

USE OF PPP IN DIFFERENT COUNTRIES AND REGIONS

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Public Private Partnership (PPP) projects are being implemented by governments for similar reasons across the globe, such as removing the responsibility of funding the investment from the government's balance sheet, introducing competition, benefiting from the expertise, experience and technology of the private sector that would lower the project delays and cost overruns. Despite sharing common motivation factors in pursuing PPP projects, the development trends, models used, legal context and legislations differ from one country to another. Depending on country's needs and political atmosphere, governments decide on the sector, where they want to use PPP and the appropriate PPP model to execute their projects. In this study, a comparative study is conducted to underline main differences and similarities between PPP practices in different parts of the world. The comparisons are based on diversification of infrastructure needs and investment sectors, legal context and PPP models used. This study investigates how use of PPP projects differs from one country to another and regions in the world. Similarities are also analyzed to summarize the state of the art of PPP practices to provide a global approach.

Keywords: Legislation, Development trends, Infrastructure investments.

1 INTRODUCTION TO PPP

Public Private Partnership (PPP) projects have gained great popularity across governments especially in the last decade as infrastructure plays an important role in economic growth and development. These projects are well-known for their close relationship with the economic state and the political strategy of the territory as well as its "ambient atmosphere". With the increasing number of vulnerable economies in recent years, global funds are less eager to invest on PPP projects after the year of 2012. According to World Bank statistics, PPP project numbers and total investment amounts are decreasing. Still, PPP projects are widely used across the world.

There has always been some degree of cooperation between the public sector and the private sector (Wettenhall 2003, 2005). The beginnings of partnership between private and public sectors can be traced as far back as the Roman Empire two thousand years ago in Europe: A network of postal stations was developed to accompany the vast expansion of the highway system under the Roman legions (PPIAF 2009). In 1438, the French nobleman Luis de Bernam was granted a river concession to charge the fees for goods transported on the Rhine (Bezançon 2004). Another well-known literature example of the concession of this type was the one that had been granted in 1792 in France to the brothers Perrier for water distribution in Paris (Chakrabarti 2014). Examples abound since the turn of the seventeenth and eighteenth century with many infrastructure facilities (water channels, roads, railways) in Europe and later in America, China

and Japan privately funded under concession contracts (Platz *et al.* 2016). In 20th century, after the World War I, great depression of 1929 and World War II, throughout the industrialized and developing world, there has been a renewed move to liberalization and privatization of infrastructure activities from the 1980s and increasing dramatically into the 1990s. In 1992 the UK started to implement Private Finance Initiative (PFI), which is a way of creating PPP by funding public infrastructure projects with private capital. Under the Private Finance Initiative, private sector firms take on the responsibility for providing a public service including maintaining, enhancing or constructing the necessary infrastructure required (Corner 2006). From 1990 to 2009, approximately 1,400 PPP deals were signed in the European Union, representing a capital value of approximately €260 million (Modukumshe *et al.* 2015). According to World Bank's January 2017 PPI database, excluding US, Canada, UK and major European countries, there are 7,132 projects, worth 2,583.214 billion \$ where highest investment is from information and communications technology sector from 1990.

There are several different definitions for PPP projects expressed by different researchers and institutes. Some see it as a new governance tool, others see PPPs as a new expression in the language of public management and yet others view PPPs as a new way to handle infrastructure projects (Hodge and Greve 2007). Public Private Partnership projects can be described as an agreement between a host government and a private entity for supplying infrastructure assets and services by the private sector (Rebeiz 2011). A wide range of economic and social infrastructure projects have utilized the PPP delivery method; however, it is mainly used to build and operate roads, bridges, tunnels, light rail networks, hospitals, schools, traffic control systems, and water and sanitation systems (International Monetary Fund (IMF) 2004). An arrangement for the provision of assets or services, often in combination and usually for a substantial or complex "package", in which both private sector supplier and public sector client share the significant risks in provision and/or operation' (Infrastructure Implementation Group 2005).

2 MAJOR DRIVERS WHY GOVERNMENTS PREFER PPPs

Underlying factors why governments use PPPs is a widely-researched topic by several scholars and institutes. According to Asian Development Bank (2008), there are three main motivation for engaging PPPs, (i) to attract private capital investment (often to either supplement public resources or release them for other public needs), (ii) to increase efficiency and use available resources more effectively, (iii) and to reform sectors through a reallocation of roles, incentives, and accountability. The philosophy of PPP projects is based on the expertise of the private sector, which ensures higher project performance by removing the burden of funding responsibility of infrastructural investments from governments and finishing the projects with lower cost and no delay. Despite of such important advantages, PPP projects still have their own risks. Using appropriate methods and legal context would save great loss of financial resources and time as well as the reputation. Also, opportunistic behavior is crucial for long-term projects as in some of them the operational period alone would continue for 20-30 years or even longer (Liu *et al.* 2016). Benefits and risks of these projects vary considerably according to the processes of tendering, execution, monitoring and closure along its aim, type, contract and relevant legal context.

