



SECTION 3

HEALTHCARE PUBLIC-PRIVATE PARTNERSHIPS IN ITALY: ASSESSING RISK SHARING AND GOVERNANCE ISSUES WITH PESTLE AND SWOT ANALYSIS

Roberto Moro Visconti*

*Department of Business Administration, Università Cattolica del Sacro Cuore, Via G. Carducci, 32 - 20123 MILANO ITALIA
roberto.morovisconti@morovisconti.it

Abstract

Healthcare infrastructural investments are a key strategic issue in countries such as Italy, whose aging population faces severe public budget constraints, exacerbated by the unprecedented recession. The choice between traditional procurement (TP) and Public Private Partnerships/Project Finance (PPP/PF) is by now a cornerstone of public strategies concerning complex infrastructural investments. PESTLE and SWOT strategic analysis provides a systematic and comprehensive reflection of the external and internal operational environment but has infrequently been applied to infrastructural procurement. Risk sharing between public and private actors and consequent corporate governance and ownership issues are still under-investigated in the literature, especially if associated with innovative PESTLE and SWOT instruments. Evidence shows that PESTLE and SWOT analysis improves procurement choices and public-private partnering, softening governance concerns. Since empirical considerations about Italy may be globally extended, even beyond the healthcare industry, the audience of this study may conveniently widen well beyond its apparently narrow focus.

Keywords: Project Finance; Infrastructure; Risk; Optimal Partnering; Corporate Governance; Stakeholders.

Jel Code: H5, I1, K4, G34, O22

Acknowledgment

This publication has been financed with research funds from the Catholic University of Milano (L.D.3.1./2016)

1. INTRODUCTION

Improving healthcare infrastructure with the construction of new hospitals or the restructuring of existing ones is a key strategic issue for public healthcare, especially in countries such as Italy, where the population is aging, and existing facilities prove increasingly inadequate to meet more sophisticated quality standards.

Outsourcing has become one of the major issues in healthcare (Macinati, 2008), and contracting out choices between TP and PPP/PF is by now a cornerstone of any public strategy concerning complex infrastructural investments, driven by Value for Money (VfM) considerations which aim to optimize uneasy alternative selections. Maximization of public policy making and implementation of innovative healthcare investments, such as new hospitals, represent a key issue for the effectiveness of the architecture of health systems, stressed by

increased managerial complexity (Demartini and Mella, 2013).

Healthcare PF is a bundled and comprehensive investment concerned with the financing of long-term hospital infrastructures based upon a complex financial structure where project debt and equity are used to finance the project, rather than to reward project sponsors. Corporate ownership considerations are naturally embedded in this framework.

VfM is the key strategic parameter behind any 'make it or buy' option, consistent with a Public sector comparator estimate (HM Treasury, 2006), which shows whether a private investment proposal is more convenient than any alternative most efficient form of public procurement (Burger and Hawkesworth, 2011; Coulson, 2008; Guccio et al., 2012; Morillos and Amekudzi, 2008; Moro Visconti 2014a) improving the delivery of public services with the involvement of private sector expertise and capital. The private incentive to carry on projects is

a powerful catalyst and time-saver, representing a precious antidote against 'born old' projects - a typical outcome of public laziness and ineptitude.

Key public management strategies wonder whether PPP/PF synergistic and bundled healthcare value chain delivers more VfM than fragmented TP; in other words, is there more VfM in public or in PPP bundling? Moreover, to which extent a public orchestra partnering with some private musicians produces a better symphony? PPP can create synergies and VfM by engaging in a long-term commitment, but as in every marriage, planning is a necessity, so as to guarantee the best of both public and private worlds, namely public provisions finetuned with private engagements (De Clerck et al., 2012). Under-investigated corporate governance issues are consequential to these questions.

Cross-functional and networked healthcare systems can be improved appreciably by making them more efficient and accountable, and enhancing the quality of care, within a structural context of resource scarcity long exacerbated by the worldwide recession, impacting on VfM (Williamson and Zeng, 2009; UTPF, 2013; EPEC, 2013), up to the point of endangering financial sustainability.

While the literature on PPP/PF VfM is extensive (Moro Visconti, 2014b) and is also related to the specific healthcare sector (De Marco and Mangano, 2013; De Marco et al., 2012), lesser evidence is dedicated to Political, Economical, Social, Technological, Legal, and Environmental (PESTLE) external / frame-working analysis or to the analysis of Strengths, Weaknesses, Opportunities and Threats (SWOT) (van Wijngaarden et al., 2012; Ghazinoory et al., 2011; Kahveci and Meads, 2008; Helms and Nixon, 2010; Herrala et al., 2011).

PESTLE and SWOT analyses, even in the peculiar healthcare industry (Christiansen, 2002; Swayne et al., 2006; Young and Ballarin, 2006; Sotiriadou and Antonopoulou, 2003; Vukašinić et al., 2009) provide a systematic and comprehensive reflection of the external and internal operational environment, but have been infrequently applied to infrastructural healthcare procurement choices. The topic of this paper is so innovative and challenging, addressing a major issue in public health policy-making, planning and management, with an eclectic theoretical and practical perspective. Since empirical considerations about Italy may be globally extended, even beyond the healthcare industry, the audience of this study may conveniently widen well beyond its apparently narrow focus.

The paper is organized as follows: a brief theoretical introduction is based on a preliminary combination of the key variables (PESTLE, SWOT, VfM, PPP/PF, and TP), to find out their synergistic interaction, improving VfM awareness and so easing public managerial choices. A consequent analysis of the most frequent risk factors affecting VfM is then conducted with an innovative PESTLE/SWOT interpretation, facilitating the aforementioned public choices between PPP/PF and TP. Risk sharing between public and private counterparts stands out as a key governance issue. Complementary considerations about the private counterpart, considering the SPV as a bundled nexus of contracts among different stakeholders (Moro Visconti, 2013), show how public VfM is also affected by private concerns, again within a PESTLE and SWOT framework.

