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Nusantara: Between sky and earth could the PPP be the solution for Indonesian airport infrastructures?

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ABSTRACT

This paper deals with the airport infrastructures in Indonesia and it investigates the possibility of defining a solution for their funding. Indeed the economic development in Indonesia requires huge capital needs for completing the numerous plans of investment in transport and particularly for the airport infrastructures.

More than 63% of the budget for the airport infrastructure needs is not funded, while the characteristics of airport infrastructure investments involve large amounts of money with a very low rate of return. It raised the questions how to attract the private investors and to conceive appropriate contracting dimensions for associating the private sector with the Indonesian government.

The Aviation Act No. 1/2009 stated that the government will let an important role to the private sector related to the transfer of management and ownership of airport infrastructures. It means also that the Indonesian government will support the creation of public private partnerships (PPP).

Therefore it required to think how the Indonesian government could create a more conductive climate to stimulate the private sector investment for the Indonesian airport infrastructures.

1. Introduction

Infrastructure development constitutes an important and vital aspect for the economic development of a country. It plays also a central role for the driving of the economic growth. The economic growth of a country can not be separated from the availability of infrastructure such as transportation, telecommunications, sanitation and energy. Moreover the development of the transportation sector is a key dimension to push further the economic development.

The 1997–1998 economic crisis that the south-east Asiatic countries faced yielded many consequences, especially concerning the funding of infrastructure in Indonesia. The infrastructure projects funded by both the private sector and the state budget were reduced drastically (World Bank, 2004). The state budget for the infrastructure projects has declined by approximately 80% compared with the situation prevailing before the crisis in Indonesia. In 1994, the central government spends nearly U.S. $14 billion in construction, 57% of this amount were for the infrastructures only.[1] In 2002 the development expenditure reached only roughly U.S. $ 5 billion, which represents only 30% of the spending in infrastructure for 1994.

Infrastructure development has provided the foundation for supporting the economic and socio-cultural life of society in Indonesia. Nevertheless there are still many challenges, especially when the infrastructure does not perform properly. The fact that Indonesia is constituted by thousand of islands and numerous isolated regions does not appear as very helpful for the country. Airport transportation constitutes an important means for making connections possible between the people.

This paper deals with the airport infrastructure needs in Indonesia and it investigates the possibility of finding a solution to fund them. Section 2 shows why the airport infrastructures are so important in Indonesia: they are the conditions of the economic growth for the country. They are also a source of growth for many economic sectors.

Section 3 presents the financial needs for Indonesia related with transport infrastructure. In fact, Indonesia faces a financial gap. The private sector could be a solution, but there are some important institutional constraints to take into consideration. Section 4 deals with the current situation of airport infrastrcutures in Indonesia,

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[1] National Development Planning Agency of Indonesia (2010).

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which could be seen as a kind of puzzle. In fact, they have to be conceived as a network. The sector of airport infrastructures knows a dynamic growth for its activity. The last section is concerned with the potentialities associated with the PPP solution. It develops the institutional framework and details the different involved key holders and their roles.

2. Airport infrastructures as crucial investments for a sustainable economic development in Indonesia

2.1. The economic development fuels the demand for air transport infrastructure

The economic annual growth is expected to reach 7–8% until 2025 in Indonesia. Such an important economic growth requires huge investments to develop infrastructure facilities in the transportation sector and to make economic growth sustainable (Dikun, 2010). Indeed the growth of population mobility is associated with the economic development. Indonesia is especially concerned with the growth of air transport passengers. The number of air transport passengers reached a level of 80 million in 2008. Moreover approximately 6% of the Indonesian population uses air transportation (Susantono, 2010). A richer country means also a higher demand for transportation and transportation infrastructures. Consequently, it requires an appropriate supply for transport infrastructure to satisfy the demand. Indonesian authorities estimated the transport infrastructure investment needs would amount to USD 155 billion over the period 2010–2014.[2] However, the allocation of State Budget for the transportation sector is limited and could only cover 7% of the total of needed investments. An alternative solution for funding this amazing amount of investment has to be found and the private sector could be this alternative.

