of particular parts of a city but describes a more complex set of measures that takes into account and influences a wide range of dimensions of the urban milieu:

1. **Environmental** (Place): the city or district viewed as a physical, infrastructural and environmental place.
2. **Social** (People): the community of persons living and working in the urban area and contributing to shaping it by developing human, social and cultural capital over time.
3. **Institutional** (Institutions): the public institutions and organisations representing the various communities and interest groups.
4. **Economic** (Economics): the economic and financial organisations and the services and opportunities for economic development.

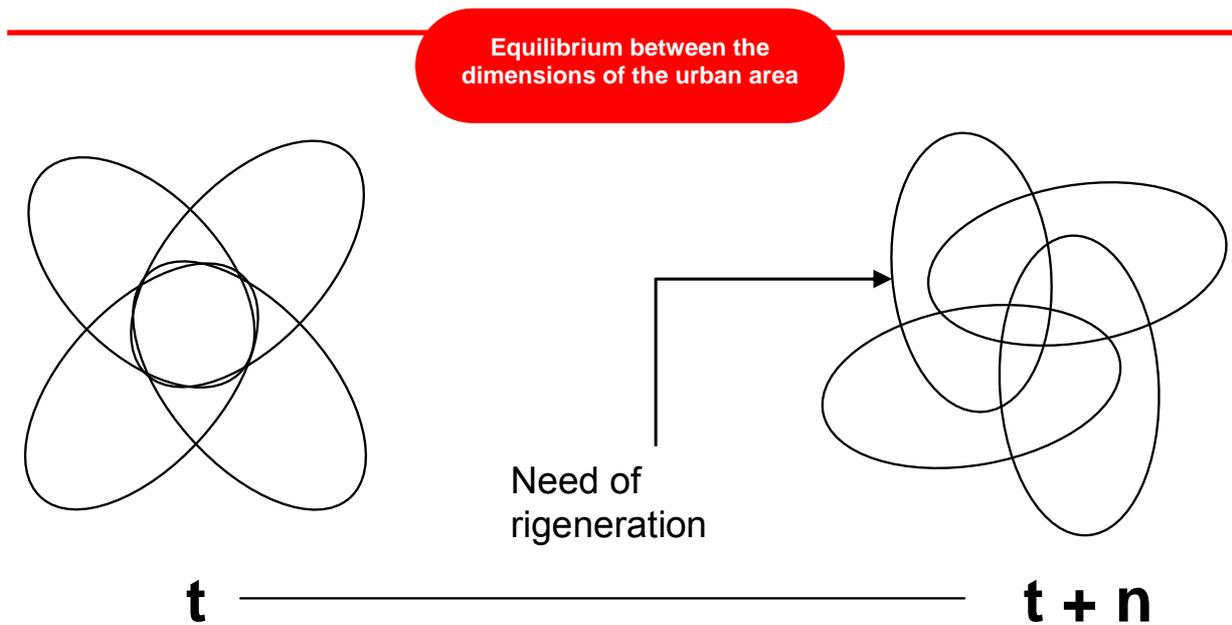
The interaction between these dimensions constitutes the **socio-cultural context of the territory and its competitiveness**. An urban system is competitive, in particular, if over time it maintains and develops the level of wellbeing of the individuals of which it is composed.³

³ IRPET.

Having defined the dimensions of the urban milieu, it must be borne in mind that they evolve and change over time, and that the harmony and consistency they may have achieved at a given period in time may not endure. In that case action to restore the equilibrium between the dimensions and their harmonious development is justified.

For example, the **environment** of an urban area may deteriorate in physical, environmental and technical terms owing to the obsolescence of its infrastructure and technology or pollution compared with other cities that may be better equipped, better located or higher in the ranking of urban status symbols. The **community of people** may suffer the trauma of the emigration of large groups or communities, or the immigration of communities whose culture and customs are profoundly different from those of groups already settled in the area. The existing **political institutions and economic organisations** may lose control over the economic and governmental processes of the territory and be replaced by new organisations.

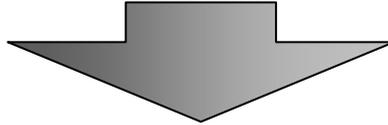
Figure 1



Urban regeneration measures must therefore also tackle the question of the instruments and methods needed to restore equilibrium between the dimensions of the urban culture by taking action where misalignments are largest and most pronounced.

In other words, an urban regeneration project becomes sustainable not only when it provides solutions appropriate to the various dimensions (environmental, social, institutional and economic) but also when it identifies and develops appropriate instruments and incentives for maintaining and/or restoring equilibrium over time.

Effective urban regeneration must therefore address not only the implementation of the project but also the question of its governance and management of the many changes and exogenous shocks likely to affect the city's development over time.



An effective urban regeneration project must therefore propose an array of measures that offer an appropriate and sustainable equilibrium between the environmental, social, institutional and economic dimensions. The project's impact on those dimensions must be analysed and as far as possible quantified.

In view of the long timeframes typical of urban regeneration projects, it is highly likely that imbalances or unexpected developments will arise after a number of years, despite the best ex-ante feasibility plan. Urban regeneration projects must therefore address the question of the instruments for governance of the project and for redirecting it over time, both during the planning and construction phase and during subsequent operation.

4.2 Territorial Diagnostics of the Tuscany Region

4.2.1 *Analytical objectives and methods*

The regeneration and development of an urban area is the result of changes in a large number of variables that have a wide-ranging impact on the life and experiences of the area's inhabitants by affecting the physical dimensions, social factors and relationships that characterise the area. A detailed analysis of those dimensions and factors must be carried out in order to be able to structure and control the process of territorial development.

The aim of such a territorial diagnostics exercise is to highlight the variables and dimensions that characterise the level of development of the territory and the main problems and critical issues that impede social cohesion and economic growth. From the point of view of the JESSICA system, the ultimate objective of the analysis is to evaluate the territory's competitiveness, interpreted as a combination of dimensions (people, place, etc.) and identify the determinants of the attractiveness of the area, which is essential if integrated and sustainable development is to be ensured.

Evaluation of the competitiveness of the territory enables the local stakeholders to:

1. identify the **strengths** that determine the attractiveness of the area on which to focus in order to promote the area's growth, but above all also the **weaknesses** that impede progress and determine a competitiveness gap in relation to other urban areas;
2. identify **ex ante** the development projects that are most effective in meeting the area's specific needs;
3. evaluate **ex post** the impact that the implemented projects have on the area's competitiveness, identifying progress achieved, scope for improvement and any errors to be avoided in future.

The purpose of this chapter is therefore to provide a snapshot of the relevant dimensions of the development and competitiveness of the Region of Tuscany, thereby endowing the preparatory study for the application of the JESSICA system with a useful set of data as a basis for analysing the suitability of individual projects for JESSICA. It goes without saying that an urban regeneration project cannot be evaluated in isolation from its context, which necessarily affects its long-term sustainability; in other words, the attractiveness of a project, and its "usefulness" in fostering the competitiveness of the area, can only be examined and justified by reference to the urban situation at the outset.

4.2.2 Environmental pressures

As to the quality of the environment, Tuscany is in a relatively good position compared to other Italian regions at a similar level of economic development. It has to be noted, however, that the level of environmental pressure is due to the concentration of the main industrial activities in a few areas – in the Arno basin and on the coast – where it is obviously above average and calls for attention on the part of the authorities.

4.2.3 Firms and the economy

Tuscany's industrial base relies still on a majority of small firms concentrated in traditional sectors. In recent decades the steady fall in employment in manufacturing has not been accompanied by adequate growth in the more innovative sectors of industry and services. The trend is less marked in the region's industrial districts, but this may conceal high risks in the event of wider crises due to external factors, as in recent years occurred in the clothing and textile sector.