Some empirical evidence from the Italian PF healthcare industry supports the theoretical

framework. Discussion about the results, which also evidences failure of the data to represent fully and support many still unanswered queries, show why the topic is yet at a pioneering stage, so demanding further research avenues, briefly enumerated in the conclusion.

2. THEORETICAL FRAMEWORK

Assessing VfM and consequential governance issues in healthcare investments is the key purpose of this paper, to be targeted with a comprehensive and integrated PESTLE and SWOT analysis, even to discriminate between alternative procurement approaches such as PPP/PF versus TP. Focused definition of the key variables, within the peculiar healthcare industry, is synthesized in Table 1 and represents a precondition for their synergistic utilization.

PESTLE considerations, being essentially external, somewhat tend to precede SWOT analyses: while the former shape the analytical framework of the investment, the latter resume environmental analysis (scanning the business environment for Threats and Opportunities), with a subsequent internal focus on organizational issues (Strengths and Weaknesses). Moreover, Strengths / Opportunities represent the key VfM discriminator between PPP/PF versus TP choices, which also depend on proper resource-based planning and cost effective allocation of funding from the public side.

Political and Social factors represent the initial steps for any healthcare investment decision, together with Environmental issues (which contrast the NIMBY - Not In My Back Yard - oppositions since hospitals are typically welcome). Economic, Technological, and Legal issues matter later ... however, longer since they accompany the investment along its milestones and especially in the crucial phases where the tender is designed and adjudicated (avoiding Political influences), after the discriminatory VfM assessment of the best choice between PPP/PF and TP.

Industry-specific Social and cultural issues, so sensitive towards key healthcare and well-being concerns, have to find a convenient Political synthesis, which should carefully balance public interests with private skills. Consequential infrastructural choices end up in either TP or PPP/PF.

The legal framework for infrastructural PPP (Subramanian and Tung, 2016) and TP is represented by a comprehensive set of general or specific legislation (procurement law; contract law; concession law; budget law), with possible government and local differences (Burger and Hawkesworth, 2011), especially wherever a federal system is stronger, even concerning public funding. Legal aspects are intrinsically dependent on Political/institutional choices, related to the types, stability, and regulatory activity of national or regional governing bodies (both effective in Italian healthcare, formally decentralized to increasingly penniless Regions, albeit tempered with some national coordination). The funding system, so crucial for expensive infrastructural healthcare choices, is currently based on a complex combination of regional taxes and central government transfers (Anessi Pessina and Cantù, 2006).

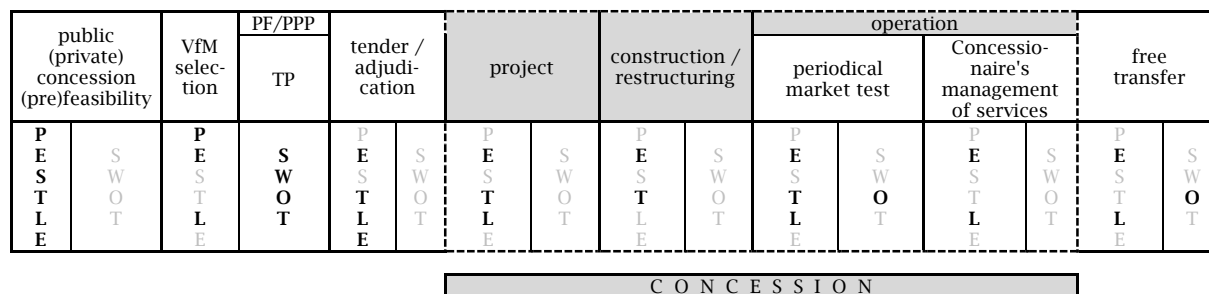
Table 1. Interaction of PESTLE and SWOT analysis with discriminating Value for Money

<i>Variable</i>	<i>Definition</i>	<i>Interaction with other variables</i>
PESTLE	Strategic methodology comprehensively using Political, Economic, Social, Technological, Legal, Environmental trendy analysis for reviewing the macro environment, with its external forces that impact on the ability to plan.	PESTLE analysis is a preliminary overlook of the strategic environment, often anticipating other surveys. Typically combined with SWOT analysis, it evidences hidden aspects of VfM, improving conscious selection between PPP/PF and TP.
SWOT	Structured planning method used to evaluate the Strengths, Weaknesses, Opportunities, and Threats involved in a project, to consider if the objective (i.e., building and running a hospital) is attainable and, if so, how.	Its discriminating functions (Strengths / Opportunities vs. Weaknesses / Threats) ease PPP/PF vs. TP comparisons, with a better focus on real VfM. Fitting the context with available resources enhances VfM.
Value for Money	VfM expresses the economy, efficiency and effectiveness of service received by a public entity (De Marco and Mangano, 2013) and orientates a “make it or buy” option, consistent with a Public sector comparator estimate, which tests whether a PPP/PF proposal is more convenient than any alternative most efficient form of public procurement.	While PESTLE describes the institutional framework, SWOT facilitates VfM comparison between PPP/PF and TP. Risk factors, also detected with PESTLE and SWOT analysis, need to be properly incorporated in VfM considerations.
Public Private Partnership / Project Finance	PPP is a business venture funded and operated through a partnership of government and private sector companies. In the infrastructure sector, complex arrangements and contracts that guarantee and secure the cash flows make PPP projects prime candidates for PF.	Strategic benchmarking of PPP/PF opportunities, versus TP, can be better focused on PESTLE and SWOT drivers, evidencing resources, capabilities and competencies and so impacting on comparative VfM.
Traditional Procurement	Classic “buy” option, where the public part runs and overlooks the entire investment, purchasing from external suppliers the needed goods and services and following a “self-solution” pattern.	Any project, whether it is a PPP or a traditionally procured project, should be undertaken only if it creates VfM. With VfM being the objective, PPPs and traditional infrastructure procurement are merely two modes to deliver it (Burger and Hawkesworth, 2011).

