

booz&co.

Public–Private
Partnerships
*A New Catalyst for
Economic Growth*



Contact Information

Abu Dhabi

Richard Shediac

Partner

+971-2-699-2400

richard.shediac@booz.com

Rabih Abouchakra

Partner

+971-2-699-2400

rabih.abouchakra@booz.com

Roy Hintze

Senior Associate

+971-2-699-2400

roy.hintze@booz.com

Beirut

Mona Hammami

Associate

+961-1- 985655

mona.hammami@booz.com

Mazen Ramsay Najjar

Associate

+961-1- 985655

mazen.najjar@booz.com

EXECUTIVE SUMMARY

Water, transportation, energy, and telecom infrastructure are essential to the growth and survival of a nation. When it is planned, funded, and maintained well, infrastructure plays a vital role in supporting a high standard of living and facilitating commerce and trade, thereby extending a nation's global reach. But despite the well-documented link between high-caliber infrastructure and economic expansion, governments operating on razor-thin budgets, especially in countries experiencing rapid population growth and urbanization, may not be equipped to make the necessary investments. In response, many government organizations are tapping the private sector for capital, technology, and expertise to finance, develop, and manage public-sector infrastructure projects. Policymakers are also finding that, when coupled with the right sets of policies and institutional environments, these public-private partnerships (PPPs) can also become catalysts for economic growth. The opportunity to drive economic growth with infrastructure PPPs is particularly rich in the Middle East and North Africa (MENA) region.

PPPs are mutually beneficial relationships that are formed between the public and private sectors. The private-sector partner typically makes a substantial equity investment, and in return the public sector gains access to new or improved services. When properly vetted and structured, PPPs allocate risk to the party best

suited to handle it. The public sector is often able to shift risks related to lack of demand and revenue, design and construction, operations and maintenance, finance, and extraordinary circumstances to the private sector (*see Exhibit 1, page 2*). Three key factors enable PPPs to stimulate a country's economic growth:

1. The number of PPP projects under way
2. The types of PPP contracts in use
3. The country's political and economic policies and institutions

In fact, PPP success is entirely dependent on having the right framework in place and knowledgeable and trusted advisors, both public and private, to assist with structuring, screening, and procuring high-value PPP projects.

At the level of individual PPPs, establishing a solid framework before launching a venture is essential. With the right circumstances in place, PPPs can prove a winning partnership for all involved.

- The government meets its obligations without debt on its balance sheet, reduces its deficit, and lays the foundation for economic development.

- The public receives services that are often more reliable and of a higher level of quality than services provided solely by the government.
- The private sector finds a new and wider market in which to expand and invest its finances in a stable, long-term cash flow.

For these reasons, infrastructure PPPs in the water, transportation, energy, and telecom sectors are experiencing a boom. PPPs are an enduring solution for strengthening infrastructure and generating economic growth. This factor, in addition to the sharing of risk, the movement of finances off the balance sheet, and the speed to market of services, makes PPPs particularly attractive for policymakers.

Success relies on a transparent government that has instituted a competitive procurement process; a focused and well-prepared implementation plan; and the savvy negotiation of each agreement to yield the greatest value based on the type of PPP. The key is matching the right partnership with the right situation to fulfill a nation's infrastructure requirements, secure public support, and generate economic gain.

*Exhibit 1
Typical Risk Allocation between Different PPP Parties*

TYPE OF RISK	PUBLIC	PRIVATE
Demand and Revenue Risks	x	x
Design and Construction Risks		x
Operating and Maintenance Risks		x
Financial Risks		x
Legal Risks	x	
Political Risks	x	
Environmental Risks	x	
Force Majeure	x	x

Source: Booz & Company

PPPS AS A REMEDY FOR BUDGETARY CONSTRAINTS

According to World Bank estimates, new investments in and maintenance of infrastructure projects will cost developing countries US\$849 million between 2005 and 2010.¹ It is no wonder that public-sector policymakers increasingly find themselves struggling to balance the rising demands on infrastructure with a lack of capital, manpower, and expertise.

For example, many governments in the MENA region are under pressure to develop the necessary infrastructure with limited resources. The region annually invests an estimated US\$40 billion to \$50 billion, or approximately 5 to 7 percent of gross domestic product (GDP), in new infrastructure projects. Non-oil-producing economies are particularly pressed to fund the public's growing infrastructure needs,

creating a wealth of opportunities for private-sector investment in the region's long-term growth.

The idea of private investment in public infrastructure may initially seem discordant. After all, the need for low-cost necessities, such as water and electricity, and the protection of public interests have historically made infrastructure a natural fit for public-sector management. Ideally, as the government maintains a monopoly over water, transportation, energy, and telecom, it can take advantage of economies of scale to cost-effectively develop and manage projects in these indispensable sectors.

Unfortunately, the reverse often holds true:

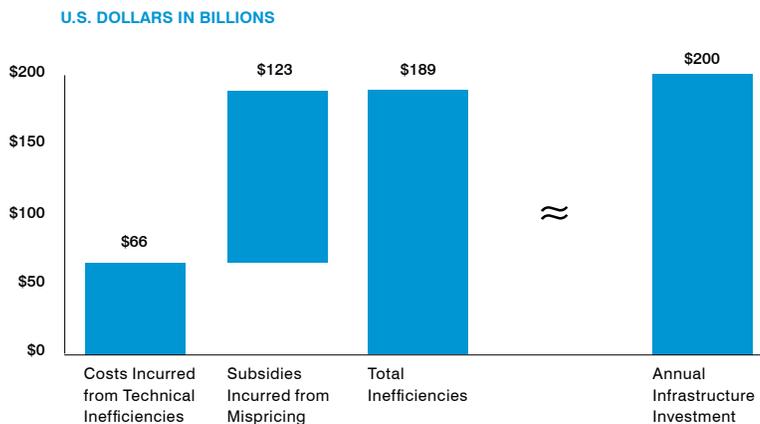
- Public pressure encourages policymakers to hold prices below costs, resulting in services that operate at a loss and require that funds be diverted from other programs.
- Overstaffing, mismanagement, and corruption result in inefficient spending and budget shortfalls.