4.2.4 Education

The education system in Tuscany has points of excellence, but the latter do not readily translate directly into an increase in the competitiveness of industry. In this context, the competitiveness of the cities depends heavily on their ability to attract human capital.

4.2.5 Demographic trends

Despite an expected increase in population due largely to net migratory inflows, the demographic projections for Tuscany show a steady ageing of the population and the emergence of single-person households as the predominant norm.

The population will be concentrated increasingly along the main axes of economic development which are likely to attract younger people, but especially foreign workers, who already make up a significant percentage in provinces such as Prato.

These trends highlight the importance of a number of issues:

- the development of social housing projects, embedded in urban regeneration projects eligible for financing, from which they can derive synergies and external economies;
- the social integration of foreign workers in the more developed areas and sufficient housing capacity to meet new demand from low-paid workers, including the above-mentioned social housing projects;
- the industrial capacity of the more developed areas is to match the migratory inflow and population growth, particularly in areas of high specialisation (industrial districts) where a crisis may have destabilising effects;
- a significant increase in public spending is to be expected, due to population ageing and a reduction in the redistributive effects of the extended family;
- income inequality between employees and workers on the one hand and self-employed professionals on the other is also likely to increase.

4.2.6 Mobility and transport

Tuscany's mobility infrastructure is congested, with negative impacts on wider economic efficiency and health. This can be attributed to:

- **the car ownership rate, which is among the highest in the country;**
- **the extra-urban location of many residential settlements, entailing high commuting costs and increases in non-systematic mobility;**
- **the inability of public transport to meet all the population's needs;**
- **the carriage of most goods by road;**
- **the urgent need to expand and modernise the coastal motorways from the ports of Livorno, Piombino and Massa.**

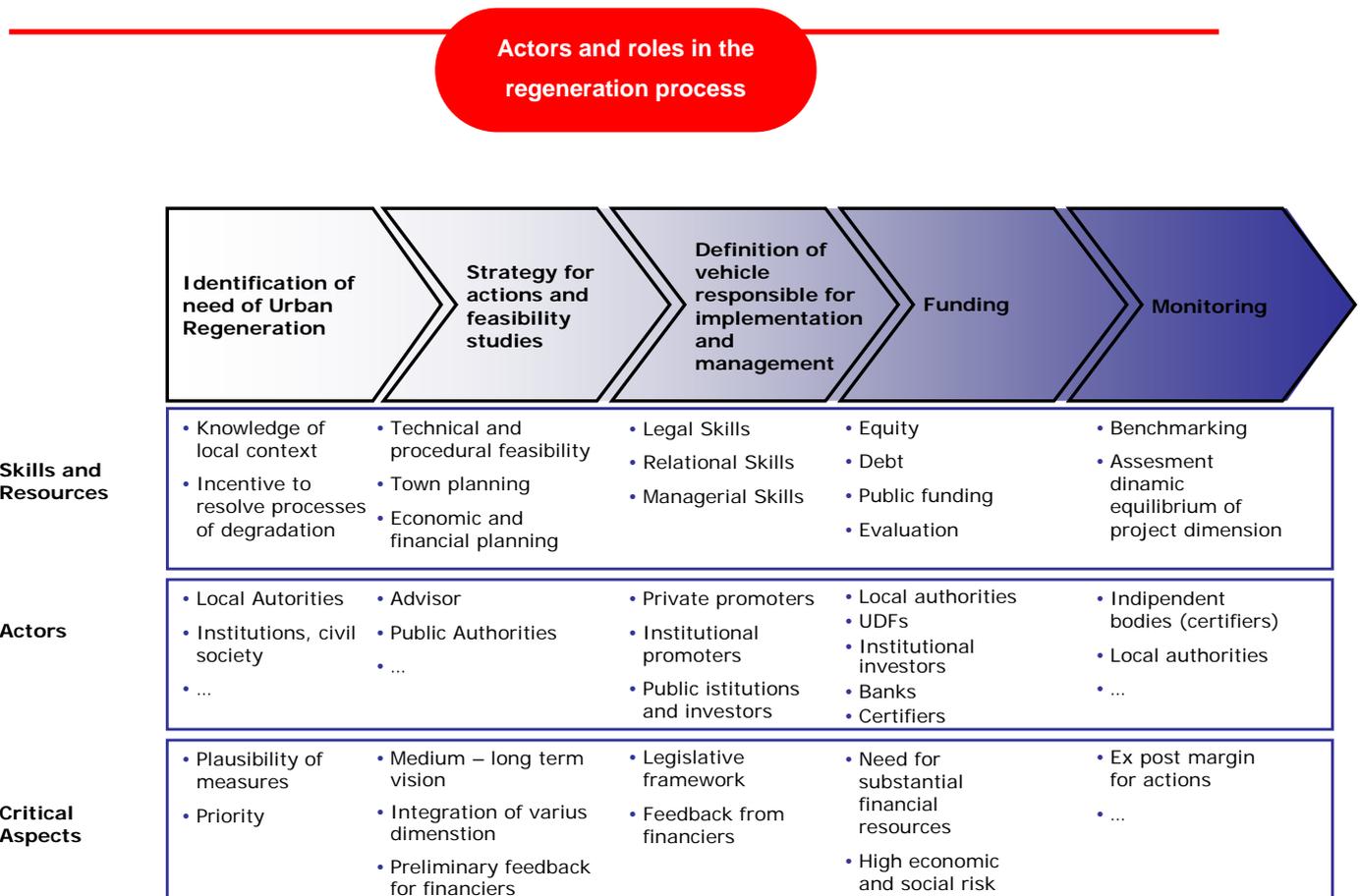
5 GOVERNANCE OF PROJECTS

A topic of fundamental importance in the evaluation and planning of urban regeneration projects is the question of governance, in other words the management of the project over its entire life. Defining the governance of the project means deciding who will be responsible for the operational management of all stages in its implementation and the relations that the manager should have with the project’s promoters and financiers.

The definition of governance calls for an optimum allocation of tasks, roles and above all risks among the various actors involved, taking into account all the characteristics and critical aspects of the project, in particular the timetable and the expected medium and long-term issues.

Figure 1 shows the five stages in the process of urban regeneration. In order to define the governance of the project it is necessary to consider skills and resources, the actors and the critical aspects for all stages in project development.

