



## PROJECT FINANCE IN THE ITALIAN HEALTHCARE SYSTEM: CONSIDERATIONS ON THE STATE OF ART

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### Abstract

*In the last few decades, Project Finance (PF) has assumed particular relevance in the healthcare sector. PF is developed as a solution to the frequently observed lack of financial resources, technical-specific and managerial skills in public entities. With reference to the Healthcare sector, the Italian experience shows discontinuous recourse to PF in the last decade. The most intense growth period, in terms of on-going project numbers and relative value, was between 2003 and 2006. From 2007, there was an evident slowdown in the number of projects which, however, after this initial drop, did not hinder growth in total value of projects, which was more marked in 2011 and 2012. The actual convenience of these operation is not always clear. In many cases, it is the very asymmetry of skills between the parties involved, usually to the detriment of the public party, which leads to an unbalance in apportioning costs and benefits associated with implementation of the PF. This aspect, along with the financial difficulty of public actors, and therefore their difficulty in accessing different instruments of infrastructure financing, can significantly influence the contractual power of the parties. The high level of frequently seen public contributions in public works is therefore explained in this way. The aim of this paper is to analyze the Italian experience of PF in the healthcare system, trying to underline, from its application, the state of art and the pros and cons of this tool.*

**Keyword:** Public Private Partnerships (PPPs); Project Financing (PF); Healthcare system; Public infrastructures; Public investments

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This paper is the result of a theoretical effort of both the Authors. However, Gustavo Barresi wrote the paragraphs III and V; Carmelo Marisca wrote the paragraphs I, II and IV.



**JEL Classification:** M10, I18.

## **I. Introduction**

The term “public-private partnership” (PPP) defines a broad typology of arrangements involving public and private entities, aimed at jointly performing traditionally public activities.

In the last few decades, among the many different configurations of PPP agreements, Project Finance (PF) has assumed particular relevance in the healthcare sector. Compared to other PPP tools (e.g. “outsourcing”), PF has developed more recently and, in many countries, is frequently considered the most important tool for overcoming limited availability of resources to finance public infrastructures (Jintamanaskoon, Chan, 2011). Generally speaking, this tool defines the complicated relationship created to realize large-scale, expensive public infrastructure, such as a hospital, whereby the building of infrastructure is undertaken through a joint public-private financing project, while the infrastructure itself is managed by the private partner on a long-term contract basis.

In consideration of the above, the aim of this paper is to analyze the Italian experience of PF in the healthcare system, trying to underline, from its application, the state of art and the *pros* and *cons* of this tool.

## **II. Public-private partnership in Healthcare systems**

Profound, continual changes in the social and economic environment, which have recently occurred in most western countries, have led to the need for public authorities to identify new ways of creating value to satisfy the complex needs of players operating in the same environment (private firms, community, regulatory entities, etc.).

The need to overcome the lack of financial and intellectual resources, to improve the quality of public services, in a changing economic environment dominated by globalization dynamics, has stimulated new ways of managing public-private relationships. Thus, the interest of research has gradually been shifted to a new idea, that of public-private partnership, usually defined with the acronym, PPP (Borgonovi, Marsilio et Musi, 2006; Zuffada, 2000; Treasury, 1995).



Many countries, both western and eastern, are today characterized by a crisis in public finance. Central and local administrations do not have sufficient financial resources to create the necessary infrastructure for social and economic development. Granting each the proper goals, the mix of private and public financial resources may be the right answer to this dilemma. Public investment oriented PPPs try to overcome the lack of financial resources which often represents the main obstacle to public investment in new infrastructure, or in the renovation of existing infrastructure.

Furthermore, different forms of PPPs are developed as a solution to the frequently observed lack of technical-specific and managerial skills in public entities. As a result of recent social and technological evolutions, citizens and customers feel new, more complex needs that must be satisfied through new knowledge and skills. Public entities, in most cases, are not ready to face, or satisfy, these new needs. With the purpose of overcoming this lack of skills, service management PPPs were developed, combining private knowledge and public servant roles.

These new issues bring the traditional role of public entities into question, and require them to play a new role - that of coordinator of regional systems, as a central node in a different kind of economic-institutional network.

In addition, in the new scenario deriving from globalization, public and private entities have to investigate new forms of interaction, in a more cooperative way, so as to increase the competitiveness of their social and economic systems in the global market. In many countries, and in different ways, it is possible to observe a certain number of experiences of public private partnerships which have been undertaken, with all of this in mind.

