

**Public -Private Partnership to Develop the Infrastructure of Transport with a reference to the experience of the construction of Algiers metro**

الشراكة بين القطاع العام و القطاع الخاص لتطوير البنية التحتية للنقل مع إشارة لتجربة إنجاز ميتر و الجزائر

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**Abstract:**

This study aims to review the role of public-private partnerships in the field of transport infrastructure, and highlights the impact of foreign direct investment on improving transport efficiency. The last part of the paper also reviews Algeria's experience in this field through a case study of the completion of the Algiers Metro project during the completion and management stages. The study depends on the descriptive analytical method.

The results of the study showed the most important issues that policymakers in developing countries must take into account in order to attract foreign direct investment towards the transport sector by strengthening the partnership between the public and private sectors, and the critical importance of technology transfer and its role in developing and operating effective transport infrastructure and services.

**Keywords:** FDI, Transportation costs, public- private Partnership, Transport technology

**JEL Classification Codes:** L9

ملخص:

تهدف هذه الدراسة إلى استعراض دور الشراكات بين القطاعين العام والخاص في مجال البنية التحتية للنقل، وتسليط الضوء على تأثير الاستثمار الأجنبي المباشر على تحسين كفاءة النقل. كما يستعرض الجزء الأخير من الورقة تجربة الجزائر في هذا المجال من خلال دراسة حالة مشروع إنجاز مترو الجزائر خلال مرحلتي الإنجاز والتسيير. وتعتمد الدراسة على المنهج الوصفي التحليلي. وأظهرت نتائج الدراسة أهم القضايا التي يتعين على واضعي السياسات في البلدان النامية أخذها في الاعتبار من أجل جذب الاستثمار الأجنبي المباشر نحو قطاع النقل من خلال تعزيز الشراكة بين القطاعين العام والخاص، والأهمية الحاسمة لنقل التكنولوجيا و دورها في تطوير وتشغيل البنية التحتية والخدمات الفعالة للنقل.

**كلمات مفتاحية:** الاستثمار الأجنبي المباشر؛ تكاليف النقل؛ الشراكة بين القطاع العام و الخاص؛ نقل التكنولوجيا.

تصنيفات JEL : L9

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## **INTRODUCTION:**

Foreign direct investment has a fundamental role in promoting growth and sustainable development, and in strengthening the competitiveness of countries, creating jobs and reducing social inequalities and income differences. But public investment alone cannot meet basic need, it is vital to bring about an increase in private investment (foreign and domestic). One way to mobilize and use private investment for development is to link this investment to public investment. However, public-private partnerships of various kinds present opportunities as well as risks. Therefore, the policy challenge is to maximize benefits and manage risk appropriately. This includes many aspects, such as establishing the right regulatory framework, identifying appropriate investment projects for cooperation between the public and private sectors, targeting the most important types of promising partnerships to achieve development goals, and achieving a sound distribution of risks between the public and private sectors.

Given the low levels of domestic investment, especially in developing countries, foreign direct investment can be used to achieve economic growth in these countries. So, foreign direct investment (FDI) can form the capital of local companies or be used to supplement or enhance the capital of these companies. Also, foreign and local companies can work together in some situations to take advantage of the relative advantages of each and achieve results with mutual benefits through interaction.

This research deals with the following problematic:

- How can we take advantage of the potentials for establishing linkages between domestic and foreign investment in the areas of infrastructure development in the transport sector through effective partnerships between the public and private sector?

To answer the previous question, the following hypothesis can be formulated:

- The best way for public-private partnerships is to provide skills, technology and financing in the transport sector in light of the Algerian experience in the construction of Algiers Metro project.

The research aims mainly to understand the close link between foreign and domestic investments, by establishing partnerships between the public and private sectors in the transport and commercial logistics sectors and how it can help greatly in meeting local development needs, especially by transferring sophisticated technologies and technical expertise to the National economy institutions and local institutions, and then submit proposals for inclusion in national policies.

The importance of the research stems from the topic it deals with. The need to confront the globalized production systems and supply chains requires access to international logistics networks and the efficiency of transport services and their contribution to trade facilitation. For this, the importance of strengthening and developing the infrastructure and transport infrastructure and its use has increased greatly, and the adoption of measures is necessary to increase the contribution of foreign direct investments, especially the private sector investment, to the maximum extent in the development of transport networks.