Figure 1



No project management approach can be deemed best a priori, since the choice depends on the characteristics of the project and the context in which it is to be applied. A public promoter of a

regeneration project intending to define the project's governance must therefore consider three aspects, concentrating especially on the questions of project management over time:

1. **The necessary skills and resources:** what specialist skills are needed to achieve the project's objectives, during the planning and implementation stages? Is the public body itself competent to manage the project efficiently and effectively over time, or does it need assistance from external professionals who can be found in the marketplace? On the resources side, it is essential to identify which funding structure is optimum, on the basis both of the expected profitability of the project and of the promoters' objectives and resources (in the light of budgetary constraints, *inter alia*).
2. **The actors:** the actors must be selected also on the basis of the necessary specialist management expertise that the promoters do not possess, but also according to the preferred method of project funding. A fundamental issue, but not the only one, is the identification of incentives (usually economic in nature) to maintain efficient and effective management of the project for private parties: a highly remunerative project will be able to attract private partners for funding and management, offering the expected earnings as an incentive for "good management"; by contrast, a low-yielding project with pronounced social characteristics will have to be structured so as to generate the necessary incentives, especially if it is desirable or necessary to involve private promoters.
3. **The critical aspects:** in an analysis taking a medium-to-long-term view, the critical management aspects relate to both the economic risks of the project and the management risks. The economic risks stem from the possibility that variations in revenue and costs will jeopardise the economic sustainability of the project. The management risks relate to the possibility that poor operational decisions, sometimes due to inadequate planning and preparation, or unforeseeable external factors will threaten the effectiveness of the project and the attainment of its objectives. Five factors need to be considered with regard to risk management and selection of the optimum vehicle:
 - a. the importance of adequate *ex ante* planning and *ex post* verification to define the best project architecture in relation to the expected risks and to verify its effectiveness;
 - b. the scope for the selected vehicle to raise capital at below market cost, a factor that ensures a higher degree of financial sustainability;
 - c. the need for projects that are integrated across several dimensions to be managed in an organic and coordinated manner so as not to lose effectiveness or stray from the strategies laid down at the planning stage;
 - d. the operational flexibility of the vehicle, which must be able to adapt to a changing environment and manage the related risks;

- e. the definition of adequate rules and regulations in the definition of the relationship between the promoters and managers, a particularly important factor if private promoters are involved in key roles.

The manager will be the entity that will take on the financial, economic and operational management, thus managing the project's flows of finance and performing all the necessary operational functions (directly or by outsourcing them to outside specialists).

In general, there are two main ways in which a public promoter can provide for governance:

- direct management of the project, either in-house or via a controlled entity, which ensures absolute and direct control of the initiative and its objectives but exposes the promoter to economic and managerial risk;
- management in partnership with external agencies, generally from the private sector; the public authority thus loses economic and managerial control, but the risks are spread among all the parties involved. In this case a suitable management vehicle must be constructed or identified that permits risks to be spread effectively among the parties best able to manage it, and similarly allows accruing revenues to be distributed adequately.

Figure 2 is an extremely simplified diagram of these two approaches to establishing governance. In the second approach the partnership method can be varied according to the type of vehicle adopted: a mixed vehicle enables the public entity to invest in venture capital alongside the private co-financiers, thus keeping open the possibility of influencing the governance of the project and part of the management risks; bestowing governance on private external bodies makes it possible to outsource management risks entirely, but makes it necessary to lay down clear and effective rules for the control and direction of the private body's actions. In this case the rules and regulations help create an adequate system of incentives for the private body. It is clear that the adoption of a different system of governance brings a different economic cost for the public promoter. In the case of a partnership, the overall financial cost it bears may:

1. decrease (along with the public authority's overall debt) in the case of highly remunerative projects managed by private bodies;
2. increase in the case of projects requiring the disbursement of grants or fees, but by way of compensation there will be a clear distribution of risks under which the private body will shoulder management risks, and hence possible further future losses that are unforeseeable or due to inefficient management, which would increase the overall cost of the operation.

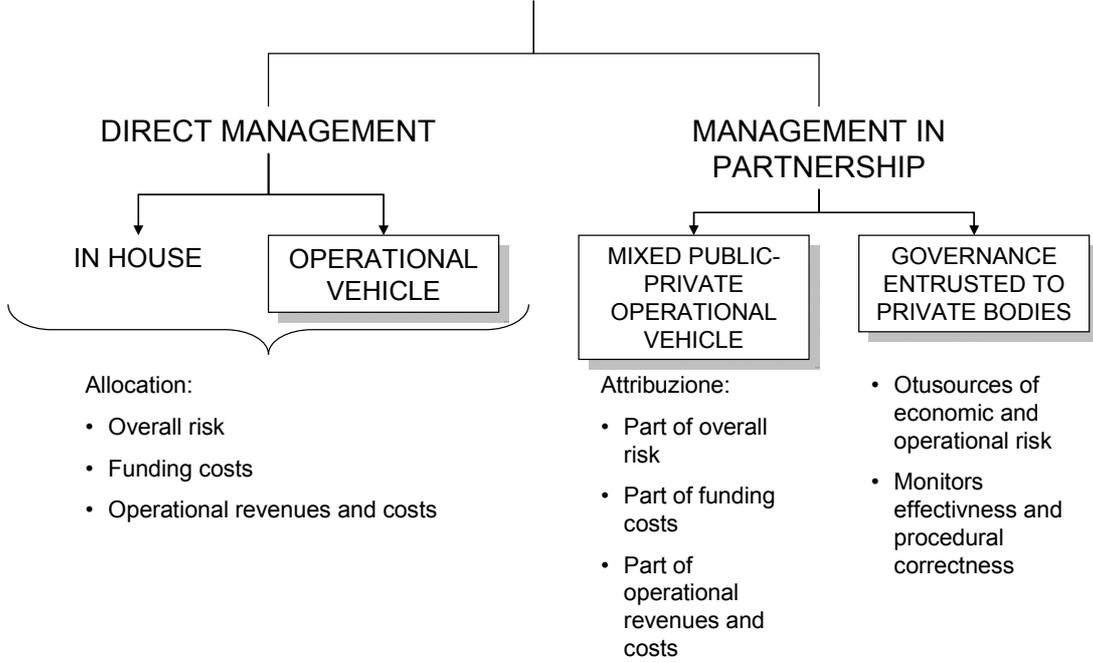
Figure 2

GOVERNANCE

Approaches to establishing governance arrangements

PROMOTER

(Local Authority, ...)



6 ASSESSMENT OF THE “JESSICABILITY” OF PROJECTS

6.1 General eligibility criteria

Identification of the “**Jessicability**” criteria of an urban development project consists in defining the features and characteristics that make a project eligible for financing under the JESSICA system.

The main characteristics of a system for assessing the Jessicability of projects can be summarised as follows:

1. JESSICA is an instrument for promoting and financing **projects** that are part of a wider **integrated** strategy for sustainable urban development. Under Community regulations, the projects that can be financed by Urban Development Funds must be included **in an “integrated plan for sustainable urban development”**. In general, this means a system of interconnected measures designed to produce a permanent improvement in the economic, physical, social and environmental conditions of a city or district within the city. The regulations however do not lay down detailed criteria for drawing up or identifying such plans. Mechanisms and criteria are left to the discretion of the Member States and/or Managing Authorities. Within such a plan, individual projects are structured, evaluated and implemented in order to capture synergies due to their interconnection, so that the results of the implementation of the plan in its entirety are greater than the sum of those of the component projects if they were implemented in isolation.
2. The second key innovation under the JESSICA system compared to the traditional use of Structural Funds is that funding is **repayable**, thus allowing for the invested capital to be repaid. Projects must meet general criteria of economic and financial sustainability, that is to say the ability, on the basis of the project’s cash-flow, to repay the debt and venture capital in accordance with investors’ expectations. Support for an urban development project acquires characteristics more similar to those of long-term investment. The Community regulations do not, however, state explicitly the required level of remuneration. Here too, the Member States and the Managing Authorities have considerable latitude to interpret the meaning of “repayable contribution”.
3. JESSICA provides for the establishment specialised investment vehicles - Urban Development Funds - an innovative instrument for funding and governing urban transformation investment. As well as being a vehicle to employ both public and private financial resources, a UDF also facilitates the development of synergies in the management of urban regeneration projects, in that potentially it makes it possible:
 - a. to transfer, at low cost, best practice between the various projects financed by the Fund;
 - b. to define minimum qualitative standards and benchmarks for projects;