In the Italian experience, the healthcare system has traditionally been seen as a context of choice for institutional experimentation. Within this context, process reengineering has started in many Italian healthcare institutions, with the aim of improving efficiency, and the level of assistance given.

This reengineering activity can follow either of two directions:

- one that intervenes on inner processes, trying to eliminate organizational glitches,



- another that completely redesigns business processes, considering the possibility of outsourcing some functions, or activating stronger forms of cooperation with external partners (Barresi; 2005; Nikolic, Maikisch, 2006).

Of course, the above activities should not be considered mutually exclusive; they are, on the contrary, perfectly compatible.

The second solution, clearly, requires the selection of criteria to be applied when distinguishing between processes to maintain under the direct control of the hospital, and processes which can be managed by external (private or public) players.

The involvement of external partners includes, to different extents, traditional outsourcing processes and a stable cooperative relationship with another player.

In all cases in which the external solution appears to be the correct one, hospitals will face decisional problem regarding the setting up of relationships with other players. These decisions are strictly conditioned by the general and specific, legal and institutional framework.

Among the various and multiform PPPs in the Italian healthcare system, and considering their increased recent use, we will focus our attention on partnerships between public and private organizations aimed at financing and managing public healthcare infrastructures. These agreements imply two fundamental steps: first, infrastructure realization and, second, infrastructure and related services management.

### **III. Project Financing: an overview**

Project Financing should be considered an articulated approach to realizing and managing complex business projects requiring high levels of investments. The main characteristic of this tool is to permit the involvement of various actors (financiers, shareholders, sponsors, suppliers and customers) all playing different roles, with different aims, yet each contributing to common project realization (Amatucci, Germani et Vecchi, 2007). The diversity of actors comes from the different kinds of financial and non-financial resources required by the investment. Due to this, the level of attention on this kind of financial tool is constantly increasing in many European countries: starting from Great Britain, where it was firstly applied, recourse to PF has gradually growth in many



other countries, such as Italy, Germany, Spain, Portugal, and, more recently, east European countries such as Czech Republic and Poland.

Focusing on the features of this tool, it should be pointed out that PF is mainly a *cash-flow based* operation. Financers assess the project, taking into consideration the expected amount of cash-flow, aimed, at first, at reimbursing the debt, and then the capital invested.

Application requires a clear separation between sponsors and the project, through the use of a Special Purposes Vehicle (SPV), a separate legal entity. The SPV allows the creation of a type of *ring fence* which isolates the project and the related risks and cash-flows from the sponsors' activities (Vecchi, 2008).

Considering the complexity of the operation, due to the broad number of players and interests involved and the contractual infrastructure required, the preliminary phase of *project design* is particularly critical for the success of the operation. Generally speaking, it is possible to identify two phases preliminary to actual implementation:

*Operation design and assessment* – the first step is to compare the PF with alternative financial opportunities to assess convenience; the operation must then be planned through the identification of the best structure, balancing the interests of private sponsors and the public interests/needs which motivate the investment.

*Partners selection* – once the operation is designed, partners must be selected. Selection must be carried out according to law, through a call for tenders. Extreme caution should be taken so that the call contains all elements needed to select the most suitable partners. After the preliminary phases, we pass to the implementation of PF.

This tool can be described taking different phases of application into consideration: in the first phase, the infrastructure is realized by investing public and private financial resources (with a variable level of participation of parties); in the second, while the public organization typically manages main activities, the private partners manage the infrastructure related services (or part of them) for a certain number of years, retaining the profits, - hence, the main guarantee of reimbursement for the private partner is represented by cash flows coming from the infrastructure management; the third and conclusive moment could be considered the phase in which, at the end of the above period, the infrastructure fully and definitively returns to the public partner.



Considering that financial sustainability is more based on quality of the project than on the sponsors' financial capability, it is clear that the second phase (infrastructure management) is fundamental, as only effective management of the infrastructure will generate the indispensable cash flows to reimburse the investment. In this perspective, the main guarantees for the participants have a contractual, more than a property right, based nature.

PF can be classified in three different typologies: "non recourse", "limited recourse" and "full recourse". In the first category, sponsors do not give financiers any guarantee on the loan contracted; in the second, sponsors give financiers limited guarantees (in time, amount and quality); in the last, sponsors give financiers full guarantees on loan reimbursement.