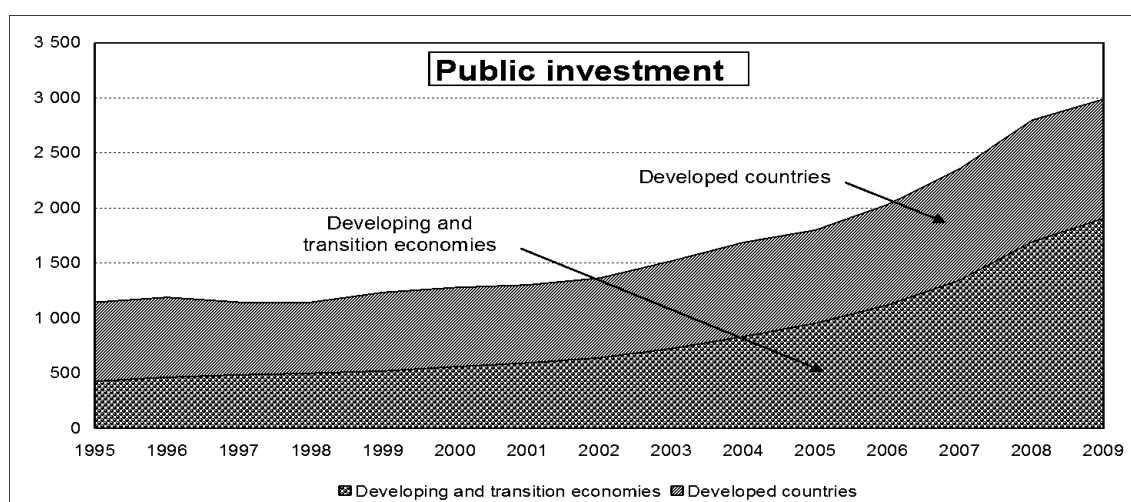
In order to take into account the specific situation of the Algeria, the research is based on the descriptive analytical approach, with the application of various statistical indicators to analyze the public-private partnerships.

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**1- Relationship between public investment, private investment and economic growth**

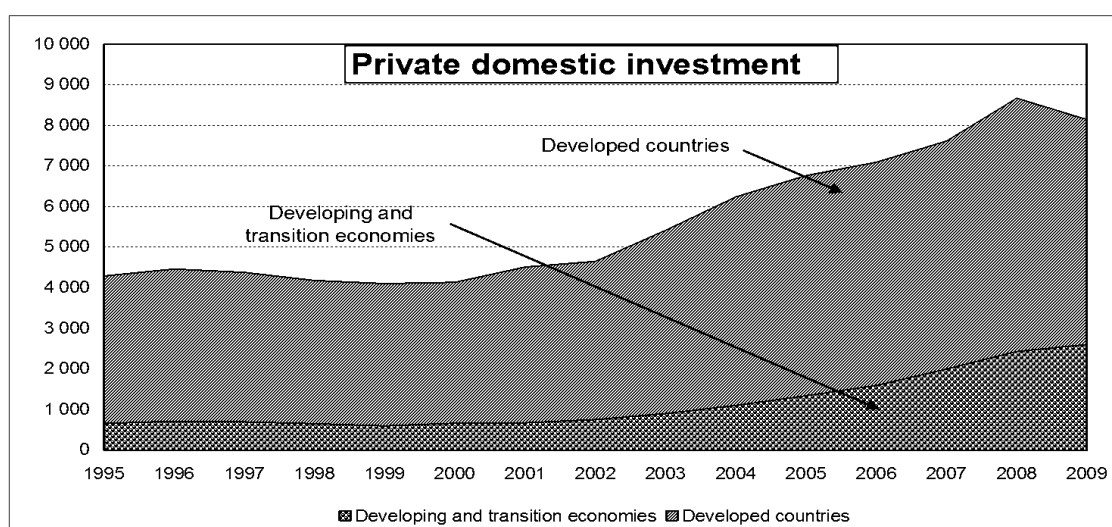
The relationship between public investment and private investment has been the focus of economic literature since the early 1980s, as the main issue has been to determine whether public and private investment have a different impact on economic growth (Khan & Kumar, 1997, p. 71). In theory, there is no clear reason justifying the importance of the institutional source of gross investment levels. However, if there are inefficiencies or distortions associated with the use of public investment, which does not apply to private investment, then the difference can be really significant. A number of studies have concluded that both private and public investment have a positive impact on long-term growth, but the size of these two types of investments varies greatly, with private investment having a much stronger impact on The economy compared to public investment (Fig (1) & Fig (1)).

**Fig (1):- Global public investment, 1995–2009 (in billions of dollars)**



Source: (UNCTAD, 2011, p. 6)

**Fig (2):- Global private investment, 1995–2009 (in billions of dollars)**



Source: (UNCTAD, 2011, p. 6)

In the context of focusing on the public / private investment dualism, there has also been debate about whether public investment increases or reduces the efficiency of private

