

Public-Private Partnerships:

A Review of International and Austrian Experience *

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1. INTRODUCTION

Worldwide, interest in partnerships between the public and private sectors to provide, finance and operate public infrastructure, services and utilities has grown at a steady rate since the mid-1990s. Despite setbacks—in terms of public image as well as challenges in the UK and slow political embrace elsewhere—the use of Public-Private Partnerships ("PPP") and policies that promote public-private partnerships and privately financed public facilities projects, are growing in Europe as well as in North America, Latin America and other major emerging markets including China.

This review first will attempt to conceptually and operationally define Public-Private Partnerships and describe the stated policy objectives they seek to attain. It will then briefly trace their historic background, before reviewing present international developments and their drivers. It will cover in more detail the current status of PPPs in Austria, the achievements in this area there, the driving forces behind their progress and key challenges faced in furthering and implementing PPPs. It will then conclude by highlighting some of the key requirements for success in structuring and implementing PPPs based on international experience, and discussing several of the policy themes and issues that have emerged in the more advanced PPP markets such as the UK.

The overall conclusion of this review is that PPPs, where they are supported by coherent and clear policies and an adequate institutional and regulatory framework, have succeeded in involving the private sector in the financing and provision of public infrastructure and services in a way that secures value for money whilst limiting public sector exposure to financial risks related to investment and operation.

For the foreseeable future, PPPs as an instrument for supplementing and augmenting the infrastructure investment capability of governments will spread and geographically

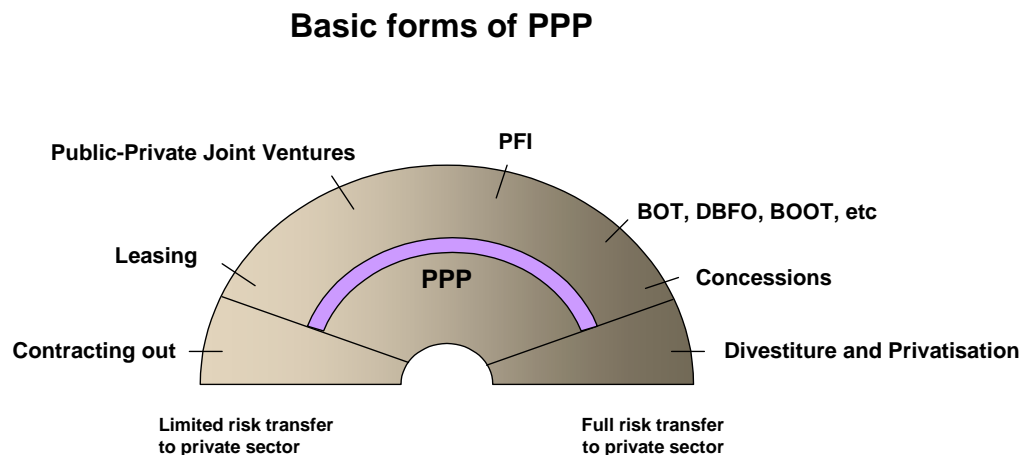
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expand in the face of public sector budget constraints, pressing capital improvement needs and the necessity to transfer financial risks away from the public sector.

2. DEFINITION AND KEY CHARACTERISTICS

2.1 Concept

There is inherent difficulty in formulating an operational definition of public-private partnerships. The concept generally is used loosely for any contractual arrangement that involves co-operation between public and private sectors in all or some aspects of the delivery of public services or provision of infrastructure. PPP is used to designate a variety of co-operation models ranging from outsourcing and private sector participation in joint ventures with the public sector, to concession projects whereby the public sector transfers significant and specific investment and operating risks to a private sector party. There is considerable variation between countries in the way the PPP concept is made operational. In the UK under the so-called Private Finance Initiative (PFI), operator and concession based models are in use whereas in countries such as Germany, privatisation and outsourcing are considered forms of public-private partnerships.



For the purposes of this overview, the term PPP is used to denote the delegation, through contract, by the public sector of responsibilities for public services and infrastructure provision statutorily conferred to it. Under such arrangements, PPPs generally involve the public sector buying, under long-term contracts for a fixed period of time, services and facilities that are built, financed and operated by the private sector. It entails transferring the risks, in part or in full, associated with the planning, development, construction, financing and operation of public services and infrastructure investment projects.

Such delegation can take the form of a co-operation or joint venture between public and private parties or of a concession. In both cases, risks are transferred away from the contracting public sector party with no or only limited financial recourse to government.

The co-operation model involves the establishment of a company, under private law, with joint public and private shareholding, to carry out investment in and/or operate public infrastructure and services. Under this model, the public and private partners essentially share all investment and operating risks. The co-operation model, in several countries in Europe, is rooted in joint planning and investment corporations, such as the *sociétés d'économie mixte* in France, or the Development Corporation in the UK, that were established in the 1960s and 1970s to undertake industrial, urban or new town development.

In contrast to the co-operation model where all risks are fully shared by the public and private partners, under the concession model, each of the different risks is contractually structured and allocated to either the public or private party.

Under the most common form of PPP, the private sector designs, builds, finances and operates facilities based on output specifications, relating to the availability, quality and level of services, decided by the public sector contracting entity. The public sector either relinquishes ownership or leases back the assets required to provide these services, such as a wastewater treatment plant, a toll bridge or a hospital, and pays the private PPP contractor a stream of committed charges for their use over the contract period. At the end of the contract and depending on the terms agreed at its outset, ownership of the asset either remains with the private sector, or is transferred to the public sector.