Classifying PF based on reimbursement of the financial resource invested, it is possible to distinguish:

- *full self sustaining projects* – regarding investments that could generate resources which are capable of providing remuneration for all the factors invested; in this case, once the infrastructure has been realized, the related services are available for private customers in a market contest (e.g. a public multilevel car park or a public swimming pool);
- *partially self sustaining projects* – projects potentially capable of generating a relevant cash flow, but not sufficient to remunerate the investment required;
- *non self sustaining projects* – projects which, by their nature, do not generate autonomous cash flows (or generate consistently low flows) and need to be subsidized by the public entity.

At any rate, all the above have the common goal of realising a public interest infrastructure, supposed to create more or less essential social benefits; what is different is the system of rules and specific conditions that define the way the infrastructure is made accessible to users (customers/community).

In some cases, the infrastructure related service is provided to private (or public) customers at a market price (or correspondent fare), thus, in these cases the project is usually fully self sustaining.

In other cases, due to political and opportunity choices or to the technical profiles of the infrastructure, market price cannot represent an applicable alternative, so the lower



level of the fare (or its absence) necessarily requires the financial participation of the public entity. These kinds of projects can be classified in the second or third category.

The above requires a further definition of the role of the public entity in the project. A public entity could intervene in a project in three different ways: (i) *regulator/supervisor*, guaranteeing the realization of the project, through the definition of frameworks for project realization. In these cases, the public authority usually plays an institutional/regulatory role, not acting (in most cases) as direct or indirect customer of the service; (ii) *financier*, when it finances the project - this could happen during the realization of the infrastructure, or during management of a contribution finalized to integrate insufficient cash flow coming from the project; (iii) *customer*, when the service is provided to the community through the public entity that shoulders all expenses.

It is clear that the effective role of the public entity depends on several aspects and can contemporarily assume the characteristics of more than one of the above categories (Vecchi, 2008).

In the Italian national healthcare system (SSN), recourse to PF has significantly increased in the last decade due to different, closely related reasons. Indeed, progress in medicine and biotechnology has completely changed the approach to healthcare problems, with a general tendency to segmentation of the entire care process in a sum of highly specialized (both in technologies and competencies) phases that need new forms of integration, which require a new way of managing care processes within hospitals, supported by adequate structure engineering. This approach, together with the “physiological” evolution of patients’ needs in terms of safety and comfort, requires new, modern hospitals and structures. In this overview, a key point for the efficiency and effectiveness of the Italian healthcare system is the renovation of existing hospitals and the construction of new structures.

A non secondary characteristic of the Italian healthcare system is the obsolescence of many hospitals. A significant number were built before the second world war and, in some cases, are located in monumental buildings, so that it is often less expensive to build new hospitals rather than restructure existing ones. It is clear that this situation requires high investment. In addition, another difficulty comes from the fact that in a capital intensive sector like the healthcare sector, operational needs are frequently put before investment needs (Amatucci, 2002, p. 229).



In the past, and not so past, construction and maintenance of public healthcare infrastructures were almost exclusively financed through public resources (Marsilio et Vecchi, 2004). In the last few years, however, reduced availability of public resources, in combination with the Maastricht agreement constraints, has made public financing of these kinds of investments much more difficult.

The combination of the above conditions has pushed many countries, and different public interest sectors, towards the adoption of financial tools capable of involving private capital in public investments. In this contest, PF is the tool that has been most frequently applied in Italy.

With specific reference to the healthcare sector, PF assumes the following characteristics:

- *The Public Entity usually intervenes to finance (in a variable percentage) the healthcare infrastructure* – recent research and surveys have shown a non homogeneous trend in public intervention: in some countries (e.g. Great Britain) the public entity does not participate in the project with its own resources and the infrastructure is fully financed with private funds. In other countries, (e.g. Italy) the invested resources are, for the most part (up to 60% of the global amount) public.
- *The Private partner(s) carry out the work established in the project and, once the work is finished, has the right to manage the infrastructure related services, in the terms (length and other conditions) contractually defined* – even for the service managed, the considered surveys highlight a significant variability of adopted solutions. Generally speaking, it can be seen that in France the only “privatized” services are those linked to building maintenance and power supply; in Italy and the UK, the tool regards a wider range of non-core services (admittance, laundry, cleaning, catering, parking, waste management, sterilization, green area maintenance, diagnostic services, etc.). In Portugal recent experiences have also involved sanitary services.
- *In most cases, the public party has to pay a periodic fee to the private partner(s) for the services provided*; research shows that the fee is made up of different components: the largest part is a fixed amount related to the use of the infrastructure, the remaining parts are generally variable, and quantified in consideration of the volume and quality of the service provided. With the aim



of improving service quality, it is often established in (Italian) agreements that private partner(s) are obliged to reinvest part of the fees in infrastructure maintenance and improvement. In some (limited) cases, according to the specific nature of the service involved, the final customer is directly charged with the cost of the service (e.g. car parking or accommodation services).