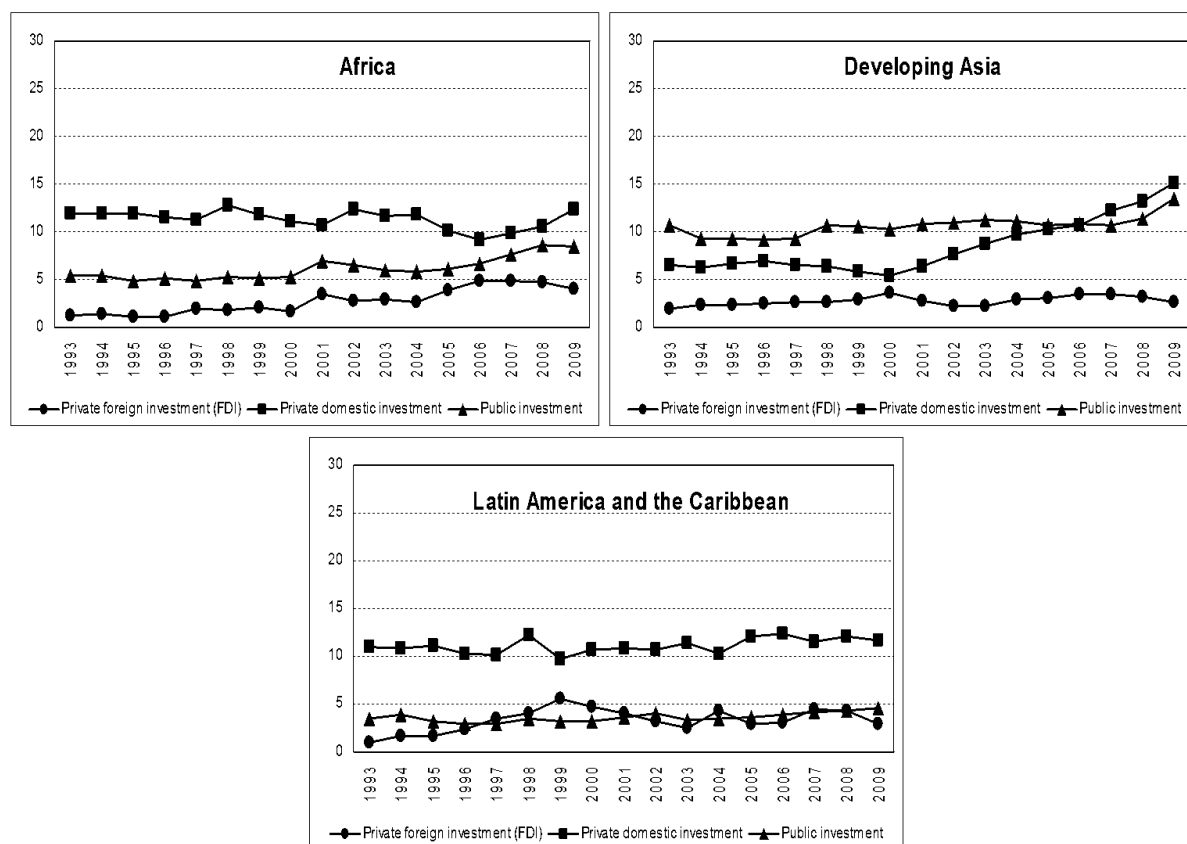
investment (Khan & Kumar, 1997). For example, some components of public investment may complement the Private investment, which may benefit the growth as much as private investment has a positive impact on growth. Moreover, these complementarities arise, for example, in public investment in infrastructure, education, climate change mitigation and agriculture. Public investment uses scarce resources in direct competition with the private sector for private sector, this investment can exclude private investment, and thus increasing public investment in some circumstances may have negative effects on private investment and growth.

Given that governments in developing countries operate with limited budgets, especially in countries experiencing rapid population growth and a civilization process, they should strive to take advantage of the potential of the private sector (domestic and foreign) in order to obtain capital, technology, and expertise to finance, develop, and manage public sector projects in the field of infrastructure and in other areas.

So, how do public-private partnerships affect economic growth? Evidence shows that - assuming all other factors are equal – the increase of public-private partnership projects in a country raise the GDP growth rate, because these projects are usually large and long-term. Private investment of this nature also attracts to the market other private investors, which creates a positive link that promotes economic growth (Koveos & Yourougou, 2010).

**Fig (3): Public and private (foreign and domestic) investment as a share of GDP,**

**1993–2009 (as percentages)**



Source: (UNCTAD, 2010, p. 7)

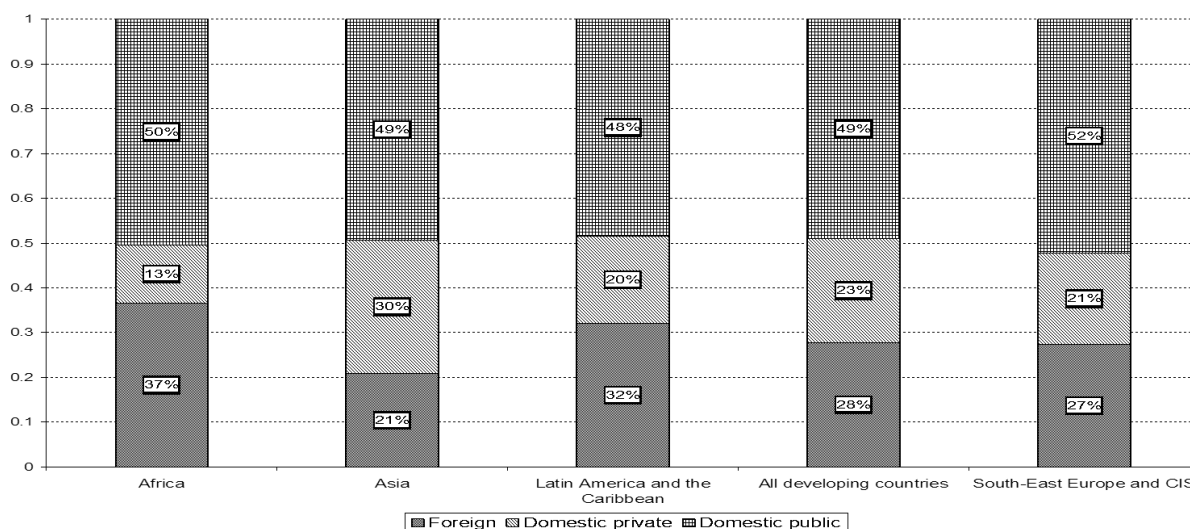
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**2- Foreign direct investment in the transport infrastructure sector**

The constraints that limit the movement in terms of fiscal policy, and considerations related to debt sustainability, have led many governments in developing countries to assess the role that private sector fund can play for some of the recognized investment needs in the future with Related to public infrastructure projects. For example, the World Bank database on private participation in infrastructure indicates that the share of private sector investors in total commitments related to investment in infrastructure industries in developing countries amounted to 50 % over the period 1990-2010 (Figure 3). The percentage of private investment liabilities to total liabilities, by region, was relatively high in Asia (80 %), while lower in Latin America and Africa (77 % and 64 %, respectively). The percentage of transitional economies was higher than that of any developing region in all infrastructure industries.