Within the intrinsically complex and increasingly specialized healthcare industry, changes in legislation have placed greater emphasis on principles of efficiency, efficacy and cost effectiveness in hospital management (Ippolito and

Viggiani, 2014), so stressing the unprecedented importance of strategic planning.

A timeframe of the decisional process shapes the investment framework since its very inception, as represented in Figure 1, with PESTLE and SWOT most fitting acronyms reported in bold font.

Figure 1. Timeframe of the healthcare investment, with PESTLE and SWOT analyses interacting with Value for Money

Considering, in particular, the selection between PPP/PF and TP, according to a VfM optimization target, both PESTLE and SWOT considerations need to be properly elaborated and processed, following the time frame mentioned above.

Since the investment is typically long termed, especially within a PPP/PF framework, many PESTLE and SWOT items refer to future planning, intrinsically uncertain, which has to be envisaged when key decisions are taken, during the preliminary feasibility phase and then within the VfM selection and the consequent tender adjudication. Long termed budgeting reflects on governance issues.

2.1. Risk and Value for Money

VfM policy making alternatives are typically examined considering the impact of risk on public and private parts which share it; as mentioned before, risk intrinsically comes out from the uncertain perspective nature of the investment. The PPP risk transfer should be one of the major factors

considered when assessing VfM (Clifton and Duffield, 2006).

The selection of intrinsically risky projects may be conveniently carried on with PESTLE analysis, as represented in Table 2.

Risk factors, which affect VfM decisions, potentially derive from all PESTLE drivers and from SWOT Weaknesses and Threats, as represented in Figure 2.

Risk transfer and sharing from the public to the private part is a key element in PF: a principal / agent optimal risk allocation (Farrell, 2003) and co-parenting are the core “philosophy” of PF. Risk transfer is deeply involved with the allocation of risks associated with the operation of a PF contract, according to the principle that it should lie with the party best able to manage (minimize) it.

VfM for the public part has to take into account not only an economic and financial comparison with alternative financial packages and instruments, but also parameters such as:

- project efficiency (optimal use of assets - facilities during the concession life ...) and (financial and economic) sustainability;
 - multi-benefit considerations (level of tangible and intangible social benefits to the end users brought by the new hospital ...);
 - effective risk transfers to the private counterpart (considering, in particular, the real value of the construction risk transfer, often underestimated).
- All these parameters may be broadly or analytically investigated with PESTLE and SWOT instruments, following the pattern synthetically represented in Figure 2.

Table 2. Value for Money and risky project selection in a PESTLE framework

Issue / Variable Impacting on Value For Money	Key PESTLE variables	Risky features Impacting on Value for Money
Location, size and features of the new hospital	P E S T L E	Risk that the existing health structures are inadequate to support new improvements. This decision concerning the location has a strong impact on the public opinion and might be consistently delayed - even for many years - by disputes and conflicting interests of local politicians. Features and specialization of the hospital must comply with proper and synergistic healthcare network planning.
Site conditions	L E	Risk that unanticipated adverse ground conditions are discovered, increasing construction costs and/or causing delays. Risk that tenure/access to a selected site needs expropriation.
Approvals - political opposition	P L	Risk that necessary approvals from competent public authorities may not be obtained in due time. Public support or opposition to the new hospital and its investment package have a strong impact on the decision or in favour of it.
PF structure	P E L	Risk that the selected structure of the PF (PBOT, BOT, BOO, BRT ...) is not the most suitable. The decision about who makes the project - either the public or the private part - is the first challenging choice.
Delay in start-up	P E S L E	Prolonged project start-up time may result in significant underestimation of initial costs, often hidden and so difficult to forecast and handle. Private incentives to have the "job done" to be paid may help.
Useful life of the hospital	P E S T L	Risk that the useful life of the hospital (normally estimated up to 60 years), once finished, shortens as a result of unanticipated events such as <i>force majeure</i> , big demographic or health treatment changes, due to which rigid structures become obsolete or increasingly useless.
Time span / duration of the project	P E S T L	If the planning and the construction period are almost standard, typically not exceeding three years, the management period can greatly vary in different projects, normally not going beyond 25-30 years and occasionally being shorter than 15-20 years. Longer projects are intrinsically riskier: the longer the concession, the higher the costs for the public entity and conversely the revenues for the public counterpart. This risk is financial but also operational and contractual.
Construction (with features, functions, and shape of the new hospital)	E T L E	Risk that unforeseen events occur during construction, preventing the facility being delivered on time and without extra costs. Architectural innovation and sophisticated technology are a must in new projects, and the construction has to follow the planning, with a rational use of the spaces which reduces running costs. Ergonomic and energy saving solutions are particularly welcome.
Maintenance - restructuring	E T L	Risk that the planning or the construction quality is not adequate and so unable to prevent an increase in restructuring costs. Ordinary and extraordinary maintenance have to be considered even during the management case, especially if long lasting.
Bid selection criteria	P E L	Risk that the selection criteria are too few or not fair or inappropriate, being unable to carry on a meritocratic discrimination among competitors. Quantitative criteria tend to be objective, but are intrinsically unable to assess not fully measurable characteristics, while qualitative assessment are discretionary and risk lack of motivation or meritocratic evidence.

2.2. TP versus PPP/PF: a VfM comparison

After the preliminary PESTLE analysis summarized in Table 2, a subsequent SWOT analysis (for its suitability to hospitals, see Van Wijngaarden et al., 2012) may be carried on in Table 3, to compare PPP/PF with TP within the usual VfM maximizing scenario.