According to Italian law, it is possible to identify two different forms of PF (depending on the public or private initiative), both referable to the Build, Operate and Transfer (BOT) model. Within this general framework, an initiative can consist of the construction of a new hospital (or other building with healthcare destination), the restructuring of an existing building or building enlargement or modernization.

#### **IV. The state of art of Project Financing in the Italian Healthcare system**

Focusing on the analysis of the Italian experience, a survey published by Finlombarda in 2013, shows discontinuous recourse to PF in the last decade. The most intense growth period, in terms of on-going project numbers and relative value, was between 2003 and 2006. From 2007, there was an evident slowdown in the number of projects which, however, after this initial drop, did not hinder growth in total value of projects, which was more marked in 2011 and 2012 (Picture no.1)<sup>1</sup>.

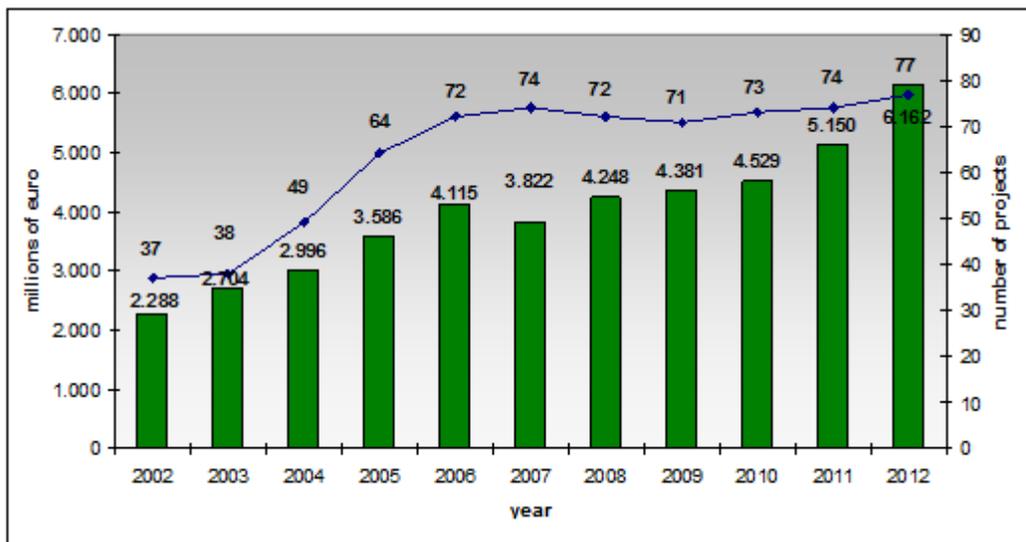
In particular, in the three year period between 2010-2012, there was an increase in the number of projects with an individual value greater than €50M.

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<sup>1</sup> Note: in picture no.1, the number and value of 'actual' projects is expressed in cumulative terms, net of abandoned projects.



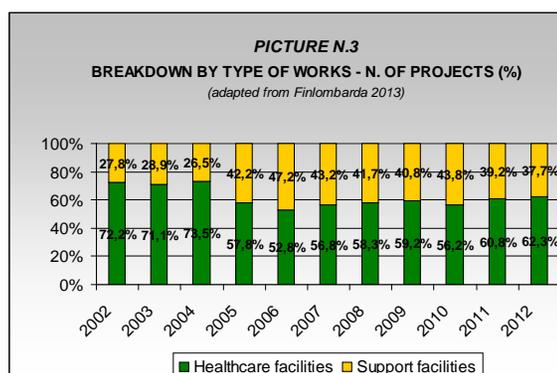
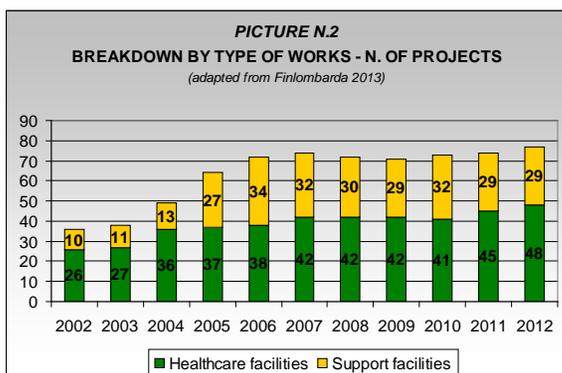
Picture 1- Project finance evolution 2002-2012