- Available funds, technology, and human resources cannot keep pace with rising populations, growing urbanization, and aging infrastructure.
- The government's limited ability to invest in emerging technologies and resources restricts the public's access to diversified products and services.

The World Bank estimates that in the early 1990s annual losses due to inefficiency and unsustainable pricing policies were nearly equal to the annual investment in infrastructure in developing countries (*see Exhibit 2*). In short, governments were spending just as much, if not more, on providing and maintaining infrastructure than they were taking in through taxes and fees.

In these situations, policymakers can continue to finance subpar or insufficient infrastructure projects, or they can find alternative funding sources. Relationships with private-sector partners, which have ready capital and expertise, are a natural remedy for these shortfalls. In fact, these

Exhibit 2
Public-Sector Inefficiencies in the Early 1990s



According to the World Bank, by the early 1990s, the annual losses from public-sector inefficiencies and unsustainable pricing policies were estimated to be nearly equal to annual investment in infrastructure.
Source: Booz & Company

partnerships can improve overall governance and operational efficiency.

- The introduction of private-sector governing principles minimizes mispricing, cost overruns, and lack of transparency.
- The private sector's sustainable pricing policies and financial discipline provide for a larger pool of investment funds, thus eliminating the financial constraints that hamstring government entities.
- More robust investment sources enable partners to meet increased demand and channel resources to previously underserved consumers.

- Private-sector organizations can attract and offer new services based on their technical expertise and business development savvy.

There are roughly 11 types of PPPs, which can be classified into four categories with increasing levels of risk and potential returns (see Exhibit 3). This variety in arrangements provides several options and opportunities for structuring agreements that best fit the project, its associated risks, and the nature of the investors. Leases and contracts, for example, have low levels of risk, because they require little capital outlay. They are often suited for water infrastructure projects, which

offer little return and thus cannot justify a high-risk investment. Greenfields, however, require a significant commitment from investors and thus are often put in place for telecom and energy projects, which have high potential returns. Greenfield agreements are by far the most utilized PPPs worldwide because they offer the greatest opportunity for governments to divest risk and investors to earn a significant return. This is especially true of build, own, and operate (BOO) and build, own, and transfer (BOT) agreements.

Exhibit 3
Types of Public—Private Partnerships

DEGREE OF PRIVATE-SECTOR COMMITMENT

LEASES AND CONTRACTS	CONCESSIONS	GREENFIELDS	DIVESTITURES
<p>Management Contract</p> <p>The government pays a private operator to manage the facility. The operational risk remains with the government.</p>	<p>Rehabilitate, Operate, and Transfer (ROT)</p> <p>A private sponsor rehabilitates an existing facility, then operates and maintains the facility at its own risk for the contract period.</p>	<p>Merchant</p> <p>A private sponsor builds a new facility where the government provides no revenue guarantees. The private developer assumes construction, operating, and market risks.</p>	<p>Partial Privatization</p> <p>Partial transfer of the equity in state-owned company to private entities (may or may not imply private management).</p>
<p>Lease</p> <p>The government leases the assets to a private operator for a fee. The private operator takes on the operational risk.</p>	<p>Rehabilitate, Lease/Rent and Transfer (RLT)</p> <p>A private sponsor rehabilitates an existing facility at its own risk, leases/rents it from government, then operates and maintains it at its own risk.</p>	<p>Build, Own (and/or Operate) and Transfer (BOT or BOOT)</p> <p>A private sponsor builds a new facility, owns and operates it at its own risk, then transfers ownership to the government at the end of the period.</p>	<p>Full Privatization</p> <p>The government transfers 100% of the equity in the state-owned company to private entities.</p>
	<p>Build, Rehabilitate, Operate and Transfer (BROT)</p> <p>A private developer builds an addition to an existing facility or completes a partially built one and rehabilitates existing assets, then operates and maintains it at its own risk.</p>	<p>Build, Lease and Own (BLO)</p> <p>A private sponsor builds a new facility, transfers ownership to the government, leases the facility, and operates it at its own risk, then receives full ownership at the end of the concession period.</p>	
		<p>Build, Own & Operate (BOO)</p> <p>A private sponsor builds a new facility at its own risk, then owns and operates the facility at its own risk.</p>	

