

## **PUBLIC PRIVATE PARTNERSHIPS IN BRICS COUNTRIES: A BROAD UNDERSTANDING OF INITIATIVES BETWEEN PUBLIC AND PRIVATE PARTNERS**

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**Abstract:** The aim of this work is to present the evolution of the understanding of public-private partnership as result of the denationalization process and the reduction of the role of States in economy

since the 1980s and 1990s, until the recent Brazilian Law of Investment Partnership Program – IPP. In addition, this work dedicates to present the Brazilian experience in PPPs and in other countries, focusing on the PPP programs in BRICS countries, which the infrastructure sector has been seen as relevant contributor to China's and India's economic growth.

**Key-words:** Public-Private partnership; BRICS.

## INTRODUCTION

According to the Annual Update Report of Private Participation in Infrastructure – PPI –, in 2016, from the World Bank Group, the private sector investments in infrastructure in emerging markets suffered a considerable fall in that year. It was 37% less than compared in 2015. The global downturn followed the fall of three big markets for private investment in the Emerging Markets and Developing Economies – EMDEs: Turkey, India and Brazil.<sup>12</sup>

In the other hand, Latin America and Caribbean projects attracted US\$ 33.2 billion in 2016, corresponding to 47% of the total private investment in infrastructure. From the 96 projects in final stage of negotiation, 62 correspond to energy sector, 27 on transportation, and 7 on water infrastructure. According to this total, only Brazil was responsible for 47 projects.

The evolution of the concept of public-private partnership – PPP – has acquired a broad understanding, comparing with the initial debates in the 1980s and 1990s.

Even in Brazil, which its legal system adopted a restricted concept of PPP in 2004. The PPP Brazilian concept is applied only in special cases of public concessions. A broader concept of PPP according to the Brazilian Law has been adopting along with the recognition of recent mechanisms of public and private interaction. As an example, the Brazilian Federal Law, which created the Investment Partnership Program – IPP (or PPI in Portuguese), uses the concept of “partnership contract” (“contratos de parceria”), involving the PPP legal framework designed in 2004 and a wide types of public concessions and privatizations programs.

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1 2016 Annual Update Private Participation in Infrastructure (PPI) of World Bank Group.. Accessed in October 13, 2017. Available at: [www.worldbank.org](http://www.worldbank.org).

2 The energy sector of the EMDEs is the most attractive for private investment, summing up US\$ 43.9 billion in 162 projects, which consist in 61,4% of the total, followed by projects in transportation and water infrastructure. It can be infer, thus, the relevance of private investments in infrastructure projects in emerging countries, mainly in energy sector (2016 Annual Update Private Participation in Infrastructure (PPI) of World Bank).

Albeit the Brazilian Law of PPPs is restricted to only a few cases, the international arena presents a broader concept, which legitimates the recent Brazilian efforts to wider their understanding about PPPs.

The enlargement of the use of the concept of PPP is notorious in the international understanding, due to the proximity of the idea to other principles and practices of good governance and public management: partnership executions, shared knowledge and responsibilities, efficiency-risk analysis and long-term planning.

International Organizations and many countries, which adopted long-term contracts for infrastructure projects, using different legal approaches, financial alternatives and mechanisms for private sector participation, all that included to the PPPs.

The aim of this work is to present the evolution of the understanding of public-private partnership as result of the denationalization process and the reduction of the role of States in economy since the 1980s and 1990s, until the recent Brazilian Law of Investment Partnership Program – IPP. In addition, this work dedicates to present the Brazilian experience in PPPs and in other countries, focusing on the PPP programs in BRICS countries, which the infrastructure sector has been seen as relevant contributor to China's and India's economic growth.

Finally, this paper's objective contributes with the academic debate about the different forms of interaction between public and private sectors.

## **2. UNDERSTANDING THE CONCEPT OF PUBLIC-PRIVATE PARTNERSHIP**

According to the World Bank's Public Private Partnership Infrastructure Resource Center – PPPIR there is a fundamental concept of PPP:

*“Public-private partnerships (PPPs) are a mechanism for government to procure and implement public infrastructure and/or services using the resources and expertise of the private sector. Where governments are facing aging or lack of infrastructure and require more efficient services, a partnership with the private sector can help foster new solutions and bring finance.*

*PPPs combine the skills and resources of both the public and private sectors through sharing of risks and responsibilities. This enables governments to*

*benefit from the expertise of the private sector, and allows them to focus instead on policy, planning and regulation by delegating day-to-day operations.*

*In order to achieve a successful PPP, a careful analysis of the long-term development objectives and risk allocation is essential. The legal and institutional framework in the country also needs to support this new model of service delivery and provide effective governance and monitoring mechanisms for PPPs. A well-drafted PPP agreement for the project should clearly allocate risks and responsibilities.”<sup>3</sup>*

It is possible to infer that the World Bank embrace a broader concept of PPP, explaining the partnership as a governmental mechanism to implement public infrastructure and services by using private resources and experience. The concept regards to every public contract in which the Government uses the private expertise to apply in projects for better infrastructure, efficiency and bring new alternatives for financing the public sector.

The World Bank qualifies the PPP as a combination of abilities and resources of both sides, which conjunction obeys a specific framework of risk and responsibility division.

Considering that PPP contracts involves long-term infrastructure and services, the project's risk analysis is a crucial element to preserve efficiency on public services and avoid economic and financial imbalances on private or public side.

Therefore, is possible to affirm that PPP contracts ought to describe the risk and responsibility division. This is, in the end, the core characteristic of a PPP. The responsibility shall be allocated to the partner with better conditions to act, which means, with more capacity and efficiency to implement a specific command. The task is related to a risk, which should be supported by the partner better qualified to the work. As an example, it is commonly considered that the private partner is more efficient in build an infrastructure, due to its flexibility to hire suppliers and workers, and commitment to the schedule initially proposed. Consequently, the risks of building should be allocated to the private partner. In case of project failure, mismanagement or other building disaster, the construction risks will be absorbed only by the private partner, considered a priori as the most efficient partner to this

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3 World Bank Group. PPPIRC. About Public-Private Partnerships. Accessed in October 14, 2017. Available at: [www.ppp.worldbank.org/public-private-partnership/about-public-private-partnerships](http://www.ppp.worldbank.org/public-private-partnership/about-public-private-partnerships).

specific field.