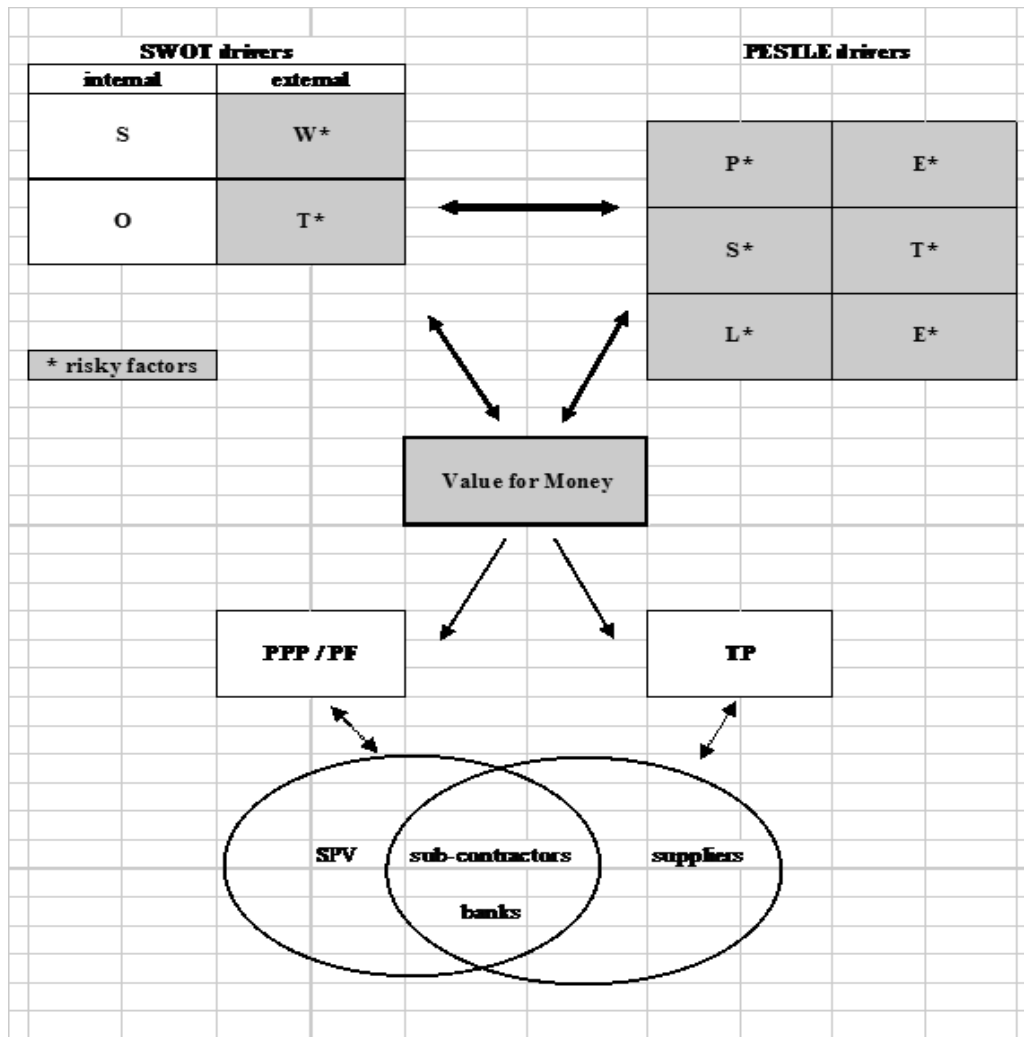
Input data are selected from empirical observation of various tenders (disciplinary with tender rules; economic and financial plans prepared as a benchmark by the public side and then presented by private competitors; various contractual agreements, even between the private SPV, its pass through suppliers and its sponsoring banks, etc.) and monitoring of adjudicated projects

(sources: UTPF, 2013; Finlombarda, 2013; EPEC, 2013).

This SWOT comparison mainly highlights the key differential points between PPP/PF and TP, without considering common issues (e.g., insurances; guarantees, etc.).

Information asymmetries intrinsically make strategies more difficult to conceive and monitor, and since they are directly proportional to the forecast horizon, TP has lower asymmetries than longer termed PPP/PF. To the extent that they can increase awareness, PESTLE and SWOT analyses may soften these problems, softening governance concerns.

Figure 2. Value for Money risk factors, interacting with PESTLE and SWOT drivers



Contractual rigidity is another well-known issue against PPP/PF, due to a long termed complex predetermination of reciprocal public and private rules, duties, and rights. Within a PESTLE / SWOT framework, this issue is addressed by Economic, Legislative but also Technological issues and represents, for the public side, a Weakness and a Threat. Mitigation strategies consist of a contractual fine-tuning, based on past experience, which may be properly sourced by shared international experiences and databases, benchmarked by standard costs (applicable to both PPP/PF and TP).

Flexibility, even with periodical performance testing or renegotiations, softens these problems, so representing an Opportunity, especially when rigidity combined with long termed information asymmetries may severely challenge VfM. This is, for instance, the case with Technological issues and supply of biomedical equipment, whose useful life is consistently shorter than that of the PPP/PF concession, so demanding for timely market testing and periodical re-auctioning.

Time, as a mental category, shapes strategic investment decisions, especially when they are long termed, and this possibly stands out as the major Threat of PPP/PF, if compared to chronologically

fragmented TP, where investment decisions may not necessarily be sub-sequentially taken at the beginning.

Another competitive advantage which is traditionally recognized to PPP/PF is represented by the presence of economies of scale and experience within private investors, where stakeholders are typically synergistically bundled within a SPV. Flexible fragmentation of tenders (for construction and different operating functions), typical of a TP process, may so represent both a Weakness and a Threat for the public side, and not only an Opportunity.

Hidden costs, such as delays in project or start-up (as mentioned in Table 2), may be significant and typically concentrated on the public side, especially if the “political dividend” of the investment is not quick and easy to cash. Private “greedy” entrepreneurship, if properly blended with the public interest, may represent a win-win strategic solution.

All these counter-weighting factors have to be analytically examined with PESTLE and SWOT instruments, considering, in particular, their impact on public VfM and governance issues.