Source: Booz & Company

PPP PARTICIPATION VARIES ACROSS SECTORS

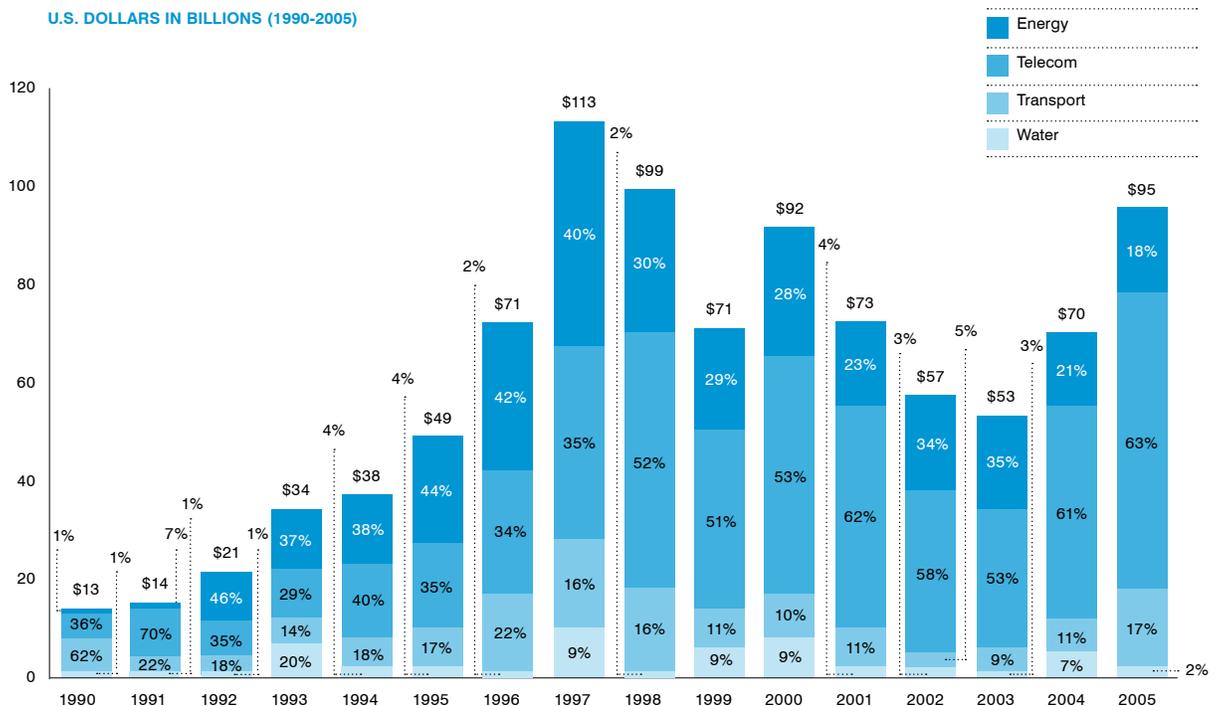
Developing countries invested a combined US\$95 billion in 178 PPPs in 2005 (see Exhibit 4). Although the majority of PPP projects falls into the energy sector, the greatest amount of investment occurred in the telecom sector.

These findings follow a trend that links the level of “public good” for a service with the level of private-sector interest. The provision of necessary services to which the public has an inherent right, such as fresh water, is considered a public good. Projects with a greater degree of public good tend to have lower returns. Thus, as shown in Exhibit 5 (see page 6), the higher the level of public good, the lower the level of private-sector involvement. Public-

sector policymakers can capitalize on this trait to strategically plan PPP projects based on their overarching infrastructure needs.

Water, a pure public good, is an essential resource that must be provided at an affordable price; the comparatively low return on investment makes it commercially unattractive to the private sector. Most water sector projects tend to be leases or contracts, although greenfield projects are common in treatment plants. The potential for offtake agreements, in which the government guarantees that it will purchase output—in this case, water—at a predetermined price minimizes political and commercial risk.

Exhibit 4
Developing Countries' Investments in PPPs by Sector



Note: Developing countries include 150 low- and middle-income countries.
Sources: Private Participation in Infrastructure Projects database, 2006; Booz & Company

The higher the level of public good, the lower the level of private-sector involvement.

Transportation projects are also considered a public good, which makes them less attractive to private investors, except when the projects are supported by a high number of guarantees; they are also extremely expensive in terms of initial capital. However, as long-term investments with a stable, dependable cash flow (through fees and tolls), they are attracting a greater percentage of private dollars, particularly in roads, rail, and airports. Private investors' mode of entry varies across the

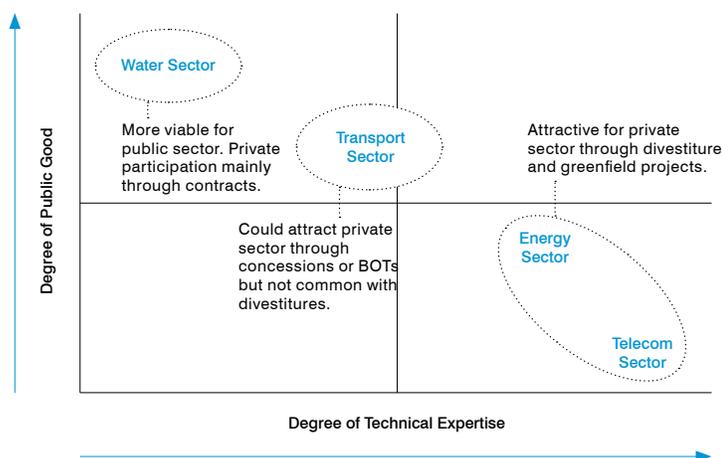
transportation sector, but leases and concessions tend to be common in railways and roads due to their politically risky natures and low potential for return.

Telecom, a perceived luxury in some markets, has received the most investment in developing countries. This sector requires a high degree of technical expertise, equating to a greater outlay of private funding and knowledge. However, the lower degree of public good makes this

sector an attractive investment with a high rate of return, often attracting BOO, BOT, or privatization arrangements.

Although telecom has the highest value, the energy sector has amassed the greatest number of projects. The sector can easily be broken down into the subsectors of generation, transmission, and distribution, creating numerous ventures for private investors. As such, the sector naturally lends itself to BOOs and BOTs.