The infrastructure associated with the transport sector provides a good example in sectors in which close cooperation between foreign and domestic investment - in either the public or private sectors - greatly helps in meeting local development requirements. Foreign companies can help bridge gaps between current and required levels in the areas of technology, expertise, and other resources needed to meet a country's needs. After the liberalization of the infrastructure industry in the 1980s, a wave of foreign investment in these activities was observed (Khan & Kumar, 1997).

**Fig (4): Share of foreign, domestic private and domestic public investors in the investment commitments of the infrastructure industries (as percentages)**



**Source:** (UNCTAD, 2010, p. 11)

In this context, transport-related infrastructure industries have several characteristics that make their activities difficult in operational terms, and therefore multinationals may have a vital role in building the capacity of local firms. These activities are technically complicated and require the involvement of a wide range of actors with different disciplines. These operations include commercial and other aspects that are predominantly political. Hence, a careful balance must be struck between protecting the interests of investors (profitability,

risks, etc.) - especially foreign investors - and the interests of local consumers (commodity costs / quality of services provided). Accordingly, and in order to take into account public and private interests in the framework of infrastructure projects, various types of partnerships between the public and private sectors have emerged, including granting private companies the privilege of providing public services through management contracts or joint operating projects. And franchises like this include projects called construction - ownership - operation or construction - ownership - transportation or construction - rental - ownership or construction - ownership - operation - transportation. (Al-Bashbishi, 2014) Generally, such concessions involve aspects related to the transfer of capabilities, and this applies for example when a multinational company builds an airport or seaport and operates it for a period of time and then transfers it to a local authority (the Foreign Company t train local staff to take over the operation of these facilities).

Indeed, whether the goal is to run PPP (Partnership between the public and private) projects in general, or to target foreign companies in particular to involve them in such arrangements, some countries have established "public-private partnership agencies". There are many and growing examples of public-private partnerships involving external and domestic partners worldwide, in both developed and developing countries (UNCTAD, 2010, p. 13). The focus on the transportation sector shows that construction and operation projects within the framework of such partnerships include the construction of container ports in Egypt (Port Said and MarsaAlam), in Morocco (Tangier Mediterranean), Tunisia (Rades), and construction, operation and transport projects in the field of airports in Tunisia (Enfidha Airport), in Armenia (Shrak Airport and Railway), and in Mozambique (Maputo Port). These countries, among others, have updated and simplified their regulatory frameworks over the past years to facilitate project creation in the framework of public-private partnerships (UNCTAD, 2011, p. 11)

The operation of infrastructure projects needs to be carefully planned and organized. Specific good practices in this area include, in particular, the development of coherent policies for public-private partnerships in order to provide clear guidance to investors, ensuring good consistency in the regulatory legal framework, transparency of public decisions and selection of partners, and a commitment to achieving sustainable development. There is also the need to provide the necessary legal protection to investors and public sector rights when investment disputes arise.

### **3- Partnership between the public and private sectors to improve transport efficiency**

Infrastructure development is a central issue that supports trade in developing countries. Similar to developments related to transport sector development, governments can use various types of public-private partnerships to provide services and infrastructure related to trade facilitation. And there is widespread acceptance that services and infrastructure to facilitate transport and trade have become an essential component of the ability of developing countries to compete in global markets. While trade liberalization has reduced the impact of tariffs and quotas as barriers to trade, the relative increase in transport costs and delays at border crossings is increasing depending on the requirements of globalized supply chains. The demand for faster and more reliable trade logistics services has increasingly drawn attention to the need to facilitate trade and transport.

However, efficient transportation effectively requires highly specialized management