Table 3. A comparative SWOT analysis of PPP/PF versus TP

SWOT parameters	Characteristics of PPP/PF versus TP And VfM impact
Strengths	<ul style="list-style-type: none"> • (Preliminary) feasibility study, with functional solutions • Economies of scale and experience, taking advantage of the private vendor's pooling of demand and technical expertise / professional management • Synergistic bundling of healthcare non-core operations • Longer and deeper Time / cost trade-off analysis • Win-win principal agent maximization, coordinating bundled stakeholders rotating around the SPV • Alleviation and partitioning of the financial burden on the public sector • Risk transfer from the public to the private sector • Contractual standardization • Platform of common technologies, available within the bundled SPV • Independent (private) finance and access to (international) capital markets • Debt Service Reserve Account, for proper debt servicing • Higher public bargaining power, intrinsically present in bigger tenders • Entry barriers for incumbents (high qualification standards)
Weaknesses	<ul style="list-style-type: none"> • Information asymmetries • Lack of public quality control over the delivery of services, especially in presence of inadequate specifications or poor contract design and management • Complexity (of tender, management ...) • Contractual rigidity • Incomplete contracting • Inflexible nature of the PPP arrangement • Performance measurement criticalities (Tchouaket et al., 2012) • Procedural criticalities (length of procedures; appeal to administrative tribunals; underestimation of investment costs; trade union issues; fiscal issues; urban planning criticalities; lengthy discussions with the promoter to reassess the proposal ...) • Length of procedure (from initial planning to publication of contract notice, tender and award, signature of contract and then construction & operation) • Time from award to financial close (on average, 25.4 months, according to Finlombarda, 2013) • Lack of exit strategy
Opportunities	<ul style="list-style-type: none"> • Competition between PPP and TP • VfM in risk shifting from public to private • Presence of professional consultants (highly useful, due to the peculiar skills requested) and of replicable external skills • Opening the market to private sector • Focus on efficiency, effectiveness and customer satisfaction • Market testing • Value-based competition • Align goal incongruence among different stakeholders • Possibility to use Governmental or supranational funds / grants, project bonds (Dastig, 2009) or other repayable instruments (loan, mezzanine, equity ...) • Strategic PPP partnering (Romboutson and Chiara, 2010) • Strategic private proposals • Technology and innovation • Benchmarking (with best practices, databases ...) • Job security • Better administrative and financial responsibility • Business risk sharing, with possible professional optimization • More business-like customer orientation • Potential for innovation and continuous improvement • Organization and coordination of flows and rationality of pathways • Humanization (welcoming; privacy; comfort ...) • Flexible adaptability • Functional coordination between building and maintenance phases
Threats	<ul style="list-style-type: none"> • Abandoned projects (caused by changed internal evaluations; changes in top management; legal/administrative impediments; initiatives incorporated in other projects ...) • Lack or loss of proper public funding sources, mainly due to the recessionary credit tightening (UTFP, 2013) • Inefficient / unfair risk allocation • Risk factors (Moro Visconti, 2010) • Contract default • Market-driven unforeseen patterns, increasingly competitive and changing after tender adjudication • Market position after end of contract • Quality of healthcare supply chain (Meijboom et al., 2010) with sub-contractors may be hardly detectable and trackable • Private bargaining for (undue) financial rebalancing, after tender winning • Changing regulation • Mismatch between technological changes and duration of the concession (mitigated by periodical market testing) • Changing environment / demographics / epidemiology • Private rent seeking • Legislative and fiscal changes / unstable and contradictory legislation • Less flexible decision-making • Demand-driven services may become rigid • Competition may shrink after tender albeit it can be enhanced by market testing

2.3. The Private SPV as a bundled nexus of contracts

Even if VfM considerations mostly concern the public side, the business model of the private counterpart, typically represented by a

comprehensive SPV, shows where economic and financial margins should come from, also considering, in a multilateral stakeholders' relationship, sponsoring banks and other strategic lenders or suppliers. This occurrence is broadly consistent with the findings of Young and Ballarin,

2006, according to which healthcare organizations must conceive their strategies in a highly unusual (multi-actor) marketplace, where a variety of system interdependencies complicate decision-making.

Any public choice, starting from the incubating project, up to tender design and adjudication, has to face and challenge the other side of the coin, represented by private interest, theoretically antithetical but in many cases converging towards a shared goal. Moreover, even private players have to face, from their side, SWOT queries, and frame-working PESTLE issues. Converging interests may so minimize governance concerns.

An important caveat, consistent with the intrinsic nature of long termed PPP/PF investments, is that they do vary over their useful life, so demanding dynamic scrutiny in a changing environment, timetabled by typical sequential milestones such as planning - engineering - construction - management - handing over, but also by events, up to *force majeure*, which may be largely unforeseen, so representing the core component of mostly unexpected risky occurrences.

3. RESULTS AND DISCUSSION

The topics addressed in this paper are too wide to be fully covered by comprehensive empirical evidence. The choice is so limited to a convenient subset of data, focusing on the PF outsourced investment.

Further analysis is dedicated to a real tender sample, where qualitative and quantitative marking of private competitors is reinterpreted with PESTLE and SWOT instruments. This evidence is meaningful since the investment perimeter represents the backbone of VfM considerations, in a risk/return context concerning public sector comparisons with TP and private convenience in undertaking the project, also considering bankability issues. Moreover, this choice is consistent with PESTLE and SWOT analysis.

The Italian case for healthcare PF is also meaningful, representing the fourth largest market in the world (Finlombarda, 2013), after Commonwealth countries such as pioneering UK (Broadbent et al., 2003; Pollock et al., 2002), Canada and Australia. According again to Finlombarda, 2013, even if PF has strongly contributed to the modernization of Italian healthcare infrastructure, there are still many criticalities that prevent PF from becoming an efficient solution to the crisis of public finance, represented by its lengthy procedures (6.4 years from the initial planning to the start of the operating stage), subject to increased risk of volatile financial conditions.

3.1. VfM Insights from a Real Tender Sample

A simplified sample taken from a recent real PPP/PF healthcare investment of more than 200 million € in Northern Italy, may give a sufficiently fair and generalized picture of a competitive tender where VfM optimization represents a key target for the public side.

