

Infrastructure Funds: The Why, What, and How?

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After privatization, joint ventures, franchising and contracting out, “Public-Private Partnerships” (PPP), are the new darling of cash-strapped governments looking to lighten the financial burden of infrastructure investments. PPP provide opportunities for governments to shift financial obligations off their balance sheets, and for institutional investors to match low-risk assets with their long term funding needs. However, the success of such partnerships is intrinsically linked to the contracting framework and the risk sharing agreement. At stake are crucially important capital and social infrastructure projects traditionally called ‘public goods’ and overseen by the government. Putting these in the hands of investment fund managers can bring about greater efficiencies to the benefit of the end user (you and I), but the appropriate alignment of incentives is imperative.

Why...

Infrastructure systems are the means to economic growth and social development, and must adapt to a growing urban population, global interconnectedness, changing technology and climate change constraints. The Organisation for Economic Cooperation and Development (OECD) has estimated infrastructure needs before 2030 at 2.5% of world gross domestic product (GDP) for telecoms, road, rail, electricity and water. Including energy-related infrastructure into the equation shifts the figure to 3.5% of world GDP. While the bulk of this will be allocated to the maintenance and upgrading of existing infrastructure in developed countries, most of the investment in developing and emerging markets will be on new construction and the expansion of inadequate networks (OECD, 2008).

However, public finances around the globe are under strain in the short and long term due to ageing populations, growing social security costs and the massive stimulus plans following the financial crisis of 2007/8. Alternative sources of financing for infrastructure are thus becoming a necessity and private sector infrastructure funds are stepping into the gap. Indeed, institutional investors such as pension funds are attracted to PPP for the long-term, inflation-protected steady returns which can comfortably match the needs of their low risk profile clients.

What...

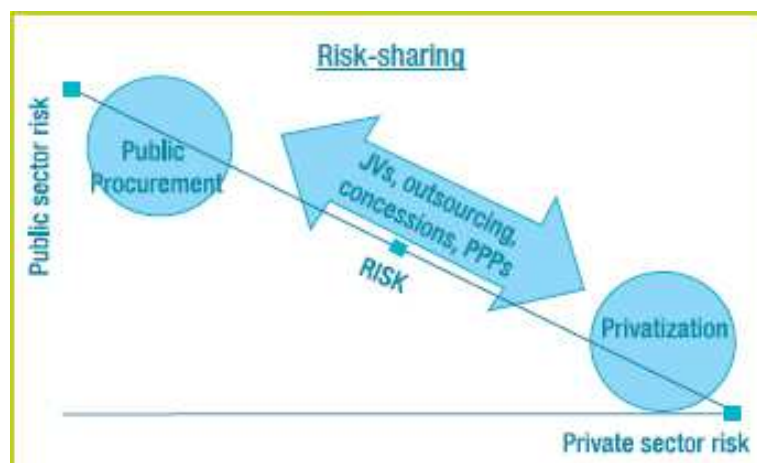
Infrastructure investing is a growing sector within fund managers' portfolios, and is currently regaining speed after the recent financial crisis. As with private equity and real estate funds, investors generally commit to infrastructure projects via professionally managed funds. While infrastructure projects are individually unique and often bear little resemblance to traditional asset allocation groups, they can be loosely defined in terms of underlying project structure, industry sector and stage of development (Probitas Partners, 2007).

Project Structure

Investments in infrastructure can take the form of purely private transactions without a public role, and operate in highly-regulated sectors such as energy, transport and waste management. These private infrastructure investments generally have higher return profiles with returns driven by capital gains rather than current income, and are considered part of the private equity asset allocation rather than infrastructure per se. Since PPP form the bulk of infrastructure fund investments, this project structure will be the focus of this section.

The International Monetary Fund (IMF) offers a definition of a PPP as “an arrangement where the private sector supplies infrastructure assets and services that traditionally have been provided by the government”, while the European Investment Bank (EIB) proposes a vague “...relationships formed between the private sector and public bodies often with the aim of introducing private sector resources and/or expertise in order to help provide and deliver public sector assets and services.” The French PPP Institute (Institut de Gestion Délégée) defines a PPP as a long-term contract in which the public authority gives the management of a project of public interest to “generally private” companies. The definition of a PPP seems to be an ex-post affair: what makes a contract between the public and private sector a PPP, rather than a traditional public procurement or privatization (or, for that matter, a concession, joint venture or outsourcing contract)?