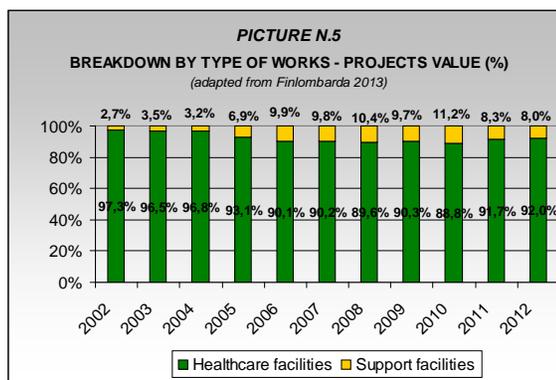
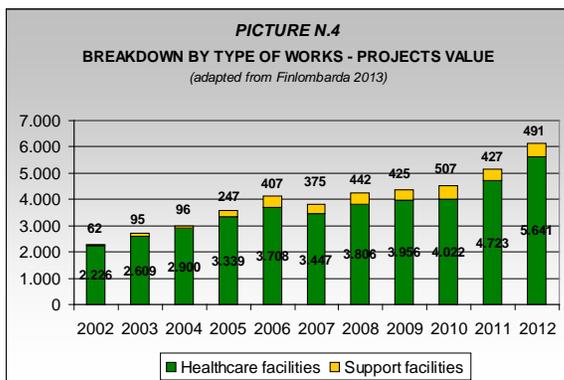


Source: adapted from Finlombarda 2013

The projects - Another aspect which emerges from the survey concerns the type of project, with a difference between the construction of new hospitals or the re-qualification of existing ones (healthcare facilities), where the private partner takes charge of “ancillary” and commercial services, and projects that are finalized to the construction of hospital support infrastructures, such as parking lots, hotels or offices (support facilities).

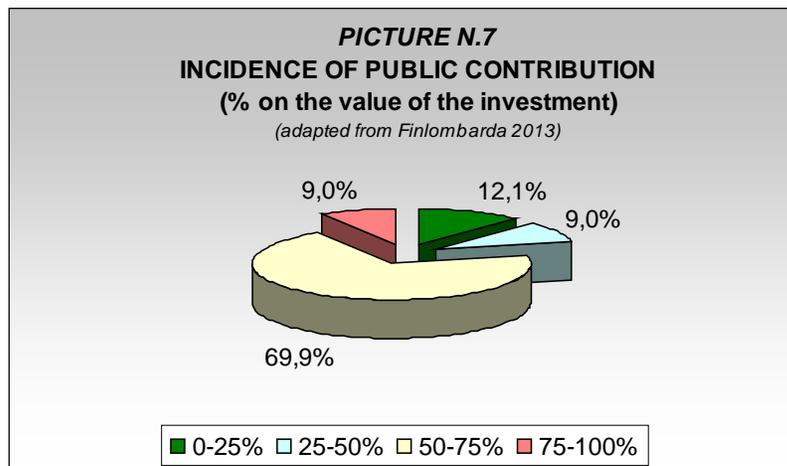
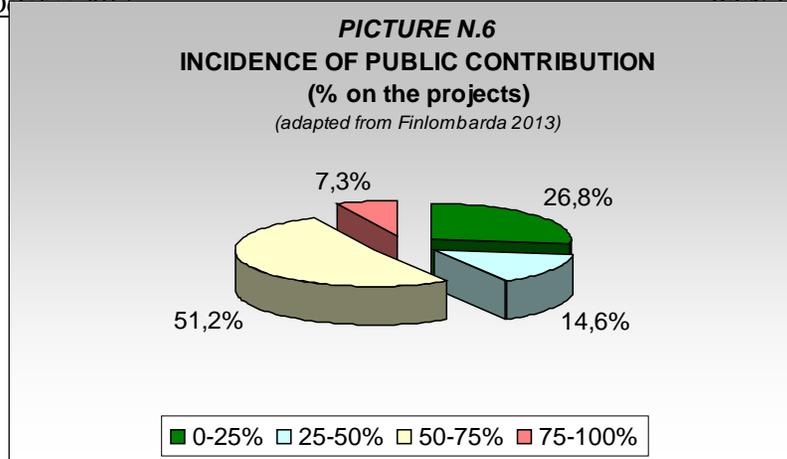
As can be seen from pictures below (no. 2, 3, 4 and 5), the percentage of projects regarding support facilities has settled at around 40% of the total, in the past few years. Obviously, these projects have a clearly inferior average value compared to projects related to healthcare facilities, with a cumulative value never reaching more than 10% of total value.