Exhibit 5
Private-Sector Investment Relative to Public Good and Technical Expertise



Sources: Akash Deep, "Public Private Partnership for Financing Development," Harvard University presentation, 2005; Mona Hammami, Jean-Francois Ruhashyankiko, and Etienne Yehoue, "Determinants of Public-Private Partnerships in Infrastructure," IMF Working Paper No. 06/99, April 2006; World Bank PPI web site, policy briefs and updates on water and energy sectors, 2007; Booz & Company

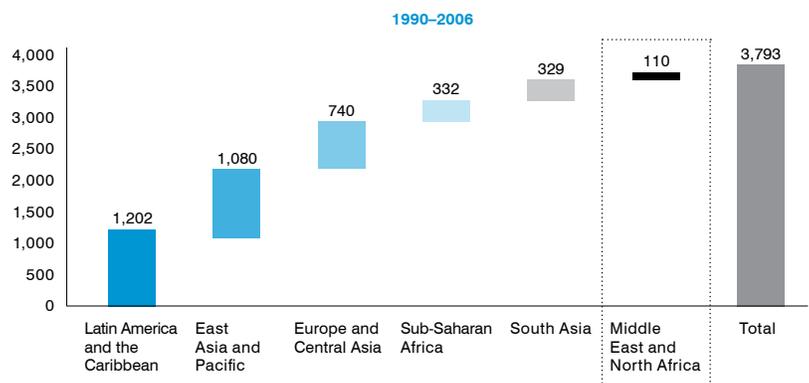
PPP PROJECTS VARY BY NATION

The number of PPP projects worldwide has declined since the end of the global economic boom from 1993 to 1997 (developing countries had a total of US\$113 billion invested in PPPs in 1997). However, evidence suggests that PPPs may again be on the rise. Developed countries are struggling to replace and upgrade outdated or insufficient infrastructure, while developing countries are racing to keep pace with rapid economic growth. Many of the MENA, sub-Saharan Africa (SSA), South Asia (SA), and even central European countries are

increasing the number of PPP projects within their borders due to the lack of existing infrastructure.

PPP projects still lag in the MENA, SA, and SSA regions, largely because these countries have traditionally lacked the right political and economic environment for PPP investments (*see Exhibit 6*). As the regulatory systems are reformed and the economies opened up in these regions, PPP investments are expected to increase in number and value.

Exhibit 6
Number of PPP Projects across Regions



Sources: World Bank; Booz & Company

HOW PPPS FUEL ECONOMIC GROWTH

Although PPPs can free up government resources for other public priorities, they will not necessarily influence the economy without the right blend of factors. The number, value, and type of PPPs, combined with supportive policies, power economic growth (see Exhibit 7).

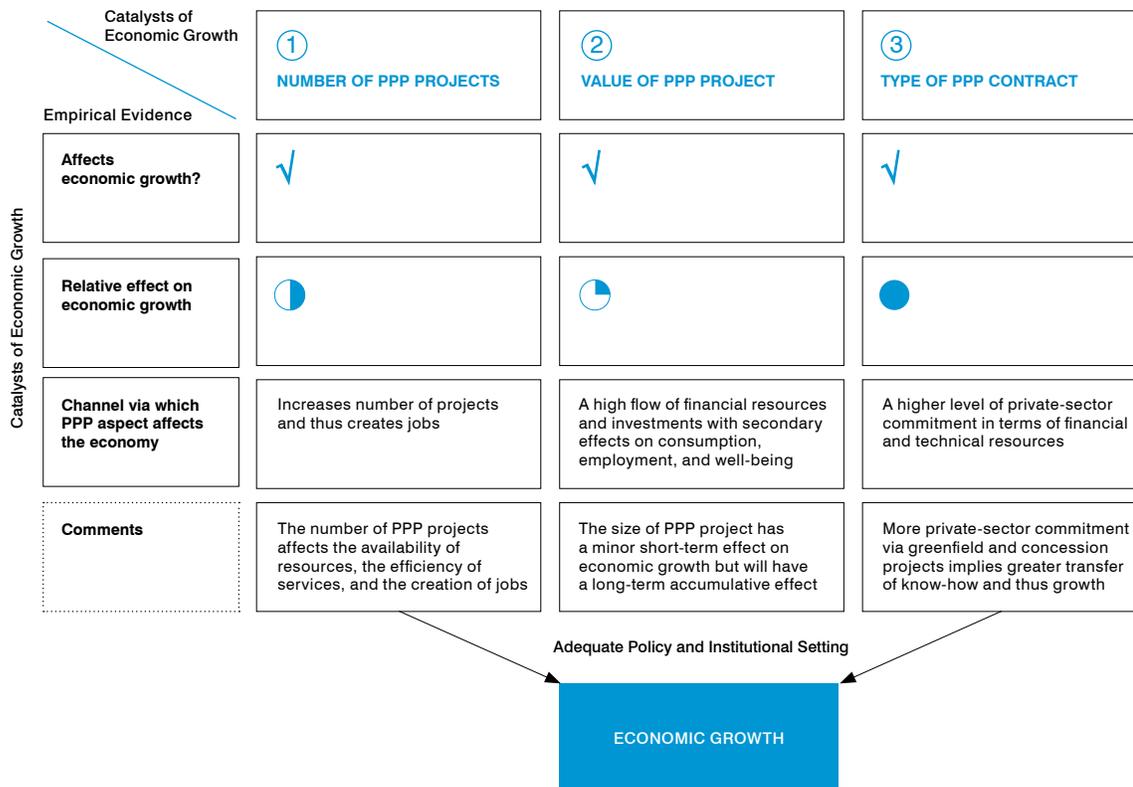
The number of PPP contracts. Evidence suggests that the more PPP projects launched in a nation, the higher the rate of GDP growth. Notably, countries with 70 or

more PPP infrastructure projects demonstrated a 25 percent GDP growth rate between 1990 and 2003.² This is because such projects tend to be large undertakings that bring capital into the market while creating long-term employment. Job growth drives more consumption, generating more wealth and fueling a stronger economy. Private investment of this nature also attracts other private investors to the market, creating a sustainable model for economic growth.