- c. to provide opportunities to transfer to the local economic players effective investment methods and instruments;
 - d. to achieve efficiency, through the use of specialised managers directly responsible for the results of their actions, and transparency, owing to the governance and supervision criteria to which such managers are normally subject.
4. The investments financed under a JESSICA project can have a significant leverage effect, especially with respect to the resources invested directly by the public authorities in UDFs.⁴ A first leverage factor stems from the funding of projects via **public-private partnerships**, in which, other conditions being equal, an effective allocation of risks between the public and private sectors may lead to a reduction in public resource requirements. A second leverage factor, which is also typical of partnership projects, relies on using **debt capital** to finance investment. The ability to service the debt is related directly to the project's cash flow, which guarantees its economic and financial sustainability.
5. The criteria for determining whether resources under Operational Programmes are eligible for JESSICA instruments are the same as those applicable to Structural Funds. They must therefore comply with Community legislation and take account of any specific national restrictions.⁵ For example, in Italy and the other EU-15 countries the residential sector is specifically considered ineligible under Community regulations.⁶ By way of illustration, measures may be taken in the following sectors:
- a. urban infrastructure: transport, water resources/waste water treatment, energy, etc.;
 - b. historical or cultural heritage, for tourist purposes or other sustainable uses;
 - c. conversion of abandoned industrial sites, including reclamation and decontamination work;
 - d. office space for small and medium-sized enterprises and for firms in sectors such as information technology and R&D;
 - e. university premises, including facilities for medical, biotechnology and other specialist activities;
 - f. improvements in energy efficiency.

Expenditure items that are not eligible may, however, be included in a broader, multi-sector plan or project, provided that such non-eligible expenditures can be financed by other public or private sources or from resources that are not drawn from the Operational Programme.

⁴ The UDF can multiply public sector resources invested in urban regeneration, especially if the authorities have opted for the fund model based on venture capital.

⁵ Under Community regulations, any further eligibility requirements for the use of the resources of Operational Programmes are left to the Member States.

⁶ Social housing is eligible for funding (subject to certain conditions) only in the twelve Member States that joined the Union after May 2004.

6.2 Matrix for evaluating urban regeneration projects

An attempt to devise a system for assessing the Jessicability of urban regeneration projects calls for the construction of a standard matrix to show the key project features and facilitate the screening and creation of portfolios of projects suitable for JESSICA instruments. The evaluation method proposed in this document provides for the use of two matrices, the first qualitative and the second quantitative.

Qualitative matrix

The qualitative matrix aims to show the characteristics of the project concerning its governance, the type of works, its strategic role in the integrated plan and in promoting the competitiveness and attractiveness of the city area.

The qualitative variables considered are shown in the following synoptic table.

Figure 1

Example of a qualitative matrix

QUALITATIVE MATRIX

Characteristics	Project 1	Project 2	Project 3	Project 4	Project 5
Type					
Sector					
Governance					
Positioning in the IPSUD					
Economic and financial sustainability					
Payment mechanisms					
Effects on dimensions of the territory					
Environmental					
Social					
Economic					

The qualitative analysis calls for an attentive evaluation of the widest range of characteristics and features of the project (governance, location, timeframe, impact on the social fabric, characteristics of buildings and infrastructure, effects on the main engines of competitiveness, etc.) in order to define not only the type of project but also to detail its impact on the territory and on the development strategy chosen by the governance bodies.

Quantitative matrix

The quantitative matrix is a necessary complement to the qualitative criteria. The criteria in the matrix consider aspects of fundamental importance for the quantified assessment of the economic and financial sustainability of the project. The aim is to “quantify” and justify the definition of “hot”, “warm” and “cold” projects by measuring in detail the composition of sources of funding needed for the project to be financially sustainable. The quantitative matrix presented in this section may well be accompanied by an analysis of socio-economic performance, which sets a cost/benefit analysis of the project alongside an assessment of financial profitability. The quantitative variables considered are shown in Figure 3.

It is clear that in order to carry out an in-depth quantitative analysis it is first necessary to perform a specific analysis of the economic and financial dimensions of the project. Specifically, calculating indicators of sustainability and profitability requires estimating the project’s expected cash-flow. This is calculated drawing up a forecast project budget at current costs, consisting of the balance sheet, profit and loss account and financial statement, and flows of funds on an accruals accounting basis.

Once such preliminary work has been carried out, it is possible to identify the indicators and quantitative data needed to assess the suitability of the investment project for JESSICA instruments. If the project is still at the planning stage, this assessment makes it possible to determine not only whether the project is Jessicable, but also the conditions for it to become so or which project features can be improved. In this way the assessment of Jessicability may constitute a further stage in project design, which also makes it possible to show which parameters and how leverage can be adjusted in order to make the project suitable for UDF funding.

Figure 3

Example of a quantitative matrix

QUANTITATIVE MATRIX

Characteristics	Project 1	Project 2	Project 3	Project 4	Project 5
Timeframe					
Planning					
Construction					
Management					
Payback period					
Financial structure					
Own funds					
%					
amount					
Debt					
%					
amount					
Mezzanine					
%					
amount					
Profitability					
NPV for project					
IRR for project					
NPV for shareholders					
IRR for shareholders					
Sustainability					
Average DSCR					
LLCR					
Grants					
Capital grants					
Operating grants					

The quantitative analysis calls for the carrying out of specific and sophisticated analyses of economic and financial planning, which make it possible to estimate the sustainability and profitability of the project. Such analyses are particularly effective if carried out at the planning stage, as they also make it possible to show which variables can be adjusted to improve the Jessicability of the project. The analysis typically uses profitability indices (NPV - IRR) and sustainability indices (DSCR – LLCR).

6.3 “Jessicability” criteria

The next step in the construction of a matrix of qualitative and quantitative characteristics for assessing the Jessicability of a project is to identify criteria for checking whether an urban development project can or cannot be financed by a UDF and the conditions on which it could become eligible.

Three types of criterion emerge:

1. Criteria concerning the **structure** of the project: they relate to the procedures and governance conditions that enable the project to be financed by a UDF and derive directly from the architecture and objectives of the JESSICA system.
2. Criteria concerning the **objectives** of the project: aimed at checking that the objectives and characteristics of the project are consistent with the requirements of regeneration and development of the urban area in which the project will be carried out. This assessment is therefore aimed at ensuring that the UDFs’ funds are targeted exclusively at projects that foster sustainable growth in urban areas, to the direct benefit of all of its inhabitants.
3. Criteria concerning the **economic and financial** complexion of the project: projects must be financed on a revolving basis and also make it possible to remunerate the resources invested in the UDFs. Hence an assessment of the revolving nature and expected profitability of the investments is required.

Structural criteria:

- a) A project is considered Jessicable only **if it is included in an integrated plan for urban development** – for example in Tuscany, in IPSUDs.
- b) A project is considered Jessicable **if it can be financed by means of a form of public-private partnership or, if other methods are used, if the projects financed can guarantee repayment of the capital**. The preferred structure for implementing PPP operations envisages entrusting planning and construction to a vehicle financed in turn by the UDF, particularly if it is decided to finance the projects with venture capital – the equity model – through the purchase of capital shares in the project company. Remuneration of the investment derives from the right to proceeds from managing the asset for a set period of time. It follows that, of the various forms of partnership:
 - **project financing through mixed companies** (urban renewal companies) appears better suited to the JESSICA system in that it makes it possible to entrust financing of

the works and the governance of projects to vehicles whose capital shares can be freely bought and sold by the UDFs;

- **the award of a management contract** calls for the involvement of specialised managers rather than financiers, so that this option is not considered the most appropriate for the JESSICA system;
 - **financial leasing** is an alternative to direct borrowing, under which a bank, instead of granting a loan to the public authority, finances the construction, and in some cases takes the responsibility of maintaining, the public asset in exchange for rent paid by the public body. This is not necessarily the most appropriate form of partnership for the JESSICA system, but UDFs could in some cases employ this approach if such transactions generated value for the public and private parties and project stakeholders.
- c) Alternatively, the non-equity model provides that projects may be financed using debt capital (probably at subsidised interest rates). In this model the UDF takes the form of a loan-based revolving fund.
- d) According to the current eligibility criteria under the Structural Funds regulations, projects focusing exclusively on residential construction are not eligible in Italy. However, multi-sector projects including some eligible components in addition to residential assets are Jessicable.
- e) Under Commission regulations on UDFs, such funds may not invest in real estate in order to directly re-develop and manage the assets and manage urban regeneration projects.