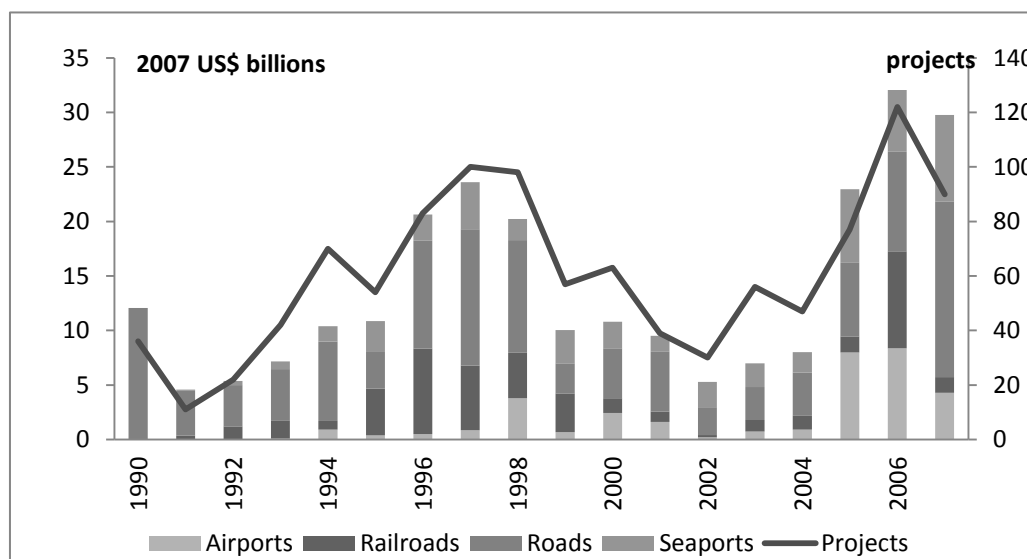
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and operational skills, as well as the need for advanced technologies. Most government agencies in developing countries will need to allocate additional resources and more time to develop such capabilities. Therefore, partnerships with business sectors with expertise in this area are necessary to enhance the efficiency and sustainability of services, transport and trade infrastructure. Consequently, governments are increasingly seeking to establish partnerships with the private sector in order to finance, construct, operate, and maintain such services and infrastructure, especially by attracting more foreign direct investment towards these sectors.

Investment commitments in transport projects in which the private sector participates in developing countries confirm the increased private sector work in areas traditionally belonging to the public sector, as these pledges actually increased between 2000 and 2007 from 14 billion \$ to 30 billion \$ (Figure 5).

In view of the importance of maritime transport in the international trade of developing countries and the main role played by ports, the public-private partnerships in the field of ports and later -internal land link networks and the potential for partnership between these two sectors in the field of internal and transit transport and the access of landlocked developing countries to Global shipping networks- improve transportation efficiency and facilitate trade in these countries.

**Fig (5): Investment commitments to transport projects with private participation in developing countries by subsector, 1990–2007**



Source: (Worldbank, 2008)

### 3-1. Directing private sector investments in the field of ports

The private sector investments in the ports in recent years have led to an increase in the quantity of goods transported and the regularity of transport services, which has led to a reduction in the costs of sea freight and an improvement in the connection to transportation networks. Until the past decade, the private sector has been involved to some extent in managing the facilities of more than 90 of the largest 100 container ports, and operators from the private sector are actually dealing with all the increase in the quantities of goods

transported through international ports. With regard to transportation costs, private sector participation, for example, in the ports of Latin America, has increased their efficiency and reduced sea freight rates (UNCTAD, 2009, p. 9).

Regarding access to international transport services, there are many examples that show that new investments by the private sector in ports have improved the connectivity of countries to global shipping networks (UNCTAD, 2008, p. 138), including Djibouti (after investments Guaranteed by the Dubai-based port operator DP World), Lebanon (which has benefited from port reforms since 2006), and Morocco (with the creation of a new international trans-shipment facility in Tangier).

Egypt and Panama are well connected to the global maritime transport networks by taking advantage of their geographical locations and their channels (the Panama Canal and the Suez Canal). The concessions of container terminals in Panama are one of the first concessions granted in this field in Latin America, and Panama is currently the most active transit hub in the Americas. Importing and exporting entities benefit from regular shipping services and low shipping rates due to economies of scale and competition among service providers. And in Egypt, private sector investors undertook the development of several stations, and they provide services to shipping lines that re-transport goods transported to other destinations in the Mediterranean and Africa regions. As a result, Egyptian merchants benefit from direct transport networks to 59 commercial partners - more than any other African country, and more than twice the prevailing percentage in the region's (24 direct transport networks) (UNCTAD, 2014, p. 69).

The most common framework for private sector participation in port operation is the "landlord port management" model in which terminal operators lease land from the port authority. Port concessions are an effective way to reduce costs and increase the quantities of goods transported through the port by attracting external expertise to overcome operational shortcomings (UNCTAD, 2014, p. 73). However, these benefits achieved by port users and owners often have social aspects, may Dockers lose their jobs, although increased trade may later lead to increased job opportunities, but the transition period may be difficult in this area. It is often required to retain workers, and therefore it is necessary to receive assistance from governments in order to accommodate workers in other jobs.

Some port parts can also be divided into sectors, developing and allocating them to perform specific tasks, towards using them as logistical centers or making them free trade zones. In such cases, the management of operations can be through a public-private partnership, but it is common for the project to be run by a government agency and private companies operate within it. In Vietnam, for example (UNCTAD, 2009, p. 7), all new port development projects in which international operators operate stations include a port adjacent to the port in which they provide tax-exempt logistical services, which is an important means of attracting foreign direct investment to these regions. Logistical centers, located near or within the port, can facilitate increasing trade and make external contracts related to the introduction of technologies in the economy in general.

### **3-2. Improve connectivity to inland and transit transport networks**

Investments in infrastructure for inland transportation and transit transport are not commercially viable unless there is trade in a certain size. The challenge in many developing countries is due to the low volume of trade with neighboring countries, which does not



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economically justify investment in infrastructure in these countries or in neighboring countries. As a result, improving railway and road infrastructure and air transport is one of the priorities that these countries have to consider.