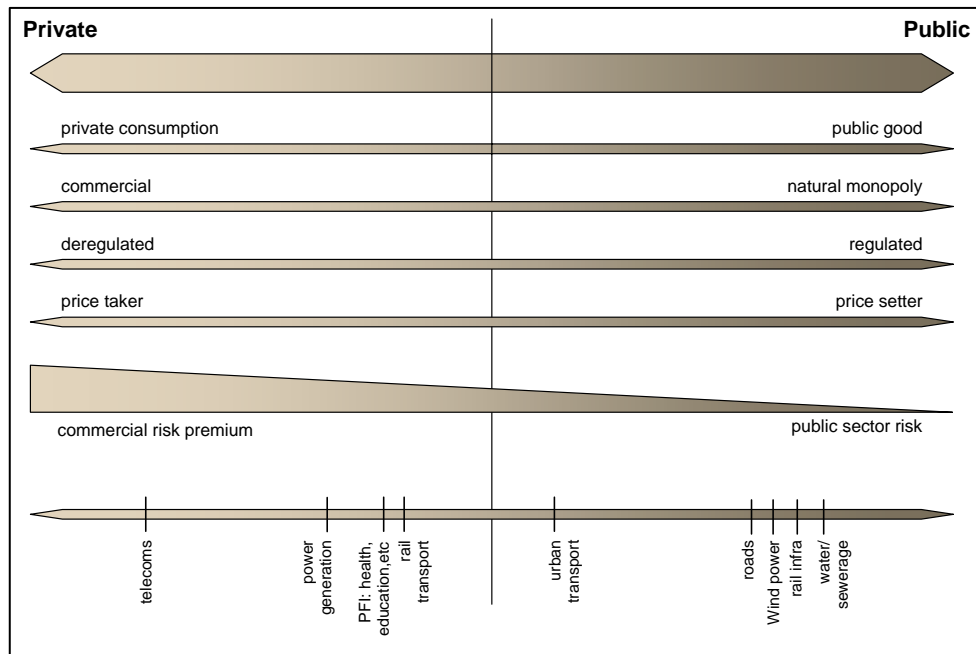
Outside the scope of this review are public services that traditionally fell within the realm of government responsibility, such as power supply, but that, as a result of technological evolution, deregulation or liberalisation have lost their character as natural monopoly and have become commercial in nature. Similarly, outsourcing (chiefly under short-terms contracts) by public entities of specific functions, such as for example revenue collection or unaccounted-for-water reduction, are not being considered. PPP differs from privatisation in that the public sector retains a substantial role in PPP projects, either as the main purchaser of services or as an essential enabler of the project. It differs from contracting out in that the private sector—or the public-private joint venture—provides the capital asset as well as the services.

We look, therefore, at PPP from the perspective that it is essentially about using private sector resources and finance to increase the level or improve the quality of public services, to improve the allocation of capital investment, and to transfer specific risks away from the public sector. The focus is on infrastructure, services and facilities that are in the nature of public good, have a natural monopoly character or involve considerable economies of scale in their construction and operation.

Generally, the aim of PPP's is to allocate to the party best able to manage them the responsibility for, and risk associated with the specification, construction, operation and

regulation of public infrastructure and services. In PPPs, private sector contractors are service providers rather than construction contractors. As a result, the contracting central and local government agencies are mainly involved as regulators and focus their role on service planning, performance monitoring and contract management.

The precise roles and responsibilities of the public and private sectors in a PPP will vary from sector to sector and even from project to project depending upon the type and nature of the service. The more a public service is in the nature of public good and natural monopoly, the less it is exposed to market risk, the more it will be subject to regulation and government control and, therefore, the more the public sector controls risks associated with such project. Likewise, PPPs that are within regulated sectors, constitute natural monopolies and entail more government responsibility, if contractually properly structured will be seen by the financial markets as nearing public sector risk and will command lower risk premiums (see table below).



2.2 Stated Policy Objectives

Foremost among the key stated objectives of PPP policies in countries such as the UK, Ireland, Italy, the Netherlands and Australia, are value for money considerations. These are based on the expectation that the private sector, given the right economic incentives and through careful design, financial discipline, better project management, innovation and efficiency can deliver public infrastructure and services at lower costs than the public sector.

A second key objective set for PPPs by many of the Governments that formally have adopted policies in this area, is the transfer away from the public sector of those risks that it is less apt at in handling in the most cost-efficient way. These generally relate to the design, construction, funding and operation of public services assets.

While value for money and risk transfer figure most prominently among the PPP policy objectives set by various governments, other stated objectives for employing private sector resources and management capacity include:

- Improved efficiency in investment and operation
- Innovation in design and operation
- Competition (e.g. establishing benchmarks against which to measure the performance not only of other private operators but also of public sector operators)
- More rapid delivery of investment and services
- New sources of funding in addition to public sector budgets allowing more or earlier investment in public services and infrastructure to be carried out.

3. CURRENT TRENDS

3.1 Historic Background

In 1996, Michael Klein and Neil Roger published an essay "*Back to the Future: the Potential in Infrastructure Privatization*". Like José Gomez-Ibañez and John Meyer before (Gomez-Ibañez, 1993), Klein and Roger noted that private sector involvement in the financing and provision of public infrastructure and services is not a new phenomenon but appears to follow cycles where public and private sector alternate. Infrastructure and public services have been private during certain periods through history. This cycle from private to public ownership and back again has been dubbed the "privatization-nationalization wheel" (Gomez-Ibañez, *ibidem*)

Already Roman law provided for the possibility of private concessions for public services provision, notably clean water. Likewise, the public finance and efficiency arguments used to validate privatisation of State owned assets have long roots in history. In 1776, Adam Smith in "*The Wealth of Nations*" argued that transfer of ownership of the crown lands to the private sector would lead to a reduction in public sector borrowing requirements and a more efficient deployment of capital.

In the 19th century, in Europe and the US the public sector awarded numerous railway concessions to private entrepreneurs. Profit motivation and private risk appetite were put to work for spurring development of new infrastructure. Also in Austria, several infrastructure projects were undertaken by the private sector in the 19th century. For example, in 1874 the State awarded a concession to a private consortium for the construction, financing and operation of the railway link between Steinach and Ried known as the *Kronprinz Rudolfsbahn*. Significantly, its financing was possible only after the State made a financial guarantee available. Equally significant, the railway link was completed well ahead of schedule and was nationalised later in the 19th century—

foreshadowing the domination by government of public services and infrastructure that was to follow not just in Austria but throughout Europe.

For most of the 20th century, in many countries, the provision of infrastructure—roads, railroads, electric power, telecommunications, water, urban transport and other public services—was viewed as the responsibility of the public sector. In most European countries including France, Italy, Germany, Great Britain and Austria, the central government, or state governments provided many of these services directly. Central government departments or state or municipality owned companies assumed responsibility for their financing and provision. Only in rare cases, such as water and wastewater services in France, was the private sector involved—and even there in a relatively limited role with financial risks to an important extent borne by Government.

In the 1980s, however, a "paradigm change" regarding the role of the State in the economy took place, initiated by President Reagan in the US and Prime Minister Thatcher in the UK. It involved the retreat of the State initially from industrial and commercial sectors of the economy. The UK started a massive privatisation programme, selling off financial participations in commercial sectors such as steel, banking and car manufacturing. Later, this was followed by the privatisation and the opening up to private investors of public infrastructure and services. In the UK, the privatisation of government owned enterprises has resulted in as much as 15% of Gross Domestic Fixed Capital Formation being transferred from the state sector—most notably with the privatisation of telecoms, gas, airports, water, electricity and railways (Pollitt, 2000).

