ALTERNATIVE MODELS OF FINANCING REGIONAL DEVELOPMENT

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Abstract:

Public financing of infrastructure proved underperforming at uneconomic prices, and because of political interference in the management of funds, understanding the problem leading to the adoption of private funding variant, an effective way of private funding being ***the financing of the project****.*

Project financing is a concept that assessed by means of financing a specific technique. In this context, those granting funds usually through loans typically are only interested in cash flows and project profit, which are a source of funds for repayment of loans; they are less interested in the creditworthiness of those employed in the project (organizations, governments, communities and so on). This approach has led to the emergence of new ways of financing projects, new types of projects, such as regional and rural development.

Key words: *alternative models,finance,regional ,development ,project.*

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1. Because a project is a distinct entity separate from *the project promoters*, participants in performance, having substantial impact on specific balance sheets of companies, institutions or organizations, project is known *as financing without recourse or with limited recourse*, relations between various parties involved in the financing of a project being established through a variety of contractual arrangements. In this respect, project financing can be defined, in the first sense, as the financing of making a coherent set of activities aimed at achieving a goal of regional development, particularly rural, circumscribed to a limited area, those who provide financial resources considering the loan guarantee cash flow and earnings through the project, they are the sources for obtaining funds to repay loans.

It results hat every project is supported by its *own financial assembly*, guaranteed solely by the value of the project or product ″ resulted of the project, the projects being considered, as I said, as distinct organizational entities. In this respect, it is built the ***concentric funding model*** being developed *project management entities*, *EMP*, donors giving EMP-sized money in terms of financing without recourse or limited right of recourse, which means that the loans are entirely dependent of cash flows generated by EMP and EMP assets used as collateral on the loan.

The following figure presents a schematic form of the concentric model of financing, funding flows being drawn by different lines, depending on the nature of funding (capital formation, loans, investments, commercial loans, guarantees, etc.).

2. Characteristics of project financing

The term of project finance covers a wide range of *financing structures*; these structures have, however, a common feature: funding does not depend crucially on creditors or sponsors support (donors) or on the value of physical assets covered by the project, those who provide funds being sensitive to the *project performance itself.* Based on the above definitions, we can identify the following *general characteristics of project financing:*

- setting project management entity (EMP);
- financing without recourse or limited right of recourse;
- balance-sheet transactions;
- sure-flow of income generated by the project, as the main guarantee for funding;
- finance-differentiated instruments;
- finance-participants;
- risk of funding.

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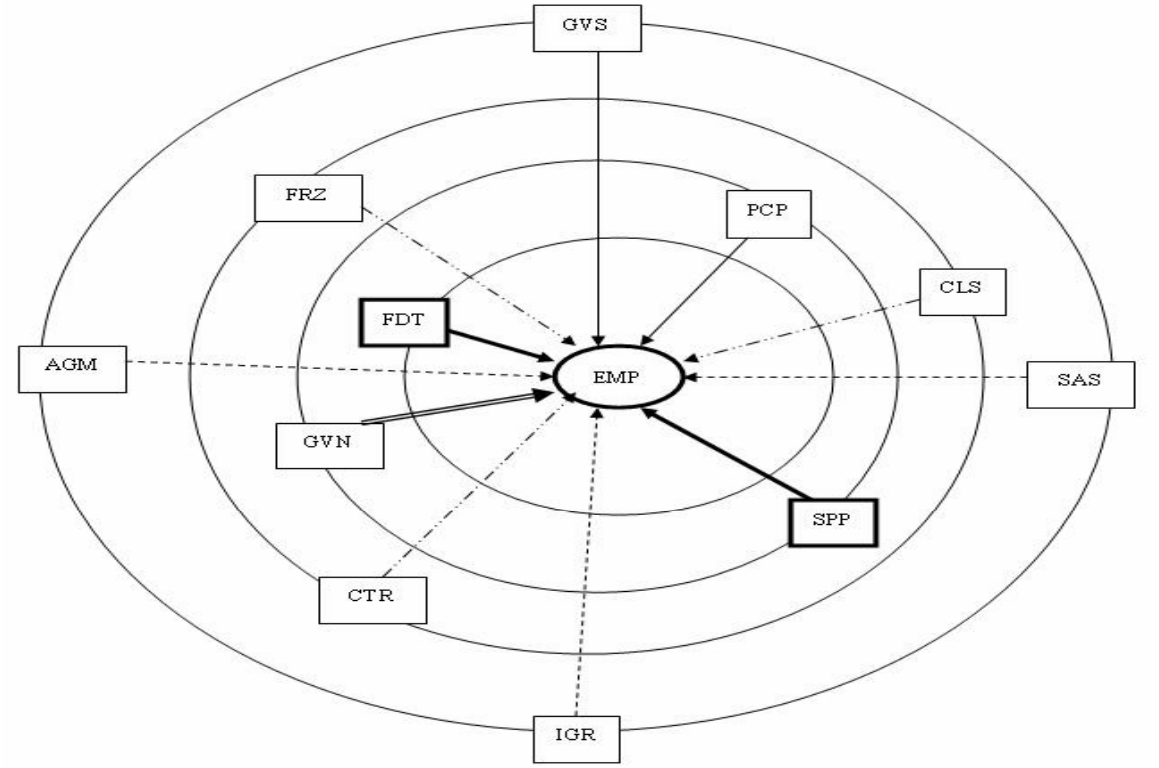
Figure no. 1. Concentric financing model