Other risks, on the contrary, could be better allocated to the public partner, like regulations and controlling services, political risks and relationship with the society, which in those the public interest prevails above the private one. In addition, risks and responsibilities could be allocated to both partners, which is necessary to define precisely the responsibilities to each partner.

According to that, a PPP contract should be flexible enough to proportionate an efficient risk matrix, allocating to a partner more efficient to manage a specific risk. Moreover, the flexibility of the PPP contract and its risk matrix should be observed in the adherence to the local situation. The set of risks and allocation determine the risk matrix, which could be general understood in this hypothetical scheme:

**Chart 1: Risk Matrix**

<b>Risks</b>	<b>Public Partner</b>	<b>Private Partner</b>
Politics (changing of power)	X	
Environment (environment licenses)	X	X
Labor (labor accidents and social charges)		X
Operation (executing and managing the service)		X
Building (building the infrastructure)		X
Public Relations (relationship with the society)	X	
Finance (financial schemes and guarantees)	X	X

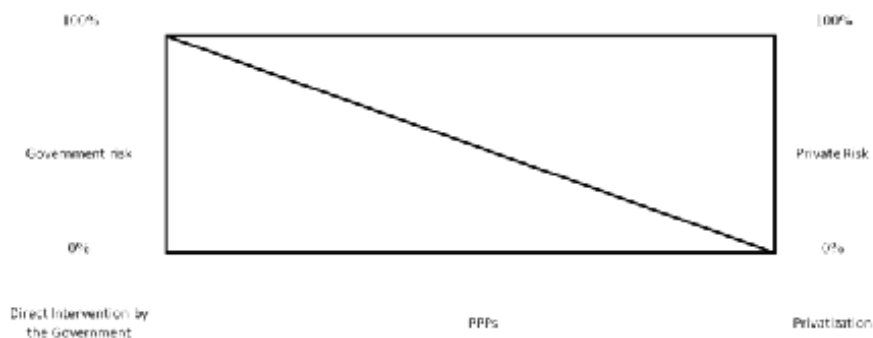
According to the Chart 1, it showed a small set of risks allocated to each partner in a PPP contract. In a PPP project, the risk matrix ought to describe as many as possible future risks in order to avoid contractual rebalancing, when one partner takes on the material and financial damages in a level superior than determined by the contract, and the other partner has to accomplish financial compensations.

Moreover, it is possible to infer that each risk involves a

cost. From each risk determined to a private partner, it is measurable in financial terms, and will impact on the total value of the project. Therefore, the risk matrix and the business plan of a PPP project are the key items to determine if is possible to establish a partnership between public and private sectors.

Following that understanding, there are numerous possibilities to establish a partnership between public and private sectors. According to the Organization for Economic Cooperation and Development – OECD<sup>4</sup> –, the PPP contract is situated between two axes: direct intervention by the Government and privatization.

Picture 1: Risk allocation between public and private sectors



(OECD)

Therefore, the PPP arrangement stays in the middle region, not well defined. The axis are the paradigms to decide how much of the public service will be transferred to the private side. In addition, there are common types of PPP arrangements according with which element would be transferred to the private partner.

*“A plethora of different kinds of contractual PPPs exist and new variations emerge continuously as each PPP contract responds to very precise needs. Some of the most frequent labels are BOT (build,*

4 OECD. Dedicated Public-Private Partnership Units: A Survey of Institutional and Governance Structures. 10 March 2000, p. 21. Accessed in October 14, 2000. Available at: [www.oecd.org/gov/budgeting/dedicatedpublic-privatepartnershipunitsasurveyofinstitutionalandgovernancestructures.htm](http://www.oecd.org/gov/budgeting/dedicatedpublic-privatepartnershipunitsasurveyofinstitutionalandgovernancestructures.htm)

*operate and transfer); that is, the private partner builds and operates the infrastructure, transferring it for the public partner at the end of the contract. BOOT (build, own, operate, and transfer) is the organizational form when infrastructure ownership is also private during the contract term; DBOT or DBOOT would be the acronyms if arrangements further include the responsibility for the design of the infrastructure project as well. The concession model is also, sometimes, separated into public works and public service concessions, depending on the business (contract) value of the infrastructure or service provision, respectively. In fact, many concessions are of mixed type: there is a balance between both activities”<sup>5</sup>.*

The PPP concept, in an international basis, does not aim to delimited the PPP scope. In the contrary, the terminology is broad enough to grand contractual flexibility, better risk allocations, quality in execution, and to elaborate legal and managing alternatives to many PPP projects.

### **3. THE EVOLUTION OF THE PPP CONCEPT IN BRAZIL**

According to the international understanding of PPP, which is a contract based on efficient allocation of risks and activities, the Brazilian Law assimilated the movement of approximation between public and private sectors and develop legal standards for the PPP concept in the country.