Spurred on by examples set by the UK, the face of the infrastructure industry gradually and fundamentally started to change, marked by a shift from public to private financing and provision of infrastructure and the introduction of the principles of competition and commercialisation. The role of the public sector changed from direct and active actor in provision of public goods and services to one of regulator, facilitator and user of such goods and services.

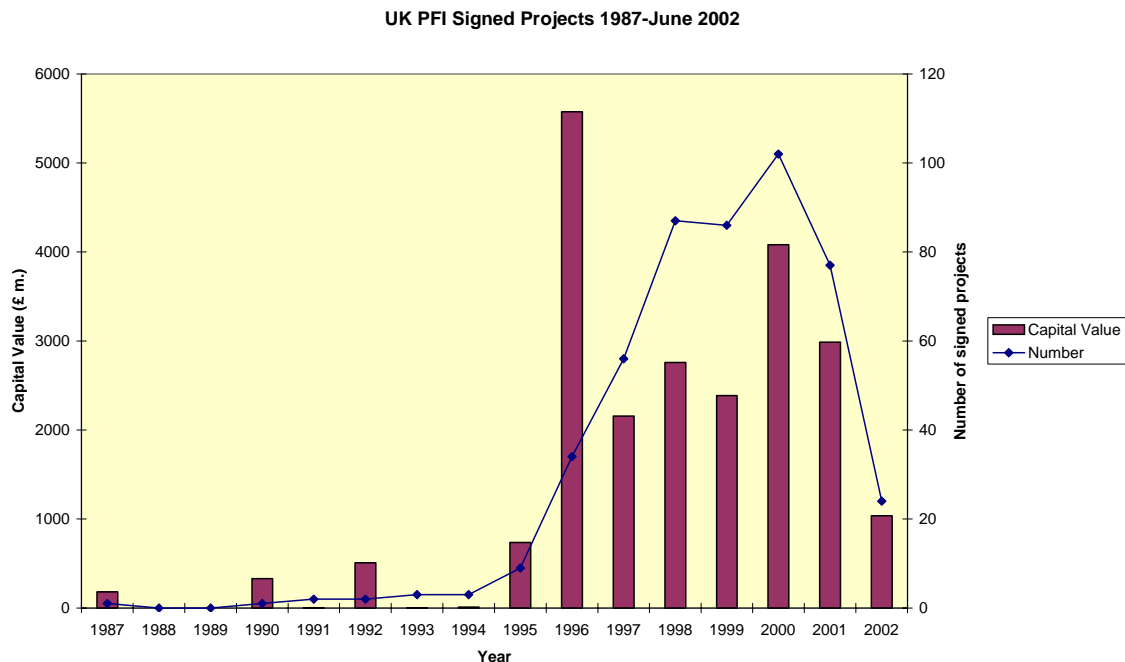
The acceptance of a direct role of the private sector in the financing and provision of public infrastructure and services was facilitated by three factors. First, there was mounting evidence that lack of market discipline led public sector providers to increase cost and reduce productivity—at the expense of consumers. Second, technology changed, ending natural monopolies in sectors such as telecommunications, where monopoly providers of fixed wire services started to face competition from deregulated cellular services. Also in the electric power sector, advances in technology led to more efficient, decentralised and flexible forms of power generation. Deregulation created third party access to transmission and distribution networks, allowing competition from new independent power producers. Similarly, the trend started in the 1990s to "separate the wheel from the rail"—i.e. infrastructure providers from transport operators—opened the railway sector, traditionally viewed as one of the most natural of monopolies, to market competition, especially in freight services. In all of these sectors, the provision of services was no longer considered a natural monopoly in a strict sense.

Finally, the fiscal discipline imposed by capital markets and globalisation of investment constrained the capacity of Governments to fund investment in the modernisation and expansion of infrastructure. The above three factors stimulated and facilitated the introduction of private sector financing and provision of public services.

From the privatisation wave of the 1980s and early 1990s emerged new and more finely attuned models of private sector involvement in public services provision. In sectors and areas where full privatisation was not considered possible or acceptable, because of the social nature of the services involved or their natural monopoly character, Governments began to involve the private sector on a more limited basis. Essentially maintaining responsibility for and control over such services, they entered into partnerships with the private sector and used its capability to assume and manage specific risks for the improvement and expansion of public service delivery. These partnerships took different forms as described under section 2.1 above.

3.2 Expansion of PPP Programmes

The UK is the precursor in the current expansion of PPPs. In the early 1990s, the UK government launched the Private Finance Initiative (or PFI) in an attempt to attract private sector support for a wide range of government projects in such sectors as roads, transport, health, prisons, and defence. The PFI has now become an established method of delivering many public services that require significant investment in capital assets. To date this initiative has raised around £23 billion of capital investment from the private sector in well over 500 projects (see graph below which covers the period up to June 2002).



The UK Treasury predicts that from fiscal year 2002-03 to fiscal year 2004-05 a further £25.5 billion of new investment will be contracted under PPP and PFI arrangements. It should be noted though, that PFI has not replaced public capital expenditure but that it supplements it. At present, PFI raises around 20% of the UK government's capital budget each year. Similarly, in Ireland the Government projects that only around 28% of the €23 billion public sector capital improvement programme for the 2001-2006 period will be funded through PPP/PFI.

The group of countries, which are using PPP/PFI models to meet public services and infrastructure investment needs, continues to grow:

- In Europe—in addition to England and Scotland—Ireland, Portugal, Spain and Italy have made PPP/PFI official policy and have created the institutional and regulatory infrastructure to support its implementation
- The Netherlands and Germany are experimenting with PPP/PFI and are expected to step up the pace as public finances continue to deteriorate. Especially the German PPP/PFI programme, while still in its infant stage, has the potential to become one of the largest in Europe, principally in the area of transportation and road infrastructure
- Advanced transition economies such as Hungary, the Czech Republic, Slovakia, Croatia, Poland and Estonia, each to varying degrees has privatised public infrastructure and services provision or opened it up for private investment and operation through PPP-like arrangements
- Outside Europe, in Canada and Australia PPP/PFI programmes have become Government policy and are rapidly evolving and spreading across infrastructure and services sectors, following the UK model
- Among emerging market countries that have adopted PPP-like policies are China, Malaysia, the Philippines, South Africa, Argentina and Chile.

