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# THE LACK OF INFRASTRUCTURE AS AN OBSTACLE TO TRADE AND PRODUCTIVE INTEGRATION IN SOUTH AMERICA[1]

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One crucial obstacle to the possibility of developing regional values chains with Brazil as a hub in South America is the current status of its infrastructure, particularly transport and trade-related elements. The difficulties facing Brazil in this area are well documented. Investments in infrastructure have been diminishing since the severe domestic fiscal and external debt crises that the country suffered in the 1980s; even with some recovery in the 2000s, levels are still low.[3]

Recent estimates indicate that Brazil's investment in infrastructure in 2013 was 2,45% of its gross domestic product (GDP) whereas for Chile and Colombia, the regional leaders in this sector, the

[1] Based on: OLIVEIRA, Ivan T. M.; CARNEIRO, Flavio L. *Trade and production integration in South America: a role for Brazil?* Economic Policy Forum, GIZ (forthcoming).

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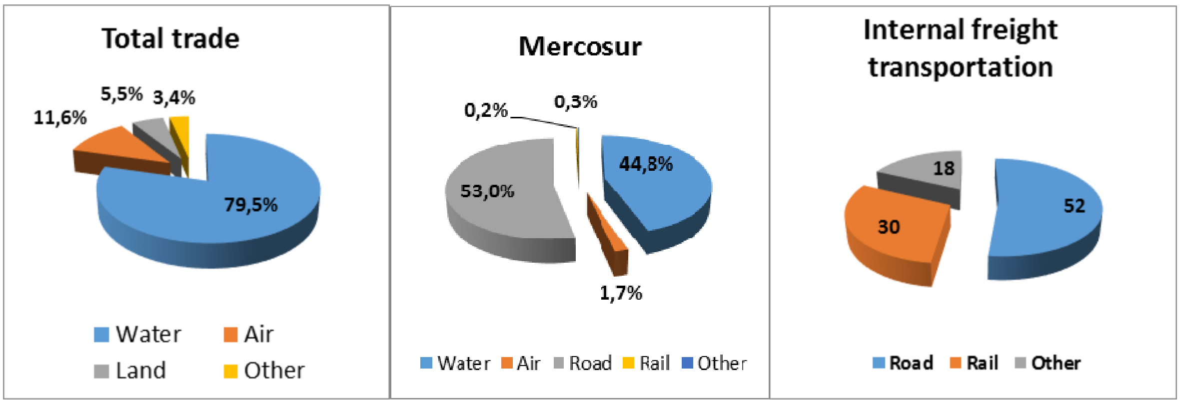
[3] Moreira *et al*, *Too Far to Export: Domestic Transport Costs and Regional Export Disparities in Latin America and the Caribbean*. Washington, DC: Inter-American Development Bank, 2013.

figures are 6-7% of GDP and in countries such as China and Vietnam may reach 10%.[4] More importantly, Brazil's estimated spend is below the minimum investment necessary to cover the depreciation of the country's existing capital stock, estimated at 3% of GDP.[5]

One defining aspect of the Brazilian transport infrastructure is its reliance on land-based transportation modes (especially road transport), both in regional trade (53% of trade with Mercosur partners is by road freight) and internal freight transport, of which 52% is by road.

**Figure 1. Brazil: Transportation modes in foreign trade and domestic freight**




Source: CNT.