Since the 1930s, the State was responsible for implement most of the economic activities, mainly after the liberalism crisis in 1919-1939 and the crash of the New York Stock Market in 1929. In Latin America, the United Nations established the Economic Commission for Latin America and the Caribbean – CEPAL –, a regional commission responsible to promote studies and policies for regional development and cooperation amongst nations<sup>6</sup>. The CEPAL was initially coordinated by the Argentine Raul Prebisch, who defended the existence of the deterioration of terms of trade between manufactured

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5 BODY OF KNOWLEDGE ON INFRASTRUCTURE REGULATION. What are the different types of PPP arrangements? Accessed in November 18, 2017. Available at: <http://regulationbodyofknowledge.org/faq/private-public-partnerships-contracts-and-risks/what-are-the-different-types-of-ppp-arrangements/>

6 United Nations in Brazil. Accessed in October 14, 2017. Available at: [www.nacoesunidas.org/agencia/cepal/](http://www.nacoesunidas.org/agencia/cepal/)



goods and commodities exporters. The manufactured goods constantly get market value more than the commodities. In a scenario of export reduction, it would cause a deficit in commercial balance of developing countries. The solution to correct this deficit would be foreign loans and currency devaluation. In order to avoid those drastic solutions, CEPAL advocated that the Latin America should change its production structure, abandoning their historic characteristics as commodity exporters.

Therefore, Latin America should adopt the Importation Substitution Model. Rather than import manufactured goods, the Latin-America countries would establish a national industrial complex in their own territories. This model was followed by many Latin-American countries, like Mexico, Argentina, and in Brazil, which that model lasted from 1930s to 1990s<sup>7</sup>. The Brazilian Industrial Complex was implanted in phases:

**Chart 2: Brazilian Industrialization in Fases**

Brazilian Industrialization in Fases:			
<b>1st Phase</b>	1930s and 1940s	Base Industry of non-durable goods (clothing, processed food and footwear industries)	Exchanges came from mostly by coffee exportation
<b>2nd Phase</b>	1950s and 1960s	Durable-Goods Industry (electro-domestics and automobiles)	Exchanges came from mostly by coffee exportation and Foreign Direct Investments (FDI)
<b>3rd Phase</b>	1970s and 1980s (in this last decade, the model colapsed)	Capital-Goods and Technology Industry	Exchange came from mostly by coffee exportation, FDI and foreign debt

According to that, the State was the main actor to promote Brazilian industrialization and development. During 1930s to 1980s, the government presented systematic economic plans for the development of the Brazilian industrialization, beginning with the heavy industry, in Vargas Administration; industry of durable goods, like electro domestics and automobiles, in 1950s and 1960s (democratic government of

<sup>7</sup> Celso Furtado, when he was the Minister of Planning in the João Goulart Government (1961-1964), implemented its theories about development guided by the State: “Even the development strategy proposed by Furtado matched (as expected) in the CEPAL’s tradition. This tradition emphasized the deepening of the industrialization process by Importation Substitution as a way to confront bottleneck constrains in the Brazilian economy. For Furtado, the economic crisis which the country was passing, was, before all, a development model crisis, and only will be overcome “with the deepening of the own model”, which means, with the enlargement of the domestic market by land reform, and by other policies regarding income redistribution” (GIAMBIAGI et al, 2011, p. 42)”



JK); and the implementation of the industry of capital goods, with robust incentive by the National Plan for Development II (PND II in Portuguese), in the military government of Geisel<sup>8</sup>.

However, the development model or the State executor model went in progressive collapse during 1970s and 1980s, since the oil shocks in 1973 and 1979, the consequent restriction of dollars and the increase of interests in foreign debts, which were the fundamental financing source to promote the Brazilian industrialization.

The Brazilian economic growth was sustained by external investment, due to the high external liquidity during 1950s and 1960s, which proportionated dollars with low interests. This foreign dependence produced drastic domestic consequences as soon as the international scenery became restrictive for foreign investment. Aligned with the restrictive international reality in that period, Brazil had maintained relatively high inflation rates and indexation mechanisms on national currency. Furthermore, Brazil were responsible for high disbursement in public expenditure to promote its development plan. (GIAMBIAGI et al, 2011, p. 135).

The successive failures to control the inflation, by many economic plans (Planos Cruzado, Bresser, Verão, Collor I e Collor II) worsened the Brazilian economic situation, characterizing the 1980s as “the lost decade”.

The Brazilian economic instability and the foreign resources restriction drastically reduced the investment capacity to the country, interrupting the national industrialization process and abandoning the Importation Substitution Model.

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8 GIAMBIAGI (2011) relates that the Brazilian development model showed high rates of growth and was a result of the CEPAL's theories: “During the period of 1950-1980, Brazil grew in rate of 7.4% by year, in average, and in only four occasions grew below the mark of 4%. This growth was associated with a policy of importation substitution, but also with some episodes of exportation promotion, like, for an example, along the [Economic] Miracle period (1968-1973). In short, we could say that the three main characteristics of the Brazilian industrialization model of the post war were: (1) the State direct participation in supply the economic infrastructure (energy and transportation) and in some sectors considered strategic (steel industry, mining, petrochemical); (2) high protection to the national industry, through taxes and many kinds of non- tariff barriers; and (3) favorable conditions in financing to implement new projects. The Importation Substitution Model (ISM), described by the Cepal, was the way to backward countries to promote their industrialization. In summary, it is possible to affirm that the CEPAL questioned the conventional economic theory in many points, mainly about the free trade capacity to promote efficiency in resources allocation (in domestic and external level) or ‘natural’ development in the economy. Therefore, the ISM defended three fundamental roles for the State: the inductor of industrialization through credit concession and intensive use of exchange mechanisms, quantitative restrictions and tariffs; the entrepreneur in order to eliminate the main economic bottleneck points; and the manager of the scarce exchange resources, as to avoid the overlap of demand peaks by currencies and recurrent exchange crisis”

Due to the international and domestic scenario of financial restriction, in the United States was established an understanding that countries should adopt a specific model of self-sustainable growth, known as the “Washington Consensus”, in 1989. Aligned with this, at the same year, the Brady Plan was announced, which brought as the main characteristic the restructuring of sovereign debt of 32 countries, by swapping debt for government emission bonds, and reducing debt burden. Brazil only applied to the Brady plan in 1992 (GIAMBIAGI et al, 2011, p. 135-136).

The international community, therefore, encouraged countries to adopt other practices of economic development. According with that, Latin-American countries assimilated successive measures of economic openness and privatization. In Brazil, those measures were implemented during the administrations of Collor (1990-1992), Itamar (1992-1995) e Fernando Henrique Cardoso (1995- 2003).