PPP programmes in principle are open to a wide variety of sectors but tend to be concentrated in public transport, waste management, road infrastructure, and—chiefly in the UK—health care and education. Only relatively few of the most recent PPP country programmes cover water supply and waste water treatment. This reflects a general reluctance on the part of politicians to be seen as subjecting to private profit seeking a sector that is perceived as eminently "social". Examples of countries where water and wastewater specifically are excluded from national PPP policies include Austria and the Netherlands. This in contrast with England and Wales—where water companies and the infrastructure they own were completely privatised in the 1980s—as well as the US, and France—which has its own version of "public-private partnership" in the water sector (in the form of long-term management agreements that transfer mainly operating risks to the private sector).

3.3 Driving Forces

Internationally, the key drivers of PPP policies are fairly uniform and powerful. Capital improvement needs—both in the developed economies and in emerging markets—are pressing and increasing due to growing demand, inadequate service coverage and

modernisation requirements. At the same time, public sector capacity to fund investment from general revenue or borrowing is constrained by falling tax receipts, pressing expenditure requirements in social areas and internationally agreed limits on budget deficits and public debt (e.g. EU's Maastricht criteria) or requirements from international financial institutions (especially the IMF) and capital markets.

Moreover, governments, in an attempt to maintain budget discipline, make public expenditure more predictable, and limit the scope for deficits, increasingly tend to view PPPs as a way of transferring specific financial risks away from the public sector and improving efficiency. For example, in 1998, the Dutch Government, although at that time not faced by public sector borrowing constraints, decided to use Public-private Partnerships for the development and operation of the high-speed railway link with Belgium with the specific objective of transferring to the private sector the risk of potentially spiralling investment cost.

In contrast to the UK, the expansion of PFI/PPP programmes in continental Europe will be driven not only by national or federal governments but also by state, regional and municipal governments who face similar pressures to invest in infrastructure under similar circumstances of constrained public finances. In some emerging markets (e.g. Central Europe; Russia; China; Philippines), where such pressures are more acute and where lack of basic infrastructure hampers economic growth, PPP programmes should continue to expand. Governments there need to strengthen their ability to handle and attract PPPs, as competition for private investment in infrastructure and utilities grows and worldwide demand outstrips supply—in terms both of financing and structuring capacity as well as investor and operator interest.

A final main driver of the expansion of public-private partnerships internationally is the liberalisation of trade in services. In Europe, EU directives have deregulated and liberalised key public services sectors such as power and energy, transport, and environmental protection. The effect of these directives will be felt over the coming decade in areas such as rail transport and environmental services. In a similar vein, the General Agreement on Trade in Services (GATS) has brought services within the framework of the world trading system. Member countries of the World Trade Organisation (WTO) will have to adopt measures and legislation to improve market access for private providers and operators of public services and infrastructure.

4. EXPERIENCE IN AUSTRIA

Like Germany, Austria has been slow in embracing PPPs as a vehicle for public services and infrastructure development. While the country has been experimenting since the mid-1990s with PPP models, the actual level of private investment in most infrastructure sectors is very limited and accounts for only a fraction of such public investment. To date, there merely have been a handful of projects where the private sector is involved in financing and provision of public infrastructure and services. There are, however, indications that this situation is changing. Since the turn of the millennium and under the

pressure from investment needs, political support for PPPs has gathered strength and the pace of new project development has accelerated—albeit from a very low basis.

4.1 Main Drivers

Investment needs

At all levels of Government—Federal, State and Regional/ Municipal—public services and infrastructure investment needs are pressing. It is estimated that over the coming ten years, the water sector alone will require over €10 billion in capital investment. In the power sector, substantial investment in the high voltage power transmission grid is needed; in the health care sector, a number of new State hospitals (*Landeskrankenhäuser*) are planned to replace existing ones such as for example in Klagenfurt, where capital investment estimates for the planned new State hospital exceed €300 million.

In the transport sector, the federal 10-year General Transport Plan (*Generalverkehrsplan*) calls for total investment in the order of €45 billion. Besides the investment deficit stemming from deferred maintenance and modernisation requirements, there is an economic requirement to better prepare Austria for the imminent enlargement of the EU to the East and to take advantage of its geographical location as pivotal point between East and West. As a result, investment requirements for east-west transport corridors have become immediate. Modern road and rail infrastructure of adequate capacity linking Austria to the Czech Republic and Slovakia needs to be developed. These new investment requirements add to an already existing backlog in north-south rail and road corridors. The Federal Government has underwritten a short-to-mid term investment programme of €17 billion—leaving the €45 billion Transport Plan largely unfunded.

Constraints on public funding sources

The Government of Austria has declared its intention to continue its fiscal policies of containing the budget deficit and public sector borrowing in accordance with the provisions of the Maastricht Agreement. As a result of the reduced availability of public sector funds, pressure is mounting towards financing of infrastructure investment from sources other than government budgets or borrowing. Falling tax revenues and priority public expenditure requirements in social areas, including pensions and health care exacerbate the situation. The pressure of public finance resource constraint is being passed on from the federal government to State and local governments. However, these are hardly in better fiscal condition.

EU competition and deregulation policies and directives

As noted earlier, these directives will allow private service providers access to markets and infrastructure facilities—such as energy distribution and the railway network. The Government is aware that it can only maintain Austria's "headquarters function" if the capacity of domestic service providers to compete in international markets is being strengthened. One acknowledged way of achieving this objective is to promote and facilitate public-private partnerships between Government and such domestic service providers.

4.2 Political Environment

The public debate on public-private partnerships in Austria is progressing and, seems to have received a considerable impulse from the government programme of the new ruling coalition.¹ The general thrust of the policy debate is the expansion of the role private sector—encapsulated by the motto "*Mehr Privat, weniger Staat*"—and, by extension, to endorse the PPP approach.² The new government programme calls for the acceleration of major infrastructure investments, such as the Brenner tunnel, on the basis of PPP. Also, some States (*Länder*)—notably Oberösterreich and Niederösterreich but also Vienna and Burgenland—seem open to involving the private sector, for example in the financing and provision of road infrastructure links to central European accession countries. They see PPPs as a means to bring forward critical infrastructure investment without burdening their budgets.

While agreement on the principle of private sector involvement in the financing and provision of public infrastructure and services seems to be emerging, consensus on the concept and its implications is still building. PPPs mean different things to different people. Their objectives do not seem to be universally well understood by politicians and government officials concerned. Most frequently, PPP is seen as way to fund public infrastructure investment from off-budget (i.e. private) sources. The risk transfer and efficiency improvement objectives, associated with PPP models in more advanced markets such as the UK, Ireland and the Netherlands, do not figure prominently in considerations. Political agreement, therefore, needs to be forged on what, in operational terms, is understood by PPPs (co-operation, privatisation, delegation or all of these); what is to be achieved; and what is required from the public sector, in terms of support, legislation and performance obligations, to make these work.