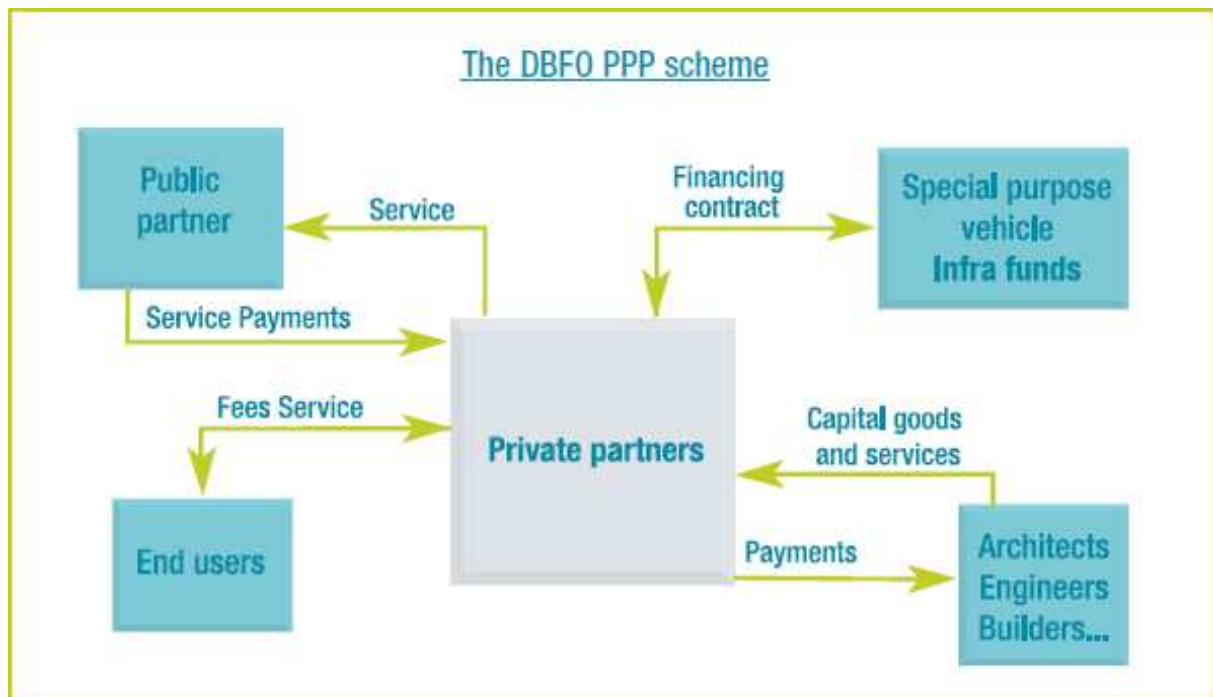
The answer can be found in the nitty-gritty of the risk-sharing contract. While governments can use traditional procurement to effectively deliver services, these are not necessarily efficient, that is, cost effective. Bringing the private sector on board often (not always) results in improved efficiency, but the gains in efficiency are linked to the share of risk allocated to the private sector. Without sufficient risk transfer, the project begins to look like a public procurement structure (see diagram below).



At the other end of the spectrum, PPP differ from privatizations in terms of the alignment of interests. While privatizations do not need to incorporate the government's objectives into their profit-maximizing strategy, a PPP' outcomes are specified by the government and negotiation between the parties takes place in order to decide the allocation of risk, and pricing. The private company can henceforth maximize its profits within the bounds of the contract.

The model of PPP that has emerged as the most typical of infrastructure funds is the Design, Build, Finance, Operate (DBFO) scheme (in France, this is similar to the "contrat de partenariat"). Under this setup, the government specifies the services it wants the private sector to deliver, and then the private partner designs and builds an asset to that end, finances its construction, operates the assets and finally provides the services to the end users or the government.