Even so, as the low investment figures would lead one to expect the quality of existing roads is poor; a 2012 study by the National Confederation of Transport (CNT) concluded that 46% of paved

[4] Silva B, 'The challenges of infrastructure investment in Brazil: the issue of funding'. *Revista Paradigma*, XVIII. 22, pp 141-162.
[5] Frischtak C & K Davies. 'O investimentoprivadoeminfraestrutura e seufinanciamento'. In Frischtak C & A Pinheiro (eds.). *Gargalos e soluções na infraestrutura de transportes*. São Paulo: FGV, 2014.

roads have 'pavements in insufficient conditions' [*sic*].[6] The extent of the road network is also inadequate. In 2011 road density was only 20km/100km$^2$, less than half of that of the US (46km/100km$^2$).[7]

The lack of adequate transport infrastructure is not restricted to roads. Another survey conducted by CNT among soy and corn exporters (responsible for about 43% of the country's exports) concluded that 83,3% of them consider the lack of railway coverage and the poor quality of existing railroads 'serious' or 'very serious' obstacles to their business and a remarkable 100% of the respondents have the same opinion about the low productivity of port terminals and the lack of adequate equipment for port operation.[8]

The low coverage and poor quality of existing infrastructure on the one hand and insufficient investment to improve infrastructure on the other, have obvious ramifications for the country's external competitiveness and are a serious hindrance to its ability effectively to contribute to the development of production-sharing and RVCs in South America.

As Figure 2 shows, the quality of Brazilian trade- and transport-related infrastructure (a component of the World Bank's Logistics Performance Index) is not only far below the standards in other regions used as benchmarks but has been in decline since 2010. Moreover, this poor situation is not limited to Brazil: average indices for Mercosur and South America are even worse and also fell in 2014, the latest year for which figures are available.

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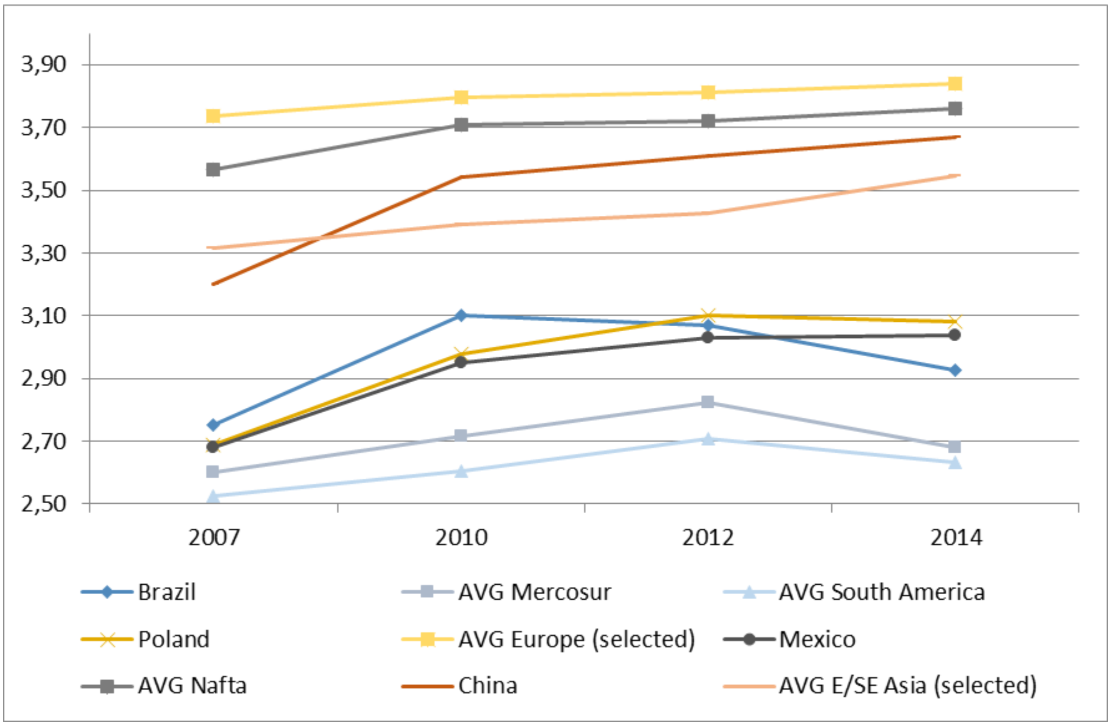
[6] CNT. Pesquisa de Rodovias 2012. Confederação Nacional do Transporte (CNT): Brasília. Available at: <http://pesquisarodovias.cnt.org.br/Paginas/Inicio.aspx>
[7] Moreira M *et al*, *op cit*.
[8] CNT. Transporte & Desenvolvimento: Entraves Logísticosa o Escoamento de Soja e Milho. Confederação Nacional do Transporte. Brasília, 2015. Available at: <http://www.cnt.org.br/Imagens%20CNT/PDFs%20CNT/Pesquisa%202015/entravesaatualisado.pdf>

