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THE CONCEPT AND ROLE OF INFRASTRUCTURE IN ECONOMIC DEVELOPMENT OF COUNTRY

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Infrastructure is the capital stock that provides public goods and services. It produces various effects, including those on production activities and quality of life for the households, which thus permeate the entire society. Poor infrastructure impedes a nation's economic growth and international competitiveness. Insufficient infrastructure also represents a major cause of loss of quality of life, illness and death. This raises infrastructure services from good investment to a moral and economic imperative. In order to stimulate growth and reduce poverty, it is essential to improve the supply, quality and affordability of infrastructure services. So, the adequate supply of infrastructure services has long been viewed as essential for economic development and poverty reduction, both in the policy and academic realms.

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Over the last two decades, considerable efforts have been devoted to theoretical and empirical evaluation of the contribution of infrastructure to growth and economic development.

Moving from Barro essentially [1] and Aaran [2] studies analysing many the relationship between infrastructures and the development economic have been realised. On this field there is a broad of theoretical spectrum viewpoints some of opposed to one another them diametrically. A general consensus basic infrastructure is facilities achieved around the idea that are features related important to economic performance. Apart this main idea from opinion differs greatly: both magnitude and causality remain subjects of debate.

Many other sustain intermediate studies often thesis distinguishing between (more or less) productive and infrastructure unproductive and trying to deal with endogeneity problem infrastructure with appropriate econometric tests.

They could be together into four grouped approach:

– The *production function* approach the amount of output that models that can be produced factor of production for each, given technological constraints. In this infrastructure enters as a free input approach public by government furnished.

– The *cost function* approach takes into such as account factor prices the price of labour, machinery, and finance. Public conceived infrastructures are as costs saving factors.

– *Growth models* belonging to the tradition of *endogenous* to consider growth and augmented as growth enhancing also public factors infrastructures.

– *Data-oriented models* analyze data series including infrastructures relations between several and GDP and do economic not rely heavily on theory.

More deeply, infrastructure is the sum institutional and personal facilities of material, and data which are to the economic agents available and which contribute of the remuneration to realizing the equalization of comparable case of a suitable in inputs the allocation of resources that is complete integration and maximum level of economic activities. Or, in a pragmatic sense, material infrastructure is understood as: 1. the totality of all earning assets, equipment and capital in an economy that serve energy provision, circulating transport service and telecommunications; we must add 2. for the conservation structures etc. of natural resources routes and transport in the broadest sense and 3. installations of public buildings and administration, education, research, health care and social welfare.

Thus, it is infrastructures include (rather should be) diffused in capillary private investments and way on the territory. The territory services that, even

if object of activities, have effects the life and on the dynamics on the territory attractiveness, on its quality infrastructure classification of development. Table 1 aims to summarise the different ideas according Infrastructure classification.

Table 1

Infrastructure classification

Hansen (1965)	Aschauer (1989)	Sturm, Jacobs et al. (1995)	Di Palma, Mazziotta et al. (1998)	Biehl (1991)
Economic	Core	Basic (main)	Material	Network
Roads highways airports naval transport sewer networks aqueducts networks for water distribution gas networks electricity networks transfer	roads highways airports public transport electricity networks gas networks network for water distribution sewer networks	(main) railways (main) roads Canals harbors and docks electromagnet ic telegraph drainage Dikes land reclamation	transport network water-system energy network	roads railroads «water highways» networks of communicatio n systems for energy and water provisioning
Social	Not-core	Comple- mentary	Immaterial	Nucleus
Schools structures for public safety council flat plant of waste disposal Hospitals sport structures green areas	residual component	light railways tramways gas networks electricity network water supply local telephone network	structures dedicated to development, innovation and education	Schools hospitals museums

Source: composed by author

Focusing on it is the empirical side worthwhile noting depends on data that all (empirical) studies regardless of theoretical consideration heavily availability. Therefore it is of some interest taking into account how official statistics address the theme of of the macro-areas infrastructure. Regarding the

scheme that physical side, the follows illustrates the composition divided into areas and sub-areas according to classification (Table 1). As can be infrastructures include areas related to the network for commodities and seen, the economic people transport those for the energy, water, and gas transportation.

Table 2

Infrastructure classification according to macro-area and sub-area

Economic infrastructures	
Transport Network	road Transport railway Transport air Transport sea Transport other aspects
Energy Network	electricity network gas Network water-system other aspects
Social Infrastructures	
Health Infrastructures	free hospital treatment health service social security Other aspects
Educational Infrastructures	nursery primary school for pupils aged 11 – 14 secondary school compulsory education University other aspects
Culture Infrastructures	Cultural, artistic and historic heritage, Theatre, music, cinema and entertainment, Sport other aspects
Environmental Infrastructures	Water purification plant, Waste disposal, Green areas Other aspects
Territory Infrastructures	
Tourist infrastructures	Tourist receptiveness other aspects
Trade Infrastructures	Retail trade, Wholesale trade Other aspects
Monetary intermediation Infrastructures	Monetary intermediation other aspects

Source: [3]

The macro-area related to social comprises four infrastructures areas: the infrastructures of the health, education, culture and of the environment infrastructures. The last to the financial side the territory infrastructures and includes resources for commerce, tourism and for monetary intermediation macro-area concerns. Turning the attention following table 3 below of public spending shows how the 30 sectors contained in the Regional Public Accounts (RPA) system are join up into macro-sectors [4].

Table 3

Macro-sectors and Regional sectors

Macro-sectors	Regional sectors
Economic infrastructures	Roads, Transport, Telecommunication, Environment, Waste disposal Water, Sewers and water treatment, Energy, Agriculture, Marine fishing and aquaculture, Industry and artisans, Wholesale and retail distribution Tourism, Other public works, Other economic sectors
Human capital	Education, Training, Research and development, Pensions and wage supplementation, Labour
Social infrastructure	Culture and recreational services, Health, Other social affairs (assistance and charity), Other health and sanitation, Defences, Public order, Justice, General administration, Unclassified expenditure
Residential building	Residential building

Infrastructure should make a net contribution to improve per capita growth performance. Raising the country's infrastructure endowment to that of the region's middle-income countries could boost annual growth by around 4 percentage points. Extensive reforms are ongoing in the power, ports, ICT, and domestic air transport sectors. But challenges persist.

Nonetheless, from the foregoing, it is clear that inadequate infrastructure is also a contributing factor. Lack of adequate power, high quality transportation, telecommunication and similar infrastructure will continue to hamper economic development in countries.

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