EMP = entity project management;
FDT = founders;
SPP = major sponsors;
NSG = national governments;
GVS = foreign governments;
CFP = capital markets;
CTR = contractors;
FRZ = equipment suppliers;
CLC = consumer purchaser (communities);
SAS = insurance companies;
IGR = guarantee institutions;
AGM = multilateral agencies.

Project funding starts with *EMP formation,* as a separate legal entity, independent of those promoting the project and operating under a license, usually granted by regional or national government.

In case of the *financing without recourse*, lenders, both through debt instruments and the equity investment instruments, do not enforceable access to heritage funds or sponsors, of the project founders. In case of the limited right of recourse, it is granted enforcement access to the heritage and general funds of sponsors, if it issues a guarantee reimbursement but only for certain risks. In the event of poor performance of the project, the creditors have the right to intervene under a clause, to change management team managing the project

Without recourse project financing offers sponsors a specific instrument by which to secure *project financing funds in its balance sheet*, which allows funding a variety of projects that otherwise could not obtain the necessary funds. *Future flow of benefits* that the project will bring to them is the most important element of any financial project assembly, all depending on their project a cash flow provided directly or indirectly by the project.

Finance organization of a project may propose to *use a variety of financial instruments*:

- *Debt-instruments*, often provide capital primarily to cover project financing, giving the lender a specified gain over a period of time. There are a variety of debt instruments, of which we can mention: *bank loans, bonds and non-convertible debt securities.*

- *Shares and equivalent instruments* generate seed capital, start-up of the EMP, provided by project sponsors. Shares issued by the entity represent *venture capital* project, or secondary liability, which comes after the debt that comes as order of priority in execution of entity assets.

- *Aid and donations*. These are financial resources, funds, often embodied in equipment, assistance, materials and so on, provided for the entity of the project by international financial institutions, regional, governmental, nonprofit and private donors and so on, with or without direct interest in the project, grants , upon the use of funds protocols or contracts, funds not otherwise released to the entity, sometimes attracting non-compliance penalties.

- *Midterm financing* is done through instruments that are essentially in the form of debt, but has some characteristics of capital stock, the name which refers to these instruments being almost secondary share capital or debt, such as *bonds title convertible into shares, preference shares and other instruments that have features of both debt and investment.* To derive the debt, the secondary debt is treated sometimes as an equity component of the project entity.

- *Contractors, suppliers and customers-buyers*. In financing of many projects contractors provide financing as capital contribution to the project entity or by obtaining credit in their own name. Similarly, equipment suppliers can participate in financing the project by contracting *provider loans*, often supported by specialized organizations in securing loans. Most projects funded through financial arrangement with customers, buyers, users, and the construction of pollution equipment, can sell its product to polluting firms, purchasing companies participating in the financing of the project by paying an *advance customer's* future purchase of equipment and can also contribute to the capital in shares of the project entity.

-*Guarantees of payment of the debt.* These are funds allocated by those guaranteeing the loans, credits and advances of client provider, to protect the interests of borrowers and investors in the event of financial loss.

-*Insurance.* These are resources allocated to insurance companies to compensate losses of the project, in case of accidents such as fires and other events that may be provided.

Organization of funding a project involves a *variety of participants*, which can be: private, sometimes having their preponderance, public, state, providing part of the funds and any incentives, financial and non-financial institutions and donor organizations, local and international investors and lenders (multilateral, bilateral trade).

If conventional methods of financing, lenders take into account not only the prospect of success of the project but also the general creditworthiness of the project sponsors. Risks associated with a particular project are not crucial because lenders have access to heritage of project sponsors. The key approach of funding through loans and investments is to get informed prudently to know the risks associated with a project and to analyze how these risks are allocated to each participant in the project, it is easy to fund a project, but if it was not well designed, that money could only be recovered with great loss and difficulty. Risks associated with a project are the following:

-*Risk of project.* Risk of assessments and mitigation of future cash flow interruption is the main issue of concern to investors and lenders.

-*Credit-risk of borrowers*. In addition to risks associated with the project design itself, there are risks associated with EMP's creditworthiness created for the project.