Interpretation of the key qualitative and quantitative marking points with PESTLE and SWOT analysis, as proposed in synoptic table 4, may provide useful insights to increase public awareness

in the discriminating choice between TP and PPP/PF and, once that the PPP/PF option is selected, so as to improve VfM assessment and monitoring.

Once properly detected and measured, PESTLE and SWOT drivers should conveniently be synthesized in an algorithm, to be used for instance while preparing the tender rules and marking.

3.2. Facing Public Budget Constraints and Credit Crunch

Proper financing of the PF initiative, consistent with the SPV business model, depends on many complementary factors (to be discounted at a different risk rate), such as:

1. The "price" of the investment, in the form of the public grant contribution for the building and, sometimes, the biomedical equipment;

2. The availability payment, represented by the annual rent paid to the private concessionaire; due to the Eurostat risk transfer rules, part of the availability payment (up to 50 % or more) is conditionally subordinated to effective management and working of the hospital and is so subject to fines if the service provided is inadequate.

3. The economic margin of the no-core services, within the investment perimeter, with a proper blending of revenues and costs;

4. The duration of the whole concession (project + construction + operation/management);

5. The (consequential) net amount to be financed;

6. Other complementary issues, such as the Debt Service Reserve Account, the VAT facility or the public grant facility;

7. The shareholders' composition, with a proper blending of complementary players, such as constructors and engineering companies, management companies in different sectors (facility management; technical and biomedical equipment; commercial activities; laundry, etc.).

Budget financed models such as PF are based on a remuneration scheme of the private partner, with payments that, following a composite set of goals/parameters, may alternatively be (Weber and Alfen, 2010, p. 69):

- Performance based, depending on specified services and standards to be met;
- Availability based, if working healthcare facilities are made available;
- Volume, result or usage based, depending on consumption, contractual targets, frequency and intensity of use, pay for use, etc.

All these features may be, once again, analyzed within a PESTLE and SWOT framework, so easing VfM assessment.

The incidence of public funding on total investments for awarded projects, again available from Finlombarda, 2013, is 45%, with a decreasing trend, if compared to the previous survey.

This parameter plays a crucial economic and financial role and is sensitive to Political, Economic and Legal considerations, representing a relative Weakness factor for the public part, directly proportional to the amount of the public contribution.

Public VfM is unsurprisingly highly sensitive not only to the overall amount of public contribution, but also on its interaction with other key variables (length of concession, perimeter and

expected income of the operations attributed to the concessionaire, the amount of availability payment), as pointed out in Table 4.

Table 4. Healthcare Tender marks [100/100]

1. qualitative elements = [60/100] marks	PESTLE and SWOT considerations
1.1 Technical, urban and aesthetic value of the preliminary project = 30 marks, to be attributed according to the following sub-criteria:	Typical Technological issue, with Environmental consequences. Economic and Legal aspects are also concerned. Strengths and Opportunities are positively considered and marked, being offset by Weaknesses and Threats. PPP risk sharing and transfer should professionally minimize its impact.
1.1.1 technical quality and completeness of the preliminary project = 1 mark;	
1.1.2 urban aspects of the healthcare investment = 3 marks;	
1.1.3 aesthetic value = 2 marks;	
1.1.4 characteristics of architectural solutions, even considering the flexibility of the project solution = 7 marks;	
1.1.5 characteristics and qualities of the structural and anti-seismic solutions = 2 marks;	
1.1.6 characteristics and qualities of the plant solutions, even considering the flexibility of the project solution = 6 marks;	
1.1.7 characteristics and maintenance of the building materials = 4 marks;	
1.1.8 characteristics and qualities of the medical equipment = 2 marks;	
1.1.9 energy quality and efficiency = 1 mark;	
1.1.10 interference of men at work with healthcare activity = 1 mark.	
1.2) management and quality of services = 26 marks, to be attributed according to the following sub-criteria:	Again a Technological and managerial issue, with Environmental and Social consequences. Economic and Legal aspects are also concerned (contractually agreed quality brings to savings and enhances VfM). Strengths and Opportunities, again offset by Weaknesses and Threats, are subject to comparative judgment among competitors. These risks are typically borne by the private part.
1.2.1 quality and management of washing = 4 marks;	
1.2.2 quality and management of cleaning services = 4 marks;	
1.2.3 quality and management of canteen and catering = 4 marks;	
1.2.4 quality and technical assistance of the medical equipment = 4 marks;	
1.2.5 quality and management of ordinary and extraordinary maintenance = 4 marks;	
1.2.6 quality and management of energy services, plants, and other equipment = 4 marks;	
1.2.7 commercial activities = 2 marks;	
1.3 quality and completeness of the proposed contract of concession = 4 marks.	An overall PESTLE and SWOT assessment, considering the comprehensive team workings, as evidenced in the private proposal.
2. quantitative elements = [40/100] marks	Easier to measure, being quantitative and so intrinsically less subjective.
2.1 quantitative contents of the economic-financial plan = 40 marks, to be attributed according to the following sub-criteria:	Economic and financial aspects, synthesizing most of the PESTLE and SWOT acronyms
2.1.1 IRR project = 1 mark;	Economic impact, as stated above, ideally within a confidence interval (if IRR is too high, VfM shrinks, but if it is too low, the project is not appealing to the private players and their banks and may become unsustainable)
2.1.2 building timesheet schedule = 1 mark;	quicker building phases, safeguarding quality with appropriate testing, anticipates the management phase and the possibility to use the hospital
2.1.3 length of the concession = 10 marks;	The shorter, the cheaper for the public part. Again, the issue is mostly Economic and Legal. Excessive length, anyway within the contractual provision, destroys VfM and represents a Threat and a Weakness of the proposal.
2.1.4 public grant = 1 mark;	The lower, the cheaper for the public part, being compensated by other Economic gains (longer concession; higher commercial revenues; higher availability payments, etc.).
2.1.5 commercial revenues = 26 marks;	Formally not affecting VfM since commercial "hot" costs are borne by end users. Economic, Socio-Political and Legal aspects are affected by the perimeter of the commercial activities.
2.1.6 availability payment = 1 mark.	Periodic cost over the whole management phase, compared to the concentrated public grant. An Economic and Legal issue but also a public Opportunity since the availability payment is conditional upon positive private performance and delivery, so transferring operational risk from the public to the private part.