*Level of Public Contribution* – Another very significant profile concerns the level of public contribution to the total expenses related to the investment. The data below refer to the projects for which information on public contribution is available. It is a sample of 41 out of 77 projects, representing 81.5% of the total amount of investments. As shown in Picture n.7, the amount of public contribution is:

- less than 25% in approximately 12% (in value) of the observed projects;
- between 25% and 50% in 9% (in value) of the observed projects;
- between 50% and 75% in about 70% (in value) of the observed projects;
- more than 75% in the remaining 9% (in value) observed projects.

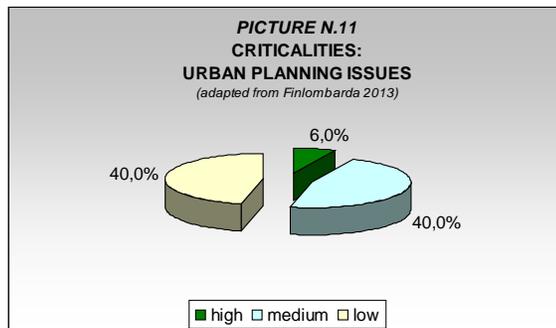
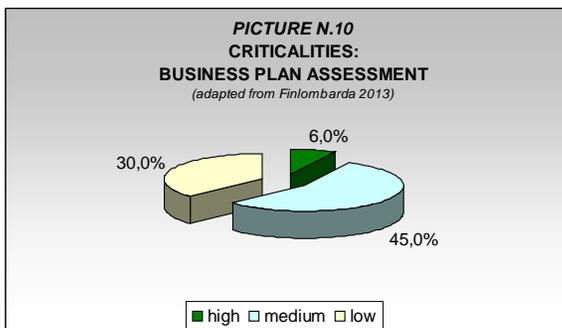
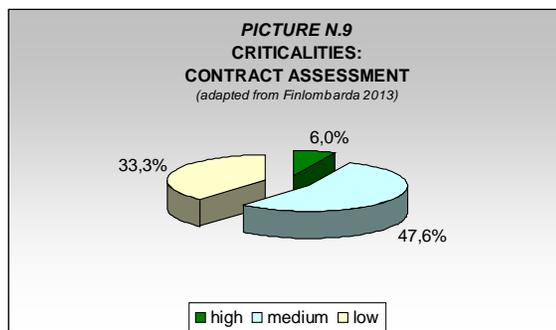
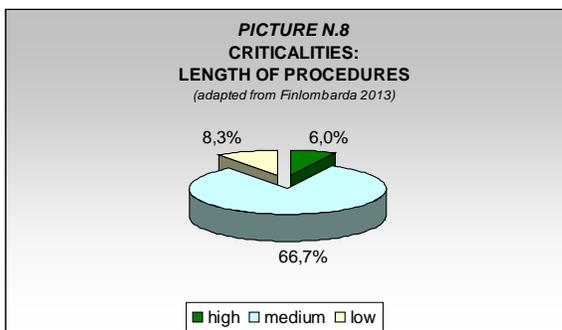


*Competition* – The level of competition can be measured by analysing the number of proposals presented by potential private partners, with different features and content based on the type of PF realised, or by the procedural phase during which the proposals were made. Here, there was a sample of 55 projects with available data. On analysis it can be seen that the average number of proposals was extremely limited (Proposal from

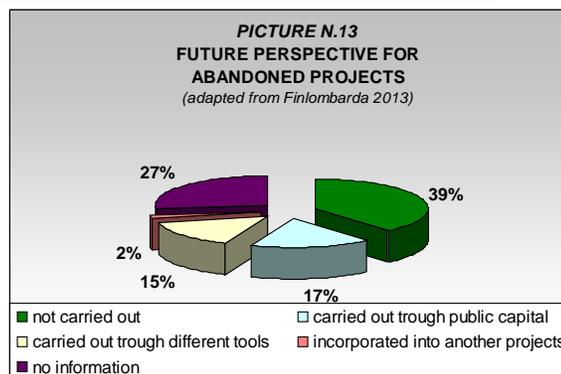
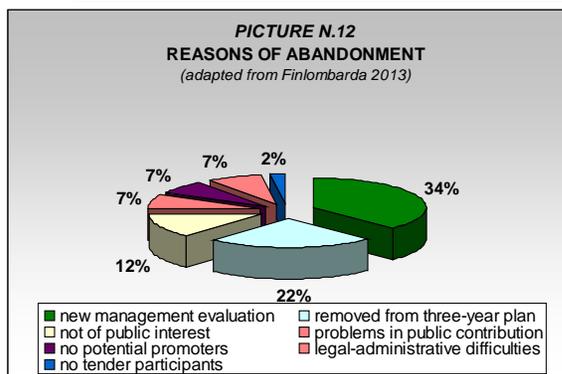


potential promoters: 1.68; Application Forthcoming: 4.56; Number of bids received: 2.17), which shows a generally low level of competitiveness.