Value of the PPP projects. Higher-value projects inject more financial resources and investment into the economy. As PPPs introduce additional financial resources into the economy, government expenditures decrease. In response,

public resources that previously would have been used for infrastructure needs are channeled into more socioeconomically productive sectors, such as education and health. Analyses show that a 1 percent increase in PPP investment will increase GDP per capita by 0.3 percent, implying that consistent investment in PPPs will increase GDP levels sizably.³ Although the short-term boost to economic growth is relatively small, it has a significant cumulative effect over time. This is true even after education, macroeconomic factors, geographic factors, institutional factors, and social factors are accounted for.

Exhibit 7
Summary of Key Findings on PPPs' Effect on Economic Growth



Source: Booz & Company

Type of PPP contract. The type of PPP contract is the element that has the greatest influence on economic growth. This is because the nature of the PPP contract will determine the level of private-sector involvement (see Exhibit 8). As private-sector involvement in a PPP increases, so too does the quality of the project and the transfer of knowledge and resources. The application of private-sector management principles, combined with investment in state-of-the-art technology and methods, leads to more cost-effective administration and greater access to services. This, in turn, attracts more private investment into the economy and raises the overall standard of living.

Opportunities for PPP Development Are Rich in the MENA Region

The MENA region is ripe for PPP development. In 2006, the region experienced a 6 percent increase in real GDP. The economic boom is especially apparent in oil-producing countries. However, if the region intends to capitalize on and further drive economic growth, it needs to improve its infrastructure. This will pose a challenge, as the need is greater than resource availability, particularly in countries that do not benefit from high oil prices.

Despite the rapidly growing amount of capital available to private businesses in the region, private investments in infrastructure projects have been low, covering only 13 to 17 percent of the overall need. There are only about 100 PPPs in the entire region, and they are of a low level of sophistication in terms of resource and knowledge transfer.

Opportunities exist to introduce foreign assets and foster intraregional investment. Before this can occur on a large scale, government policies in many of the region's nations need to be revised to be more supportive of PPP projects. To create a market in which PPPs will thrive, public-sector policymakers must:

1. Establish legislative frameworks that support quick and transparent decision making and allow for competitive bidding
2. Develop regulations that specifically apply to each type of PPP
3. Create economic frameworks that mitigate the private sector's risks without compromising the public good

Exhibit 8
Investment by Type of PPP

	TYPE OF PPP	OPERATION AND MAINTENANCE	OWNERSHIP	INVESTMENT	COMMERCIAL RISK	DURATION (YEARS)
High Public-Sector Commitment	Management Contract	Private	Public	Public	Public	3–5
	Leasing	Private	Public	Public	Semi-Private	8–15
	Build, Design and Operate (BDO)	Private	Public	Public	Private	20–30
High Private-Sector Commitment	Concession	Private	Public	Private	Private	20–30
	BOT	Private	Public	Private	Private	20–30
	BOO	Private	Private	Private	Private	20–30
	Privatization	Private	Private	Private	Private	Lifetime

Sources: WDI data, 2006; World Bank PPI in Infrastructure database, 2005; Booz & Company

HOW THE TYPE OF PPP CONTRACT IMPROVES QUALITY AND STANDARD OF LIVING

Countries with a large number of PPP projects that require greater levels of private-sector involvement tend to exhibit a higher grade of infrastructure. Fewer delays, fewer outages, and fewer failures in energy, water, telecom, and transportation service result from the right types of PPPs.

- In Guatemala, public access to electricity increased by 38 percent after the Guatemalan government implemented PPP agreements.
- In the Philippines, the formation of PPPs increased access to water by 34 percent.
- The East Asia Pacific (EAP) region, which has hundreds of PPPs in the energy and water sectors, experiences significantly fewer power delays and water supply failures than the MENA region, which has fewer than 100 such agreements (see Exhibit 9).⁴

By extension, higher-quality infrastructure equates to a higher standard of living, better prices, and elevated levels of productivity. PPPs are able to provide this higher level of quality because they are less restricted by finances, can draw from a wider pool of expertise, and often operate with greater efficiency.

PPPs foster service expansion. For the private sector, investment in a public infrastructure project is a business prospect. The drive to generate profits, combined with technical and managerial specialization, spurs private partners to invest more resources in expanded services and improved customer service.

PPPs operate with greater efficiency. Wasteful practices eat into profits; in PPP projects, private-sector partners find opportunities to introduce more efficient practices to reduce waste and improve revenue collection.

PPPs deliver in less time. Private firms have numerous incentives for delivering a project on time, including the prospect of a faster return on their investment. More efficient management practices, combined with a greater pool of resources and capital, also enable private-sector partners to fast-track infrastructure projects that might otherwise be held hostage by limited public funding.