4. CONCLUSION

The strategic choice between TP and PPP/PF rotates around the outsourced optimization of public VfM. The big question is whether one-shot bundling of

construction and management within a PPP/PF framework produces more VfM than fragmented contracting with TP.

Within this framework, complementary PESTLE, and SWOT analyses increase the awareness of the

internal / external and general / specific strategic forces which drive healthcare infrastructural investments. The decision between PPP/PF versus TP is Politically sensitive since it affects many neuralgic interests of different stakeholders, both public and private.

Among the other most frequent biasing factors, also affecting VfM, public budget constraints emerge as pro PPP/PF factors, especially if proper risk transfer to the private counterpart occurs. Proper use of PESTLE and SWOT instruments, eased by careful benchmarking, and sourced by appropriate and updated databases, stands out as a useful problem-solving device. While the seminal paper of Romboutson and Chiara, 2010 shows a pioneering analysis of strategic PPP with PEST and SWOT instruments, this paper is fine-tuned to the specific healthcare industry.

The topics analyzed in this paper are so wide and still pioneering that further research avenues naturally emerge; among the many critical issues, the following deserve being mentioned and thoroughly investigated:

- Tender and adjudication analysis, sourced by available databases, matched and compared with standard healthcare purchase pricing of goods and services; this is a key VfM issue, first of all to discriminate between TP and PPP/PF;
- Analysis of the risk matrix of healthcare investments (Moro Visconti, 2010), so as to detect which risks are effectively transferred to the private counterpart;
- Economic and financial sustainability of all the stakeholders involved (public, private with their sponsoring banks, end users, etc.);
- Corporate governance considerations (conflicts and convergence of interests, etc.) in a PESTLE and SWOT scenario;
- Convenience of public healthcare outsourcing to private players, considering cost reduction issues, efficiency improvements, quality controls, etc. (Macinati, 2008) and performance measurement criticalities;
- Relationships between central and regional public authorities, to optimize the tradeoff between local autonomy and needed global coordination, also to avoid arbitrages between efficient and inefficient regions and undue cross subsidies.

Many of the aforementioned points, which extend well beyond the narrow focus of the investigation of this paper, still miss proper empirical evidence and comprehensive analysis, so representing a vital and joint stimulus for both academics and practitioners.

From a research point of view, the main conclusion of this paper is that PESTLE and SWOT analysis, sourced by increasingly systematic databases, may proactively contribute to underline key strategic drivers for optimal public and private partnering. PPP corporate governance issues are strictly dependent on such a partnering. Being leverage a prominent characteristic of PPP/PF projects, governance and control issues are intrinsically embedded in their financial package. The contents and findings of this paper may well be extended beyond the apparently narrow focus of the healthcare industry, even outside Italy.

REFERENCES

1. Anessi Pessina, E. and Cantù, E. (2006), "Whiter managerialism in the Italian National Health Service?", *International Journal of Health Planning Management*, Vol. 21 No. 4, pp. 327-355.
2. Broadbent, J., Gill, J. and Laughlin, R. (2003), "Evaluating the Private Finance Initiative in the National Health Care Service in the UK", *Account Audit Account Journal*, Vol. 16 No. 3, pp. 442-445.
3. Burger, P. and Hawkesworth, I. (2011), "How To Attain Value for Money: Comparing PPP and Traditional Infrastructure Public Procurement", *OECD Journal on Budgeting*, Vol. 11 No. 4, pp. 1-56.
4. Clifton, C. and Duffield, CF. (2006), "Improved PFI/PPP service outcomes through the integration of alliance principles", *International Journal of Project Management*, Vol. 24 No. 7, pp. 573-586.
5. Coulson, A. (2008), "Value for money in PFI proposals: A commentary on the UK Treasury Guidelines for Public Sector Comparators", *Public Administration*, Vol. 86 No. 2, pp. 483-498.
6. Christiansen, T. (2002), "A SWOT analysis of the organization and financing of the Danish health care system", *Health Policy*, Vol. 59 No. 2, pp. 99-106.
7. Dastig, M. (2009), "How can EU-Funds be used to finance Public-Private Partnerships?" *European Public Private Partnership Law Review*, Vol. 4 No. 3, p. 158.
8. De Clerck, D., Demeulemeester, E. and Herroelen, W. (2012), "Public Private Partnerships: Look before you Leap into Marriage", *Review of Business and Economics Literature*, Vol. 57 No. 3, pp. 249-262.
9. De Marco, A. and Mangano, G. (2013), "Risk and Value in Privately Financed Health Care Projects", *Journal of Construction Engineering Management*, Vol. 139 No. 8, pp. 918-926.
10. De Marco, A., Mangano, G., Cagliano, A.C. and Grimaldi, S. (2012), "Public Financing into Build-Operate-Transfer Hospital Projects in Italy", *Journal of Construction Engineering Management*, Vol. 138 No. 11, pp. 1294-1302.
11. Demartini, C. and Mella, P. (2013), "Beyond feedback control: the interactive use of performance management systems. Implications for process innovation in Italian healthcare organizations", *International Journal of Health Planning Management*, Vol. 29, No. 1, pp. 1-30.
12. EPEC (2013), Market Update. Review of the European PPP Market in 2012, URL <http://www.eib.org/epec/resources/Market%20Update%202012.pdf>.
13. Finlombarda (2013), Survey of Project Finance in Healthcare Sector (XI report), Maggioli, Rimini.
14. Farrell, LM. (2003), "Principal-agency risk in project finance", *International Journal of Project Management*, Vol. 21 No. 8, pp. 547-561.
15. Ghazinoory, S., Abdi, M. and Azadegan-Mehr, M. (2011), "SWOT methodology: a state-of-the-art review for the past, a framework for the future", *Journal of Business Economics & Management*, Vol. 12 No. 1, pp. 24-48.
16. Guccio, C., Pignataro, G. and Rizzo, I. (2012), "Determinants of adaptation costs in procurement: An empirical estimation on Italian public works contracts", *Applied Economics*, Vol. 44 No. 15, pp. 1891-1909.
17. Helms, M.M. and Nixon, J. (2010), "Exploring SWOT analysis - where are we now?: A review of

