The economic and Integrational Effects of Infrastructure Investment in Latin America

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Abstract: This paper aims at analyzing the current, the past as well as a prospect of the future situation of infrastructure in Latin America, by presenting the historical integration attempts, their failures, and the ideology behind them. It also gives an insight into missing components to the development of the Region, such as geographical research, mobility planning, and policy analysis. Besides that, it also focuses on the German Model and its benefits, especially for underdeveloped countries that struggle to attract foreign capital.

Keywords: Latin America, Integration, Infrastructure, Development

1. Introduction

The movement for Regional Integration in Latin America has a long history. Its beginning dates back to the early 1800s and several attempts of regional integration over the past two centuries were made. Despite the focus on regional integration, most of these attempts didn't set common infrastructure policies, and conjoint endeavors in railway, highway, and port building.

The current condition of infrastructure in Latin America is slightly better than it was 20 years ago, especially in the urban areas, with the construction of new subway and train lines. Also, Bolivia, Chile, Peru, and Brazil have plans of building the Bioceanic central rail corridor ("Corredor Bioceânico"), which would connect ports along the Pacific Coast in Chile and Peru with the port in Santos, Brazil, on the Atlantic Coast.

Despite such projects being envisioned, the way that infrastructure is managed in Latin America is one of the reasons for its failures because lots of the projects are done without the proper planning and logistics required for such a massive investment, "Most national transport policies in Latin America have failed in part because planners have treated national territory as a homogenous spatial container with uniform socioeconomic characteristics and thus have failed to understand the spatiality or geography of socio-economic opportunity"[1].

Latin American geographers seem not to focus much on the infrastructure problem that affects the continent, and a great contribution could be made to this field, especially with Geographic Information Systems (GIS) that could be used to model and predict accessibility and mobility demands.

Researchers and transport planners could also benefit from having an understanding of models implanted in other regions that could be of use for Latin America, since, the German Model, for instance, uses the state as its main support., which would be in line with most of the integration schemes put in place in the region.

2. Integration attempts and failures

In the nineteenth century, with the beginning of the independence process of the Spanish colonies of the so-called new world, the movement for political independence in Latin America was initiated. Símon Bolívar proposed a unified Latin America and tried to convince the regional nations of it several times, especially in the Congress of Angostura (1819) and in the Congress of Panama (1826). Bolívar thought that regional unity was necessary because of Spain and the Holy Alliance's threat.

Bolívar took for granted that all of the former colonies would have a sense of unity, because of the common language, religion, and political system. However, "each province had been individually and exclusively linked with the metropolis for political, economic and cultural affairs. Consequently, there was no previous set of interrelations upon which to build new integration schemes in the region."´[2].

Other hindrances were the lack of communication between the nations and the geography of the continent. These problems would require an expensive solution: infrastructure, meaning railways, water routes, and telegraphs. With that, the flow of people, trade, and culture would expand rapidly along with the countries and the feeling of being compelled to unite would, by consequence, also expand.

The next major event towards regional integration came with the creation of ECLA (The United Nations Economic Commission for Latin America) under the command of Raúl Prebisch, which put economic development over political autonomy, despite not disregarding the latter. With this begins the era of the "Union for Economic Development" in contrast with the former "Union for political autonomy" and "Autonomic Regionalism"[3].

Despite being very influential, ECLAS theories, especially import substitution, weren't easy to implement on a national level because of the limited scope of most national markets.

In 1960 the Latin American Free Trade Association (LAFTA) was created. The group consisted of all of the Spanish-speaking countries in South America, except Bolívia and Venezuela, Mexico and Brazil (the only Portuguese-speaking country of the region). The relations between the member countries were purely economical, which included tariff reductions for trades amongst the members and sectorial complementarianism, dividing the different stages of production of the same good amongst the nations.

The Mercado Común Centroamericana or Central American Common Market (CACM) was created and contained Honduras, Guatemala, El Salvador, and Nicaragua in the same year. It came closer to integration than LAFTA, because it established a common external tariff, tariff-free intraregional trade, the creation of regional institutions, and aid for the least developed countries in the group, by stimulating the regional industries to be built in such countries.

Later, in 1969, came the Andean Group, composed of Chile, Colombia, Bolivia, Ecuador, Peru, and Venezuela. The members, knowing what happened with LAFTA and CACM, went even further, and focused not only on an economic scope, but also on a social, cultural, educational front, and adopted policies that were capable of strengthening regional integration, such as the creation of the junta and the commission, institutions designed to implement and make decisions respectively. They also adopted industrial rationalization and sectorial industrial planning, with control of foreign investment to prioritize the most underdeveloped countries.