Those measures were implemented with the Industrial and Foreign Trade Policy (PICE in Portuguese), during Collor administration, followed by the National Plan of Destatization. According to GIAMBIAGI (et al, 2011, 137-138), the Brazilian experience, compared with other Latin-American and Asian countries, showed a moderate rhythm and extension, due to the difficulties of low investment and economic crisis of the national industry.

Hence, in the late 1980s and the beginning of 1990s was held a substantial change in the national investment and development model by the reduction of State participation in economy as the conductor of development, promotion of commercial openness, and reduction of the Public Administration.

The National Plan for Destatization was created by the Brazilian Federal Law nº 8.031, in 1990, altered by the Law nº 9.491, in 1997. This law defines as general goals the reorientation of the State strategic position in the economy, transferring to the private sector activities prior exploited by the public sector; the return of private investment, and the definition of activities destined exclusively to Administration<sup>9</sup>.

Therefore, the destatization movement in Brazil during 1990s occurred in enterprises and financial institutions directly or indirectly controlled by the Federal Government; enterprises prior created by the private sector and later assumed by the State; public services executed

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9 Bresser-Pereira (1997, p. 14), underlined the influence of the globalization of communication and transport, pressing the Administration for reforms. The reduction of communication and transport costs, the increase of international trade and the foreign investments from multinationals elevated the level of international competition, reorganizing the production and the market, breaking the national frontiers. The countries suffered high reduction of the capacity to elaborate and execute macroeconomic policies and deepened the income concentration among countries and between citizens in the same nation.

by concessions and authorizations; subnational financial institutions; and properties of the State, according to the article 2º of the National Plan for Destatization.

Aligned with the reduction of the State, were created Regulatory Agencies, with independent budget, aimed to regulate the execution of public service by the private sector. During 1990s and 2000s, many agencies were created in different economic sectors, like oil and natural gas, electric energy, health, transport (fluvial, aero and terrestrial modals), communication, civil aviation and cinema<sup>10</sup>.

The articles 174 and 175 of the 1988' Brazilian Constitution determined the role of the State as regulator of the economy by controlling, planning, and creating incentives. The State also has the obligation to execute public services directly or by concession after a procurement process.

The Brazilian constitution of 1988 was altered by the Constitutional Amendment nº 19, in 1998, in which was introduced the principal of efficiency to oriented the activities of the Administration.

The efforts of destatization promoted reduction of the State, opening to a broad participation of the private sector. This orientation, with great effort since 1990s, was determinant to the definition of new strategies of implementing infrastructure and executing public services, creating new legal institutions in the Administrative Law<sup>11</sup>, and, in consequence, new approaches of participation of the private sector in public services.

In accordance with the evolution of the Public Administration in Brazil, aligned with the new conceptions of destatization and execution of public services by the private sector, the country adopted in 1990s a specific law to regulate public concessions.

The Brazilian Federal Laws nº 8.987 and 9.047, both of 1995, established the regime of concession and permission of public services.

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10 During 2000s and 2010s, the model of regulatory agencies has been carried on in Brazil, but new agencies have not been created. It is possible to infer that have been a reduction of the incentives in this model to control the public service, however, the agencies still maintain their competences.

11 In addition, the Brazilian Federal Law nº 9.307, of 1996, established the regulation and permission of the arbitration in Brazil. In 2005, the Law nº 13.129 widened its dispositions. The law permits the Administration to use arbitration to resolve conflicts related to properties and other patrimonial rights (article 1º). The arbitration rules allows the celebration of an arbitral convention (article 3º), by an arbitration clause (written clause in the same contract or in a document annexed) or an arbitral agreement (a contract that regulates the arbitration to a specific matter). In addition, is possible to argue preventive measures to the Judiciary only before the arbitration court is settled (article 22-A). Once the arbitration is settled, preventive measures only can be argued directly by the arbitrators (single paragraph of article 22-B). The arbitration consists in jurisdictional mechanism for pacific solution apart from the Judiciary, in order to produce more celerity in the sentences.

The concept of concession is a delegation of an execution of public service to a private sector, which demonstrates the capacity to do the service by your own risk and cost in a specific period. The concessionaire is remunerated by the citizens that uses the services. The concessionaire's remuneration is essential to maintain the public service and the financial equilibrium of a contract. Concessions are long-term contracts that the private sector execute public services, after procurement, and regulated by the public sector. Examples of concessions are: water distribution, street lighting services, waste management, highways, railways, ports, airports, public transportation, oil and natural gas exploitation, among others.

After that, the Brazilian Federal Law nº 11.079, of 2004, defined the general rules of procurement and contraction of public-private partnerships – PPP. This is a general rule to coordinate PPP contracts.

It is important to observe that the PPPs contracts permits to execute public services with or not a previous implementation of infrastructure. Therefore, PPPs are related to complex projects, which is necessary huge sums of investment in the beginning of the contract. The investment budget in a PPP is not commonly supported by the public sector and, the service is incapable to generate income by itself, which demands a supplementary payment by the State.

According to the article 2º of the Brazilian PPP law, public-private partnership is an administrative contract of concession, characterized by two modalities:

- Sponsored Concession: a contract which involves a tariff from users and a direct remuneration from the State to the concessionaire. For example: tolls in highways, tariffs in airports and ports;
- Administrative Concession: a contract which involves only remuneration from the State, because the Administration is the direct or indirect user; For example: national parks, public hospitals and schools, waste solid management and penitentiaries.

Therefore, the Brazilian law system restricts the concept of PPP to only two special forms of concessions of public services, which differs from the broader international approach. Moreover, PPPs in Brazil is vetted for:

- Contract value inferior of BRL 20 million (or US\$ 6 million);
- Contract term inferior of 5 years and superior of 35 years;
- Contract aimed only to supply with labor force, equipment or implementation of infrastructure.