An important step towards improving trade facilitation and connectivity to transport networks is the identification of common interests between traders from landlocked developing countries and service providers from neighboring transit countries. In particular, port operators can become a private partner of landlocked developing countries. As mentioned above, it is increasingly public-private partnerships that operate the ports, and these operators often have a real interest in attracting additional shipments from neighboring countries, including landlocked countries. For example, the Walvis Bay port in Namibia is targeting landlocked Zambia, and private port operators in Karachi are targeting to take over freight transportation from Afghanistan and Central Asia, and the ports of Chile and Peru, whose rights have recently been granted concessions, are competing to provide services to Bolivian exporters (UNCTAD, 2009, p. 11).

Another successful method for achieving mutual benefits between landlocked and transit states is to find institutional and technological solutions on the basis of corridors that give stakeholders long-term sustainable capacity to improve transit transport operations. The corridor-based solution may include neighboring countries, as well as private service providers and dealers. Focusing on linking regional and global trade to transport networks enables a combination of system, enterprise, technology, and operational improvements along defined routes.

### **3-3. Transfer of technology and knowledge through foreign direct investments in the transport sector**

These days there is widespread use of technology to develop and operate transport infrastructure and services. When governments enter into public-private partnerships, they also benefit from managerial, operational, and technological skills that successful private sector operators, especially foreigners, have developed over the years. For example, transporting goods in containers, the most common means of transporting general cargo, requires specialized handling technologies and equipment and highly sophisticated computer software in the field of management to ensure the highest operational effectiveness in ports and inland terminals. The most effective international logistics network uses information and communications technology on a large scale to exchange information, to book and track shipments, or even to prepare trade and transport documents.

While individual ports can face special cases and conditions, they no longer need to design technical solutions tailored to the situation as many of the systems available to everyone in the market can be modified according to the needs of any particular port. In the case of partnerships between ports and international terminal operators, it is common practice for partners to use software solutions that have been tried and tested in other ports. Advances in port cargo handling equipment such as giant Panamax cranes, automated guided vehicles and the introduction of these components into a large-scale integrated system in several ports have already resulted in increased ship turnover and higher port performance (UNCTAD, 2017, p. 113).

Some ports can, by operating an integrated system, unload ships at rates of more than 70 units equivalent to twenty feet per hour per crane and 450 units equivalent to twenty feet per hour using multiple cranes in optimum conditions. In Nigeria, for example, the Apapa container terminal operated by APM Terminals, has achieved 47 movements hour per crane (UNCTAD, 2009, p. 9).

The improvement in productivity is due to the new training programs, the improvement of the arenas and the use of new equipment. While some ports have achieved more than 70 movements per hour per crane, most cranes operating at less than half of this rate are considered effective. Over the past years, the entry of two container cranes, or three containers and even four containers into the market has improved the performance of ports at an increasing rate (UNCTAD, 2017, p. 97).

#### **4- The Algiers Metro as a model of public-private partnership in the transport sector**

The subway is an expensive way of transport to accomplish, but it is the most important means of common transport within the major urban areas and is characterized by a high degree of safety and transports a greater number of passengers and runs faster than other urban transport means and does not occupy a large space because it runs underground on the travel distances that are more than 10 km.

The Algiers metro is considered one of the best examples of the partnership between the public and private sectors in the transport sector with a prominent role for foreign direct investment, as this partnership started from the stages of study and achievement to the stage of management and exploitation.

##### **4-1. Presentation of the Algiers Metro**

The Algiers Metro (Métro d'Alger) is a subway and one of the transportation networks that serve the city and its suburbs, a project that dates back to 1928 and was revived in 1970, in order to confront the demographic explosion, poor urban organization, narrow roads and traffic jam, as well as facing the requirements of the urban common transport of the capital. The first start of the project was in 1980, but its completion was delayed due to financial and security difficulties in the 1990s. Then the project witnessed a new start in 2003 after the return of stability to the country and the recovery of oil prices, and was put into service on November 1, 2011 on the occasion of the 57th anniversary of the Algerian liberation revolution. It is considered the first metro of Maghreb and the second in Africa, after Cairo metro.

It is operated by the Independent Authority of the Parisian Transport - Algeria Branch (RATP El Djazaïr - FR). It is currently 18.2 km long, with 19 stations, mostly underground.

The Entreprise Métro d'Alger-EMA was established in 1984 as the owner of a project authorized by the Ministry of Transport in order to achieve studies, accomplish and exploit the urban railway transport network and underground known as the Algiers Metro. Since its transformation in 1989 into a public economic institution - a company with shares with an estimated capital of 380,000,000 dinars, the Algiers Metro enterprise has also begun to develop its capabilities for studies and engineering with regard to transportation and the completion of traffic plans through the establishment of an urban transport studies office (Bureau d'Etudes des Transports Urbains -BETUR-) which has become a 100 percent subsidiary of the Algiers Metro Corporation (EntrepriseMétrod'Alger, 2013).

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Within the framework of the urban transport development plan, the Algiers Metro enterprise has been tasked with implementing a number of new projects since the year 2005. In particular, it is related to studies, implementation and exploitation of tramway lines across the national territory in addition to the completion, renewal and technological modernization of air cables lifts across the various cities of the country.

#### **4-2. Partnership projects during the study and achievement stages**

After independence, a new urban development plan was proposed for the Algiers region, and the task of feasibility study was given to the French company to study and implement urban transport (COMEDOR). It was conducted between 1969 and 1970 to plan to build a subway system in the Algerian capital.