- academic research from the last decade", *Journal of Strategy and Management*, Vol. 3 No. 3, pp. 215-251.
18. Herrala, M., Pakkala, P. and Nokkala M. (2011), "SWOT analyses of infrastructure networks' ownership and governance models", *Research Reports in Department of Industrial Engineering and Management*, No. 7, URL <http://herkules oulu.fi/isbn9789514294938/isbn9789514294938.pdf>.
 19. HM Treasury (2006), *Value for Money Assessment Guidance*, URL http://www.hm-treasury.gov.uk/d/vfm_assessmentguidance061006opt.pdf.
 20. Ippolito, A. and Viggiani, V. (2014), "Positioning matrix of economic efficiency and complexity: a case study in a university hospital", *International Journal of Healthcare Planning and Management*, Vol. 29 No. 4, pp. 362-372.
 21. Kahveci, R. and Meads, C. (2008), "Analysis of strengths, weaknesses, opportunities, and threats in the development of a health technology assessment program in Turkey", *International Journal of Technology Assessment in Health Care*, Vol. 24 No. 2, pp. 235-240.
 22. Macinati, M. (2008), "Outsourcing in the Italian National Health Service: findings from a national survey", *International Journal of Healthcare Planning and Management*, Vol. 23 No. 1, pp. 21-36.
 23. Meijboom, B.R., Bakx, S. and Westert, G. (2010), "Continuity in health care: lessons from supply chain management", *International Journal of Healthcare Planning and Management*, Vol. 25 No. 4, pp. 304-317.
 24. Morillos, D. and Amekudzi, A. (2008), "The State of the Practice of Value of Money (VfM) Analysis in Comparing Public Private Partnerships to Traditional Procurements", *Public Works Management & Policy*, Vol. 13 No. 2, pp. 114-125.
 25. Moro Visconti, R. (2010), *The Risk Matrix of Project Finance in the Healthcare Sector*, URL <http://ssrn.com/abstract=1417289>.
 26. Moro Visconti, R. (2013), "Evaluating a Project Finance SPV: Combining Operating Leverage with Debt Service, Shadow Dividends and Discounted Cash Flows", *International Journal of Economics, Finance and Management Sciences*, Vol. 1, Num.1
 27. Moro Visconti, R. (2014a), "Multidimensional Principal-Agent Value for Money in Healthcare Project Financing", *Public Money & Management*, Vol. 34 No. 4, pp. 259-264.
 28. Moro Visconti, R. (2014b), "Improving Value for Money in Italian Project Finance", *Managerial Finance*, Vol. 40 No. 11, pp. 1058-1077.
 29. Pollock, A.M., Shaoul, J. and Vickers, N. (2002), "Private finance and value for money in NHS hospitals: A policy in search of a rationale?" *British Medical Journal*, Vol. 324 No. 7347, pp. 1205-1209.
 30. Roumboutsos, A. and Chiara, N. (2010), "A strategic partnering framework analysis methodology for public-private partnerships", *Journal of Financial Management of Property and Construction*, Vol. 15 No. 3, pp. 235-246.
 31. Sotiriadou, K. and Antonopoulou, L. (2003), "PEST and SWOT Analyses of the "Home Care" Program in Greece", *Hellenic Journal of Nurse Science*, Vol. 2 No. 2, pp. 35-40.
 32. Subramanian, K.V and Tung, F. (2016). "Law and project finance", *Journal of Financial Intermediation*, Vol. 25 No. 1, pp. 154-177.
 33. Swayne, L.E., Duncan, W.J. and Ginter, P.M. (2006), *Strategic Management of Health Care Organizations*. Blackwell, Oxford.
 34. Tchouaket, E.N., Lamarche, P.A., Goulet, L. and Contandriopoulos, A.P. (2012), "Health care system performance of 27 OECD countries", *International Journal of Health Planning Management*, Vol. 27 No. 2, pp. 104-109.
 35. UTFP (2013), *Relazione al CIPE sull'attività svolta nel 2012 dall'Unità Tecnica Finanza di Progetto*, URL www.utfp.it/docs/relazione/Relazione_UTFP_2012.pdf.
 36. van Wijngaarden, J.D.H., Scholten, G.R.M. and van Wijk, K.P. (2012), "Strategic analysis for health care organizations. The suitability of the SWOT-analysis", *International Journal of Health Planning Management*, Vol. 27 No. 1, pp. 34-49.
 37. Vukašinović, Z., Bjegović-Mikanović, V., Jančić, R., Spasovski, D., Živković, Z., Cerović, S. and Terzić, Z. (2009), "Strategic planning in a highly specialized orthopaedic institution", *Srpski Arhiv Za Celokupno Lekarstvo*, Vol. 137 No. 1-2, pp. 63-72.
 38. Weber, B. and Alfen, H.W. (2010), *Infrastructure as an Asset Class*, John Wiley, Bognor Regis.
 39. Williamson, P.G. and Zeng, M. (2009), "Value for Money Strategies for Recessionary Times", *Harvard Business Review*, Vol. 87 No. 3, pp. 66-74.
 40. Young, D.W. and Ballarin, E. (2006), "Strategic decision-making in healthcare organizations: it is time to get serious", *International Journal of Health Planning Management*, Vol. 21 No. 3, pp. 173-191.