Criteria relating to objectives:

- a) A project should be considered Jessicable only if allows it to take action to correct unbalances within the urban area in which it operates, and hence if **its objective is to increase the competitiveness and attractiveness of the urban area** by supporting the area's development and sustainable growth. In order to establish whether the configuration of an urban development project meets this criterion, a detailed analysis of the project's impact on the variables determining the sustainable development of the urban area is required. Such an analysis should be complemented by an examination of the broader territorial competitiveness, highlighting the critical dimensions on which attention should be focused and the needs and drivers of the territory's development.
- b) A project is considered Jessicable **if it contributes to raising the competitiveness and attractiveness of the urban area in the long term**. In this respect the consistency of the project with the principles of sustainable development depends on the durability of its impact, which must be maintained over time. It is therefore necessary to assess whether

the effects of the project are sufficiently robust over time for the planned objectives to be achieved, and also to assess the impact of any exit strategy the UDF may have, in case it considers appropriate to withdraw from some projects before their effects on urban transformation have fully unfolded. In order to maintain an appropriate balance between the dimensions of urban regeneration it is also necessary to assess the efficiency and governance of the vehicle adopted to manage the project. Under appropriate governance mechanisms, the vehicle will be able to tackle exogenous shocks and emerging unbalances between the various urban dimensions, keeping the development of the project consistent with its initial objectives.

Economic and financial criteria:

- a) A project is considered Jessicable **if it can achieve a certain level of financial self-sufficiency, ensuring the revolving nature of the invested capital**. It follows that the project must display the following characteristics:
- the Internal Rate of Return from its cash-flow must normally be positive or at least in line with the expectations of the investors, including the Managing Authority, and in accordance with the Funding Agreement between the Fund and the MA;
 - its average Debt-Service Cover Ratio (DSCR) must be above unity (in the case of projects under project financing arrangements, the minimum DSCR required is normally 1.3⁷ in each period);
 - its IRR and NPV for shareholders must meet the minimum target demanded by investors in the Fund;
 - assuming that the conditions set out above remain unchanged and that the project meets its objectives of socio-economic effectiveness, its financial structure must be such as to minimise the payment of public grants;
 - assuming that the conditions set out above remain unchanged, the project's risk profile must be within the limits foreseen by investors in the Fund, in line with the risks revealed by an analysis of expected variations in the remuneration of the project and changes in key driving parameters (prices, inflation, demand, interest rates, etc.).

As has already been shown, the assessment of the Jessicability of an investment is better made before detailed design and may provide further opportunity to configure and optimise the project.

⁷ A figure of at least 1.3 is usually demanded by banks as a requirement for projects carried out under project financing arrangements.

However, a relatively advanced stage in project design is one of the conditions for including a project in an IPSUD under the configuration laid down by the Regional Government of Tuscany. The application procedures require all the characteristics of the project to be fully coherent with the strategy for regional development and urban planning obligations, and the project's economic and financial viability needs to be assessed in advance. The inclusion of a project in the IPSUD therefore gives sound reason for considering the projects as candidates for investment by JESSICA-type instruments.

7 ANALYSIS OF PILOT PROJECTS

As a necessary complement to the system established in this study for assessing urban regeneration projects, this chapter describes certain pilot projects taken from the past programming cycle, the features of which serve to show how the project in question “would have been” if it had been funded using the JESSICA model. The two projects examined are from projects that were actually financed and developed in the Region of Tuscany under the Documento Unico di Programmazione (DOCUP, Unitary Programming Document) 2000-2006.

The reworking of the projects follows the two possible JESSICA development models: the equity model, which provides for the projects to be funded by acquiring shares in the management companies even at low rates of return (in any case below those expected by the market), and the non-equity model, which provides for them to be funded by means of debt, possibly at concessional below-market rates.

7.1 Hydro-electric power plant in the Province of Massa

The project, which was financed and implemented in 2003, consists in the restoration of the hydro-electric power plant attached to the spinning mill in Forno, close to the city of Massa, in order to create an eco-energy centre attached to the Parco delle Apuane (Regional Park of the Apuan Alps). Although the primary objective of the project is to enhance the park’s tourist services by creating a visitor service centre, it also intersects with environmental issues related to the conservation and sustainable use of the area’s natural heritage and economic issues associated with the search for renewable energy sources.

The technical aspects of the project, in its original configuration, are as follows:

- the project is managed and governed by the Municipality of Massa, which owns the premises and benefits directly from the scheme;
- the overall investment amounts to about EUR 1 million, of which around 25% is covered by a grant and the remaining part financed by the Municipality of Massa, which retains project management responsibilities;
- the project provides for construction to take one year and management to last for 25 years;
- the project’s receipts stem from the sale of electricity and expenditures consist of fixed and variable management costs associated with electricity generation. Given the healthy flow of revenues in relation to costs, the project’s IRR works out at 12%, with a grant of 25% of the investment amount;

- in summary, given the project's ability to cover its costs and pay a return on the initial investment, the total grant resources invested by the public authorities equal EUR 0.25 million.

7.1.1 Reworking of the project for JESSICA: equity model

Configuration of the project under the JESSICA system requires three fundamental steps:

1. the formation of a mixed (public-private) company (Special Purpose Vehicle – SPV) to act as an operational vehicle by the scheme's promoters and beneficiaries (in this case the Municipality of Massa), which will be responsible for the implementation and management of the project;
2. the purchase of shares in the SPV by institutional investors and the UDF in order to finance implementation of the project, thereby allocating risks and rewards among the public and private actors;
3. the possible involvement as shareholders, of specialised bodies with proven experience in the management of hydro-electric power plants or in energy generation.

The new configuration for governance of the project has significant consequences, both on the management level and from the economic and financial point of view.

Managerial consequences:

- clear separation between the main beneficiary/promoter of the project, the Municipality of Massa, and the manager, the vehicle company;
- delegation of project management responsibilities to a body concentrating exclusively on that task and possessing specialisation and specific expertise in the sector;
- control of the project impacts on the local territory rests with the Municipality (promoter), which holds shares in the SPV and may prescribe particular governance powers when the vehicle is formed (see regulations on mixed companies);
- allocation of management risk entirely to the SPV, which must be structured in such a way that it can adequately sustain that risk;
- the possibility of providing greater transparency in the management of the project by identifying income and expenditure flows relating to the activities of the SPV.

Economic and financial consequences:

- purchase of SPV shares by the UDF through equity investment, on which the required return is below market rates. In this way it is possible, for the same income flows, to increase the expected return for the remaining investors and to reduce the risk they bear on their investment in the vehicle company.

- The SPV can borrow without burdening the budget of the Municipality of Massa, thus making it possible to further optimise the profitability of the project for investors.
- Increase in the desirability of the project to private investors attracted by the expected profitability of the investment.
- At the same time, reduction of the Municipality's financial exposure towards the project by leveraging public funds, thereby reducing its investment share and associated risks.