3 REGIONAL TRENDS

World Bank statistics show that highest investment area for PPPs is information and communications technology (ICT) and electricity projects. These are followed by road projects in terms of total project budget since 1990. Latin America and the Caribbean (LAC) region have

the highest investment number and amount. Brazil is the top contributor and influencer in Latin America, where more than half of the investment in the continent, also %20 of whole global investment is being obtained.

Table 1. Regional numbers of PPP projects 1990-2016 (Worldbank 2017).

Region	Number of Projects	Total Investment (Billion \$)	Sector with Highest Investment
East Asia and Pacific (EAP)	2062	448,007	ICT
Europe and Central Asia (ECA)	923	434,462	Electricity
Latin America and the Caribbean (LAC)	2212	1009,010	ICT
Middle East and North Africa (MENA)	179	114,720	ICT
South Asia (SA)	1195	403,682	Electricity
Sub-Saharan Africa (SSA)	562	175,152	ICT

Greenfield projects serve to build and operate a new facility for the period specified in the contract, where the divestiture projects could be clarified as private entities buy equity stakes in state-owned enterprises through asset sale, public offering, or a mass privatization program and under management and lease contracts private entity takes over the management of state-owned enterprise for a fixed period (Akintoye and Beck 2009). Brownfield is when a company or government entity purchases or leases existing production facilities to launch a new production activity.

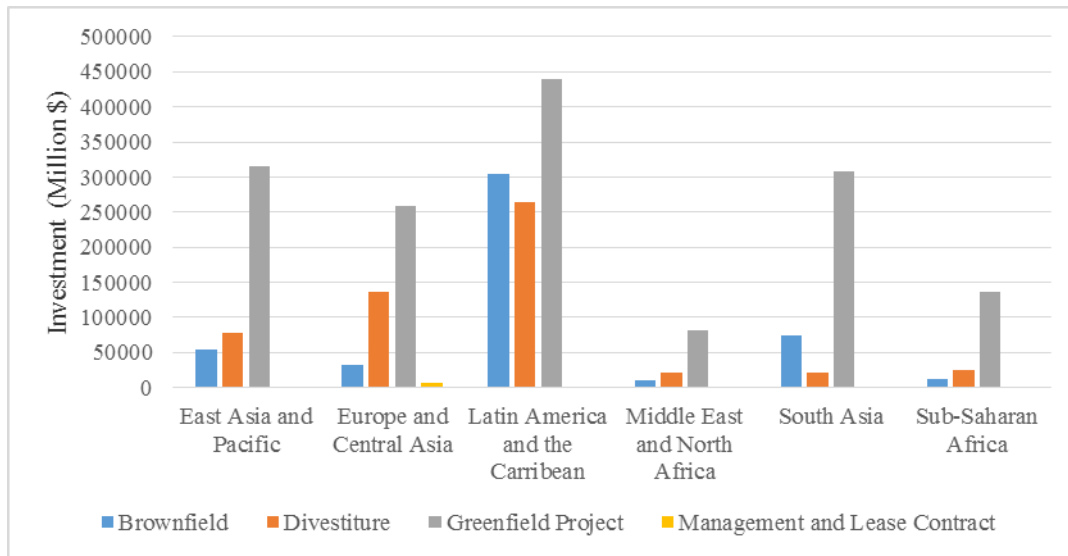


Figure 1. PPP types by region (1990-2016).

Figure 1 shows that brownfield investments remain having larger portion in LAC and SA regions. Reducing the cost of starting up and the time devoted to construction attracts investors to use existing facilities. Operating those facilities with greater efficiency often generates employment, which is one of the essential components for a developing economy and steady growth. On the other hand, feasibility reports should be carefully considered according to the strategy as restoring old facilities may result in higher costs in longer period rather than constructing a greenfield project. It is critical to establish trust between parties through risk

management and contract administration processes by virtue of a divestiture, which gives the private operator full responsibility for operations, maintenance, and investment like a concession. Taking advantage of the private sector experience and developing stronger shareholder value management would result with great benefits after a careful planning process. In ECA and LAC regions divestitures are stronger associated with the presence of larger private enterprises having international investments.

There are different kinds of PPP Models used, modified or improved due to dynamic nature of a country’s requirements. Most commonly used models across main executors of PPP projects are given in Table 2. These models differ from each other in terms of tender, procurement and execution methods, responsibility and risks of parties, contract type and period, stakes (reimbursement), cost/benefit analysis, legal context and also the environmental impacts.