In 1980, the French company SOFRETU (now SESTRA) was added, in addition to the General enterprise of Urban Transport for the city of Algiers for the first time to study the completion of the metro project in Algiers (CNES, 1998, p. 28).

In 1981, a preliminary evaluation of the first line of the Algiers Metro was undertaken and submitted to the Algerian government. In 1982, the French company, SOFRETU announced that it had won the study to create a network of 64 km. With priority given to the first half of 12.5 km, technical studies took place in 1982 and 1985.

On November 24, 1984, the Algiers Metro enterprise was responsible for the project (JournalOfficiel, 1984, pp. 13-73), and two companies, one German and one Japanese, were sponsored by the project, but the collapse of oil prices in the same period from \$ 30 to half reduced the revenues of the Algerian state, delaying implementation.

After three years, the construction project was allocated to the Algerian company COSIDER and Cedar in July 1988 and August 1989, but with the emergence of the economic and political crisis in the country during that period, the project stopped completely, although only four stations were completed within 15 years.

In 1994, the first part extending from Prince Abdul Elkader Square to the central post office with a distance of 450 m was completed, followed by the completion of another section from the central post station to the Khalifa Bou Khalfa station. In 1996 an intersection was made between the stations of "Khalifa Bou Khalfa" and "1 May square".

In 1999, the Algerian Metro enterprise launched a national and international tender, and the international assemblers "SYSTRA French" for the project management and the union of the Algerian " COSIDER " and German " DYWIDAG " companies were chosen to implement and complete the excavation and civil engineering work within 38 months.

In 2002, taking advantage of the return to economic situation, the Algerian government decided to give the project adequate funding and renew organizational and operational structures through public investment programs that it approved within the framework of the Economic Recovery Support Plan 2000-2005 as well as the supplementary plan to support growth 2005-2009 . The Algiers Metro enterprise launched an international tender to complete the remaining 4.1 km. eight international companies bided. In 2003, the lowest-cost complex (145 million Euros) was chosen, the German-Algerian Gamma complex (GAAMA) consisting of German DYWIDAG companies (51%), local dealers such as COSIDER (35%) and INFRAFER (14%), in When SYSTRA will be the design office for the

main contractor, they are given 38 months to complete the excavation and civil works (MEED, 2003).

In January 2006, the Algerian metro enterprise handed over the task of completing the system in full to the French complex (Siemens Transportation Systems), including the installation of fixed equipment, the signal system, electricity and the central control station (PCC) for 150 million euros, as the Italian company commissioned Vinci for 121 million euros to build the facilities ( The ten stations, the warehouse area of 16,000 square meters, ventilation and escalator systems, and the Spanish company (Construcciones y Auxiliar de Ferrocarriles-CAF) by providing equipment from metro and other vehicles (consisting of 14 trains of 6 carts per one) and provide auxiliary vehicles for maintenance work in the amount of 112 million euros (VINCI, 2006).

The Algiers Metro enterprise has also contracted with TALIS Company to equip the ten stations with the complete ticket merging system. This system is based on a mixed solution that combines magnetic technology with the type B card contact technology. The stations are also equipped with control gates (input and output), the ticket distribution system and ticket vending machines to the public.

#### **4-3.Partnership during the management and exploitation stages**

The Algiers Metro enterprise has held several partnerships for the management and exploitation of all of the Algiers Metro and Tramway:

**Table (1):Algiers Metro partnership in the stage of management and exploitation**

<b>MODES OF TRANSPORT</b>	<b>OPERATOR</b>
<b>ALGIERS Metro</b>	RATP EL DJAZAIR Subsidiary of RATP DEV. France
<b>TRAMWAY of ALGIERS</b>	SETRAM - Joint-stock company under Algerian law composed of: EMMA - the TRANSTEV group - RATP DEV.
<b>TRAMWAY of ORAN</b>	SETRAM - Joint-stock company under Algerian law composed of: EMMA - the TRANSTEV group - RATP DEV.
<b>TRAMWAY of CONSTANTINE</b>	SETRAM - Joint-stock company under Algerian law composed of: EMMA - the TRANSTEV group - RATP DEV.

**Source:** (EntrepriseMétro'Alger, 2013)

##### **4-3-1. Establish RATP-EL Djazair for the operation of the Algiers Metro**

In August 2007, the Algiers Metro enterprise contracted the branch of the Paris Independent Transport Authority (RATP) to operate and maintain the metro for an eight-year period of 130 million euros and the contract was signed on December 4, 2007, and accordingly the contract was created under the designation RATP-EL Djazair in the year 2009, and the contract includes the export of experience in metro control for local talent and their training. However, the Algiers metro was not put into service until 1 November 2011 on the occasion of the 57th anniversary of the Algerian liberation revolution, that is, after more than two decades of planning and implementation.

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**4-3-2.The establishment of the SETRAM enterprise to operate the tramway lines**

In the framework of the partnership between the Algerian Metro enterprise, the RATP, an Algerian company has been established in charge of the maintenance and exploitation of tramway lines in Algeria, and this company bears the name of the company that exploits the tramway lines (EntrepriseMétrod'Alger, 2013).

The Algiers Metro Corporation owns 15 percent of the company's shares supplies the necessary skills to **SETRAM** and participates actively in the development of this company.