IIRSA ("The Initiative for Integration of Regional Infrastructure in South America") was an integration attempt that focused only on infrastructure, compiling ten years of information about obstacles to the development of the infrastructure network in South America. It also created a new methodology, allocating the proposed projects into groups by "Integration Axis", such as the Andean Axis, the Mercosur – Chile Axis, and the Peru – Brazil – Bolivia Axis.

The eventual failure of each of these groups was mainly due to political reasons. In the case of LAFTA, disagreements started to erupt because most of the benefits were mostly being appreciated by Brazil, Argentina, and Mexico since these countries already had larger economies and attracted more foreign investment than the most underdeveloped members. CACM began to crumble when the group started to implement industrialization plans, and some countries weren't willing to make concessions and – to top it off – the war between Honduras and El Salvador erupted. In the case of the Andean Group, the major blow occurred when Chile experienced a *coup d'etat* and Pinochet took office, implementing a series of neoliberal economic policies and reforms, which were incompatible with the integration program.

In the case of IIRSA, it was expected that the integration would have a great leap in the following years, however, that did not occur, especially because of the failure to obtain multilateral funding for the projects and the lack of capacity by most countries to get into debt.

3. The German Model

CACM and the Andean Group both had a certain control over foreign capital to prevent unbalanced levels of investment in the member countries. The German experience has shown that having the infrastructure be managed by the state has its advantages, such as guaranteeing that the future infrastructure will be built not only aiming profit and self-preservation but wherever and whenever it is needed.

"Taking into consideration the existing experience of the European Union countries, two main railway infrastructure management, and railway transport service provision models can be singled out, i.e. the separated model and the integrated model" [4].

The separated model consists of having the infrastructure and transportation services completely separated, meaning, that legal persons are not interrelated. Whereas the integrated model can consist of having the infrastructure management and transport services separated into more than one legal person, but within a common holding structure.

Germany adopted the integrated model when the country reformed the railway transport sector in 1994 when they merged two state companies *Deutsche Bundesbahn* and *Deutsche Reichbanh* together creating *Deutsche Bahn AG*. Later on, the company would be divided into several other companies, which would have 100% of their shares owned by *Deutsche Banh AG*. For the management of the railway network infrastructure and train stations: *DB Netz AG* and *DB Station&Service AG.* For railway communication: *Railion Deutschland AG (*freight transportation), *DB Fernverkehr AG* (passenger transportation on long distances), and *DB Regio AG* (passenger transportation on short distances).

Later, the country decided to privatize only part of the main company, that part being the railway communication and service sectors, with the infrastructure still being exclusively owned by the state. With this, Germany remains a very competitive country, as can be seen in Tables 1 and 2.

Table 1 – The Global Competitiveness Report -2019 WEF

Country	Infrastructure rank	Infrastructure score
Germany	8	90.2
Brazil	78	65.5
United States	13	87.9
Argentina	68	68.3
China	36	77.9
Chile	42	76.3
Japan	5	93.2
Bolivia	100	57.1
Netherlands	2	94.3
Mexico	54	72.4

Table 2 – GDP Ranking 2019

Country	GDP Rank
Germany	4
Brazil	9
United States	1
Argentina	26
China	2
Chile	43
Japan	3
Bolivia	92
Netherland	7
Mexico	3

As seen in Tables 1 and 2, the most competitive countries in international trade tend to be the ones with better infrastructure.

4. Conclusion

In general terms, infrastructure in Latin America still has a long winding road to go. Despite the fact that integration in the continent has a history of over two centuries, infrastructure wasn't the main focus of the various integration attempts.

In any case, Latin America also has a long history of political and economic tensions, which creates predicaments to the objectives of the integration. Examples of this can be seen in the *coup d'etat* in Chile and the war between El Salvador and Honduras.

The German model could provide a way for the least developed countries to improve their infrastructure, especially because, in some cases, they struggle to attract foreign capital, so the state firstly would act as an instigator initiating the investment process at the same time it would ensure integration of the country and, possibly in the region.

A lot could be achieved with the expansion of geographic research and methodology, considering mobility in a socioeconomic, and cultural manner. This also could be achieved by utilizing GIS to have a better understanding of the flow of people and cargos.

The development of infrastructure also has a great impact on the competitiveness of a country, since it makes both exports and imports cheaper to the final consumer.

5. References

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