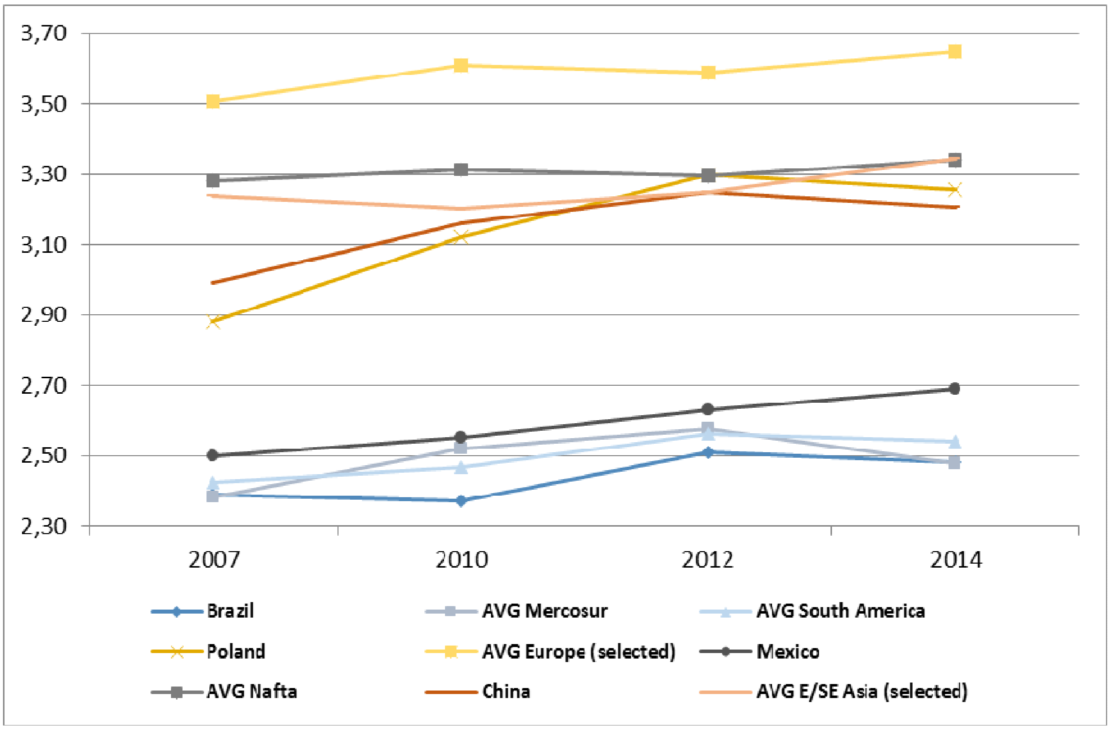
**Figure 2. Logistics Performance Index: Quality of trade & transport-related infrastructure (1=low to 5=high)**




Source: World Bank, Logistics Performance Index, http://lpi.worldbank.org/

As other components of the Logistics Performance Index show, the obstacles to international trade in these countries go beyond physical infrastructure per se. One example is customs efficiency: Figure 3 indicates that Brazil, Mercosur – and South America as a whole – fare poorly in this respect.