The private partners receive either a stream of payments from the government or from direct user charges, or both. Entrusting the private sector with each phase of the project reflects the conviction that the private sector can be more efficient in service delivery, and enables a significant transfer of risk at all stages from the public to the private sector. The objectives of the government are thus aligned with the profit objectives of the private partner.



Industry sector

Infrastructure investments can also be defined according to their industry sector, as the latter will in turn define the project's risks, duration and financing method. Generally are listed four principal sectors:

Transport

The “classic” infrastructure sector, transport projects are perhaps the most adaptable to the PPP framework. The construction of toll roads, airports, high speed train links and bridges provide infrastructure funds with large scope, long-term projects whose revenues are derived from end user fees. Examples in France include the Autoroute de Liaison Seine-Sarthe worth €900mn, and the TGV Rhine-Rhone high-speed train line.

Water and waste

The management of water and waste is a growing sector for PPP, with private partners attracted by user fee-driven revenues. Large companies are entirely focused on providing these services, such as Veolia in France.

Energy

Projects such as natural gas transmission lines, natural gas storage and wind farms appear to be adaptable to PPP contracts, although the sector is much broader as a whole.

Social Infrastructure

Somewhat controversial, social infrastructure projects entail the delivery of public sector services, with revenues generated by payments from the public authority concerned. Education projects can include school transport, food services and cleaning, while actual teaching remains in the public domain. PPP are increasingly used to construct hospitals, social housing, defence projects, and prisons. The French government is particularly aggressive in these areas, with plans to build 18 prisons and 30 schemes in healthcare (OECD, 2008).

Stage of Development

Categorizing the risk-return profile of infrastructure investments according to their stage of development is a deceptive and misleading exercise. Infrastructure funds which seek the highest possible return from a brownfield¹ investment can leverage the deal to a point where the ‘low-risk’ project is as risky or riskier than rehabilitated brownfield or greenfield² investments. Indeed, the risk-return profile must be determined on a case-by-case basis, taking into account factors such as contract risk, capital structure and leverage, demand elasticity, inflation and political risk. As mentioned above, the specific allocation of risks between the private and public partners will also define the risk-return profile.

¹ As the name might imply, brownfield investments are ‘aged’, well-established infrastructure investments that already generate cash flows, such as a toll road. In terms of their risk-return profile, these investments can be compared to long-term bonds, and their duration can be over 30 years.

² In contrast to brownfields, greenfield investments are concerned with new infrastructure that must be built from the start. The risks involved are thus more complex, involving all DBFO phases, with cash flows only being generated after the building phase. Since Greenfield investments are often sold on to other investors at completion, they require deal-making expertise not necessary in more classic investments. The duration is typically shorter than brownfield investments.

How...

The How of the Why: Policy framework and National accounting treatment of PPP

We mentioned in the first section that many governments are aggressively pushing for more PPP in a context of widening public deficits. However, the economic justification of PPP is not always forthcoming, with some countries (normally those with imposed budget deficit rules) motivated simply by an accounting incentive to shift the infrastructure debt burden off their balance sheet.

Policy framework

The theory of contracts suggests that private participation is only workable if the government can write a fully specified, enforceable contract with the private sector. PPP are thus well suited to situations where the government can clearly identify the quality of the services it wants, and translate these into measurable output indicators to be linked to service payments. Situations where service requirements are expected to change substantially over time, or where technical progress is likely to change how the service is provided are not ideal for PPP. Cases where the government cannot write complete contracts because service quality is inherently not contractible are not candidates for PPP.

Policy frameworks for PPP must incorporate the elements of contractibility, adequate risk-sharing and incentive-based regulation in order for the gains in efficiency to offset eventual higher private sector borrowing costs. Other prerequisites for long-term success include political commitment, good governance and an appropriate legal framework that guarantees the honouring of contracts. The development of government expertise in managing PPP programmes, as well as a more refined project appraisal methodology, is also necessary.