4.3 Legal, Regulatory and Institutional Framework

Only some of the elements of a coherent, enabling legal and regulatory framework are in place. The existing set of laws and rules that impact the contracting, structuring and implementation of PPPs is incomplete and, in some aspects, open for different interpretations. Specific legislation for concession and delegation arrangements does not exist in all sectors. Also, there is a need for public procurement rules that are specifically tailored for contracting PPPs and that promote competitive and transparent tendering processes without compromising cost efficiency.

PPP expertise in Austria is growing as experience is gained and more analysis to inform policy is carried out.³ There is an understanding and knowledge of basic models and requirements often furthered by strong support from the private construction and operator industry as well as from commercial banks. This knowledge, however, is not widespread

¹ *Regierungsprogramm der Österreichische Bundesregierung für die XXII. Gesetzgebungsperiode*, February 2003

² Federal chancellor Schüssel in an election campaign speech in Linz in November 2002

³ Cf The 1998 report on *Innovative Kooperationen für eine leistungsfähige Infrastruktur* by the *Beirat für Wirtschafts- und Sozialfragen*.

within the government agencies concerned. Nor is it uniform, organised or systematically accessible such as is the case in other countries (see below).

4.5 Pathfinder Projects

HGV electronic toll system

In 2002, through a competitive tender a private investor and operator has been selected to finance, install and operate an electronic system to levy and collect distance dependent tolls from Heavy Good Vehicles (HGVs) using the Austrian motorway network. Reportedly, the system involves an investment of €600 million. This public-private partnership is based on hybrid co-operation–concession model that is essentially a joint venture agreement between ASFINAG, the national motorway company, and the consortium led by Autostrade SpA from Italy, which won the tender. The joint venture/concession agreement involves a genuine transfer to the private consortium of the risks associated with investment cost, financing and technology. The latter risk relates to the requirement that the Austrian system be "interoperable" with the electronic HGV toll system under development in Germany.

Cargo terminal Graz Werndorf

This project involves the design, construction, financing and operation of a cargo terminal located near Graz. Its contractual structure is based on a mixed model that leans towards a co-operation agreement with limited risk transfer. Capital cost amounts to around €70 million. Government investment grants contribute 43% of investment financing while the Federal Government pre-finances 53% through Schig (the State-owned railway infrastructure company), in the form of a loan raised as public sector borrowing by the *Bundesfinanzierungsagentur*. This loan is to be repaid over a 30-year period by the private operator under a lease agreement. The private operator, Cargo Centre Graz, effectively assumes limited risk, being essentially the operating costs, while construction and income risks are borne by Schig. While the Werndorf contractual structure has less significance as a PPP model, it is of consequence in that it introduces the private sector into an area that hitherto was the main preserve of government and its agencies (i.e. the railway company ÖBB).

Ebelsberg by-pass road Upper-Austria

The Ebelsberg by-pass represents a model where the private sector has built and pre-financed a road and is being repaid by the public sector over a 30-year period under a lease-type agreement. This €100 million investment project has many features, including VAT concessions and private acquisition of rights-of-way, which makes it unique and unlikely to be replicated in a similar form. Nonetheless, it is significant as a groundbreaking project and pathfinder for co-operation between public and private sectors in road infrastructure development at regional and municipal level.

Other projects undertaken in Austria under PPP-like contractual arrangements between public and private sectors include: the Waidhofen Thaya wastewater treatment plant, developed under a Build-Operate-Transfer (BOT) contract, and where private sector involvement is reported to have resulted in capital efficiency gains; the emergency hospital in Linz which is being built under arrangements that resemble those used for

health sector PFI projects in the UK; several small water and sewerage schemes (Ernstshofen, Ruden, Zellerbecken); and the *Klima-Wind-Kanal* (a tunnel for aerodynamic and climatological testing of rolling stock)—the latter being more an example of public-private co-operation in a commercial capital venture and, as such, not strictly within the sector scope under review here. Another landmark is the aborted attempt in the early 1990s to carry out the Semmering road tunnel under a BOT-type arrangement. This project faltered mainly because of risks associated with the length and uncertain outcome of the planning and environmental impact assessment process, risks that private parties were not prepared to take on.

4.6 The Future of PPP Projects in Austria

Political support for PPPs is strengthening and the challenge is to move from intentions and declarations to the formal adoption of a consistent and coherent PPP policy framework that guides and informs Government action. Such a policy framework needs to cover the economic, legal and organisational forms of public-private partnerships.

In general, the capacity of public sector agencies and departments to design, contract and implement PPPs needs strengthening. Project ideas proliferate, but private sponsors and public sector promoters of infrastructure investment projects sometimes lack the experience and expertise that would enable them to progress their project ideas and convert them into PPP projects ready for tendering and contracting. More infrastructure investment needs could be converted into real PPP projects if the (State, regional or local) public authorities concerned would receive advisory support in (i) developing the PPP model for such projects; (ii) procuring and tendering the related PPP concession contract or similar arrangement; and (iii) negotiations and contracting. Countries such as the UK in the 1990s (Treasury PPP Task Force), Italy (*Unità Tecnica Finanza di Progetto*, also in the Treasury), the Netherlands (*PPS Kenniscentrum* in the Finance Ministry) and Ireland (a PPP Unit that works across various government departments) have organized functions to promote PPPs and support public authorities involved in the appraisal, structuring and awarding of contracts for specific projects.

A further critical issue that PPP policy formulation in Austria needs to address is that of accounting for financial liabilities incurred for loans raised by, or on behalf of so-called corporatised public sector companies. Corporatisation ("*Ausgliederung*") of public sector service functions—through the creation under private law of autonomous but fully state-owned companies that can borrow in their own right—seemingly allows relieve from government debt constraints. Loans to such government-owned companies, while generally raised by the *Bundesfinanzierungsagentur*, fall outside the Maastricht criteria of government deficit and debt if they meet certain criteria formulated by EUROSTAT—the European Commission agency responsible for tracking public sector indebtedness of EU member states. Whereas EU rules may allow such debt to be accounted for as private, financial markets and lenders clearly view the Government as its implicit guarantor.

The use of off-public budget structures seems to have increased over the past few years. Not only has it reduced pressure on the government to mobilise private capital for

infrastructure investment, but also it could have had the perverse effect of validating continued public sector involvement in infrastructure financing and provision because of the access these government-owned companies have to low-cost funds.