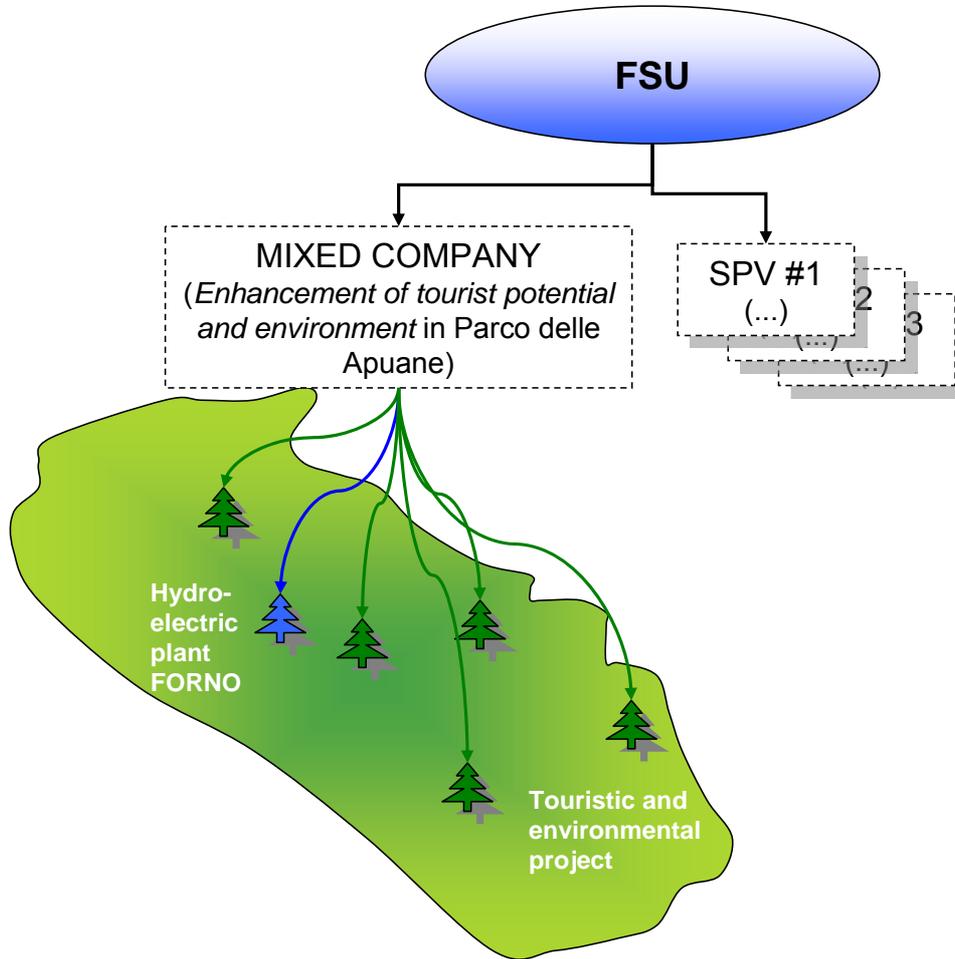
The institutional and financial structure of the project can thus be determined on the basis of the forecast cash-flow pattern and the form of governance. The analysis is subdivided into qualitative and quantitative analyses along the lines described in the preceding chapters.

Qualitative analysis

At the **governance** level the project is managed by a mixed company with a remit to govern and manage the initiative, thus ensuring its sustainability. The company may be appointed to finance and manage several projects to boost the supply of tourist services in the Province of Massa or within the Parco delle Apuane. In that case, the mandate and social purpose of the vehicle extend beyond the management of the hydro-electric power plant or energy generation in general and **focuses on improving the provision of tourist services in the Park, with a view to ensure environmental and economic sustainability**. In this way, thanks to the fact that several projects are being managed by the same body, it is possible to reduce the SPV's fixed management costs by apportioning them "pro rata" among the various projects. In addition, benefits may derive from cross-subsidising between high-return ("warm") and low-return ("cold") projects, with more strongly social objectives. Figure 1 shows a simplified picture of the governance of the project and the initiatives that may potentially be included in the management of the mixed company.

Figure 1

Governance set-up
Equity model



Quantitative analysis

The quantitative analysis of the project is shaped by the analysis of expected cash-flows, which determine the profitability of the project and make it possible to define the optimum financial structure for shareholders in the SPV responsible for governing the project.

The pattern of cash-flows for the project in question is shown in Diagram 1. Note that after the launch year, when income is sufficient to cover only management costs, there are seven years of substantial and increasing income which stabilise at a constant level from the eighth year of management onwards.

Hydro-electric power plant

Diagram 1

Expected cash flow and
electricity prices

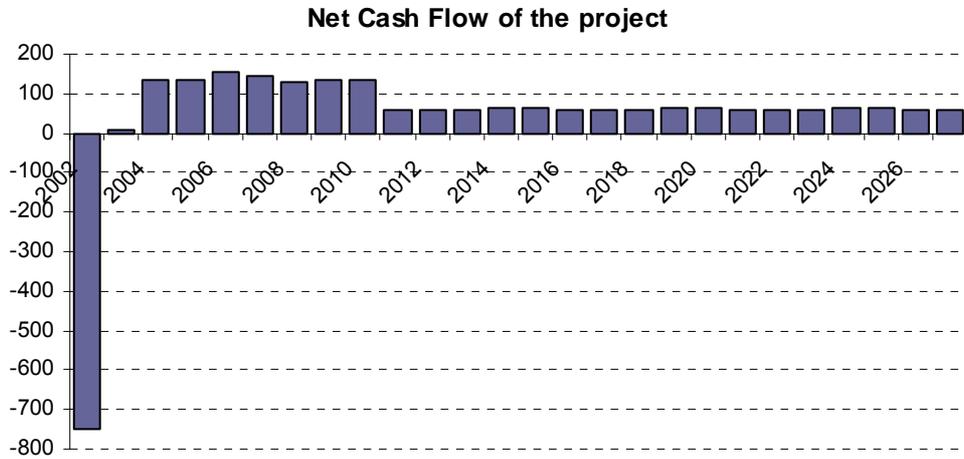
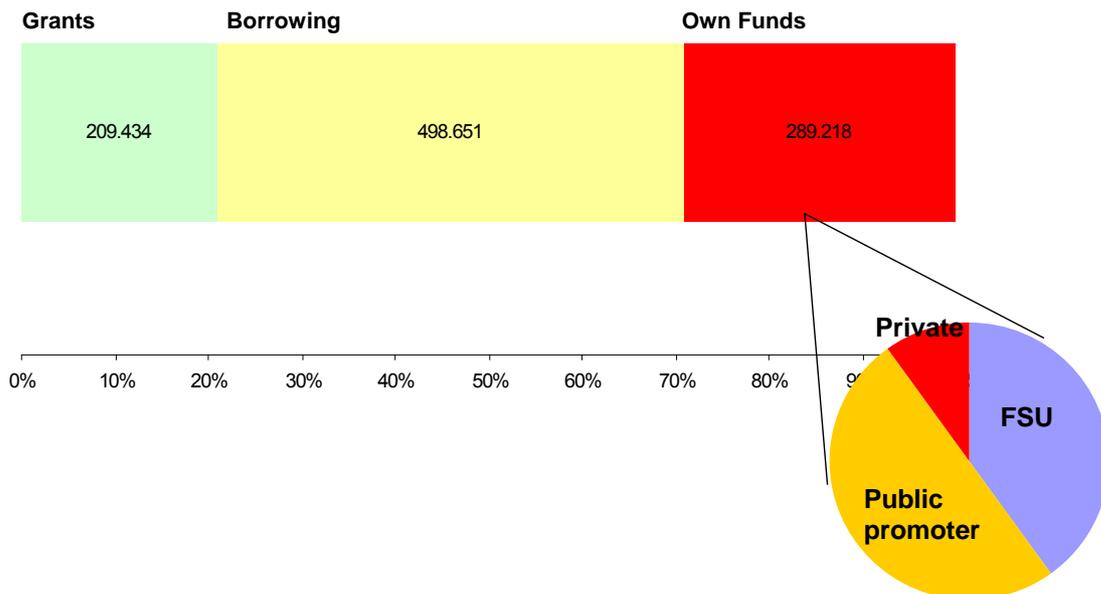


Diagram 2 portrays the envisaged financial structure for the project.