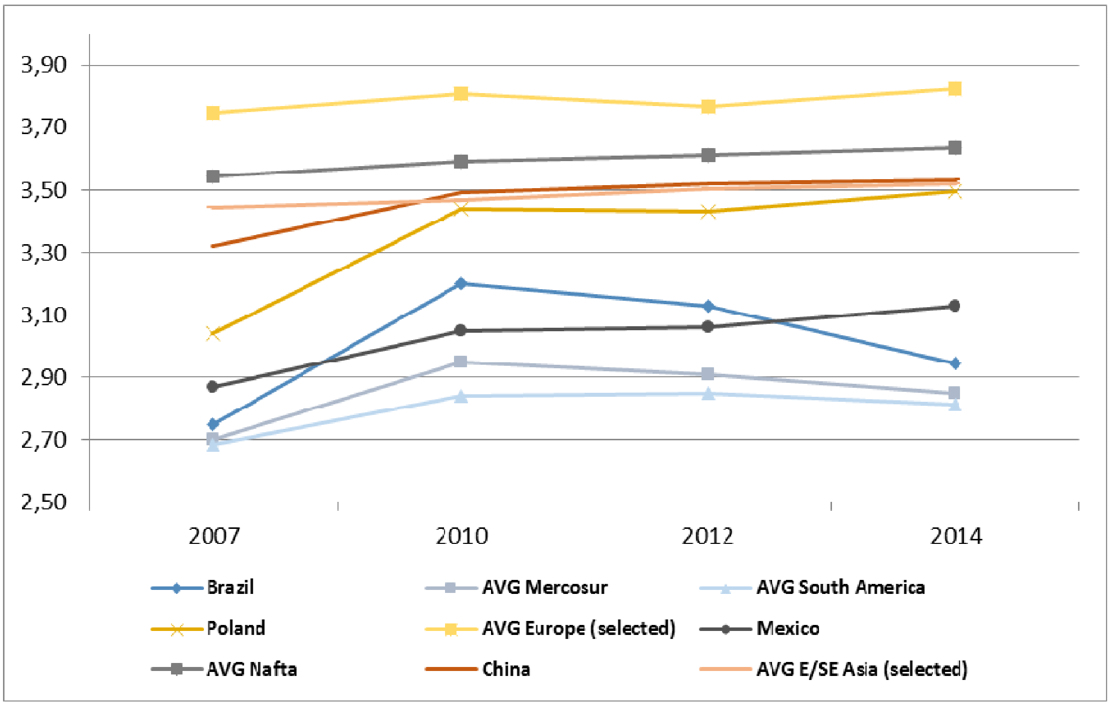
**Figure 3: Logistics Performance Index: Customs efficiency**




Source: World Bank, Logistics Performance Index, http://lpi.worldbank.org/

The overall result, evidently, couldn't be different, as Figure 4 shows, with serious consequences for regional integration. The example of Mexico is noteworthy: with index levels similar to those of the South American countries at the beginning of the series, that country's performance has been steadily improving and constitutes an model, albeit unheeded, for its southern neighbours.