2.2. The air transport infrastructures fuel the economic growth

Transport infrastructure plays a role of catalyst for economic growth and regional development. They constitute also a stimulant for the growth of other sectors of the economy. Higher levels of investment imply a more important economic growth, but also an increased output for the future when these investments are correctly directed and managed. More outputs per capita mean also an improved people's welfare. Infrastructure investment is expected to provide "*basic services*" for the industry and the households, to be a "*key input*" for the economy and "*crucial inputs*" for the economic development (Grimsey and Lewis, 2000). It would permit to increase mobility of people and a smoother working of markets by linking consumers and producers. Ideas, goods and services would be also available on different places and markets, creating a more unified, coordinated and competitive economy. The development of transport infrastructure would drive to the creation of new economic activities needed for the building, the maintenance of infrastructures, but also for providing goods and services for the users of such infrastructures (taxi drivers, shopping activities, security devices).

Investment in transport infrastructure could also impact economic growth through creativity and the development of new knowledge (North, 1990). Indeed the needs for funding the different transport infrastructures imply the development and the conception of new institutions related to contracting activities, the definition of property rights, the conception of partnerships between public bodies and private firms (Akintoye and Beck, 2009a,b).

Another consequence concerns the structure of the Indonesian economy. New and available infrastructures mean some industries would benefit from new markets (scale economies, higher demand) and the reduction of transaction costs (reduction of transportation costs). Some others will face a higher level of competition with the coming of new competitors. Consequently, the development of airport infrastructure will contribute to shape a new structure of the Indonesian economy.

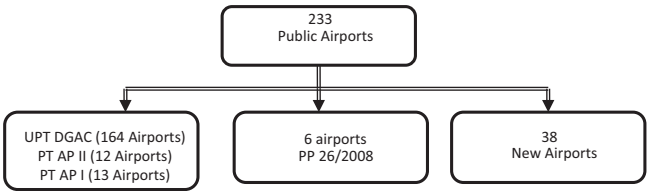

Fig. 1. The different categories of airport in Indonesia.

3. Airport infrastructures in indonesia: the current situation

3.1. Airport operation and management: an institutional puzzle

Based on the Ministerial Decree KM No 11/2010 and the Indonesian aviation act,[3] the number of public airports amounts to 233 in Indonesia (Fig. 1). There are 164 airports[4] managed by local government bodies (technical operation units) (TOU/UPT) for the Directorate General of Civil Aviation (DGCA), 13 airports managed by the Indonesian State Owned Enterprise (SOE/BUMN) PT. Angkasa Pura I and 12 airports managed by PT. Angkasa Pura II.[5] Moreover there were 6 recent airports operating under the governmental regulation PP 26/2008. These airports are owned and operated by companies for business purposes only (Oil Company, manufacturing, etc.).[6]

Finally there are also 38 new airports that were built and conceived as "pioneer airports". These airports are managed and operated directly by the DGAC. These new airports face a low traffic demand because of their recent launch. Their management could be transferred to a SOE, when a sufficient demand will exist and make possible an operation of the airport under the recommendations[7] defined by the DGCA. The transfer to a SOE is possible only if the airport became a profitable asset.

Indonesia is characterized by a high number of airports spread over the country and embedded in a particular institutional framework where many organizations (public and private) intervene and manage the different airport infrastructures. In a sense, the institutional organization is characterized by fragmentation and could be conceived as a kind of puzzle and constitutes a key element to take into consideration for defining cooperation with the private sector and a solution to financial needs.

3.2. A network of airport infrastructures: organization and functionality

In Indonesia, airport can be differentiated by function, utilization, classification, status, type of management (local government, central government, private firms) and type of

[2] National Development Planning Agency of Indonesia (2010).

[3] Indonesian Aviation Act No 115 of 2009 on Civil Aviation, Ministry of Transportation Indonesia. It defines what is to be considered as an airport.

[4] These airports are local or regional and not profitable ones.

[5] *PT Angkasa Pura I* is an Indonesian State Owned Enterprise, which manages profitable airports located in the eastern region. *PT Angkasa Pura II* is an Indonesia State Owned Enterprise, which manages profitable airports located in the western region. Technical operation units (TOU/UPT) are the governmental organizations working for the Directorate General of Civil Aviation from of the Transportation Ministry and they manage the "pioneer airports".

[6] Good and passenger services for private business company.

[7] The Directorate General of Civil Aviation defines also the criteria for operating an airport and what has to be considered as a profitable airport.