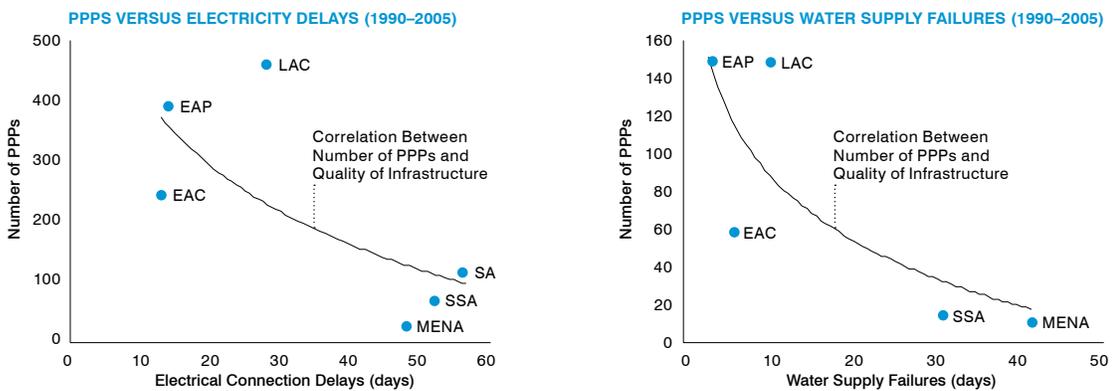
PPPs offer more choice and modern services. Private investors have the capital to invest in specialized training, resources, and technology, enabling them to offer more choice in terms of service provision than the government can do on its own. A greater array of services

will appeal to private businesses that will, in turn, provide additional goods, services, and job opportunities.

PPPs assign risk based on resources and ability. The allocation of risk to those players that can manage it best is the underlying driver of PPPs. That is, the public sector bears risks related to politics and, to some extent, economics. The private sector typically bears commercial risks related to

financing, developing, and managing a project. Commercial risks are often complicated and, as a result, are often shared between the public and private sector. The sharing of risk enables both public and private players to focus their strengths and resources for the project's benefit. However, risk allocation must be aligned with the political climate and government policies. Risk that is not adequately studied, understood, or assigned can cause the PPP to collapse.

Exhibit 9
Quality of Infrastructure and Number of PPP Projects across Regions



Note: EAP is East Asia and Pacific; LAC is Latin America and Caribbean; ECA is Europe and Central Asia; MENA is Middle East and North Africa; SA is South Asia; and SSA is Sub-Saharan Africa.
Sources: World Bank; Booz & Company

GOVERNMENT POLICIES CENTRAL TO ATTRACTING PPPS

Although the data we have presented relates to developing countries worldwide, it is consistent with current circumstances in the MENA region and Africa. These include the lack of a regulatory framework; there is no legal framework for regulation in many countries, and only a few have independent regulators. Institutional setups are fragile, with monetary policy and financial stability in question, few incentives to attract private investment, and little in the way of stable and predictable political policy—private-sector partners must contend with the threats of war and weak governance. Finally, there is no widespread vision for a PPP network, as most projects are ad hoc and standardized procurement methods—which would increase transparency, reduce time and money spent on procurement, and eliminate the risk of a sudden change—have yet to be created. Although infrastructure

PPPs can offer positive results for the public, private, and community arenas, they carry a fair amount of risk for their investors due to their large, lengthy, and capital-intensive natures. The costs to enter a PPP agreement are typically high, and it is often difficult to form an exit strategy—selling a bridge is not always an easy prospect.

Not surprisingly, the duration of the project can deter investment, especially when potential liability is greater than potential returns. Furthermore, PPPs are often funded in foreign currency, particularly in developing countries that lack liquid financial markets, yet revenues are collected in local currency, which may be less valuable in global currency markets. PPPs also present a commercial risk triggered by tariff restrictions, most notably in highly regulated markets or in smaller markets that do not provide an adequate revenue base. And like any investment, PPP cash flows are affected by financial crises. For these reasons, private firms are naturally selective of the environments in which they invest their capital. They typically undergo a three-step decision-making process before entering into a PPP; the choices they make during this process will affect

the PPP's potential to positively influence overall economic growth.

- *Enter the country or not?* The answer to this question hinges on economic risks, political risks, market size, and potential revenue generation. Countries with large markets and low political and economic risks are the most attractive to investors.
- *What is the optimal mode of entry?* Once they have decided to enter a country, investors must next determine their mode of entry. The mode of entry is based on the sector, the level of risk, and the potential to generate revenue. This is the stage where the investor will decide on its level of commitment to the market, which determines the type and value of the PPP contract.
- *What is the level of resource commitment and knowledge transfer?* After entry, investors decide how much of their technical expertise to share and technology to invest in, what prices to charge, how many new products to introduce, and other provision-related decisions. For public-sector policymakers looking to invigorate the economy, this step

Britain's M6: Transportation PPP Leads to Community Reinvestment

Beset by chronic congestion on the M6 trunk road, Birmingham's northwest side needed a bypass for through traffic. Unable to fund such an undertaking, the British government determined in 1991 that it would launch a design-build-operate-maintain-finance concession agreement for a new 27-mile, six-lane M6 Tollway. The government awarded a 53-year concession for the \$1.7 billion project, which became Britain's first privately funded toll road.

With the exception of changes in design standards, the concession team, led by Macquarie Infrastructure Group (MIG), bore all of the project risks, which included planning, delivery, cost, quality, revenue, and statutory. The team successfully managed these risks based on their technical capability and experience, long-term commitment, ownership of technical quality and approval authority, an integrated contract, and a strong relationship with the Highways Agency, the project's sponsor.