-*Credit-risk of sponsors.* In assemblies of project funding sponsors material risk is limited to the resources invested in the project by them.

-*Country-risk*. In many cases of project financing, the host government issue guarantees or counter-guarantees of the state capital borrowed by the EMP. Rating of solvency of a national government is called *grade (rating) of the country*, on the loans

taken by the state, any change in the rating of the country can influence project viability. Project financing approach starts from its three main phases:-define and assess of the project-implementation / execution of the project;-operation of the project.

Exact profile of *the cash flow curve* for a project depends on *various factors* the fact that cash flow remains negative until reaching breakeven project, highlighting that a project needs funding type from outside sources until reaching the threshold. The profile of this curve shows that the initial phase requires fewer financial resources, but as the project nears implementation phase financing needs increase, reaching maximum execution phase completion, the slope of the curve expressing the rate of spending. After the project is put into operation, when it begins to generate revenue, borrowing outside the project becomes smaller and smaller, finally providing sufficient resources for project operation and maintenance, as well as some surplus, but even after overcoming breakeven project funding may need short periods to cope with negative differences between receipts and payments.

In project financing, this *future cash flow* is what justifies obtaining resources invested in the project, the task of dealing with the financing of this project is to organize cash flow so that, on the one hand, to meet the needs of their project and on the other hand, be of interest to agencies, lenders and investors willing to commit funds to the project. Since the *financing needs of a project* depend on future cash flow, which in turn depends on time, a classification of financial instruments is of the temporal nature, that is clustering of financial instruments into long-term instruments and short-term instruments: Long-term financing: debt, equity and interim financing, which have a maturity of over 1 year payment; short-term financing: financial instruments usually have a maturity of under 1 year of repayment.

A project will require *long-term financing* primarily for long-profitable investment, long-term funding is necessary because the assets created by the project have a *gestation period* before they generate revenues.

The main types of long-term financial instruments are presented in the following table.

Table no. 1

Type of instrument	Instrument
Of debt	Collective loans, loans in euro debt securities; Export credit, loan provider, loan buyer.
Shares	Common shares, preferred shares.
Of negociations	Normal rate bonds less risky, and risky high-interest bonds, floating rate bonds, bonds with large discount, profit conditional obligation; Eurobond; Fund bond underwriting, insurance fund bills, warrants, convertible bonds.
other instruments	Deposits in custody, financing leasing (operational, financial, with initial sales) Venture capital, Help refundable

Projects need *short-term debt* in two forms:

- *necessary capital or stock*, these funds became necessary when the project is put into operation;
- *bond-financing* or interim borrowing to cover temporary cash deficits.

Short-term funding options, which may involve regional development project capital requirements in the operational phase other than internal resources can be grouped into *three categories*, unsecured bank loans;- guaranteed bank loans;-other sources such as bank acceptances and trade effects.

Specialists in *financial arrangement* appeal to specific financial tools and techniques to improve the financial performance of an assembly. Term *financial planning can be defined* as the design and implementation, creatively, of the financial technology to solve financial problems and exploit opportunities to use financial instruments to restructure an

existing financial model in the form of another model with more advantageous qualities and characteristics (cost, performance, risk, maturity, conversions, etc..).

Financial engineering techniques are widely used in modeling and forecasting financial markets in developing *financial derivatives* to hedge the currency risk and the management of financial, investment management and asset allocation, as well as solvency management.

Tools used by financial planners are created in the last two or three decades, namely term sales contracts securities (forwards), advance sales contracts (futures) exchange securities transactions (swaps) contracts of options (options). These basic tools are combined in different ways by financial planners to create more complex systems, able to meet the specific needs of their clients.

3. Modeling regional financial interdependence

The core of regional and multiregional models represents external, exogenous links of the regions because interdependencies clarity decreases with increasing size of the region or multiregional space. Traditionally, attention has been paid to modeling regional trade, but particular importance has been given to the *funding streams and programs of development.*

Two main approaches are outlined in *shaping exogenous regional ties*:

1.shaping of national-regional linkages;

2.shaping of interregional links.

The choice between the two approaches depends on the theoretical perspective, national-regional approach is more suitable for financial actors and multiregional economic and financial factors acting at national level and for reduced financial costs and interregional approach is most appropriate modeling financial flows from financing where financial costs are considerable and the effects of development projects differ by region.

In *specification of models* used, theory is not very important, more important is the *availability of data*, the number of external interactions taken into account when tackling interregional being the R2-R (R being the number of regions), while in the national-regional approach the number of interactions is 2R.