The maximum contractual term should obey the projected amortization of investments and not surpass the limit of 35 years<sup>12</sup>.

The main relevant characteristic of a PPP contract is its remuneration. The payment to the private sector only can be made when the infrastructure is built and in conditions to execute public services. This aspect is relevant to force the concessionaire to build the infrastructure on time, avoiding delays on execute public services.

If delays in building occur, the concessionaire will assume the risk and the additional costs. In addition, the public sector will not pay the private sector until it finishes. Therefore, it is an incentive to the private sector to be committed with efficiency.

Moreover, the PPP Law innovates in linking the remuneration to private sector with quality indicators. The law established the possibility to pay the concessionaire according with its performance. The remuneration will be total only if the quality of services are complete according to performance indicators.

The linking between payment and performance consists in a private sector incentive to maintain the quality of public services. This mechanism is an automatic penalty to the private sector if the service is below the indicators defined in contract.

The Federal Law nº 12.766, in 2012, created a new form of remuneration in PPP contracts: “the resources amount” (“Aporte de Recursos” in Portuguese).

The resources amount allows the reduction of the project value, advancing payments of capital expenditure (capex) during the infrastructure-building phase. This permits the reduction of capital cost through the concession period.

In the ordinary PPP payment structure, all the high infrastructure costs are amortized and paid through the years of the contract with a considerable interest tax. With the resources amount, there is a reduction of the total value of the contract. However, it is necessary to analyze carefully the amount of payment designated to the infrastructure-building phase and the service-execution phase, to assure incentives to maintain the quality of the service.

Finally, it is possible to summarize the advantages to contract PPPs for both sides. For the public sector there are:

- Lesser necessity for immediate investments by the public sector, human and other financial resources;
- Better quality of public services;
- Respect of contractual schedules;
- Reduction of cost by analyzing the value of money of the PPP

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<sup>12</sup> On the contrary of the Brazilian Federal Law of Concessions (Law nº 8.987/1995), which there is not a limit term in contracts, the PPP Law restricts the contracts until the 35 years.

- project
- Better risk allocation;
- Reduction of contract financial rebalance,

In the other hand, the advantages for the private sector are:

- Stable revenues through the contract;
- Solid guarantees made by the public sector;
- Better conditions to access financing resources in the market and development banks;
- Risk allocation with the public sector;
- Possibility to use new sources of investment and revenues.

GIAMBIAGI (2011) affirms that the macroeconomic stability, conquered through the 1990s, was maintained during the Lula Administration in the 2010s and recent social achievements were implemented. However, the author underlines that historical hurdles still obliterate the Brazilian development<sup>13</sup>.

Since the beginning of the current Brazilian President (Temer Administration), in 2016 the Federal Law number 13.334 was voted, which created the Investment Partnership Program – IPP (or PPI, in

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13 According with the innovation in the Brazilian legal system, promoting more private sector involvement in the public services, GIAMBIAGI (2011) summarizes the Brazilian overview through the 2000s at Lula Administration: “In general, the beginning of the 2000, Brazil was situated in the same ground of Spain or Portugal in the 1980s, when these countries were starting to confront the costs of integration to the European Economic Community, and the advantages are not well understood. From the beginning of the 1990s, Brazil went through important changes in its economy: the rate of commercial and financial openness increased; enterprises became more competitive; it was a broad process of privatization; the inflation control became priority from 1994; and severe measures of fiscal adjustment were made. In general, these measures are steps to a process of economic transformation towards to a situation of more competition with the foreign sector and involves the goal of solid fiscal indicators, low inflation and relatively stable rules of the economic policy. (...) In the end of the second turn of Lula Administration, in 2010, this history was only written only in a half. The eight years in his government are truly characterized by macroeconomic stability and the Brazilian strategy was rewarded with the investment rate by rating agencies. However, by a destiny irony – even more with the qualification of liquid creditor, in financial terms, this impact was very different than in 10 or 15 years before – Brazil, in the final years of 2010s, was again with expressive – and growing – external deficits in its account, besides maintaining a high interest tax in international terms. (...) In summary, what is possible to say about the 2003-2010 period is that years were characterized by the consolidation of the stabilization process and by important social advances. On the other side, Brazil in 2010 still maintain, after 15 years of the Real Plan, with some similar problems of the 1995, such as an insufficient investment level, a low domestic savings, and a deficient competitiveness in economy, aspects that were behind again of the resurgence of high deficits in public accounts (GIAMBIAGI et al, 2011, p. 232-233).



Portuguese). The IPP objectives are: extend opportunities for investment and employment in Brazil; expand the public infrastructure, assuring moderate tariffs; guarantee the legal environment with minimal State intervention in business and investments; and strength the State role of regulator along with the public agencies of control<sup>14</sup>.

It is interesting to observe that the IPP brought back the fundamental directives of the National Destatization Program of the 1990s, which reinforces the role of the private sector as the engine for investment and employment, and underline the role of the State as a regulator.

The objective of the IPP, in accordance with the article 1<sup>st</sup>, is to work on public infrastructure and services by executing directly by the private sector (privatization) or via partnership contracts with the State and other subnational entities.

The IPP law established a new concept apart from the current theory of the Administrative Law in Brazil: the “partnership contract”. Along with this bill, the partnership contract involves common concessions, the two models of PPP in Brazil (sponsored and administrative concessions), concessions specifically defined by sector legislation, permissions and authorizations for executing public services, alienation of public properties and other public-private business that, in accordance with its strategic character and its complexity in investment volume, long-term of execution, risks and other uncertainties, which adopts a similar legal structure.

The concept of partnership contracts is not completed delimited and involves a non-specific terminology: other public-private business.