In 2007, MIG refinanced its debt, which was expected to generate \$700 million for the organization. It agreed to reinvest 30 percent of these gains in neighboring public projects to continue to strengthen the area's infrastructure without cost to the public—and to bring more traffic to the M6 toll road.

is the most important, as the level of commitment and knowledge transfer is the factor that most affects the PPP's influence on the economy.

Given this three-step decision-making process, the government's role is apparent. To encourage private investors to enter into PPPs, governments need to minimize economic and political risks. And although sound policies will help attract PPPs to the market, astute negotiating is necessary to develop agreements that will improve the overall economy.

Governments need to minimize economic and political risks. Investing in an infrastructure project at any level is risky for the private investor. The government cannot control fluctuations in the world markets, but it can minimize political and economic risks within its purview to attract more PPPs to its market.

Governments with well-established and enforced policies against corruption, combined with low business transaction costs, a transparent legislative system, and exchange rate and monetary stability are far more attractive to the private sector, particularly for projects that require a sizable investment of capital

and knowledge. Governments with homogenous populations and fewer veto points should capitalize on this advantage, as reforms are easier to introduce and manage.

Policies that ensure overall economic stability will minimize financial risk for the private investor. For example, a country with an independent central bank that is free from political influence is understandably more appealing to a private investor than a country with little monetary stability. Accounting for the PPP in the budget process will also yield more stable results, as decisions are based on affordability and the project's rate of return.

Furthermore, defined standards for dealing with PPP partners, an established champion for the PPP process, and clear rules for entering into and maintaining PPP agreements

send a distinct message that the government is organized and committed to bringing private-sector investments into the nation. Policymakers then need to market the idea to the public to garner support.

Governments need to optimize private-sector commitments to maximize the PPP's effect on the economy. The nature of the PPP contract will determine its influence on the economy; PPP arrangements with greater private-sector involvement will contribute to GDP growth. The government, therefore, needs to promote and negotiate contractual agreements that encourage the private sector to invest more money, transfer expertise, and increase accessibility and product choice. Potential projects should be screened based on a cost/benefit analysis and the ability to deliver a good return on

investment, and private partners must be vetted for their experience as well as their financial backing.

In return, the government should offer guarantees that decrease the private investors' risks, such as minimum revenue and volume, equity buyout, and offtake agreements. Guarantees must be carefully structured to ensure risk is properly assigned, as the misallocation of risk is the leading cause of PPP failure.

At the same time, the contracts should include incentives and penalties that protect consumer welfare by ensuring private partners offer the best services at the best prices. Too many guarantees could encourage monopolies or prompt the private investors to become lax on efficiency and quality. Thus, to be successful, these guarantees must be based on thorough investigation of project risk, partner strengths, and alignment of project type with partner.

Governments should secure a sound regulatory system to maximize resource commitment and transfer of know-how. Competitive markets yield benefits for consumers and government alike by reducing prices, creating more services, and providing greater accessibility. However, competitive

Policies that ensure overall economic stability will minimize financial risk for the private investor.

markets do not always occur naturally; the government needs to establish policies that encourage competition.

Transparency in the competitive bidding process, along with clearly defined regulations and criteria for selection, are key to attracting high-quality private investors. The procurement process should also be as simple and straightforward as possible, with a clear outline of the project and partner vetting process, the project scope, who will bear what risks, and the steps for negotiations. A realistic timetable and a fair competitive process will further reduce the government's risk in undertaking the tender process.

An independent regulatory agency should also be established to monitor overall performance, including tariffs and quality, and to discourage political intervention. Evidence from around the world shows that independent regulatory agencies provide essential checks and balances by keeping private providers monitored, while their establishment signals the government's commitment to reform. By indicating fairness in business practice, the government is able to attract more private investors into the market.

Hungary's M1/M15: Lack of Defined Policies and Risk Mitigation Causes PPP Failure

PPP success is dependent on the right sets of policies combined with appropriate risk allocation and mitigation. When these policies are not in place, the venture will fail—often at the expense of taxpayers.

In the early 1990s, the Hungarian government developed an ambitious plan for a motorway to make its recently opened borders more accessible and appealing to foreign investors. The first project, the M1/M15, was to link Budapest with Vienna and Bratislava. Unable to fund the project due to its high state of debt, the government conducted numerous studies that suggested the project could be 100 percent financed by private sources.

A 35-year BOT concession for the toll road was awarded to the Hungarian Euro-Expressway Consortium (HEEC), led by Transroute International of France, with nine other equity partners and the European Bank for Reconstruction and Development. The HEEC was responsible for design, finance, construction, toll collection, and motorway operation and maintenance. The organization also accepted all traffic risk in exchange for setting the toll rate.

The forecasted traffic rates were inflated, leading to lower-than-anticipated revenues. Further, the high toll rates and lack of transparency in the bidding process resulted in lawsuits against the HEEC. With the private investors teetering on insolvency, the government refused to back the concessionaire or renegotiate the agreement. The venture folded, and the government was forced to nationalize the project. In doing so, it eliminated the tolls but also lost a pipeline of private investment. Further development of the motorway plan was delayed due to lack of funding.

On a subsequent PPP for the M5, the Hungarian government improved how it structured its agreements; rather than allocating risks completely to the private sector, the government took a more equitable approach and shared many of the risks. Given the inherent uncertainty of traffic forecasts, the Hungarian government provided revenue guarantees to ensure project financial viability and avoid risk premia, which lenders and investors would otherwise have required. Moreover, experienced technical, traffic, financial, and legal advisors were hired to ensure a satisfactory allocation of risk and appropriate revenue support mechanisms. The project has proven a success and is a model for similar projects.