**4-3-3.The establishment of the "SITAL» Enterprise in order to give additional impetus to the development of urban transport**

"SITAL" is a company subject to the Algerian law, one of its tasks is to install and maintain tramway tugs in Algeria, and it is the result of a partnership agreement between the Algerian Metro Enterprise and the Ferrovia» Enterprise and the French company Alstom specialized in the industries related to rail transport The SITAL is located in Annaba, and also sponsors all tramway projects across the various cities of the country while ensuring maintenance services (EntrepriseMétrod'Alger, 2013)

The Algiers Metro Enterprise, which holds an estimated 10 percent stake in SITAL, is contributing to the development of this company.

**4-3-4.The establishment of the Algerian Cable Transport Enterprise to develop cable transport**

To achieve an efficient development of cable transport at the national level, the Algiers Metro Enterprise has entered into an agreement with the TRANSTEV Group to enhance bilateral efforts by establishing a joint Enterprise with the global partner POMAGALSKI (EntrepriseMétrod'Alger, 2013).

This Enterprise with Algerian rights, called the Algerian Cable Transport Enterprise, is charged with:

- preparing for commercial operation, exploitation and maintenance of cable transport equipment in Algeria;
- study and implement cable systems, mode or network in Algeria;
- Establishing the elevator installation unit.

**4-4.The achievements of the Algiers Metro Enterprise in the framework of the partnership**

The Algiers Metro has managed to occupy its place in the field of transport of passengers, with an average of 200,000 passengers per day on a 18.2 km long line. The following table shows some of the accomplishments that the Algiers Metro Enterprise achieved in the framework of the partnership:

**Table (1): Some indicators of the Algiers Metro Enterprise in 2019.**

<b>Data</b>	<b>Statistics</b>
Turnover	1.690.015,000 DZD
Number of Workers	365
Number of passengers	45 million passengers (2019)

**Source:** (EntrepriseMétrod'Alger, 2013)

### **Conclusion:**

The current challenging economic developments require a more effective role for developing countries, through the development of innovative national and regional policies, to enhance transport infrastructure as part of trade and development plans, including through public-private partnerships. Such partnerships between the public and private sectors are based on the sharing of investments and risks between the public and private sectors. In addition, from a broader perspective, public-private partnerships can also include voluntary and cooperative relations between the two sectors throughout the entire policy development process.

By attracting foreign direct investment, foreign and domestic companies can work together in some situations to take advantage of the comparative advantages of each and achieve mutually beneficial results by interacting in the field of transport infrastructure, as it is possible to closely link between foreign and domestic investments - by establishing partnerships between Public and private sectors - largely help in meeting local development needs, in particular by transferring sophisticated technologies and technical expertise to the local economy and local institutions.

Discussions in this paper show that strengthening the interaction between private investment and public investment in the transport sector and its related infrastructure, with the aim of generating development benefits, is a complicated challenge, especially for foreign direct investment.

There is no "appropriate solution for all cases" that applies equally to all countries and industries / sectors, so designing the "correct" policy framework and defining the "best" form of cooperation between the public and private sectors requires sufficient skills and capabilities. All of these requirements are exacerbated by the fact that the investment needs in the transport sector are enormous, and countries are competing to attract foreign investors. For Examples , the infrastructure development, where investment needs are significant and where private investment - both foreign and domestic - plays a crucial role, effectively complementing public investment and providing knowledge and technology.

Some other results that can be mentioned include:

- Experience has shown that timely investment in trade and transport facilitation with the involvement of private operators leads to an increase in the rate of movement of goods and the frequency of transportation services, which has resulted in a decrease in freight charges and improved connectivity to transportation networks. These investments can become a strategic component of overcoming crises when they are part of tax policies to counter periodic fluctuations in order to promote recovery through trade.

- When preparing policies to attract foreign direct investment, decision makers can take into account best practices in the field of finance, technology transfer and knowledge to

***Public -Private Partnership to Develop the Infrastructure of Transport  
With a reference to the experience of Algeria in the construction of Algiers metro***

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develop infrastructure and services related to transport and trade facilitation.

- Global experiences that public-private partnerships provide advanced management skills and operational technologies are now well documented. Public-private partnerships have proven to be very important in developing effective solutions to improve operations in seaports or in inland charging stations.

To enhance the interaction between public investment and private investment and attract foreign direct investment to develop the transportation sector and facilitate trade, and to achieve the associated development goals for developing countries:

- One of the priorities of governments in developing countries should be to strengthen the rule of law and develop transparent and predictable laws and regulations. The existence of a high-quality institutional and regulatory framework is crucial for enhancing the interaction between public investment and private investment, and this is particularly important when investments are largely capital-intensive and / or have long duration and involve strong government participation as it occurs in Transport infrastructure sector.

- These countries should decide to what extent they want to open the transport sector to private investment, and whether this will include foreign investment, with a specification of the policy challenges that this will follow, as well as the final development impacts that differ according to individual countries. An example of this is widespread public control in many infrastructure related industries. To the extent that private investment is permitted, governments also need to identify critical bottlenecks to private investment and should therefore set a priority list for projects in which they see a need to involve private investors.

- Effective investment promotion by investment promotion agencies can contribute to raising awareness of opportunities for joint investment between the private and public sectors in the transport sector. Investment promotion agencies should identify projects that have the potential for such interaction and promote this investment by ensuring appropriate care for it.

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