It could be inferred that the IPP law uses the term of “partnership” and public-private business” as an attempt to approach the international concept of PPP, described before in this work. The PPP concept in the international basis allows different ways of public-private approach

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14 The IPP, in synthesis, aims to define which projects and sectors are strategic to the Federal Government, creating an administrative structure tied directly to the Presidency. IPP law establishes a Council to discuss and define what projects are strategic before the President's decision. In addition the IPP involves an executive secretary to develop orientation norms and supervise the execution. Moreover, the IPP authorizes the National Bank for Social and Economic Development (BNDES in Portuguese) to manage the Support Fund to Structure Partnerships (FAEP in Portuguese). The fund's objectives are develop specialized studies and technical services for new projects in partnerships and in destatization. The BNDES is also responsible for analyze the financial feasibility and for offer financing structure to projects in the IPP. In addition, the BNDES is responsible for the National Fund for Destatization and the procedures for privatization. Finally, the Caixa Econômica Federal (a national public bank for housing loans) is also authorized to offer loans for projects of the IPP. The IPP law was change in 2017, by the Federal Law number 13.448, which established general rules for extension in contracts and the possibility to do again procurement process of current partnerships. These permissions are allowed only in projects of the IPP.



according with the risk matrix and cost-efficiency in a project. On the other side, the enlargement of the term “partnership” in Brazilian law system could raise questions about what is the legal fundamentals of “strategic public-private business”, because each concession model in Brazil is based on a specific law.

Therefore, the lawmakers in Brazil did not present a new concept of PPP, in order to approach to international standards. On the contrary, they linked a non-legal concept to a list of existing models of contracts and created another type of contract (public-private business), without legal grounds, which could harm the principles of Administrative Law and Public Administration, assured by the Brazilian constitution.

#### **4. NATIONAL AND INTERNATIONAL EXPERIENCES IN PUBLIC-PRIVATE PARTNERSHIPS**

According to the Brazilian Federal Government, its Federal PPP Program shows 37% of its projects concluded, since the beginning in 2016, and a sum of US\$ 10 billion (BRL 33 billion). There are 54 projects concluded from a total of 146 projects modeled.

The State of Minas Gerais, one of the 27 Brazilian Subnational governments, was the first Administration in the country to start to model and study PPP projects. The Minas Gerais law of PPP was set in 2003, one year before the Brazilian Federal Law of PPP. Recently, the Minas Gerais Law number 22.606, of 2017, established two specific funds for PPP in that State: The PPP Fund for Payments and the PPP Fund for Guarantees.

In the State of São Paulo, the PPP Program sums a total of US\$ 33 billion in investments (BRL 95 billion). In 1996, São Paulo Administration started its State Program of Concession and, only in 2004, the State created the PPP Program, which are eleven projects signed in main four public sectors: transportation, water and sanitation, health and housing.

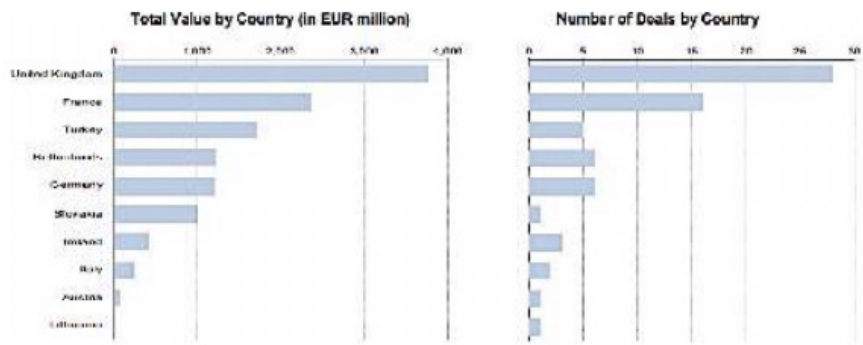
In the European Union, there are the European PP Expertise Centre – EPEC –, an initiative financed by the European Investment Bank – EIB –, European Commission and member-States of the UE and candidate-States, like Turkey, Serbia and Albania. The EPEC mission is the reinforce the public sector ability in doing PPPs by sharing knowledge, experiences and good practices.

In 2016, the total expenditure in PPP (considering only the EPEC members) was €12 billion. This sum suffered a reduction in 2015, which was €15 billion. However, 2016 saw an increase of projects concluded, 66 in total, compared with 49 in 2015<sup>15</sup>.

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<sup>15</sup> European PPP Expertise Centre – EPEC. Market Update – Review of the European PPP Market in 2016. Acesso em 16 de outubro de 2017. Disponível em: [www.eib.org/epec/](http://www.eib.org/epec/)