There is a stock of federal government projects in Austria that are likely to be turned into viable PPP/PFI projects for private financing, if public sector debt would be defined more broadly and debt limits applied more rigorously, recognising that implied State guarantees for public sector companies constitute a form of contingent liability. To this end, lukewarm institutional support and at times even scepticism needs to be overcome from key public entities that doubt if private sector involvement will lead to savings and efficiency gains or that PPPs are capable of delivering value for money.

In spite of these issues, the commonly held view among project sponsors and public sector institutions in Austria is that the PPP-approach will gain in importance as a way of financing and provision of public infrastructure and services. A number of large projects, especially in motorways and railway infrastructure, are currently under preparation or consideration for private sector involvement. They include:

- Motorway links with new EU member countries to the East
- Pyhrn-Schober Railway corridor
- Tschirgantunnel in Tyrol
- Brenner Basis Tunnel
- Central Station Vienna (*Südbahnhof*)
- Cargo terminals Freudenau, Inzersdorf

It is therefore reasonable to assume that, in the years ahead, a PPP programme in Austria will take shape and that not only several of the projects listed above will be contracted as PPPs, but also that the programme will be extended to other sectors such as health care.

5. IMPLEMENTATION REQUIREMENTS AND CURRENT ISSUES

5.1 Requirements for Success

Experience in countries that have adopted or are experimenting with PPP policies indicates that chief among the requirements for their successful implementation are:

- Political and institutional support
- An enabling legal and regulatory environment
- Economically efficient and fair sharing of risks and rewards
- Transparent and efficient procurement, and
- Financial viability.

Political and institutional support

Evidence suggests that the economic benefits of PPPs are greatest if there is clear and unequivocal political commitment to private sector involvement. The risk premium charged by private investors and capital markets will be lower if they believe that government backing is strong and continuous—that is, undeterred by political succession.

This is best provided in the form of explicit, coherent and specific policies that promote and support PPPs.

Enabling legal and regulatory environment

The successful implementation of PPP policies demands an enabling, comprehensive and coherent set of laws and rules that not merely "tolerate" PPPs but facilitate these. To this end, they need to provide legal security to investors and operators with regards to process, reward and recourse. In Germany, for example, legislation generally still favours the use of traditional—i.e. public forms—of infrastructure provision and financing. One reason for this is the existence of legal barriers, which prevent the widespread use of alternative procurement solutions (Clifford Chance LLP, 2001). Many services traditionally are the preserve of public administration, which makes it difficult to involve the private sector in their financing and delivery.

PPP implementation is affected by laws and rules that cover aspects as diverse as performance monitoring; contract renegotiation, termination, novation and extension; dispute resolution; and recourse. The various parts of legislation and regulation that intersect over PPP have to include PPP-specific provisions covering contracting, structuring and financing as well as implementation. They also have to be neutral with regards to the extent, nature and method of private sector involvement. They should not prescribe or exclude certain approaches, but be output orientated. As an example, the German *Fernstraßenbauprivatfinanzierungsgesetz*, the law on the private financing of motorways, currently allows private operator models only for special segments of road infrastructure, namely bridges and tunnels (Clifford Chance, *ibidem*). Also, its definition of costs that toll revenues can cover is unpractical and constraining.

Public procurement law, public sector accounting rules and tax law all have their bearing on the way PPPs can be structured and financed. Tax law should be neutral, conferring the same tax and depreciation treatment to private infrastructure projects as to such projects carried out by the public sector. In Ireland, for example, infrastructure projects carried out by local authorities are exempt from Value Added Tax. Although not intended, this has the effect of favouring public solutions over private ones.

Finally, PPPs usually involve complex legal and contractual arrangements often with multiple parties and highly structured financings. The multitude of contractual arrangements that typically govern a public-private partnership can easily give rise to legal and transaction costs that are disproportionately high in relation to the size of the underlying service project without providing commensurate certainty and security (see the schedule of a typical PPP project structure below). Legislation and regulation, therefore, have to promote simplicity and efficiency in legal and contractual structures.

Efficient and fair sharing of risks and rewards

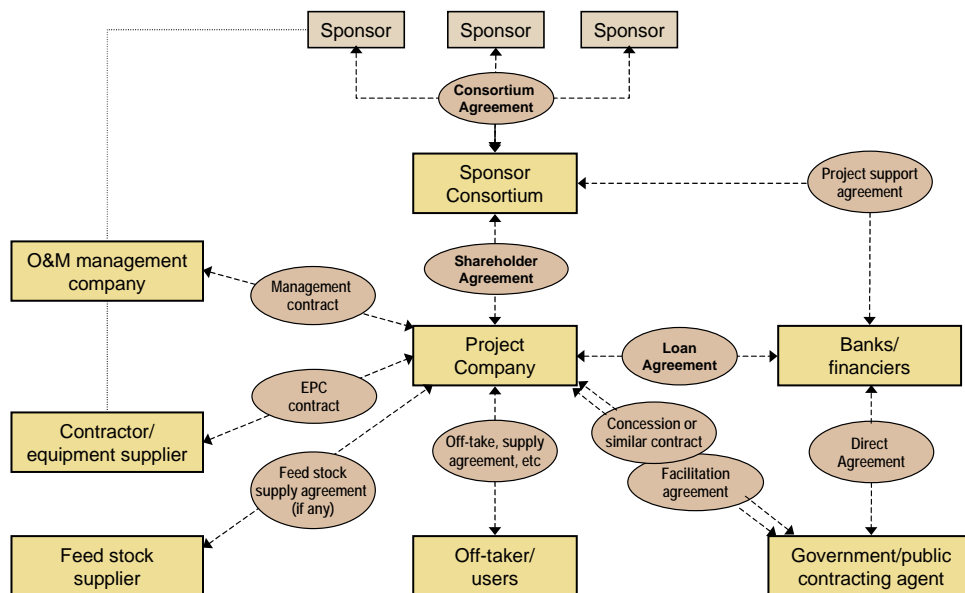
One of the least understood aspects of PPP contracting and structuring is the economically efficient and fair sharing of risks and rewards between private and public parties. The simple underlying principles here are to allocate risks to the party that best

controls such risks, reward it for assuming these and provide economic incentives to do so in an efficient way.

It is not cost efficient to transfer all risks to the private party—especially where risk elements are under the control of the public sector. Inherent to the concept of public-private partnerships is the flexibility these provide to structure an economically optimal and efficient allocation of risks between public and private parties depending on sector, specific project and local conditions.

Planning and statutory process (permitting) risks as well as Force Majeure risk are best borne by Government, whereas the risks associated with project design, construction and completion, financing and operations are best managed by the private sector. The private sector is best placed to assume and manage risks allocated to it if it has the economic incentives to maximise capital and operating efficiency relative to specified levels and quality of service.