Table 2. PPP models used by county/region (Gurgun and Touran 2014).

Country/region	PPP Models
Continental Europe	DBOM, DBO, BOOT, BOO, joint venture
U.K.	PFI, joint venture, concessions, outsourcing, sales of equity stakes in the state-owned business
U.S.	DB, DBFO, DBF, concession, BOT, DBM, DBOM
China	BOT, concession, equity transfer of state-owned enterprises
Turkey	BOT, TOR, BO, BLT

Note: DBO: design-build-operate; DBOM: design-build-operate-maintain; DB: design-build; DBF: design-build-finance; DBFO: design-build- finance-operate; DBM: design-build-maintain; BOOT: build-own- operate-transfer; TOR: transfer of rights; BOO: build-own-operate; BOT: build-own-operate; BO: build-operate; BLT: build-lease-transfer.

Developed countries mostly focus on new demand and the maintenance of existing infrastructures. The annual share of total investment and project numbers can be seen in Figure 2.

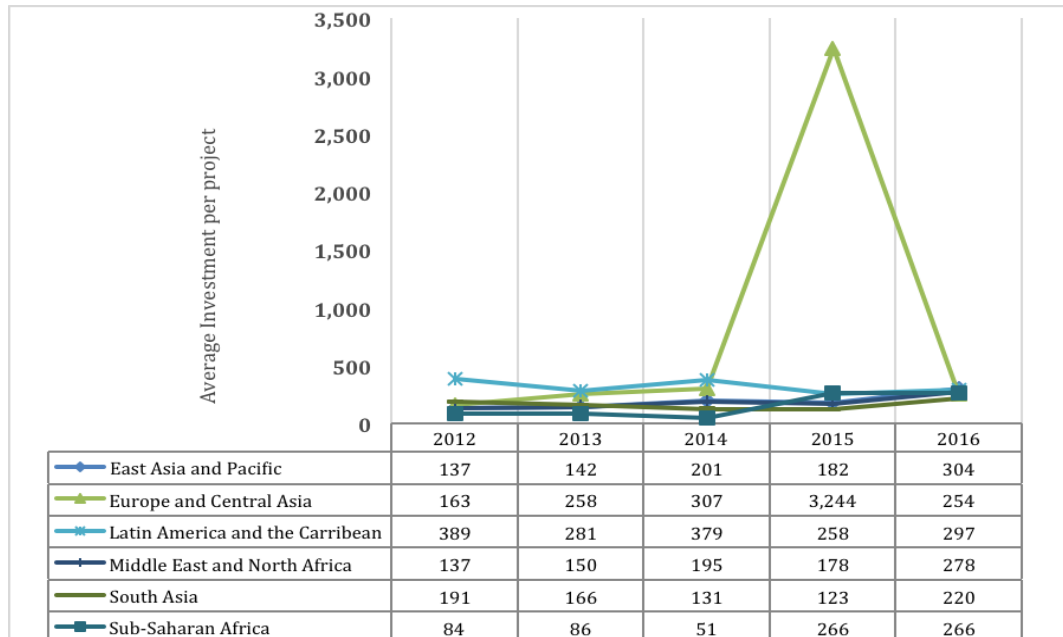


Figure 2. Project time series between 2012-2016 (Worldbank 2017).

Project numbers and the total investment values have significantly decreased starting from 2014. Global political and economic factors like the increase in dollar prices against local currencies, centralization trends in production, trade and investments, political uncertainties, terror attacks and refugee crisis broke the confidence of investors and adversely affected the spreading speed of PPP projects especially at developing countries. This atmosphere could be beneficial for successful investors and politicians who accurately assess the upcoming developments. To be able to continue the progress at the infrastructural demands, governments are obligated to claim responsibility for more risks or create more flexible contracts that would attract the investors. Different regions have their own opportunities and risks, like location, available resources or the human force, which pushes forward to arise unique strategies. Governments should realize that main goal is to provide a better life standard to community while making this investment decisions and establishing strategies.

4 CONCLUSION

The PPP movement has grown with different advancements and modifications around the globe. These projects are irreplaceable for governments with their satisfactory benefits in time and money while closing the gap of public service needs. There are some common challenges, risks, limitations, and success factors but the main reason for preference is being made on economic, legal, social, and environmental factors in addition to expectations that can vary according to countries. PPP models, types and project time series are summarized to provide a better understanding of the latest numbers from a broader window. The information presented in this paper summarizes the PPP experience of various regions and provides a review of the latest trends while putting forward the hypothesis about the reasons.

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