Diagram 2

Possible financial structure
under the JESSICA system



The new financial structure of the project has a significant effect on profitability, leading to the following results:

- IRR of the project 10.00%, associated with an NPV of EUR 116,681 (on an investment of EUR 807,869)
- IRR for shareholders, determined from distributed dividends, of 17.00%, associated with an NPV of EUR 97,405 (on an investment of EUR 185,530)
- IRR for the UDF is 7%, set as the maximum allowed yield for the UDF.⁸

The quantitative analysis of the project shows that in the JESSICA configuration, with different governance arrangements that call for particular attention in governance design, investors in the project may receive higher net remuneration than that provided in the previous (no-JESSICA) configuration.

Moreover, in the configuration proposed in Diagram 2, in which it is assumed that the public promoter acquires half of the shares in the special-purpose vehicle, the public body is able to generate a **leverage effect, such that each euro invested by the Municipality “generates” the 5.9 euros worth of investment by other financial entities (the UDF, banks, private shareholders, etc.).**

Use of the resources of the UDF, with an expected yield below market rates and a medium-to-long-term investment period, ensures the financial sustainability of the project for a lower amount of grants: **the original project provided for grants of around EUR 250,000, compared with EUR 209,000 if the JESSICA system were applied, a reduction of 16%.** The saved grant funds, while still ensuring financial sustainability, can be invested by the public entity in order to improve the “social” performance of the project or to integrate it with other parallel “cold” projects which could increase the positive overall impact on the territory. In other words, JESSICA may facilitate not just a reduction in the public resources invested but also their more efficient use, by increasing the impact on the wider competitiveness of the urban area.

In addition to these financial benefits, the JESSICA system brings other advantages in the governance of the urban investment process thanks to the synergies between the various projects:

1. the objectives of shareholders and the balance of financial incentives within the mixed corporate structure create a strong motivation for project managers to be efficient (sustainability and profitability) and effective (attainment of social and environmental objectives) **throughout the duration of the project;**
2. the use of revolving resources facilitates the financial support of successive cycles of urban development projects, while at the same time remunerating investors over the medium-to-long term, albeit possibly at capped returns;
3. the optimisation of the public resources makes it possible to channel public budget resources towards “cold” (low financial return) initiatives, thus for the same level of

⁸ As a counterpart to the lower return than that received by other shareholders, the UDF could be given the right to be paid ahead of other shareholders by issuing preference shares subject to a return cap.

financial sustainability augmenting the overall economic and social impact of the investment schemes. The resources released can therefore be used to **“improve” the environmental and social characteristics** of the operation.

JESSICA may therefore produce an overall improvement of urban transformation projects, in terms of both their economic and financial characteristics and their social and environmental dimensions.

7.2 Expansion of the industrial estate at Montopoli in Valdarno

The second project analysed concerns the expansion of the industrial estate at Montopoli in Valdarno to meet new demand exceeding the capacity of the existing estate and to permit industrial activities located in mixed-use zones to move into a “specialised” area. A further reason to expand the area for industrial use is to meet demand from firms wishing to move from external locations into the municipality.

The technical features of the project are as follows:

- the project is managed by the Municipality of Monopoli in Valdarno, which owns the area and is the direct beneficiary of the scheme;
- the overall investment amounts to about EUR 2.67 million, of which 72% is financed by a grant (split between DOCUP contributions and financing under the Territorial Pact of the Province of Pisa) and the remainder is provided by the Municipality of Montopoli as project manager;
- the project is expected to take three years to complete and to be managed for 24 years;
- the receipts derive from the sale of serviced lots, while expenditure comprises all fixed and variable management costs, primarily costs borne by the manager after the sale of lots (ordinary maintenance, etc.). Given the high level of grants, the IRR of the project is 27%.
- In summary, given the project’s capacity to cover its costs and pay a return on the initial investment, the total grant resources invested by public bodies at all levels (regional, national, European) amounts to EUR 1.9 million.
- The investment is eligible for ERDF funds for 56% of the invested capital (about EUR 1.4 million).

7.2.1 Reworking of the project for JESSICA: non-equity model

The JESSICA system can assist with raising the finance not covered by grants, which in the baseline configuration is borne entirely by the municipal promoter and manager. Using a non-equity structure under a JESSICA approach, it is possible to fund the project by means of concessionary debt.

The configuration of the project in a Jessicable style could proceed through the following steps:

1. the promoters and beneficiaries (in this case the Municipality of Montopoli) establish an urban transformation company (*Società di Trasformazione Urbana*, STU) to act as vehicle for the operation and responsible for managing and implementing the project;
2. The municipality gives ownership of the areas to the STU in exchange for shares;

3. the STU is funded by debt capital at below-market rates provided by the UDF, established as a revolving fund, possibly as a separate block of finance in a bank, in accordance with the non-equity model described above;
4. shares in the STU may possibly be sold to institutional investors or qualified bodies, thereby spreading risk and profits among public and private entities.

The new configuration for project governance has significant consequences, both on the management level and from the economic and financial point of view.

Managerial consequences:

- clear separation between the main promoter of the project, the Municipality of Montopoli, and the manager, the STU;
- delegation of management of the project to a body concentrating exclusively on that task;
- the Municipality (promoter), which may in any case maintain a majority shareholding in the vehicle for the operation maintains control of the impact of the project on the local territory;
- consequently, the real estate risk is entirely allocated to the STU, which must be structured so that it can adequately bear that risk.

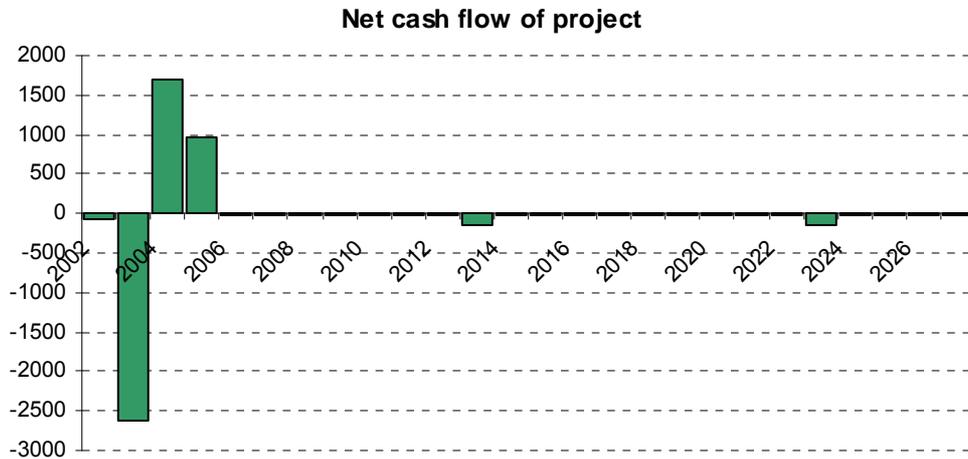
Economic and financial consequences:

- The STU can borrow without burdening the budget of the Municipality, thus making it possible to finance the project with debt capital and lower the budgetary resources required to fund the project.
- The STU can have access to low-cost finance granted by the UDF in the JESSICA non-equity model.
- The Municipality as project promoter can benefit from a significant leverage effect even if conditions in the capital market are not particularly favourable.
- It is possible to involve private investors attracted by the expected profitability of the investment in order to reduce the Municipality's exposure to project risks.