Typical PPP Contractual Structure



Transparent and efficient procurement process

As argued earlier, PPPs tend to involve public infrastructure and services that are in the nature of natural monopolies and for which there is no market competition. In the absence of competition *in* the market, competition *for* the market needs to be organised in order to unleash private sector efficiency (see also Klein et al. 1996). It is of critical importance, therefore, that the procurement process through which private partners are contracted, promote competition. To this end, the procurement process has to be open and accessible, allowing as many private companies to enter as reasonably possible.

Reducing the development risk and tender cost for private investors will further competition. This generally is achieved by:

- Strengthening the institutional capacity of public authorities to conduct and manage PPP procurement process;
- Standardisation of documentation and contracts;
- Ensuring the fairness and transparency of tendering, negotiating and contracting private participations and concessions; and
- Providing for predictable outcomes, with contracts awarded to the private operator who offers the lowest price for a specified quantity and quality of service provided.

Besides being transparent, the procurement process also needs to be efficient, that is, optimise competition while containing costs, as well as output-orientated, focused on the specification of services level and quality of required and not on inputs (i.e. the way in which services are provided and the technology used). In practice this may mean that for smaller PPP contracts limited tenders may need to be organised or competitive negotiation procedures used.

Financial viability. Finally, a critical requirement for successful implementation is the financial viability of PPP projects. Factors that adversely affect project viability are:

- High development risks and costs
- Constraints to economic pricing and cost recovery
- Tax and accounting inefficiencies
- Re-negotiation risk—i.e. the risk that at some time after a PPP contract has been entered into, public authorities for political or other reasons open up clauses.

5.2 Current Issues in the Advanced PPP/PFI Markets

Financing Costs. In countries such as Germany, the Netherlands and Austria, opponents to private sector involvement often use the lower financing cost of the public sector as an argument against PPPs. In general, borrowing backed by the full faith and credit of Government represents a low risk for lenders and hence the cheapest way of raising funds. Private sector companies are inherently riskier propositions and borrow on less advantageous terms (higher margins, shorter maturities) than public sector agents such as the National Loans Fund in the UK or the *Bundesfinanzierungsagentur* in Austria.

In PPPs, return expectations and the associated cost of capital are a reflection of the perceived extent and probability of risks that have been transferred by the public sector as well as market perception of the strength of political support and of the willingness and ability of public sector contracting parties to perform their PPP obligations—financial, regulatory or otherwise.

UK experience suggests that the difference between the cost of private sector capital and public borrowing narrows as PFI matures, and the public and private sectors gain in experience. Financing spreads on PFI projects in the UK have continued to narrow, thanks to strong government support, a well-regulated system and models that are established and tested. Banks and capital markets now see PFI investment risk as nearing

those of the public sector. This reflects accumulated PFI experience, amounting to some 530 PFI projects, of which 380 are operational. Debt margins have decreased from 120-160 basis points in the 1996-2000 period to below 100 basis points at present while loan tenors have become longer. Equity returns have decreased from 15%–20% in the first years of the PFI to 12%–15% at present with expectations that these will decrease further to 10%–12% in the coming years. Indeed, the UK Office of Government Commerce currently believes that shareholders' returns of 8 to 15 per cent in real terms would be reasonable.

Furthermore, the argument that the public sector has lower financing costs can be challenged on the ground that it does not take into account the value of the financial and cost overrun guarantees that are implicit to public sector financing. As David Currie of the London Business School argues (Currie, 2000):

"In the private sector, investors carry the risk of default and are rewarded accordingly but in the public sector, taxpayers carry the risk but receive no commensurate reward. In other words, although the public sector can borrow at the risk-free rate to finance investment, this imposes a residual risk on taxpayers in much the same way as private sector investors but without a reward. Clearly the contingent liability being imposed on taxpayers is a cost that ought to be accounted for in any cost-benefit analysis. Unfortunately it is not normal practice to quantify in the public balance sheet these contingent liabilities faced by the public. Once taken into account, the true cost of borrowing is the same for the public and private sector if the underlying risk of the projects is the same."

This argument essentially falls within the realm of public economy and thus far has been largely disregarded in political debate. However, it is therefore not less compelling and applies to all public repayment obligations whether incurred directly through Government borrowing or in the form of contingent liabilities. Loans raised by borrowing agencies with State guarantees are included here, even if such loans are for Government owned companies under private law that do not fall under EU definitions of public sector debt.

Public sector liabilities. In the UK, the £23 billion in investment capital under PFI contracts signed up to the end of 2002 entail long-term Government current payment obligations totalling around £90 billion up to 2025. Critics point to the scope that PFI and PPP offer for Government to disguise the underlying position of public finances and, specifically, to increase public sector debt by stealth and under a different name. This is because capital expenditure under PPP/PFI structures and the borrowing required to fund it, not normally score as public expenditure (although the charges levied by the private sector operator for the services that are provided do). Even though Governments do not tend to keep balance sheets in a strict financial accounting sense, this popularly is referred to as "off-balance sheet" financing. The debt liability is taken by the private sector and does not show up as public sector debt. The most obvious effect on the public finances is to reduce capital spending now and replace it with a stream of future payment obligations.

In response to such criticism, the UK Treasury department has emphasised that the main driver of PFI is value for money and not management of public sector debt. In an attempt

to improve transparency in public sector accounts, it now annually publishes forecasts of the committed expenditure for public services flowing from signed PFI contracts. Moreover, the counterargument goes that, unlike debt repayments, these obligations are included in the current account and not in the capital account, and cover all cost to government related to the provision of a specific service. This not only makes them more predictable than under traditional public sector procurement methods, which have a common history of over-specification, cost overruns and weak financial discipline, but also limits government exposure to inflating operating costs.

Further, payments under PPP/PFI contracts are not automatically payable on a due date but only if the private contractor supplies the service according to availability, quality and reliability specifications. This contrasts with the servicing of public sector debt, incurred to fund investment in services undertaken by government agencies or departments. Such debt repayments are due and payable irrespective of the quality and availability of services provided.

Development risks and procurement costs. Development risks are a critical issue. Bid cost for PPP/PFI investment projects generally tend to be significant relative to total investment cost. Only in a limited number of jurisdictions, foremost among these the UK and some other advanced PPP markets, does the legal and political environment provide an acceptable degree of certainty that contracts will be awarded fairly, timely and transparently and on the basis of rational and known criteria. But even in EU countries bid risks and costs may go up if EU directives are adopted in the form currently under consideration.