Chart 4: Expenditure and Number of Projects of PPP in EPEC Countries

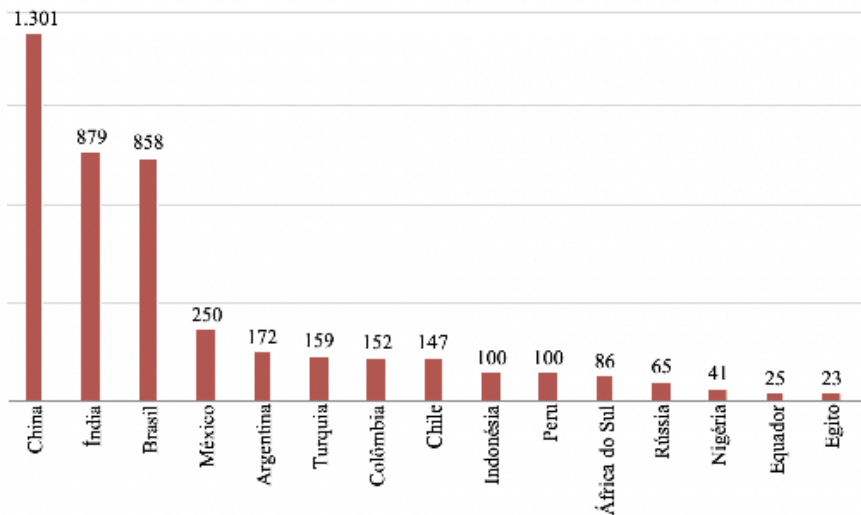


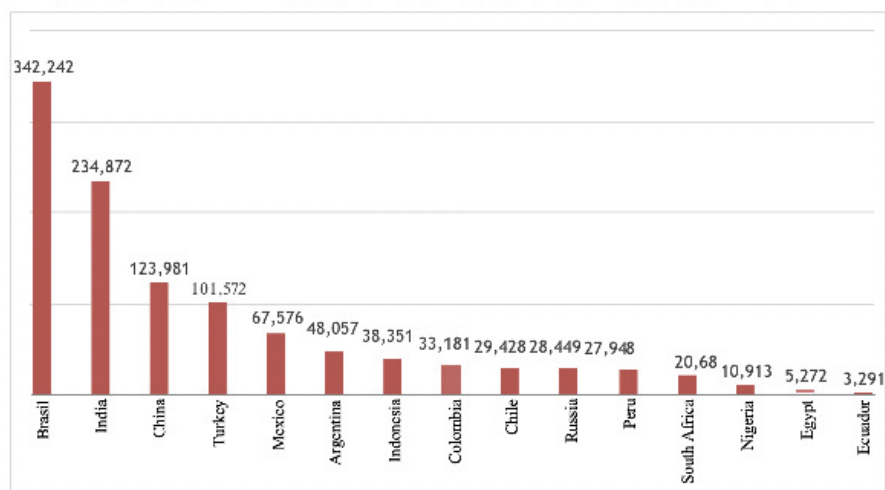
(EPEC, 2017)

In Europe, the United Kingdom is the major PPP market, in terms of value and number of projects. There are €3.8 billion and 28 projects. France is the second largest PPP market in Europe, with €2.4 billion and 16 projects. Since the last five years, United Kingdom and France have been leading the PPP market in Europe.

Analyzing only the emergent markets, China, India and Brazil are the largest ones with high number of projects and high investments in PPP.

Chart 5: Total of PPP Projects in the Developing Countries



**Chart 6: Total of PPP Investments in the Developing Countries (in US\$ million)**

Brazil is the leader of the investments in PPP with a sum of US\$ 342 billion, followed by India, with US\$ 234 billion, and China, with US\$ 123 billion. About the number of PPP projects, China is the leader of emerging markets, with 1.301 projects, the second position is India with 879 projects, and Brazil with 858 projects.<sup>16</sup>

When PPPs involves BRICS, there is a significant relation between these two aspects. The BRICS countries and other emerging markets are investing heavily in infrastructure, due its rapid urbanization, income and better life conditions' increase. According to The Economist: "emerging economies are likely to spend an estimated \$1.2 trillion on roads, railways, electricity, telecommunications and other projects this year, equivalent to 6% of their combined GDPs—twice the average infrastructure-investment ratio in developed economies"<sup>17</sup>.

Moreover, in accordance with the PPP KnowledgeLab data<sup>18</sup>, China, India and Brazil are the leaders of the emerging markets in projects and investment in PPPs. There is a huge demand for investment in infrastructure and public services. However, China is the principal investor in infrastructure, not only made by PPP.

*"Between 2003 and 2007 global annual GDP grew by an average of five percent with China*

16 Accessed in November 13 2017. Available at: [www.pppknowledgelab.org/countries](http://www.pppknowledgelab.org/countries)

17 The Economist. Building BRICS of growth. Accessed in November 13 2017. Available at: [www.economist.com/node/11488749](http://www.economist.com/node/11488749)

18 PPP KNOWLEDGE LAB. PPP Framework by country. Accessed in November 13, 2017. Available at: [www.pppknowledgelab.org/countries](http://www.pppknowledgelab.org/countries)

*consistently breaking the ten percent mark. But not all of the BRICs were as adept at reinvesting and developing their infrastructure. Internal investment in infrastructure is a huge part of China's growth model; between 2003 and 2007 the country built over 1500 skyscrapers reaching over 30 storeys. Shanghai, a city without a subway system until 1995 now has 454km of underground railways, compared to 402km in London, which has been developing it's network for a century. São Paulo, Latin America's largest city, by contrast, still only boasts 74km”<sup>19</sup>.*

The infrastructure gap in BRICS countries is not only a hurdle for further development, but also an asset to bring more investments to them. In order to boost investment and financial alternatives in all BRICS countries, PPP is a relevant mechanism.

In specific, China launched in 2017 a new project in infrastructure: “The Belt and Road Initiative”, or called, “One Belt, One Road – OBOR”. The OBOR project is the new Silk Road route, involving now investment and commerce. The project will involve maritime and land-base routes throughout Asia, Africa and Europe, connecting many countries and boosting investment in transport, infrastructure and energy.

*Belt and Road, formerly known as One Belt, One Road or more properly as the Silk Road Economic Belt and 21st Century Maritime Silk Road initiative, is a development strategy that focuses on land and sea based connectivity from China to major markets in Europe, Asia and the Middle East. The ‘belt’ refers to land-based routes, with several ‘transport corridors’ identified to reach key markets in 64 countries, while the ‘road’ refers to a maritime route through the South China Sea, South Pacific Ocean and Indian Ocean<sup>20</sup>.*

In order to promote this project, China will promote the use of PPP in the OBOR project and reinforces other countries and international