FOCUS EUROSTAT (2004)

Decision on the treatment of PPPs

Assets involved in PPPs should be classified as non-government assets and recorded off government balance sheets if both of the following conditions are met:

- 1 The private partner bears the construction risk.*
- 2 The private partner bears either availability or demand risk.*

These conditions are not met if the government makes service payments to the private sector:

- a) Irrespective of the state of the asset,*
- b) Independent of the service delivery,*
- c) Independent of demand.*

National accounting, fiscal and reporting treatment of PPP

The treatment of PPP in the national accounts is directly dependent on the risk-sharing arrangement in individual PPP projects (see Eurostat insert). Assessing risk transfer remains a complicated exercise, given the legal complexity of contracts and ex-ante nature of risk assessment. In addition, the 'Too big to fail' problem is ever present in large projects that provide essential services, where the government bears more risk than stipulated in the contract.

There is currently no international fiscal and accounting standard specifically applicable to PPP, which allow partners to avoid certain expenditure controls and move debt off balance sheets. The General Finance Statistics Manuel 2001 (GSFM) covers the current accounting treatment of PPP operations, but a more comprehensive framework will do much to promote transparency in the area.

The How of the What: Infrastructure fund strategies

The financing of PPP provide opportunities for private infrastructure funds, whose investment strategies have some common threads: most funds prefer investments in developed countries (European and northern American markets); major funds are sponsored by large financial institutions and are run like divisions of an investment bank, but this model is becoming unpopular with investors who prefer independent vehicles; the most popular types of investment are brownfield and rehabilitated brownfield projects; and finally, almost all funds are focused on equity investments, with very few attempting to raise debt for infrastructure, nor are there many focusing on secondary investments (Probitas, 2007). The fund of funds strategy is gaining ground, although the additional management fees involved are discouraging for brownfield-focused strategies.

Fund durations vary from very long-term, concession-based funds to traditional private equity fund structures with ten year maturities. The latter are often inappropriate for projects with 15 or 30-maturities, and more experienced investors prefer to maintain their exposure for as long as possible. Hybrid structures allow investments across the range of infrastructure projects, with greenfields being sold upon completion, and brownfields transferred in some way at the end of the vehicle's life to appropriate partners. The transfer between shorter and longer-term funds raises the problem of pricing of positions upon transfer: conflict arises when some investors want to maintain exposure, and others want to liquidate their positions. No standard method exists, but structures are evolving in the direction of greater flexibility for all parties. Open-ended, or 'evergreen' structures which provide liquidity to investors after a set period would appear to match long-tailed assets well; however, the pricing issues are not fully solved, and the legal difficulties discourage investors with fixed duration requirements.

The pricing of infrastructure funds typically reflects the norms in vigor for private equity funds: 2% management fee plus 20% carry ('carry' is the share of the profits in a partnership that is paid to the manager as compensation, and is designed to incentivize the manager to maximize performance). Management fees are calculated based on net asset value, resulting in lower fees than in private equity models. Additional fee structures including acquisition, financing and disposal fees, hurdle rates of return and other methods for calculating and distributing carry are possible. For brownfield funds with returns of around 10-12%, the '2 and 20' fee structure is perhaps hard to justify. Funds focusing on rehabilitated brownfields or greenfields will have higher returns (15-20%) and thus charge higher fees (Probitas, 2007). The fee structure is undoubtedly crucial for the correct alignment of interests between investors and fund managers, and there is no one size to fit all. Indeed, the previous sections have detailed the unique nature of infrastructure projects and their risk-return profiles.

Last word

Investments in infrastructure have naturally taken on an element of sustainable growth, with 'green infrastructure' reducing greenhouse gases and 'adapted infrastructure' built to adapt to future climate change. Public policy which guides PPP processes could do much to further this trend, by integrating emission targets and climate change adaption into the choice criteria for private partners. Private partners would thus need to evaluate and integrate long-term environmental risks into their investment decision which represents a cost and added complication to an already delicate risk-return profile. However, doing so would have a beneficial impact on the company's ethical image. The gains from infrastructure PPP are thus numerous for both private and public parties, but should be harnessed in such a way that public imperatives are compatible with private interests. This would appear to be more art than science, and experience will no doubt be the sculptor of this oeuvre.