PPPS LAY THE GROUNDWORK FOR GLOBAL DEVELOPMENT

Infrastructure PPPs can be a significant force for powering economic growth and development. PPPs have proven an effective means of bridging the gaps between demand and resources, quality and accessibility, and risk and benefit. The ability to share risk with the private sector, tap external financial resources, and profit from private-sector investments and intellectual capital gives public-sector policymakers greater flexibility in allocating both human and financial resources. Emerging and rapidly growing economies, especially in the MENA region, stand to benefit from the economic development that is generated by infrastructure PPPs.

In short, PPPs can positively influence a nation's GDP. However, they are not magic bullets. Their influence on economic growth is

entirely dependent on the number and value of PPPs in the country, the type of PPP contract, and the policy and institutional environment. Policymakers must thoroughly evaluate how these factors apply to their jurisdiction before launching a PPP project.

This means policymakers must craft a strategy for infrastructure development and then ensure their actions—governed by established policies—can sustain the strategic goals. Before a PPP is undertaken, a PPP-friendly environment must exist to attract private investors, encourage public support, and ensure long-term project success.

Establishing an internal PPP champion is a first step toward creating an environment that fosters PPPs. Policies that support quick decision making, competitive bidding, and transparency also must be in place. At every step, the private investors' interests must be balanced with public safety and access. Every PPP prospect presents a new and different opportunity to guide economic development. As such, every prospect needs to be evaluated, vetted, and selected on its own merits.

Third-party trusted advisors with knowledge about the intricacies of PPP structures and the factors that drive economic growth can provide assistance with creating PPP-supportive frameworks. These advisors should also have the expertise and capability to develop a model for advertising, vetting, and procuring high-value PPP projects that will generate economic growth.

With the ideal circumstances in position, public-sector policymakers can chart a course for a stronger, more vibrant future in which private investors improve the levels of service and quality of public infrastructure projects. In return, the government invests more resources in other areas of public interest in anticipation of a thriving and open economy that is better positioned to extend its global reach.

Endnotes

¹ Clive Harris, "Private Participation in Infrastructure in Developing Countries: Trends, Impacts, and Policy Lessons," World Bank Working Paper Series No. 5, Report no. 26526, 2003; Akash Deep, "Public Private Partnership for Financing Development," Harvard University presentation, 2005; Marianne Fay and Tito Yepes, "Investing in Infrastructure: What is Needed from 2000 to 2010?" World Bank Policy Research Working Paper No. 3102, July 17, 2003; Booz & Company analysis.

² World Bank Group, World Development Indicators 2006; Private Participation in Infrastructure Projects (PPI) database, a joint product of the World Bank's Infrastructure Economics and Finance Department and the Public-Private Infrastructure Advisory Facility (PPIAF), 2005; Booz & Company.

³ Analysis based on econometric regressions.

⁴ Clive Harris, "Private Participation in Infrastructure in Developing Countries: Trends, Impacts, and Policy Lessons," World Bank Working Paper Series No. 5, Report no. 26526, 2003; Booz & Company.

About the Authors

Richard Shediak is a partner with Booz & Company based in Abu Dhabi. He specializes in financial services and public sector projects and has led and participated in various strategy, operations improvement, and organization projects in the Middle East, Europe, and Asia.

Rabih Abouchakra is a partner with Booz & Company based in Abu Dhabi. He focuses on public administration modernization, public policy, large-scale transformation, and organizational development and change management.

Roy Hintze is a senior associate with Booz & Company based in Abu Dhabi. He focuses on strategy, transformation, organizational development, operations improvement, and public policy projects in the Middle East.

Mona Hammami is an associate with Booz & Company based in Beirut. She focuses on public policy, private-sector involvement in development, social and labor policies, macroeconomic policy, governance frameworks, and organization restructuring projects.

Mazen Ramsay Najjar is an associate with Booz & Company based in Beirut. He focuses on public policy, socioeconomic development plans, macroeconomic policy and governance frameworks, and turnaround and transformation projects.

The most recent list of our office addresses and telephone numbers can be found on our website, www.booz.com

Worldwide Offices

Asia

Beijing
Hong Kong
Mumbai
Seoul
Shanghai
Taipei
Tokyo

Australia,

New Zealand &

Southeast Asia

Adelaide
Auckland

Bangkok
Brisbane
Canberra
Jakarta
Kuala Lumpur
Melbourne
Sydney

Europe

Amsterdam
Berlin
Copenhagen
Dublin
Düsseldorf
Frankfurt
Helsinki
London

Madrid
Milan
Moscow
Munich
Oslo
Paris
Rome
Stockholm
Stuttgart
Vienna
Warsaw
Zurich

Middle East

Abu Dhabi
Beirut
Cairo

Dubai
Riyadh

North America

Atlanta
Chicago
Cleveland
Dallas
Detroit
Florham Park
Houston
Los Angeles
McLean
Mexico City
New York City
Parsippany
San Francisco

South America

Buenos Aires
Rio de Janeiro
Santiago
São Paulo

Booz & Company is a leading global management consulting firm, helping the world's top businesses, governments, and organizations.

Our founder, Edwin Booz, defined the profession when he established the first management consulting firm in 1914.

Today, with more than 3,300 people in 58 offices around the world, we bring foresight and knowledge, deep functional expertise, and a practical approach to building capabilities and delivering real impact. We work closely with our clients to create and deliver essential advantage.

For our management magazine *strategy+business*, visit www.strategy-business.com.

For the Ideation Center, Booz & Company's leading think tank in the Middle East, visit www.ideationcenter.com.

Visit www.booz.com and www.booz.com/me to learn more about Booz & Company.