3.1. National-regional links

The financial flows between national and regional can be specified in two ways:

- *from national to regional*, *top-down*, national and regional relationships between variables can be specified in various ways. Let x (r) and y (r) be the financial variables relating to region r, and let x and y corresponding national financial variables, and the relations can be written:

$$y(r) = f_r\left(y, x(r)\right) \quad (1)$$

$$y(r)/y = c(r), \sum_r c(r) = 1 \quad (2)$$

$$y(r)/y = a(r) + b \times x(r)/x, \sum_r a(r) = 0, \text{ b} = 1 \quad (3)$$

$$y(r)\Big/y = f_r\left(x(r)/x\right)\Big/\sum_r f_r\left(x(r)/x\right) \quad (4)$$

In 1, y (r) depends on variables corresponding national and regional variation in a model with a complete region sum of y (r) is equal to y, in such models of proportional adjustment y (r) ensuring achievement of consistency between national and regional values.

A property of this type of models is the possibility of attachment to the extended economic models, the disadvantage consisting of ignoring feedback from the regional to the national level.

- *from regional to national, from bottom to top*, the values of domestic variables are obtained by aggregating the corresponding regional variables, if any pure form of the model is not invariant regional variable in the model, their occurrence in practice meaning that bottom-up models are rare. These models may include feedback allowing greater detail to the regional sites at national, sector and regional.

The applications of bottom-up models give little attention to the nationally generated variables, making it difficult to use these models in policy, but the inclusion of feedback from regional to national sites are suitable for studying conflicts between *interregional equity and national efficiency.*

In this model of regional financing investments in certain sectors are obtained, in a top-down manner, from national funding of investments, taking into account local advantages of the regions. In turn, regional funding of investments is determined by regional financial capacity of regional profits, such profits may be aggregated, resulting in national profit, which is determined by domestic investment. This generates *a model of interdependence* in which the national and regional variables are obtained simultaneously.

3.2. Interregional connections

Particular economic models of each region are interrelated if there are discussed linkages between individual or grouped regions and sub-regions. Modeling financial flows between individual sub regions is treated by different methods of modeling the movement of factors because the factors are mobile only long term, while financial flows can vary and may balance even in the short term.

Interregional financial flows can be treated in different ways in interregional economic models, such as linear programming, general equilibrium, interregional input-output analysis, and gravity and entropy methods and so on; the most common method is that of *input-output coefficients.* Often, capital formation is considered an exogenous variable in interregional models as finance investments aimed at regional development is seen as a policy instrument.

3.3. Modeling

Regional interdependence models can be used for diverse impact analysis, projections or forecasts, simulation, and policy analysis, utility models depending on their regional and sector detail, their purpose and specification database.

On the specification, two aspects stand out: regional-national interaction and confrontation of supply and demand orientation of funding, in addition it is important to model the temporal dimension.

Effectiveness of a financing instrument, I, for objective j, denoted by E (i, j) can be defined as the relative change (edge) derived from the relative change of the objective of the instrument i.

Given the tools and = 1, ... I and objectives j = 1, ..., J, complete set of indicators E (i, j) can be represented by a *matrix of impact*, M, of size I * J. From the point of view of national-regional relations, both objectives and instruments can be distinguished at regional and national level leading to partitioning of impact matrix as in the following table.

Table no. 2

	regional obiective	**national obiective**
regional instruments	M(rr)	M(rn)
national instruments	M(nr)	M(nn)

Matrix M (rr) expresses the effects of regional funding on regional objectives, a problem traditionally studied by regional models. Matrix M (rn) expresses effects, often unintended, of regional funding of national objectives. Matrix M (nn) expresses national

funding effects on national development objectives, and the matrix M (nr) describes effects possibly unintended, of national funding on specific regional objectives.

4. Conclusion

An important aspect of modeling lies in the role of *supply and demand financing factors*, financing instruments being considered as exogenous models, the application is directed, assuming high elasticity of supply of funding and funding sources mobility between regions, depending on the needs of regional development funding. In recent years *regional models were modularized* by *satellite* phenomenon that includes the model in a systematic way, all key regional indicators as the core of the model, while the indicators and components increasingly detailed models can be introduced by satellite.

However, they showed *small-scale modeling* efforts, while the construction of *simple models* to complex spatial dynamic systems remains an unresolved issue. We must not forget that no matter what regional development strategy would be designed the decisive factor will still be the involvement of companies operating in the region. In this respect, the development of specific mechanisms of co-operation between businesses, local administration, financial system, and people should be a concern for all stakeholders.

Lately, more and more it is raised the question of sustainable development, a concept that has direct and immediate link with the micro level. With the reduction of quality and quantity of environmental resources available, unpredictable climate change, reducing environmental quality generally pose major problems to reorient their local communities throughout (public, population, businesses, non-profit organizations). In this sense it becomes very important how people are rethinking basic concepts of economic efficiency, optimality, resource allocation. In this context, business financing mechanism should be sustainable itself, meaning to find and use renewable financial resources (as a reflection of other categories of resources, in turn renewable).

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