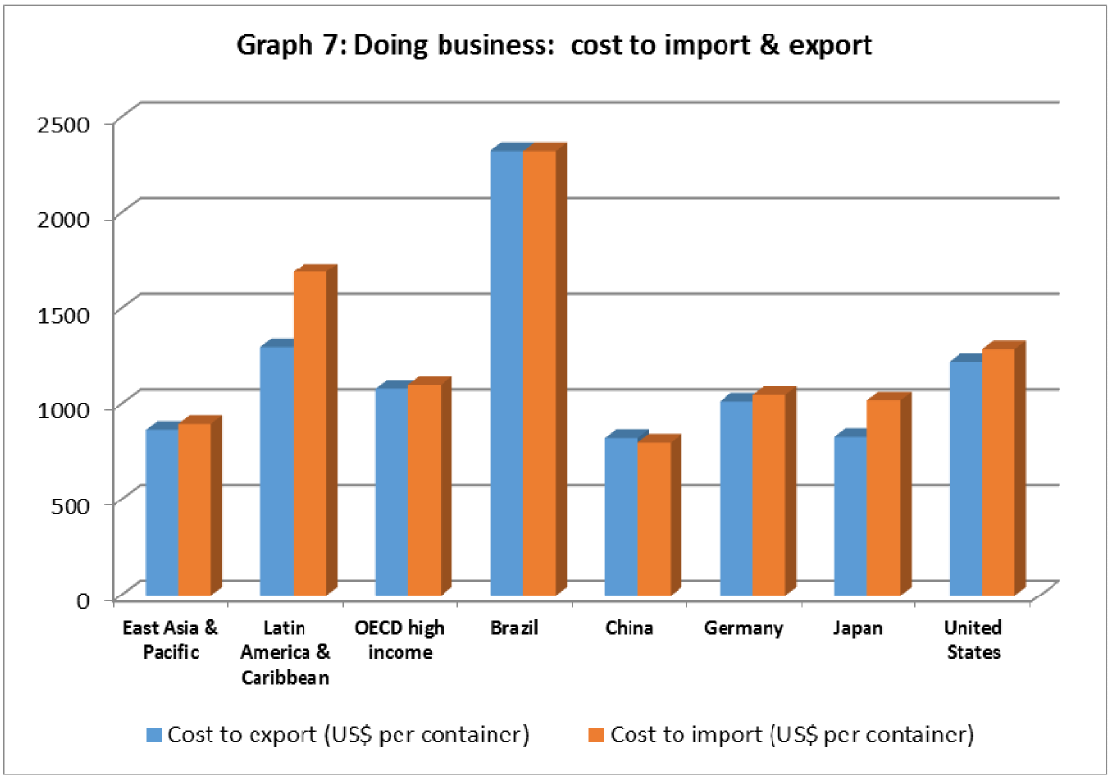
**Figure 4. Logistics Performance Index: Overall**




Source: World Bank, Logistics Performance Index, http://lpi.worldbank.org/

One striking example of the consequences of this situation for the region's trade and integration capabilities can be seen in trade costs. Figure 5 shows the estimated costs to import and export, as calculated by the World Bank's Ease of Doing Business Report. Brazilian costs are much higher than those of the other countries and regions used as benchmark. Data for South America as a single region are not available but the results for Latin America and Caribbean (of which South America is a large subset) suggest that the situation is not good.

**Figure 5: Doing business, cost to import & export**




Source: World Bank, Ease of Doing Business Report, http://www.doingbusiness.org/

Given this framework and its consequences, one must recognise that the prospects for improvement are not encouraging, at least in the short term and in Brazil, which has somehow to manage to hive off infrastructure investment amid a complicated economic environment in which the government is struggling to implement a series of fiscal adjustment measures. At the same time major infrastructure companies are involved in corruption scandals that may threaten their operations in the foreseeable future.[9] The situation is even worse in neighbouring states such as Argentina and Venezuela, both of which are in undergoing serious fiscal and political hardship.

In this context, the Initiative for the Integration of the Regional Infrastructure of South America demands attention. Launched in 2000 with the objective of helping bridge the infrastructure gap in the region, which was regarded as a serious threat to internal and external trade, it was absorbed 11 years later into the South American Council for Infrastructure and Planning, itself subordinate to the Quito-based Union of South American Nations (Unión de Naciones Suramericanas: Unasur). Some analysts suggest that the essentially political nature of Unasur may hinder (or has been hindering) its potential as an effective technical support body through a loss of focus on infrastructure development.[10]

[9] See for example < http://www.bbc.com/news/world-latin-america-33203790> , or < http://www.ft.com/cms/s/0/246ee1ae-73d8-11e4-92bc-00144feabdc0.html#axzz3e5B6XLVK>.

[10] Costa C & Gonzales M, Infraestruturafísica e integração regional naAmérica do Sul: umaavaliação da iniciativa para a integração da infraestrutura regional da América do Sul. Institute of Applied Economic Research. Discussion paper no. 2060, 2015.