*Criticalities* – In the Pictures below, the most frequent criticalities to emerge in a survey of 35 Public Authorities are shown. As seen, length of procedures, difficulties in evaluating the concession contract draft and business plan, and urban planning issues were perceived as the most conditioning criticalities. Other difficulties, less frequent but perceived as severe, include: fiscal issues, appeals to administrative tribunal, delays in construction schedules and so on.



*Abandoned projects* – Information relating to abandoned projects was of particular interest. In the Pictures below, data on a sample of 41 unrealized projects are presented. The main reasons for abandoning projects include: new management



evaluation, removal of project from the three-year planning, lack of public interest. In Picture n.13, an overview on abandoned projects is illustrated.

## V. Conclusions

As shown previously, PF should be considered, for many reasons, an obliged choice to overcome the lack of resources in the public healthcare system, and to provide more qualified services.

However, PF, in its different configurations, is not the “panacea” for many of the above mentioned problems (Eduards et Shaoul, 2003) and, as we have seen, in many cases its application (or attempt of) was not fully coherent with the nature of the tool, missing the expected benefits.

Indeed, every possible application must be analyzed considering the peculiarities of each single case: in particular, to partner choice (competencies, reputation, previous experiences, financial capability, etc.), kind of services (core and non-core), length of agreement, level of financial contribution, etc.

In addition, the complexity of the concrete application of these kinds of agreement has to be considered, regarding contractual and legal profiles, control procedures, bureaucratic difficulties, cultural and procedural changes.



The need of a clear definition of interest priorities is of vital importance. The difficulty in assessing the social (direct and indirect) implications of the PF, often does not permit a complete evaluation of the initiative, limiting the assessment to the financial domain. It is quite evident that this aspect cannot be the only criteria to be considered in PF options: any choice regarding public services must primarily consider the impact on service quality provided and other social spin offs and externalities.

Another critical aspect concerns the impact of the private partner interest: it is evident that the important initiatives which are attractive for private investors, are favoured with respect to the less profitable ones, leaving out of consideration other public planning criteria.

Moreover, it has been seen that recourse to this instrument is often not really based on a financial and economical mid/long term analysis but on a political evaluation aimed at overcoming current public finance restrictions (Mayston, 1999). In this perspective, PF becomes a technical way to postpone a problem instead of facing it and trying to find a more definitive solution, with the consequence therefore, of passing expenses to future generations, reducing their operative and decisional margins (Ball, Heafey et King, 2001; Barretta, 2005).

Looking at the experiences of the Italian healthcare system, PF appears to be a tool with very high potentiality, but, to be applied, in previously assessed and selected situations. It is not possible to exploit the potentiality if the prerequisites are missing; the infrastructure must be of clear public interest, and, at the same time, must be profitable for the private investor. On analysis of the rate of abandonment of projects and the relative reasons for this, certain superficiality seems to emerge in evaluating the conditions for application of this tool. In many cases, the project was abandoned because, on deeper analysis, there was no public interest that could justify activation. In other cases, it was thought better to go ahead with the realization of some projects with recourse to more traditional forms of financing, with the latter being thought of as less burdensome or less complex than PF. In a similar way, in a certain number of cases, a negative evaluation regarding the profitability of the project for private investors was the cause of abandonment. It should also be pointed out that some cases of abandonment came about due to changes in management in the local authorities involved. This high level of subjectivity in evaluating convenience, so much so as to determine a radical change on the part of management, would logically lead to the hypothesis of a not always so clear, and



possibly ambiguous, evaluation of the reciprocal convenience of all parties involved. Given this, another fact arises, that of the limited involvement of external consultants for management of the operation. Rarely, in fact, can technical-administrative experience and competence be found in the public sphere which allows efficient, fully aware management of the tool. Vice versa, in many cases, it is the very asymmetry of skills between the parties involved, usually to the detriment of the public party, which leads to an unbalance in apportioning costs and benefits associated with implementation of the PF (Pollock, Shaoul, Vickers, 2002; Dudkin G., Vällilä T, 2005). This aspect, along with the financial difficulty of public actors, and therefore their difficulty in accessing different instruments of infrastructure financing, can significantly influence the contractual power of the parties. The high level of frequently seen public contributions in public works is therefore explained in this way.