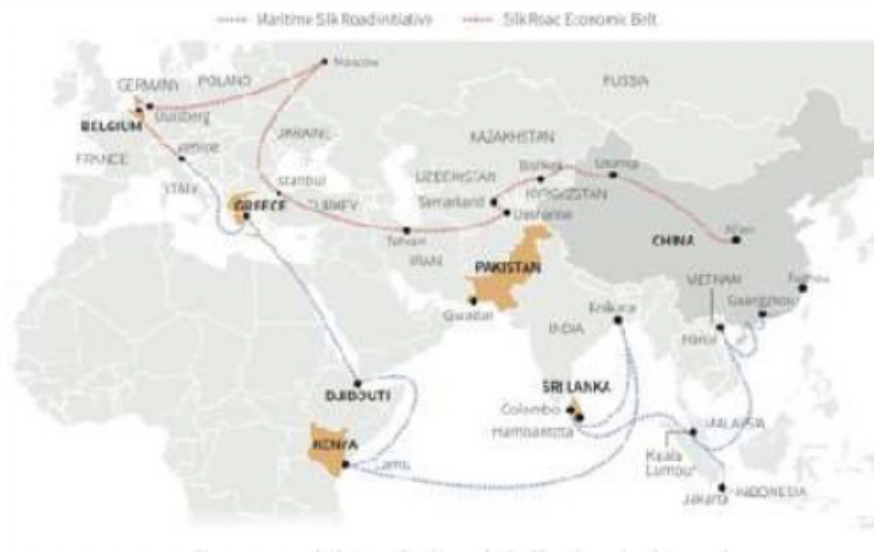
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19 World Finance. Investment in infrastructure: a few BRICS short. Accessed in November 13 2017. Available at: [www.worldfinance.com/contributors/investment-in-infrastructure-a-few-brics-short](http://www.worldfinance.com/contributors/investment-in-infrastructure-a-few-brics-short)

20 OUT-LAW. China to promote use of PPP in Belt and Road projects. Accessed in November 18, 2017. Available at: [www.out-law.com/en/articles/2017/january/china-to-promote-use-of-ppp-in-belt-and-road-projects/](http://www.out-law.com/en/articles/2017/january/china-to-promote-use-of-ppp-in-belt-and-road-projects/)

organizations for engagement and financial cooperation

**Chart 7 – China's One Belt One Road Project**



(qz.com<sup>21</sup>)

The project is still in the beginning and is too early to describe which partnerships could be feasible in the future. However, PPP could be applied as a reliable mechanism for long-term projects, like the OBOR's.

In addition, alongside with the One Belt One Road Initiative, China has announced a PPP Fund of US\$ 28 billion to increase the country's PPP program. The shareholders include the Industrial and Commercial Bank of China, China Construction Bank (CCB), Postal Savings Bank of China (PSBC), Bank of China, China Life Insurance, CITIC Group and the National Council for Social Security Fund. The Fund's manager will be the Ministry of Finance<sup>22</sup>.

## CONCLUSION

The concept of PPP is not entire unique. Each country or research institution determine the boundaries of which ones could be considered PPP. Albeit the concept varies, there is a fundamental characteristic of

21 QUARTZ. One Belt, One Road. Your guide to understanding OBOR, China's new Silk Road plan. Accessed in November 18, 2017. Available at: [www.qz.com/1131428/if-the-entire-us-went-vegan-itd-be-a-public-health-disaster/](http://www.qz.com/1131428/if-the-entire-us-went-vegan-itd-be-a-public-health-disaster/)

22 OUT-LAW. China launches \$28 billion PPP fund. Accessed in November 18, 2017. Available at: [www.out-law.com/en/articles/2016/march/china-launches-28-billion-ppp-fund/](http://www.out-law.com/en/articles/2016/march/china-launches-28-billion-ppp-fund/)

PPP: the joint participation of public and private sectors to provide a specific infrastructure or a public service.

In order to succeed in modeling PPPs, there is necessary to establish an accurately risk matrix and the contract to determine the risks, responsibilities and obligations for each partner. Another important aspect is the PPP financial structure, which governments should offer sustainable and reliable guarantees that will pay the private partner and give suitable compensations in case of contractual imbalance or discontinuance of the concession.

Therefore, many divergences in the execution of the contract could be avoided in the modeling phase, when risks and costs are quantified. Although PPPs involve a sensible relation of public and private partners, governments and international organizations still rely on this kind of contract as the best way to increase public infrastructure and quality of public services.

As an example, the World Bank Group helps countries design public-private partnerships and create a balanced regulatory environment in order to ensure more efficient and sustainable provision of public services and infrastructure. In addition, the World Bank believes that PPPs is the best way to delivery infrastructure and achieve its goals: eliminating extreme poverty and boosting shared prosperity.

Analyzing the Brazilian law system, PPP is a part of the government policies and has a minimal regulatory environment, created during the 1990s and 2000s. Now, Brazilian lawmakers need to advance the model by bringing financial alternatives, a robust guarantee structure, transparency, accountability and suitable controlling procedures. The major aspect is the financing structure in long-term contracts and the economy stability. When the economy is more reliable and robust, the interest rates can reduce and PPP contracts bring more concurrence and attractiveness to the market.

The recent Brazilian laws about PPPs and other forms of partnerships between public and private sector ought to be more consistent, transparent and attractive to the market, also considering a long- term view of how to invest in infrastructure and public services in Brazil for the next decades.

The long-term financing in Brazil relies almost exclusively on the BNDES. Private banks did not participate or demonstrate desire in invest in infrastructure. This is a fragile reality for long-term investments in Brazil and the necessity to reduce the infrastructure gap. Thus, more funds and financial architectures, which involves local, national and international actors to share knowledge, experiences and confidence in contracts.

National development banks and international finance organizations are essential to sustain credibility to the market and

are the leading actors to bring innovative structures of financing with private companies, pension funds and other investors.

Considering every country has its own unique challenges and financial constraints, PPPs can provide benefit by leveraging the management capacity, innovation and expertise of the private sector. However, is necessary to underline that, in some cases, a traditional public sector approach could be more appropriate.

About the BRICS, since 2000s, its economic relevance to the international market and world growth are well recognized. The recent scenario of emerging markets as major economies, like China and India, takes the study of PPP as an important issue to increase world's growth.

This work aimed to highlight the PPP general aspects and show examples of projects in the world. Further studies are necessary to contribute to the concept of PPPs and deeper analysis for development and financial cooperation in emerging markets.

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