From the financial point of view, the cash-flow for the project is shown in Diagram 3.

Diagram 3

Expected cash flow

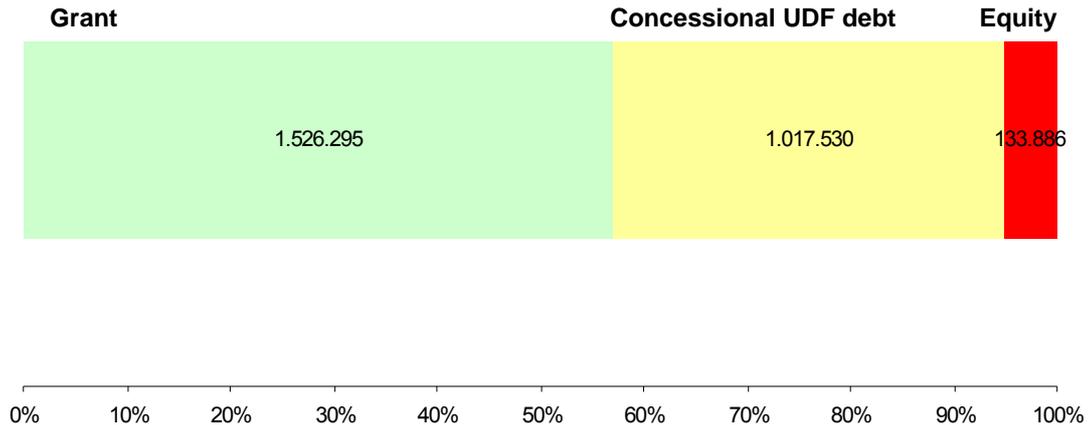


Note that the positive cash flow is concentrated in the first two years of management, during which the sale of the lots is expected to take place, and that subsequently there are only costs for maintenance and activities for which the municipality is responsible. In the configuration presented in this example, however, these costs fall on the STU, as the vehicle for managing the project.

Refashioning the project in the JESSICA mould entails far-reaching changes in the financial structure, which is modified by introducing below-market rate debt provided by the UDF to support the project. The new financial structure is shown in Diagram 4:

Diagram 4

Possible financial structure under the JESSICA system



In contrast to the preceding case, although the project for the industrial area in Montopoli remodelled as a Jessicable scheme generates substantial profits for shareholders, it does not manage to exceed the high cash-flow of the project in its original configuration, for two reasons:

1. the significant reduction in the grant component;
2. the burden of taxes and management costs on the project vehicle.

Nevertheless, the profitability of the JESSICA version of the project remains positive and potentially attractive to market operators, despite a 21% reduction in grants.

The conclusions drawn on the preceding case study therefore also apply to this project. The JESSICA effects operate in parallel on the two “pillars” of economic and financial sustainability on the one hand and effective project governance on the other:

1. optimisation in employing local public resources makes it possible to increase the proportion channelled over time to urban regeneration projects with positive implications for local environmental, social and economic development;
2. the system of governance creates management incentives that are efficient, in terms of their ability to meet the financiers’ remuneration objectives, and effective in attaining the project’s balanced territorial development objectives.

7.3 Conclusions on the analysis of pilot projects

The findings of the analysis of the two pilot projects - the hydro-electric power plant in Massa and the industrial estate in Montopoli - can be summarised as follows:

1. Retaining prices and costs as assumed in the DOCUP 2000/2006 (and hence reflecting the social objectives that justified the payment of public grants at the time) and adapting the projects under a JESSICA approach makes it possible to obtain higher returns for project managers and improve their attractiveness for private and institutional investors. The main factors responsible for this outcome are:
 - a. the possibility of drawing on finance below-market rates from the UDFs under the JESSICA equity and non-equity models;
 - b. the leverage created by the good profitability from the cash-flow of the projects in their original configuration.
2. Configuring the projects to suit the JESSICA system means that profitability is positive and at the same time it is possible greatly to reduce the grants needed to ensure financial sustainability.
3. Optimising the use of public resources makes available a greater volume of public funds, which can be invested either as revolving finance or as grants. In other words, the more efficient use and management of financial resources under the JESSICA system makes it possible to increase the volume of grant funding available to the public authority, without affecting financial sustainability.
4. The surplus resources released by the projects in the JESSICA configuration can be reinvested in other projects, thereby increasing the scope for sustainable urban transformation investment, or employed in connection to the same projects in order to improve their environmental and social attributes.
5. With revolving investment, the resources are returned to the investor at the end of the project life or at the time of repayment. This makes it possible to finance other projects in future, perhaps similar ones, thus extending the effective duration of the original investment. Furthermore, since the UDF is a long-term investor normally receiving a capped return, the economic and social effects of the invested capital can unfold over a far longer period than the short-term horizon typical of market investors.
6. The availability of resources at competitive cost for long-term investment should stimulate market competition for the development projects in the area, such as those examined here. In this context, the UDF would act as a catalyst, investing its resources in the “best” projects that can strike the most efficient and effective balance between financial sustainability and the ability to affect urban competitiveness and sustainable development.
7. The projects examined have a high gross self-financing margin, in other words a capacity to repay at least part of the cost of finance out of cash-flow: projects of this sort are good

candidates for funding through JESSICA instruments and hence to enjoy the benefits of the tailored financial instruments envisaged in the JESSICA system, unlike projects that do not provide for any form of remuneration of the invested capital.

8. The projects reconfigured for the JESSICA system normally provide for a separation between the public promoter and the project manager, which is nevertheless controlled by the promoter. This solution has merits in terms of transparency, specialisation and financial optimisation, as described in previous chapters, but it requires careful and detailed planning and ex-ante evaluation during the project preparation.
9. The new system of project governance, typified by the entry of managers and the UDF as new shareholders and by the use of debt at market or concessional rates to support the funding of the project, generates powerful incentives for efficient and effective project management:
 - a. to be efficient in attaining the shareholders' remuneration objectives;
 - b. to be effective in attaining the social, environmental and economic objectives on which the award of funding from the UDF and grants from the public bodies involved depends;
 - c. to exploit the UDF's ability to monitor and steer operations towards the creation of value for the local area.
10. The system of governance of the projects configured for the JESSICA system facilitates the integrated management of the projects because it requires projects with similar content and/or objectives to be managed by the same body. In this way it is possible to manage urban regeneration processes that are integrated functionally and in economic and financial terms.

The effect of JESSICA in the projects analysed is to introduce a new system for the comprehensive and integrated management of projects, which aims, through the use of funding and governance techniques configured to suit specific project features, to ensure the sustainability of urban regeneration projects, extending their long-term performance and their social, environmental and economic effectiveness.

In short, JESSICA is an innovative system for funding urban regeneration projects - its primary objective remains the funding of socially-oriented projects by means of resources yielding a capped return, but it introduces powerful incentives to select and support the "best" projects in terms of their sustainability, efficiency, effectiveness and integration.