In the UK, private partners have often criticised the high cost of organising bids for PFI projects. Private sector contractors who tend for PFI project bids have to cover higher preparation, due diligence and structuring cost when drawing up detailed specifications and contract terms and securing funding commitments than when preparing bids for public services projects under conventionally tendered contracts. A 1996 report from the Adam Smith Institute found average tender costs expressed as a percentage of expected total costs to be substantially higher for PFI public services projects than for traditionally procured projects. According to the report, the total cost of tendering for a PFI project to all potential contractors were around 3% of expected total project costs, while for traditional procurement the tendering costs accounted for just under 1% (Butler, 1996). Consequently, operator companies have become more selective as multi-million pound bidding costs and high development risks weigh on financial returns. One of the leading UK PFI contractors reckons that the net present value of the cost of failed bids now can exceed the predicted NPV of the return to equity on successful bids. As a result, in some cases competition for PFI contracts has decreased.

Refinancing benefits. In the UK some controversy has arisen in recent years over the question to which party—public or private—the gains should accrue that stem from opportunities to refinance PPP/PFI projects. These mostly occurred for projects that were contracted and built in the early years of the PFI programme when the risk premium on the financing of such projects was higher than at present (see above). The gains from

such refinancing can be significant and, under early contractual arrangements, they mainly benefited the private investor. These changes were brought about by the National Audit Office's report on the refinancing of the Fazakerley PFI prison which showed that the PFI contractor had made significant extra profit as a result of refinancing, increasing equity returns to 39% in this particular case. This was an early PFI project where there had been significant risk for the private sector, as experience in public sector procurement in this area was limited and political commitment not as unequivocal as at present.

The UK government has addressed this controversy by issuing new guidelines on the sharing of refinancing benefits. While it recognises that it is implicit in PFI that contractors should benefit from effective management of projects, it also advises public contracting agencies that they seek an even sharing of the financial gains of refinancing.

6. CONCLUSIONS

6.1 Status and Trends

Since the 1980s, the private sector increasingly has become involved in the financing and provision of public infrastructure and services. This process first started in the UK and from there gradually spread to other industrialised countries as well as the emerging markets. Private sector involvement initially took the form mainly of utility privatisation and market deregulation.

In a later stage, it was extended through public-private partnerships to sectors where deregulation or outright privatisation was considered economically inefficient or socially unacceptable. Through PPPs, government continued to purchase public services, or, where such services are provided directly to the public—for example, in the case of toll bridges—delegated its statutory responsibility to provide these under long-term contracts. Such PPPs take two basic forms:

- The co-operation (joint venture) model, where public and private sector partners pool their assets, finance and expertise under joint management; and
- PFI-type contracts and concessions, where a private sector consortium designs, builds, finances and operates infrastructure and public services assets with the public sector's involvement limited to output specification, contracting and facilitation.

Worldwide, PPPs have received considerable attention as a way of mobilising private sector resources and expertise as well as a means of reforming public procurement practices. The resulting project flow, however, still is limited relative to potential and to expectations raised. It is concentrated mainly in a fairly small group of countries including the UK, Ireland, Portugal, Greece and Australia where it has resulted in significant capital investment. In these countries, the underlying model is well established and is underpinned by political commitment and adequate legal and institutional structures.

But even here, some controversies surround PPP/PFI. Again, the UK, where a very substantial programme has been underway for the last decade and is still expanding, provides valuable lessons. Labour-related UK think tanks remain sceptical about the PFI—despite its unquestionable achievements. Several trade unions oppose it on grounds that it may create different classes of public services workers and reduce employment. The problems that recently besieged the London Underground concession, where progress in the contracting process was held hostage to the ambitions of local politicians, illustrate the vulnerability of PPP/PFI to political and institutional factors.

Such problems and reversals, however, are to be seen as a natural part of the process of acceptance of novel approaches and the maturing of new markets. They should be overcome as investment needs continue to increase beyond public funding capability and politicians learn to handle opposition to PPP/PFI. The use of PPPs to improve and increase the delivery of public infrastructure and services, therefore, will expand geographically and sector-wise. To an important extent, such expansion will be driven by constraints on public sector resources and borrowing. In Europe, the present tendency to loosen the restrictions that the Stability Pact imposes and allow higher levels of public sector debt will be temporarily only and is likely to benefit mainly social sectors (pensions, health care) rather than infrastructure development.

Recent developments in the Netherlands, Spain, Italy and Scandinavia as well as policy initiatives in Germany and Austria indicate that PPP's are now playing a major role throughout most of the EU. Similarly, OECD countries such as Canada and Australia are adopting new, or expanding existing PPP programmes.

6.2 Achievements and Benefits

There can be no doubt that privatisation and deregulation in public services and infrastructure, and public-private partnerships generally have been successful. They have delivered results in the form of lower cost to Government, increased consumer welfare stemming—from better and, often, lower priced services—and shareholder benefits (Pollitt, 2000; PricewaterhouseCoopers, 2001). It also has led to an overall increase of investment in such services, supporting the argument that private financing supplements rather than replaces public sector expenditure. Where there have been problems, such as with the privatisation of railway infrastructure in the UK or energy distribution in California, these can be traced back to fundamental flaws in the design of the process or in the structure of contractual arrangements and incentives—leaving the underlying principles intact.

The assessment of private sector involvement in public infrastructure and services through PPPs is more difficult than that of privatisation and deregulation. Taking the PFI as proxy and precursor of PPPs, various studies and analyses conclude that overall it has delivered on its promises and that the value for money objectives set for it have been achieved.

An independent study commissioned by the UK Government in 2000 to assess the PFI experience found that amongst a sample of 29 PFI projects for which a public sector cost comparator was available, savings on average amounted to 17% (Arthur Andersen and Enterprise LSE, 2000). This finding is supported by the outcome of a survey by the UK National Auditor's Office that most authorities who had contracted public services under long term PFI agreements, consider that these offer good value for money (NAO, 2001).

The PwC report for the Government of Ireland points to experience elsewhere in the world which indicates that significant benefits can be derived from the PPP approach including:

- *Better value for money*—resulting from competition, whole life costing, design innovation, improved efficiency and risk transfer;
- *Better quality services*—reflecting the benefits of competition, service innovation, performance incentivisation and customer focus;
- *Faster project delivery*—because private contractors are paid only upon service availability; and
- *More project delivery*—as PPP enables more infrastructure projects to be carried out within a defined period of time (PwC, 2001)

Public private partnerships thus can yield substantial benefits for the user of services and the taxpayer. However, they only do so if appropriately designed, procured and implemented—allowing the public sector to benefit from the financial discipline, commercial approach, technical expertise and performance incentives that generally are inherent to private sector economic behaviour.

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