In conclusion, the experience of the Italian healthcare system would seem to confirm that PF will certainly increase in importance in the future, but it must be further assessed, as there are no easy solutions (Vällilä T. 2005); it may represent a great opportunity to improve the level of public services (in term of efficiency and effectiveness) and to finance new infrastructures, but, if not well managed, it could represent a risk both for public entities and communities who are supposed to be the beneficiaries of the services.

### References

1. Amatucci F. (2002), *Il Project finance nelle aziende pubbliche*, Egea, Milan;
2. Amatucci F., Germani A., Vecchi V. (2007), *Il Project finance in sanità: un'analisi delle caratteristiche economiche e finanziarie, nelle aziende pubbliche*, "Rapporto Oasi 2007", Egea, Milan;
3. Ball R., Heafey M., King D. (2001), *Private Finance Initiative – a good deal for the public purse or a drain on future generations?*, "Policy & Politics", Volume 29, n.1, January 2001, pp. 95-108;
4. Barresi G. (2005), *Dalla competizione alla collaborazione. Nuovi modelli per la gestione dei servizi sanitari*, Giappichelli, Turin;
5. Barretta A. (2005), *Valutazione preventiva delle iniziative di project financing in sanità e salvaguardia degli interessi collettivi*, "Mecosan", Volume 14, n.56, pp. 125-139;
6. Bentivogli C., Panicara E., Tidu A. (2009), *Il project finance nei servizi pubblici locali: Poca finanza e poco progetto?*, Società Italiana di Economia Pubblica, XXI Conferenza,



- “Public choice e Political Economy: I fondamenti positivi della teoria di finanza pubblica, Pavia, 24-25 settembre 2009;
7. Borgonovi E., Marsilo M., Musi F. (2006), *Relazioni pubblico privato. Condizioni per la competitività*, Egea, Milan;
  8. Dudkin G., Väililä T. (2005), *Transaction costs in public-privatepartnerships: a first look at the evidence*, Economic and financial reports / European Investment Bank, No. 2005/03;
  9. Eduards P., Shaoul J. (2003), *Partnerships: for better, for worse?*, “Accounting, Auditing & Accountability Journal”, Volume 16, n.3, pp. 397-421;
  10. Finlombarda (2013), *11° Osservatorio finlombarda sul project finance in sanità*, Milan, April 2013;
  11. Gatti S., Germani A. (2003), *Le applicazioni del project finance nel settore sanitario: stato dell’arte e prospettive di utilizzo in Italia*, “Economia & Management”, n. 3, pp.91-108;
  12. Jintamanaskoon S., Chan P.W. (2011), *Changing in reforms agendas and public private partnerships (PPP)*, Proceedings of the CIB TG72 /ARCOM Doctoral Research Workshop, “Public Private Partnerships”, University of Lancashire, Preston, U.K;
  13. Marsilio M., Vecchi V. (2004), *Il finanziamento degli investimenti in sanità*, “Rapporto Oasi 2004”, Egea, Milan;
  14. Mayston D.J. (1999), *The private Finance Initiative in the National Health services: an unhealthy development in new public management?*, “Financial accountability & Management”, Volume 15, n.3/4, August 1999, pp. 249-274;
  15. Nikolic I.A., Maikisch H. (2006), *Public-Private Partnerships and collaboration in the health sector: an overview with case studies from recent European experience*, The International Bank for Reconstruction and Development / The World Bank, Washington DC;
  16. Pollock A.M., Shaoul J., Vickers N. (2002), *Private finance and “value for money” in NHS Hospitals: a policy in search of a rationale?*, BMJ, 324, pp. 1205–1209;
  17. Treasury T. (1995), *The private Finance Initiative.Partnership for prosperity*, HMSO, London;
  18. Väililä T. (2005), *How expensive are cost savings? On the economics of public-private partnerships*, EIB Papers, ISSN 0257-7755, Vol. 10, Iss. 1, pp. 95-119;
  19. Vecchi V. (2008), *Il Project finance per gli investimenti pubblici*, Egea, Milan;
  20. Zuffada E. (2000), *Amministrazioni pubbliche e aziende private. Le relazioni di collaborazione*, Egea, Milan.